THE CHINESE UNIVERSITY OF HONG KONG

Funding Scheme for Engaging Postgraduate Students in Teaching and Teaching Development Supported by Teaching Development and Language Enhancement Grant for the 2019-22 Triennium

Project title:	**Passing the Torch: Professional Development for PhD Students and Undergraduates in Nursing**
Principal supervisor and unit:	**Professor CHAN Yue Lai Helen, The Nethersole School of Nursing**

Project objectives

This project aims to engage MPhil-PhD students in research supervisory roles for undergraduates who joined the Guided Research Scheme.

Activities, process and outcomes

Six full time MPhil-PhD students with outstanding academic performance were recruited to be mentors. Interviews for selecting undergraduates were conducted between November and December 2021. A mentorship training workshop to prepare the MPhil-PhD students was conducted in January 2022. Six MPhil-PhD students and six high caliber Bachelor of Nursing students were pair-matched.

Deliverables and evaluation

Between February and April, three manuscripts about aged care, cancer care and stroke care were under preparation for international refereed journals by the students. One poster presentation was accepted for presentation in Research Poster Exhibition organized by the CUHK in May 2022.

Dissemination, diffusion and sharing of good practices

The team will prepare a short article to report this project through the School website and social media platform.

Impact on teaching and learning

Through this project, the MPhil-PhD students act as role models in research development for undergraduates. They appreciated the opportunities to reflect on their research skills during the mentoring process. More importantly, the project synergizes the research works conducted by academic staff, postgraduates and undergraduates. Given the positive experience, this project will be maintained in our School to benefit more students.

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Funding Scheme for Engaging Postgraduate Students in Teaching and Teaching Development Supported by Teaching Development and Language Enhancement Grant for the 2019-22 Triennium

Project title:	**Development of Competencies in Advanced Nursing Practice at High-fidelity Simulation Ward**
Principal supervisors and unit:	**Dr. TANG Wing Ki Fiona, The Nethersole School of Nursing** **Professor SO Kwok Wei Winnie, The Nethersole School of Nursing** **Professor CHAIR Sek Ying, The Nethersole School of Nursing**

Project objectives

The objectives are 1) to develop simulation courseware for advanced simulation training, 2) to implement simulation training in a high-fidelity simulation training ward, 3) to enhance postgraduate nursing students' critical-thinking, clinical decision-making and clinical practice in specialized areas, and 4) to evaluate the learning experiences of Graduate Assistants and postgraduate nursing students.

Activities, process and outcomes

The simulation training was implemented in an online mode and scenarios were filmed. During the online training, the facilitators guided students to critique and comment the clinical practice based on the scenarios. The Graduate Assistants gained positive experience and their pedagogical competence was enhanced. The outcomes of postgraduate students will be evaluated after completion of all online training.

Deliverables and evaluation

The major deliverables include preparatory workshop for courseware development and simulation courseware (scenarios, simulation programmes and videos) for advanced nursing practice. The evaluation involved the development of competencies of students and their learning experiences.

Dissemination, diffusion and sharing of good practices

This project demonstrates the good practices of using an online platform to provide specialty training. The good practices will be disseminated in international education conferences.

Impact on teaching and learning

The team explored an innovative teaching platform to conduct simulation training. The online approach is feasible to maintain teaching activities and engage students in learning when face-to-face mode is suspended for whatever reasons in the future. Both teachers and students appreciated the new experience in a virtual classroom. The project showed simulation training is significant in preparing nurse for specialization.

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Funding Scheme for Engaging Postgraduate Students in Teaching and Teaching Development Supported by Teaching Development and Language Enhancement Grant for the 2019-22 Triennium

Project title:	**Development of a Cross-discipline Teacher Apprenticeship Programme and a Micro-module of Designing Teaching Course and E-learning Materials in Ophthalmology**
Principal supervisor and unit:	**Professor CHAN Pui Man Poemen, Department of Ophthalmology and Visual Sciences**

Project objectives

To include at least 5 postgraduate students in the Department of Ophthalmology and Visual Sciences (DOVS) to join a teaching project that includes (1) a cross-discipline teacher apprenticeship programme, and (2) A micro-module of designing teaching courses and e-learning material for undergraduate medical students.

