# CONTENTS

<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-5</td>
<td>At a Glance</td>
</tr>
<tr>
<td>6-13</td>
<td>Signature Events</td>
</tr>
<tr>
<td>14-19</td>
<td>Programmes, Series, Sessions</td>
</tr>
<tr>
<td>20-21</td>
<td>Teaching Enhancement Grants</td>
</tr>
<tr>
<td>22-23</td>
<td>Consultations</td>
</tr>
<tr>
<td>24-27</td>
<td>Collaborations &amp; Outreach</td>
</tr>
<tr>
<td>28-29</td>
<td>Publications</td>
</tr>
<tr>
<td>30-31</td>
<td>Visitors</td>
</tr>
<tr>
<td>32-35</td>
<td>Academic Developers</td>
</tr>
<tr>
<td>36</td>
<td>Administrative Support Team</td>
</tr>
<tr>
<td>37</td>
<td>2020: What To Look Out For at CDTL</td>
</tr>
<tr>
<td>38</td>
<td>Thank You: From the CDTL Team</td>
</tr>
</tbody>
</table>
AT A GLANCE

- 2 Signature Events
- 2 Programmes
  - 3 Series
  - 42 Sessions
- 229 Consultations
- 22 Collaborations & Outreach
- 2 AJSoTL issues
- 3 CDTLink issues
- 16 Teaching Enhancement Grants
- 6 Institutional Visits
Signature Events
There are 2 Signature Events organised in 2019, as follows:
  • Education in Residence Programme (EiRP), with Dr Mary Deane SORCINELLI as the EiRP Scholar.
  • NUS Festival of Learning, a two-day programme, with Higher Education Campus Conference (HECC) on Day 1 that brought together faculty, students, and staff members in sharing ideas and good practices in teaching to optimise student learning, and Learning on NUS Campus and ATEA Ceremony on Day 2 to showcase excellent teachers in action and celebrate teaching excellence.

Programmes, Series, and Sessions
In supporting NUS faculty colleagues in their professional development, the following teaching and learning programmes, series, and sessions were offered:
  • 2 key programmes - the Professional Development Programme - Teaching (PDP-T) and the Teaching Assistants Programme (TAP);
  • 3 series - Developing a Teaching Portfolio, Blended Learning, and Grant Writing; and
  • 42 sessions led by academic developers and sharing sessions by faculty colleagues.

Consultations
Throughout the year, our academic developers conducted 229 consultation sessions where they met faculty colleagues either on a one-on-one or small group basis to discuss various teaching and learning issues and teaching inquiry projects.

Collaboration & Outreach
Our academic developers participated in 22 collaboration and outreach projects with faculty colleagues from various departments. We were engaged as co-applicants for research grants, co-authors of journal articles, and co-investigators in module/programme development or teaching inquiry projects.

Publications
2019 was a productive year for CDTL's publications:
  • CDTLink released 3 issues - A Year in Review 2018 and two issues focusing on strategies for engaging students in large classes and blended learning. We are grateful to faculty colleagues and students who shared their strategies and to those who responded to these blog posts.
  • AJSoTL released 2 issues. In 2019, the journal continued to receive a higher number of quality submissions from NUS faculty colleagues, Singapore, and beyond.

Teaching Enhancement Grants (TEG)
16 Teaching Enhancement Grants were awarded this year, namely 11 Learning Improvement Projects and 5 Education Conference Grants

Institutional Visits
We hosted 6 visits by higher education institutions and prominent scholars from around the world.
During her visit, Dr Mary Deane SORCINELLI, EiRP Scholar 2019, gave a lecture and workshop to the NUS community that underscored the importance of mentorship and building “productive mentoring networks”. She shared concrete ways to implement (and assess) the effectiveness of mentorship programmes that will help create a positive cycle and culture of enablement so that as an academic community, in addition to realising our own potential, we can contribute to the aspirations of others and the community as a whole.
Engaging in conversations at the post-lecture reception

Bottom row: EIRP 2019 Scholar Dr Mary Dean SORCINELLI (middle) with members of Dr Ruth WONG’s family and invited guests. The Wong family are the donors of the Ruth Wong Memorial Lecture.
Top row (from left): Assoc Provost (Undergraduate Education) A/Prof CHNG Huang Hoon with CDTL’s Director and Deputy Directors
Higher Education Campus Conference (HECC) 2019

The Higher Education Campus Conference (HECC) 2019, which took place on Day 1 of the NUS Festival of Learning, was about sharing good practices in a contextualised and grounded way. It was also about sharing ideas in anticipation of future teaching and learning environments.