Activities, process and outcomes

Seven postgraduate students joined our program. All of them completed the teaching sessions of the final year medical students (one clinical skill learning and one flipped-classroom problem-based learning session). The clinical attachments part (at least one out-patient clinic and one surgical session) will be completed before 30 June 2022. Three of the students also helped out creating teaching materials. All students will write a short essay of up to 1000 words about their teaching philosophy and the use of new pedagogy. The student who wrote the best essay will win the prize (to be decided after the evaluation by the supervisors).

Deliverables and evaluation

Seven postgraduate students joined the program. Three students also joined the micro-module of preparing teaching materials. They created two teaching videos, edited 3 surgical videos, helped file information for 1 problem-based learning (PBL) case, and set up more than 60 multiple choices questions related to the teaching videos.

Dissemination, diffusion and sharing of good practices

We planned to present the project in our departmental meeting first. Afterward, we will include the program on our departmental website. Since we have encouraging feedback from the participant, we plan to continue this project for another group of PhD students in the coming September. Results will be presented in CUHK Teaching and Learning Innovation Expo as an abstract paper after more postgraduate students complete the program. Eventually, we plan to set up the program as a regular activity in DOVS.

Impact on teaching and learning

The project targets postgraduate students in our department. We aim to provide an opportunity for them to develop teaching skills in various aspect, while also helping the building up of their communication skills and confidence essential for their future progress in academia. Feedbacks from the participants were encouraging. They reflected that they now have a better understanding of the clinical aspect of ophthalmology. We will also share the experience with Joint Shantou International Eye Center (JSIEC), a close collaborator of DOVS. Such experience could also influence the training program in JSIEC.

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Funding Scheme for Engaging Postgraduate Students in Teaching and Teaching Development Supported by Teaching Development and Language Enhancement Grant for the 2019-22 Triennium

Project title:	**Developing Hands-on Micro Modules of Seismological Data Processing**
Principal supervisors and unit:	**Professor YANG Hongfeng, Earth System Science Programme**

Project objectives

The objective of this project is to develop 15 micro-modules about seismic data processing, starting from the basic Linux operation command to general tools used in seismology research. Part of those modules will be adopted by courses (ESSC4140 "Seismology", 4160 "Marine Geology and Geophysics", 4180 "Earthquake Source Physics", 4510 "Statistical Methods and Data Analysis for Earth System Science") for students' self-learning and practice.

Activities, process and outcomes

We have developed 15 micro-modules with contributions from graduate students and undergraduate students. The modules are divided into Entry, Intermediate, and Advanced levels. We provide introduction to the scientific questions, detailed codes, and illustrations for each step of data processing, as well as some additional exercises. The modules of Entry and Intermediate levels have been utilized in teaching the course ESSC4140, in the 2nd semester of 2021-22.

Deliverables and evaluation

Those training modules have been further designed and organized on the website CUSeisTut at https://cuseistut.readthedocs.io/en/latest/. Currently, all those modules can be accessed on this website.

Dissemination, diffusion and sharing of good practices

To make the micro-modules accessible for broad users, we built a website and upload modules on it: https://cuseistut.readthedocs.io/en/latest/. Currently, all the modules are open-access. The modules have been introduced to all Earth System Science (ESSC) students. In addition, the modules have been utilized in the course ESSC4140.

Impact on teaching and learning

The modules can serve as a complementary to the course content and motivate students' self-learning altitude. In addition, the online modules provide great opportunities to deliver high-quality teaching/learning to students outside CUHK and Hong Kong.

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Funding Scheme for Engaging Postgraduate Students in Teaching and Teaching Development Supported by Teaching Development and Language Enhancement Grant for the 2019-22 Triennium

Project title:	**Development of a VR-enhanced Supplemental Instruction Program for the School of Life Sciences**
Principal supervisors and unit:	**Dr. NGAI Hung Kui Patrick, School of Life Sciences** **Dr. LO Fai Hang, School of Life Sciences**

Project objectives

This project aims at developing the first Supplemental Instruction programme in the School of Life Sciences to enhance students' performance and to cultivate a collaborative learning environment.