The conference theme focused on nurturing a culture of teaching, one that appreciates and values diversity and inclusivity in the context of the changing higher education landscape at NUS.
Ms Sylvia SIM (CELC) talking about student voice

Keeping the conversations going even during tea breaks!

Ms Sylvia SIM (CELC) talking about student voice
Learning on NUS Campus (2019)

Learning on NUS Campus (2019), held on Day 2 of the NUS Festival of Learning, brought together excellent teachers who presented short talks and demos.
Participants listening to a talk by A/Prof Eleanor WONG (Law)

Dr Francis CHONG (Chemistry) and A/Prof LEE Kooi Cheng (CELC) at their respective sharing sessions
ATEA Ceremony

Day 2 of the NUS Festival of Learning 2019 recognised excellent teachers at the ATEA Ceremony, while recipients of the 2019 Outstanding Educator Award (OEA) presented talks as part of the OEA Public Lectures Series.

A/Prof Hans TAN spoke on the topic “Deform to Create” in the context of creative design.

A/Prof NGA Min En shared her teaching journey, which she entitled “Me? Teach? The Evolution of an Incidental Teacher”.

NUS Provost Prof HO Teck Hua envisioned the journey ahead for NUS through his keynote address, “Charting the journey for lifelong education and adult learning at the National University of Singapore”.

OEA WINNERS

02
OEA WINNERS

08
HONOUR ROLL
RECIPIENTS

46
ATEA WINNERS
PROGRAMMES

CORE
02 runs | 66 participants*

SEMINAR SERIES
02 runs | 44 participants*

PDP-T

This programme is offered to NUS early-career academics with fewer than 3 years of higher education teaching experience. Conducted twice annually, the PDP-T provides a collegial environment to help new faculty explore and critically reflect on their teaching practice, in order to improve their students’ learning.

The programme comprises two components: the PDP-T Core and the Seminar Series. The Core is a 3-day programme which focuses on helping participants become more familiar with teaching and learning processes. The Seminar Series engages participants in a mentored faculty community of practice that culminates in the completion of a course portfolio. These sessions aim to integrate and develop concepts and ideas introduced during the Core into the participants’ teaching practice.

* unique participants
Teaching assistants (TAs) play an important role in supporting teaching in tertiary institutions. As part of the University’s commitment to teaching excellence, CDTL conducts a formal training programme for TAs. The Teaching Assistants’ Programme (TAP) aims to enhance the TAs’ knowledge and skills in facilitating collaborative learning in classrooms. These hands-on sessions focus on planning and designing peer-to-peer learning that engages students to participate actively during labs and tutorials to improve their learning.
SERIES

BLENDING LEARNING

02 runs
32 participants *

* unique participants

DEVELOPING A TEACHING PORTFOLIO

02 runs
106 participants *

GRANT WRITING

01 run
21 participants *
**Blended Learning**

This 18-hour series focuses on guiding colleagues through an evidence-informed approach to design and develop blended learning modules. The series aims to support colleagues in identifying and adopting appropriate strategies and educational technologies to develop a blended module that engages learners. The principles and strategies that underpin blended learning are discussed within relevant disciplinary contexts. The series ends with participants presenting a prototype blended learning lesson at a gallery walk.

**Developing a Teaching Portfolio**

The teaching portfolio is critically important as a way of documenting colleagues’ achievements as academic teachers, and assumes a key role in the promotion process. The main goals of this series are for participants to reflect on their teaching, examine what constitutes high-quality teaching, articulate their teaching philosophies, and explore how they can draw on multiple sources of evidence to develop impact narratives that demonstrate growth as a teacher and good teaching practice.

**Grant Writing**

This two-day series guides colleagues to prepare a formal education grant proposal for research into higher education. In addition, the series fosters cross-institutional, collaborative projects. It introduces participants to qualitative and quantitative research methodologies, supports them to formulate research questions, explore current and relevant literature, and design appropriate measures of students’ learning outcomes.
CDTL runs sessions which support a range of teaching and learning needs. They cover pedagogical topics, including designing online lectures and e-learning resources, promoting student engagement in large classes, and tracking student learning through mid-semester feedback.