Activities, process and outcomes

A Supplemental Instruction programme (SI) was designed to enhance the effectiveness of teaching and learning in historically difficult courses. In this project, the SI program was implemented in selected lecture and laboratory courses after consultation with academic staff in the School. All teaching activities were supported by the Virtual Reality (VR) learning tools and guided by two trained supervisors. The programme adopts a non-remedial approach to learning that supports students toward academic success by integrating "what to learn" with "how to learn." The SI programme consists of regularly scheduled, voluntary, out-of-class group study sessions driven by students' needs. Sessions are facilitated by trained SI leaders who utilize collaborative activities to ensure peer-to-peer interaction in small groups.

Deliverables and evaluation

The major deliverable of this project is a Supplemental Instruction programme that engages postgraduate students. The program was evaluated through focus group meetings and questionnaires surveys.

Dissemination, diffusion and sharing of good practices

The Supplemental Instruction Programme were disseminated in education conference, workshops and sharing sessions.

Impact on teaching and learning

This project demonstrated an exemplary use of VR technologies to train postgraduates and facilitate the learning of laboratory skills. The SI program managed to enhance students' performance and to cultivate a collaborative learning environment in large class courses.

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Funding Scheme for Engaging Postgraduate Students in Teaching and Teaching Development Supported by Teaching Development and Language Enhancement Grant for the 2019-22 Triennium

Project title:	**Engaging Postgraduate Students in Teaching Development of E-learning Materials and Micro-modules for Earth System Science/ Earth and Atmospheric Sciences Courses**
Principal supervisors and unit:	**Dr. AU-YEUNG Yee Man Andie, Earth System Science Programme** **Professor TAN Yen Joe, Earth System Science Programme** **Professor TAM Chi Yung Francis, Earth System Science Programme**

Project objectives

- To engage senior postgraduate (PG) students in developing learning materials for Earth System Science (ESSC/EASC) courses so that they can gain experience regarding curriculum design and how to assess students' needs
- To identify key knowledge gaps that students encounter in the target courses
- To develop e-learning materials and micro-modules that will allow students to better personalize their learning experience based on their specific needs

Activities, process and outcomes

- A junior research assistant and the PG engaged conducted surveys to identify the knowledge gaps for the target courses, under the guidance of the Principal Supervisors
- Micro-modules bridging the knowledge gaps were developed on KEEP, a CU eLearning Plaform, and implemented into the courses.
- Feedback received from students shows satisfaction those the enhanced educational practices

Deliverables and evaluation

- Bi-weekly advisory sessions were held for the working group to keep track of their progress.
- Entry surveys and exit surveys were conducted, and Course and Teaching Evaluation (CTE) responses were compared with previous years, to evaluate students' satisfaction with the resources produced.
- 4 micro-modules were made. One for EASC5001 "Research Frontiers of Earth and Atmospheric Sciences", two for ESSC4510/EASC5510 "Statistical Methods and Data Analysis for Earth System Science", and one for ESSC4520/EASC5520 "Numerical Methods and Modeling for Earth System Science". From the evaluation based on the surveys, students agreed that the micro-modules are useful in helping them deal with the challenges encountered in the course.

Dissemination, diffusion and sharing of good practices

- Hope to take the initiatives to launch micro-modules or "pre-lectures workshops" similar to those in other local and foreign universities that cater for postgraduates from various academic backgrounds

Impact on teaching and learning

- Materials developed acted as a revision for the students
- Students revised the fundamental concepts or prior knowledge first before the lectures to enhance the effectiveness of lecturing

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Funding Scheme for Engaging Postgraduate Students in Teaching and Teaching Development Supported by Teaching Development and Language Enhancement Grant for the 2019-22 Triennium

Project title:	**Supporting Statistics Research Postgraduates to Teach Quantitative Data Analysis to Postgraduate Students without Statistics Background – Phase I**
Principal supervisor and unit:	**Dr. WRIGHT John Alexander, Department of Statistics**

Project objectives

The project aims to prepare and engage RPGs in Statistics to conduct workshops on various statistical analysis methods for other postgraduate students who need to learn statistics for their research studies. The current phase involves developing micro-modules to enhance Statistics RPGs' knowledge and skills in teaching students without a statistics background.

Activities, process and outcomes

The content of the micro-modules, which act as future teaching assistant (TA) training self-learning materials, are developed based on the consolidation of: the literature review; the findings of the survey of 179 PGs; and the in-depth interviews of two Statistics RPGs. In addition, these two Statistics RPGs were invited to go through the training materials and create pre-learning videos of the proposed trial hands-on workshops.

Deliverables and evaluation

Micro-modules for TA training, including the difficulties and anxiety in learning statistics for the non-statistics background students, their learning needs, and suitable instructional techniques, are being developed. An online course titled "Statistical Methods For Research Students" has been established on the KEEP (CU eLearning) platform. Two topics of pre-learning videos are uploaded. Pilot statistics workshops will be conducted when face-to-face teaching can be resumed. The online course content will be expanded and enhanced in the Phase II project.

Dissemination, diffusion and sharing of good practices

The micro-modules will be available to all Statistics RPGs. The two TA volunteers shared their experiences and reflection on the training process and development of the pre-learning materials. Future TAs can learn from accumulated experiences to better prepare their teaching to non-statistics background students. We will apply to present our work at an upcoming CUHK Teaching and Learning Innovation Expo.

Impact on teaching and learning

The micro-modules and the development process of the learning materials can enhance Statistics RPGs' skills in teaching other PGs without a statistics background. At the same time, other PGs can enjoy the opportunities to learn various statistical analyses. As a result, they can conduct statistical analysis independently and confidently in their current and future research.

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Funding Scheme for Engaging Postgraduate Students in Teaching and Teaching Development Supported by Teaching Development and Language Enhancement Grant for the 2019-22 Triennium

Project title:	**Integrating Augmented-reality with Design Thinking (AR-DT) in Self-directed Teaching and Learning by Postgraduate Architecture Students**
Principal supervisors and unit:	**Professor CHUNG Wang Leung Thomas, School of Architecture** **Professor FINGRUT Adam, School of Architecture**

Project objectives

To engage postgraduate students in academic ownership and collaboration with different teaching initiatives of individual courses, facilitate self-directed teaching and learning activities, document the application of AR-DT learning, provide state-of-the-art training and integrate with design thinking in the School of Architecture.

Activities, process and outcomes

Online and face-to-face workshops, seminars, reviews, software testing on and off campus, YouTube channel, application in funded research projects and existing curriculum.

Deliverables and evaluation

Training sessions and workshops are delivered. Short videos of application by students are documented. One online questionnaire on perception of AR-DT completed. Essential hardware and configuration for AR are readily available for students.

Dissemination, diffusion and sharing of good practices

YouTube channel is set up and short videos are uploaded. One media coverage (RTHK interview) in a rural revitalization research project.

Impact on teaching and learning

Students are motivated to try out new tools, implement and integrate with their own projects. Use of AR tools facilitated hybrid learning during pandemic outbreak, where face-to-face interactions are minimized. Integration with existing curriculum is demonstrated without adding extra workloads to teachers.

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Funding Scheme for Engaging Postgraduate Students in Teaching and Teaching Development Supported by Teaching Development and Language Enhancement Grant for the 2019-22 Triennium

Project title:	**Implementing Versification Knowledge in Classical Chinese Poetry Writing and Teaching**
Principal supervisor and unit:	**Professor SIU Chun Ho, Department of Chinese Language and Literature**

Project objectives

This project consists of a database for Tang and Song Versification, which will provide students with comprehensive and new guidelines on versification studies and poetry writing.

Activities, process and outcomes

A database with full text of 48,000 Tang poems and 260,000 Song poems have been constructed with a webpage of identifying tones of Chinese characters, and bibliography of Tang-Song poets.