In addition, faculty members regularly share their approach. Some of the topics led by faculty members focused on using peer feedback to engage their students, benefits and challenges of using wikis for learning, and applying strategies in the classroom to foster creativity.
### SESSION LISTING

#### CDTL-Led
- LumiNUS For Teaching and Learning: Getting Started
- Facilitating Effective Online Discussions Using LumiNUS
- Assessing Student Learning Using LumiNUS
- Designing e-Learning Resources Using Camtasia Studio
- Moderating Online Synchronous Discussions for Tutorials
- Recording Online Lectures with Panopto
- Designing an Authentic Learning Environment
- Designing Learning Activities to Promote Deep Learning
- Developing Rubrics for Assessing Students’ Learning
- Promoting Active Learning in a STEM Tutorial Class
- Promoting Student Engagement in Large Classes
- Scaffolding Student Learning
- Tracking Student Learning Through Mid-semester Feedback

#### Sharing by Faculty
- Applying a Rubric Development Cycle: Challenges from Rubric Application to Validation
- Course Design to Connect Theory to Real-World Cases
- Engaging Students Using Peer Feedback
- Initiatives for Fostering and Valorizing Creativity in Science Students
- Learning and Documentation Using Wikis: Use Cases, Benefits, and Challenges
- Personalising Feedback & Support for Students at University: Affordances & Impact of Learning Analytics Reporting Systems
- Steering Students Towards Overseas Experiential Learning
- Theory for the Reflective Educational Practitioner
TEACHING ENHANCEMENT GRANTS

16 GRANTS AWARDED

11 Learning Improvement Projects

05 Education Conference Grants
# Learning Improvement Projects

## 1-year Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Designing Fieldwork Activities for Multidisciplinary Undergraduates Through Inter-departmental Collaboration</strong></td>
<td>Linda SELLOU, Dept of Chemistry; Vikneswaran Gopal, Dept of Statistics &amp; Applied Probability</td>
</tr>
<tr>
<td><strong>Exploring Undergraduate Students’ Abilities of Learning and Applying Systems Thinking and Modelling Skills to Energy Challenges/Issues</strong></td>
<td>BELLAM Sreenivasulu, Residential College 4; R. Subramaniam, National Institute of Education, NTU</td>
</tr>
<tr>
<td><strong>Implementing IT Tools for Spaced-retrieval, Interleaving and Collaborative Learning</strong></td>
<td>Chammika UDALAGAMA, Dept of Physics</td>
</tr>
<tr>
<td><strong>Improve At-risk Student Performance by Peer Tutoring With Lecturer Supervision</strong></td>
<td>ZHANG Jianwen, Dept of Electrical &amp; Computer Engineering</td>
</tr>
<tr>
<td><strong>Intercultural Language Teaching and Learning and the Development of Intercultural Competence: Cases of Thai as a Foreign Language</strong></td>
<td>Sasiwimol KLAYKLUENG, Centre for Language Studies</td>
</tr>
<tr>
<td><strong>Integration of Bioscience and Nursing Practice to Enhance Knowledge Acquisition and Learning Experiences of Nursing Students in Year 1 Undergraduate Nursing Curriculum</strong></td>
<td>Tanushri ROY, Alice Lee Centre for Nursing Studies (ALCNS); Zakir Hussain Abdul Salam, ALCNS; LIAW Sok Ying, ALCNS; Lim Fui Ping, ALCNS</td>
</tr>
<tr>
<td><strong>Pushing Analytical Skills to the Limit by Building a Raspberry Pi Lab Instrument – A Multidisciplinary Project</strong></td>
<td>Michael YUDISTIRA, Dept of Chemistry</td>
</tr>
</tbody>
</table>

## 2-3 year Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Blended Learning to Internalise Engineering Leadership: A Longitudinal Study of Student Learning in a Critical Thinking and Writing Course</strong></td>
<td>Nadya Shaznay PATEL, Centre for English Language Communication (CELO); WU Siew Mei, CELC</td>
</tr>
<tr>
<td><strong>Promoting Team-based Learning Pedagogy in Engineering Education – a Case Study to Develop Intra-Department Teaching and Learning CoP</strong></td>
<td>SNG Wei Meng, Daniel, Dept of Mechanical Engineering; Woon Keng Soon, Dept of Mechanical Engineering</td>
</tr>
<tr>
<td><strong>RepoSense: A Tool for Visualizing Student Work in Code Repositories</strong></td>
<td>Damith Chatura RAJAPAKSE, Dept of Computer Science</td>
</tr>
<tr>
<td><strong>Writing and Critical Thinking Class and its Affective Learning Outcomes</strong></td>
<td>LEUNG Wing Sze, Evelyn, University Scholars Programme</td>
</tr>
</tbody>
</table>
CONSULTATIONS

56 Grant applications
141 One-On-One
32 Small group
CDTL’s academic developers (ADs) offered consultation sessions for 56 grant applications, namely 25 teams applying for the Ministry of Education (MOE) Tertiary Education Research Fund (TRF) and 31 colleagues proposing Teaching Enhancement Grant (TEG) projects. The main objective of these sessions was to provide and discuss feedback that might enhance the proposals.