Deliverables and evaluation

The database has been adopted in courses of disseminated the current output in the courses CHLL2350C "Classical Chinese Poetry: Selected Readings and Writing Practice", CHLL2131A "Introduction to Chinese Phonology" and CHLL3314 "Major Author(s) (*Ci* Poetry)". One conference paper has been presented in "Conference on Building a Techno-Humanities Culture in Hong Kong" in Jan 2022, and the supervisor has given a talk titled "Reunderstanding Chinese Versification: Digital Humanities Initiatives" in April 2022.

Dissemination, diffusion and sharing of good practices

We have merged the database with the database for *Ci* lyrics tunes for better illustration and comparison of prosodic patterns among different genres. The IT technicians also assigned a most commonly used tone to each character with multiple pronunciations as the default value, with a memo page for feedback and erratum.

Impact on teaching and learning

1 final-year undergraduate student has conducted his final-year thesis with the aid of this database. As undergraduate students reflected that the currently website is very useful to verify basic versification knowledge of versification, it hoped that the database will be further promoted to postgraduate research, especially among MA students. This project also aims at encouraging postgraduate students to adopt Digital Humanities in both teaching and conducting research, particularly in illustrating humanities issues and history of poetics in terms of big data.

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Funding Scheme for Engaging Postgraduate Students in Teaching and Teaching Development Supported by Teaching Development and Language Enhancement Grant for the 2019-22 Triennium

Project title:	**Teaching Assistant Training for a First-year Music Foundation Course**
Principal supervisor and unit:	**Dr. POON Kiu Tung, Department of Music**

Project objectives

Musicianship training in a first-year foundation course is currently delivered by postgraduate students. This project aims to 1) better identify the current needs when involving postgraduate students in undergraduate teaching; 2) develop postgraduate students' pedagogical competence and better prepare them to teach; and 3) engage postgraduate students as active partner in course design, teaching and learning materials development, assessment, and evaluation.

Activities, process and outcomes

Professionals were hired to work with the Principal Supervisor to 1) develop and deliver training sessions on pedagogical issues; 2) provide on-site teaching observation, 3) give feedback to the observed PGSs; 4) work with PGSs on teaching materials preparation and assessment; 5) equip them to be active teaching partners; and to 6) provide continue support. The Co-supervisor facilitated 5 PGSs to consolidate previous teaching materials and to develop a semester teaching plan with revised teaching materials, and worked with the Principal Supervisor to revise the current curriculum.

Deliverables and evaluation

1. 12 PGS training sessions/meetings delivered in group/individually
2. 12 tutorial class observations
3. 2 PGS sharing sessions
4. A web resource of musicianship training curriculum with weekly teaching materials for 4 groups of students, developed collaboratively by 6 PGSs.

A comparative study on the same tutorials delivered without training were conducted based on instructor's class observation and evaluation on PGSs' work samples. A survey on PGSs' teaching were also completed. The result was positive.

Dissemination, diffusion and sharing of good practices

Experience gained from the implementation of the project and its evaluation will be disseminated together with other e-learning initiatives at the annual CUHK Teaching and Learning Innovation Expo and other experience sharing sessions.

Impact on teaching and learning

This training and peer learning programme for PGS is expected to be self-sustaining and the web source is expected to keep expanding as more future PGSs will continue to contribute their work as they teach.

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Funding Scheme for Engaging Postgraduate Students in Teaching and Teaching Development Supported by Teaching Development and Language Enhancement Grant for the 2019-22 Triennium

Project title:	**Engaging RPg Students in Teaching Development through Preparing and Implementing an Undergraduate Medical Capsule Design Project**
Principal supervisors and units:	**Professor ZHANG Li, Department of Mechanical and Automation Engineering** **Dr. CHAN Kai Fung, Chow Yuk Ho Technology Centre for Innovative Medicine**

Project objectives

- Increase postgraduate students' delivery and communication skills for teaching, learning and researching by engaging them as teaching assistants in MAEG3920 "Engineering Design and Applications"
- Postgraduates can contribute to Faculty-level by serving in other Engineering courses and conducting usual research work with their acquired skills
- Provide undergraduate students with better learning and practicing experience

Activities, process and outcomes

Postgraduates prepared, delivered project content, related practical skills, and guided undergraduate students throughout the course project. Postgraduates have benefited from their deep involvement with their courseware preparation enhanced. Undergraduates are satisfied with the course and teaching assistants.

Deliverables and evaluation

- Capsules designed, produced, and tested by undergraduates
- Workshop/tutorials conducted by postgraduates
- Teaching materials produced by postgraduates
- Field trip visiting industries
- Postgraduates experience sharing seminar

Dissemination, diffusion and sharing of good practices

Postgraduates shared their experiences in a seminar. Content includes discussing the structural difference between such project-based and regular courses, sharing of phenomena observed during the implementation, and possible improvements that can be implemented in the next offering.

The field trip to the industry can be replicated in other project-based courses to provide mutual benefits and increase the exposure of both undergraduate and postgraduates.

Impact on teaching and learning

The mode of deep involvement of postgraduates in an undergraduate design project has synergy and creates mutual benefits for both parties. Undergraduates' learning experience has improved over the previous years with new and better project material, the opportunity to fabricate their designs, the organized field trip, and feedback provided from postgraduates.

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Funding Scheme for Engaging Postgraduate Students in Teaching and Teaching Development Supported by Teaching Development and Language Enhancement Grant for the 2019-22 Triennium

Project title:	**Enriching the Medical Law of the Law and Medical Students in Hong Kong**
Principal supervisors and unit:	**Mr. LEE Hang Kin Arthur, Faculty of Law** **Ms. WONG Man Yi, Faculty of Law**

Project objectives

The project engages postgraduate students as partners in teaching development through designing micro-modules, video-making, interacting with medico-legal students and practitioners, and public outreach.

Activities, process and outcomes

The project team collaborated on the project website with articles written by JD, LLB and Psychology students, a promotional video, and other administrative and marketing materials. They were invited by Metro Finance Radio to share the importance of medical law with the general public. They will also be the speakers for the upcoming conference entitled "Directions in Legal Education 2022".

Deliverables and evaluation

The project website with short articles published for the purposes of public outreach has been actively managed. The student-initiated video-taking, micro-modules and cross-faculty articles enables the postgraduate students, co-production of short articles, meetings with practitioners including ONC Lawyers, Hong Kong Academy of Medicine and the Hong Kong Bar Association, radio interviews at Metro Finance to hone their project management and presentation skills.

Such invaluable opportunities have enabled the postgraduate students to connect with medical-legal practitioners and the general public.

Dissemination, diffusion and sharing of good practices

The postgraduate students have leveraged different platforms (e.g. webinars, social media pages of legal and medical organizations) to formulate publication topics. The cross-faculty collaboration on articles is healthy to the growth of the medical law community.

Impact on teaching and learning

This project encourages curriculum design based on the needs of the target audience. It emphasizes feedback from stakeholders to ensure the materials are value-adding. It highlights the need to adopt different languages to explain legal terms across different channels.

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Funding Scheme for Engaging Postgraduate Students in Teaching and Teaching Development Supported by Teaching Development and Language Enhancement Grant for the 2019-22 Triennium

Project title:	**Enhancing Cultural Sensitivity among Healthcare Professionals**
Principal supervisors and unit:	**Professor CHAN Ngo Sheung Dorothy, The Nethersole School of Nursing** **Professor SO Kwok Wei Winnie, The Nethersole School of Nursing**

Project objectives

The objectives are to 1) equip the postgraduate students with the skills to develop and prepare appropriate teaching materials; 2) enhance their self-development and develop their collaboration and cooperation skills, 3) develop the recruited South Asian postgraduate student's leadership skills, and 4) develop micro-modules to enhance Master students' understanding of South Asians' culture and raise awareness of areas of concern during the provision of care.

Activities, process and outcomes

Five postgraduate students helped in developing the micro-modules. The micro-modules were implemented in the Master of Nursing year 1 course to assist the implementation of a flipped classroom. This assisted the students with their learning and guided their preparation for next lecture. Self-reflection of the experience was made by the postgraduate students. All agreed that they learned how to work together effectively and how to develop quality teaching materials. For the Master of Nursing students, a satisfaction survey was used to collect their opinions and they agreed that they were satisfied with the micro-modules.