Besides consulting on grant applications, the ADs offered 141 one-on-one and 33 small group consultation sessions for faculty colleagues and teaching assistants. These sessions encompassed providing feedback on course portfolios, teaching portfolios for those applying for promotion, advice on module design and other aspects of teaching and learning.
In 2019, our academic developers were active in collaborating with colleagues in CDTL and from various other departments. We were involved as co-applicants for research grants, co-authors of journal articles, and co-investigators in module/programme development as well as teaching and learning inquiry projects.
Grant Application

MOE TRF Project: Investigating Feedback From Academic and Industry Supervisors During Final-year Projects (FYP) and Industry Attachments
Sarah CHEAH, Dept of Management & Organisation;
Bimlesh WADHWA, Dept of Computer Science;
Mark GAN, CDTL

Workforce Development Applied Research Fund (WDARF) by the Institute of Adult Learning (IAL): Development and Evaluation of Building Resilience@Work Training Among Healthcare Workers
LAU Ying, ALCNS;
Jeanette CHOY, CDTL
Module/Programme Development

**e-Module Development**

Co-design e-Assessment Sessions (ExamSoft) for Faculty
WU Haixin, Centre for Instructional Technology (CIT);
Mark GAN, CDTL

Co-design Online Course to Build Online Teaching Capacity of Academic Teachers
Collaboration with Open Networked Learning;
Alan SOONG, CDTL

Co-design Use of Pre-class Video Learning Resources in a Blended Learning Economics Module
SEET Min Kok, Dept of Economics;
Mark GAN, CDTL

Re-design The Fundamentals of Academic Life
Esther TAN Peck Geok, Registrar’s Office;
Cheryl GIAM Mun-Ye, Registrar’s Office;
Jeanette CHOY, CDTL;
Mark GAN, CDTL;
Alan SOONG, CDTL;
Adrian LEE, CDTL;
LEE Kooi Cheng, CDTL;
Kiruthika RAGUPATHI, CDTL

**Module Development**

Co-design Develop Your Own Module” (DYOM) “Chemistry of Food
Francis CHONG Yuan Yi, Dept of Chemistry;
Mark GAN, CDTL

**Programme Development**

Customised Programme for Post-docs at the Yong Loo Lin School of Medicine (YLLSoM)
Inthrani RAJAH, Dept of Pharmacology
Adrian LEE, CDTL;
Alan SOONG, CDTL;
Mark GAN, CDTL;
Kiruthika RAGUPATHI, CDTL

Co-design Feedback Session for Resident Teaching Assistants (TAs) in Faculty of Dentistry
Kelvin FOONG, Faculty of Dentistry;
Mark GAN, CDTL

Mentorship Programme for Full-Time TAs
YEONG Foong May, Dept of Biochemistry;
Mark GAN, CDTL

Customised Dialogue Session for Dept of Communications and New Media (CNM)
Audrey YUE, CNM;
ZHANG Weiyu, CNM;
Adrian LEE, CDTL
Mark GAN, CDTL;
Kiruthika RAGUPATHI, CDTL
Advocating for Self-regulated Learners Using Peer Feedback in Higher Education  
CHAN Yah Shih, ALCNS; 
Mark GAN, CDTL

Assessing the Impact of Grade-free Learning  
Chris McMorran, Dept of Japanese Studies; 
Kiruthika Ragupathi, CDTL

Effects of Learning through Peer Discussions on Student Performance  
LOY Hui Chieh, Dept of Philosophy; 
Kiruthika RAGUPATHI, CDTL

Guidance on Literature Review with Research Assistant for Out-of-classroom Project  
Daniel JEW, College of Alice and Peter Tan (CAPT); 
Alan SOONG, CDTL

Investigating Instructor Intervention in Massive Open Online Course (MOOC) Forums  
KAN Min-Yen, Dept of Computer Science 
Kiruthika RAGUPATHI, CDTL 
Bernard TAN, PVO

Review of Rubrics Used in Nursing Assessments  
ALCNS Team; 
Mark GAN, CDTL

Significant Conversations and Microcultures in the Alice Lee Centre for Nursing Studies (ALCNS)  
Kamala DEVI, ALCNS; 
Alan SOONG, CDTL

Students’ Experience at NUS and at University Town Residential Colleges: A Longitudinal Study  
Adrian LEE, CDTL; 
Kiruthika RAGUPATHI, CDTL