Deliverables and evaluation

Four micro-modules (scenario-based video-clips) were developed. Self-reflection of the postgraduate students regarding the experience was done. The course students' cultural sensitivity and satisfaction with the micro-modules were explored.

Dissemination, diffusion and sharing of good practices

The process and outcome of engaging postgraduate students as partner in teaching development was disseminated in international conference.

Impact on teaching and learning

This project impacted the teaching practice of teacher that a combination of teaching methods and materials should be adopted to enhance students' active and self-directed learning. Engaging postgraduate students in developing quality teaching materials and participation in teaching will be adopted in other class teaching.

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Funding Scheme for Engaging Postgraduate Students in Teaching and Teaching Development Supported by Teaching Development and Language Enhancement Grant for the 2019-22 Triennium

Project title:	**Engaging Research Postgraduate Students to Develop Micro-modules for LSCI6000 Research Methods and Ethics in Life Sciences**
Principal supervisor and unit:	**Professor JIANG Liwen, School of Life Sciences**

Project objectives

To achieve the strategic goal of the University Strategic Plan 2025 in further engaging postgraduate students in teaching and teaching development, in this project we aim to engage existing RPG students of School of Life Sciences (SLS) in developing teaching materials with inputs from RPGs based on their experiences.

Activities, process and outcomes

With the supervision of Prof. Jiang, RPG students have developed short online videos to introduce and discuss recent publications in prestigious international journals (e.g. Science) that are related to Research Methods and Ethics in Life Sciences as well as personal experience and career development. In a simple and inspiring way, they have summarized the content of each selective paper or essay (e.g. "Working Life" published in each issue of Science) with several questions in a 5-minute video for in-class discussion.

Deliverables and evaluation

During the project period, 10 micro-modules that are related with the Research Methods and Ethics in Life Sciences have been produced by Prof. Jiang and his RPGs collaboratively.

Dissemination, diffusion and sharing of good practices

The micro-modules produced in this project have been uploaded to Blackboard and KEEP (CU eLearning) Platforms of the course.

Impact on teaching and learning

While developing the micro-modules, the senior RPG students who were responsible have reinforced the background knowledge and explained the knowledge in a way that junior students can understand easily. It has served as a valuable experience in teaching and will be useful in their further career.

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Funding Scheme for Engaging Postgraduate Students in Teaching and Teaching Development Supported by Teaching Development and Language Enhancement Grant for the 2019-22 Triennium

Project title:	**Engaging Research Postgraduate (RPg) Students to Develop and Produce Micro-modules for Protein Trafficking, Biological Electron Microscopy and Live Cell Imaging**
Principal supervisor and unit:	**Professor JIANG Liwen, School of Life Sciences**

Project objectives

To achieve the strategic goal of the University Strategic Plan 2025 in further engaging postgraduate students in teaching and teaching development, in this project we aim to engage RPg students from the two research groups of Prof. Jiang and Prof. Kang Byung Ho, Co-Supervisor of the project, in developing new teaching materials using our newly established advanced platforms of Cryo- FIB/CLEM (Focused Ion-Beam/Correlative Light and Electron Microscopy) and new research findings.

Activities, process and outcomes

In the project period, we have produced micro-modules from our recent research findings published in prestigious international journals that are related to protein trafficking, electron microscopy and live-cell imaging. We have also produced videos to elaborate the new/advanced platforms and applications in cell biology research.

Deliverables and evaluation

During the project period, 10 publication videos that explain the contents of the research publications have been produced. 2 videos that elaborate the new/advanced platforms and applications in cell biology research have been produced.

Dissemination, diffusion and sharing of good practices

The micro-modules produced in this project have been uploaded to Blackboard and KEEP (CU eLearning) Platforms of the course.

Impact on teaching and learning

While developing the micro-modules, the senior RPg students who were responsible have reinforced the background knowledge and explained the knowledge in a way that junior students can understand easily. It has served as a valuable experience in teaching and will be useful in their further career.