Study on Engineering Students’ Motivation During FYP  
LUO Sha, Dept of Electrical & Computer Engineering; 
Mark GAN, CDTL

Using Student Feedback to Enhance Teaching Practices and Policies  
Johan GEERTSEMA, CDTL; 
Kiruthika RAGUPATHI, CDTL

Web-based Clinical Pedagogy Programme to Enhance Registered Nurse Preceptors’ Teaching Competencies  
Vivien WU Xi, ALCNS; 
Mark GAN, CDTL
PUBLICATIONS

AJSoTL
2 Issues:
6 Articles
9 Reflections

CDTLink
3 Issues:
1 Year in Review
2 Strategies For...
Asian Journal for the Scholarship of Teaching and Learning (AJSoTL)

Volume 9, Number 1
The 2 articles and 4 reflections showcase examples of SoTL in action and reflections on the challenges of improving student learning, such as:
• applying flipped classrooms with real-time interventions
• comparing critical questions asked by first year undergraduate and postgraduate students
• cultivating 21st-century skills in PhD students
• reflecting on beliefs in English Language teaching and learning and actual classroom practice

URL: http://nus.edu.sg/cdtl/engagement/publications/ajsotl-home/archive-of-past-issues/v9n1

Volume 9, Number 2
The 4 articles and 5 reflections in this bumper issue highlight different ways of improving teaching practice, including:
• investigating the attributes of critical thinking in academic writing
• using person-centred analysis to investigate the pedagogical approaches of graduate TAs
• developing an instrument to measure the impact of student self-assessment
• using course design to connect political philosophy theory to real-world cases
• using 3D imaging and augmented reality to build capacity of undergraduate dental students
• evaluating the effectiveness of pre-class video resources in a blended learning Economics module

URL: http://nus.edu.sg/cdtl/engagement/publications/ajsotl-home

CDTLink
In 2019, we shared A Year in Review 2018 and highlighted two key teaching and learning issues which resonate with the NUS community.

CDTL 2018: A Year in Review
We showcased the inaugural installment of A Year In Review, in which we looked back on key events and developments that occurred in CDTL in 2018.

URL: http://blog.nus.edu.sg/cdtl/2019/01/14/januaryfebruary-2019/

Strategies For...Engaging Students in Large Classes
We featured colleagues who shared concrete examples, strategies, and techniques that have worked for large classes.

URL: http://blog.nus.edu.sg/cdtllink/2019/03/19/marapr-2019/

Strategies For...Engaging Students in Blended Learning
We turned the spotlight on blended learning - what it is and why colleagues might consider this approach. We also featured students who participated in such modules, as they shared their experience and thoughts on improvements.

VISITORS

University of St. La Salle, Bacolod City, PHILIPPINES

Victoria University of Wellington, NEW ZEALAND

University of Kansas, UNITED STATES

Sri Sivasubramaniya Nadar (SSN) Institutions, Chennai, INDIA

Université de Moncton, New Brunswick, CANADA

National Taiwan Normal University
ACADEMIC DEVELOPERS

Back row (from left): Jeanette CHOY, Mark GAN, Johan GEERTSEMA, Adrian LEE, Alan SOONG
Front row (from left): Kiruthika RAGUPATHI, Charina Li ONG, LIEW Shin Dee, LEE Kooi Cheng
Publications & Presentations


Selected Publications & Presentations


Selected Publications & Presentations


Back row (from left): BEH Keng Khim, Elsie LIM
Middle row (from left): Doreen THIA, Halizah binte HAMDAN (Teaching Academy)
Front row (from left): Pansy KOK, Aini binte JAAFAR, MA Lin Lin, NG Cheng Cheng (Teaching Academy)
Winnie CHOI (not in photo)
In 2020, a key focus will be on strengthening learning communities within NUS through re-conceptualising the Teaching Enhancement Grants (TEG) and by finding good ways in which our outreach platforms (CDTLink and the NUS Festival of Learning) can further engage different NUS communities. Another exciting development is the introduction of a new Module Design Institute.

**WHAT’S DIFFERENT?**

**TEG:**
Learning Communities + Sharing

**Outreach:**
CDTLink + Festival of Learning

**WHAT’S NEW?**

**Module Design Programme/Institute**
A new course to support module design will be introduced in 2020. This intensive multi-day course will support faculty in re-imagining current modules in fostering significant learning environments for students.
Thank you.

2019 was a most enriching and fulfilling year for us as we had opportunities to engage with many colleagues, to collaborate with them, and to learn with them.

Thank YOU for your continued support and contributions.