# EDUCATIONAL DEVELOPMENT AT SUTD

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**S**ingapore University of Technology and Design started out in collaboration with Massachusetts Institute of Technology (MIT) in 2012, and the educational development of faculty members at SUTD was initially taken care by the MIT Teaching and Learning Lab (TLL).

Educational Development broadly refers to learning and development in teaching and it is usually supported by units known as teaching and learning centres. According to the Professional and Organizational Development network, educational development includes instructor, instructional, and organizational development.

In the early years of SUTD, educational development with MIT TLL involved selected faculty members attending the Training to Teachers (T2T) Program at MIT. A total of 30 faculty members had attended the T2T program over the course of 5 years. This is about 25% of faculty members then. At the same time, there were also several support initiatives offered by the Office of Education. This

included the annual Pedagogy day and Pedagogy innovation fund, with periodical pedagogical workshops and talks by experts.

As the university began to mature, the Office of Education decided to set up a central unit to take care of the educational development work at SUTD. So the Learning Sciences Lab was founded in July 2016.

Currently, the LSL team consists of myself and Clement Lim, under the advisory of Associate Provost for Education, SUTD Academy and Digital Learning, Professor Pey Kin Leong.

The aim of learning Sciences Lab is to inspire teaching excellence at SUTD. LSL's motto is Engaged Teaching for Engaged Learning and Engaged Learning for Effective Learning. We named the unit as Learning Sciences Lab to emphasize the research element in teaching, and to signify a multidisciplinary approach to innovating and evaluating teaching.

Our goals are that

- 1. We move from individual-oriented educational development to include community-oriented educational development
- 2. Include all types of instructors such as graduate teaching assistants in educational development
- 3. Include staff members who play supportive roles in teaching and learning in educational development
- 4. Induce a change from teaching to scholarly teaching that is evidencebased, reflective and peer reviewed
- 5. Shift from short-term training workshops to self-directed and lifelong learning to enhance teaching through Scholarship of Teaching and Learning
- 6. Leverage training opportunities for professional recognition
- 7. Connect SUTD members with local and overseas universities and other industrial partners/stakeholders on educational development

We hope to achieve this by working with key stakeholders in SUTD to come up with a holistic guideline to identify the development needs and offer suitable programs and services that fit the SUTD context. In addition, we hope to build in recognition for engaging in educational development activities.

The educational development blueprint at SUTD caters to all levels of instructors, be it teaching assistants or faculty members, teaching track or tenure track, early career or established. Our current focus at present is mainly instructors as a community, and we also engage in some degree of organizational educational development (in contributing to policy making on teaching and learning etc.). All our activities, in particular, talks and workshops are typically open to all at SUTD, including students. This is one of our ways of reaching to the entire SUTD community.

In the first year of LSL, we focused on initiatives for graduate teaching assistants. The graduate teaching course on "Teaching at SUTD: Engaging the Learners" was established and we have now completed 5 runs over the 2 years, reaching out to nearly 130 GTAs, with good and positive feedback.

This year, we focus on initiatives for faculty members. The faculty educational development blueprint in Figure 1 captures the overview of the initiatives.

The blue print was designed based on the following factors: (1) Open and collaborative organizational culture at SUTD, (2) Existing educational development initiatives, (3) Existing recognition system for engaging in educational development work and (4) Needs as indicated by various stakeholders such as faculty and heads of pillars and clusters. Several discussions and focus groups were conducted with key stakeholders.

The blue print was also passed through various categories and levels of faculty and staff members to seek consensus and fine-tune.

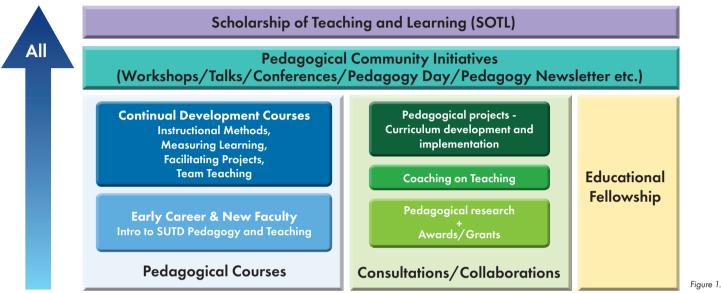
Based on the blueprint, LSL provides four types of support initiatives for faculty: (1) Pedagogical courses/workshops, (2) Community-oriented initiatives such as talks, pedagogy newsletter and pedagogy day, (3) Consultations and collaborations. The fourth and new addition that we are working on in 2018 is setting up an opportunity for professional recognition in teaching for faculty members through an educational fellowship program.

The traditional pedagogical courses are kept minimal for three main reasons. One is the belief that pedagogical workshops that are theoretical may not be sufficient. Instead, we would like to encourage more practice-oriented, reflective teaching which are long-lasting. So we have identified Scholarship of Teaching and Learning (SOTL) to be the main mode of faculty educational development at SUTD.

The second reason is tied to the first. We believe that educational development at SUTD should be faculty-owned. This is in line with SUTD's pedagogy of studentcentered learning approach which suggests taking ownership of self-development. Hence we would like to move away from instructor/specialist-oriented teacher training to practitioner driven experiential learning.

The third is the resource limitation in running many workshops at this juncture. Therefore, we have kept the pedagogical courses minimal.

## SUTD'S FACULTY EDUCATIONAL DEVELOPMENT BLUEPRINT



At present, the introductory workshop on Teaching at SUTD for new and early career faculty members is the main pedagogical course/workshop offered by LSL. This is run bi-annual, starting from June 2018. SUTD's pedagogy and teaching context is unique and different from many other universities. Teaching at SUTD involves multi-disciplinary curriculum, teaching in teams, student-centered teaching, design projects as signature elements. So early career and new faculty members are to attend the introductory session to SUTD teaching context.

In line with SUTD's pedagogy and student-centered learning approach, our aim is that all faculty members are engaged in some form of Scholarship of Teaching and Learning (SOTL), which is characterized by (1) Scholarly teaching, (2) Reflective, evidence-based teaching, and (3) Peer-reviewed teaching. This could be in partnership with LSL or independently. But our hope is that such explorations are fed back into the SUTD community to inspire teaching innovations and excellence. LSL's pedagogical presentations, consultations and collaborations on pedagogical projects, teaching, and educational research support this. Community initiatives such as Pedagogy day, Pedagogy newsletter, LSL website and blogsite add to this.

Learning from experience that lack of participation in educational development work is often linked to perceived value and recognition, we are introducing a pilot scheme of educational fellowship. The educational fellowship involves faculty members taking a reflective journey to document their experiences and experimentations as a teaching portfolio, which is then submitted for peer review and certification, leading to international recognition. Our aim is that the educational development is bi-functional, as a professional development tool as well as a recognition scheme.

So in a nutshell, educational development at SUTD aims to take a holistic, inclusive, community-based approach that is innovative in embracing SOTL as the primary medium for educational development.

To assess the impact of educational development work on teaching and learning at SUTD, LSL takes a multi-pronged approach. While traditional workshops tend to rely on end of workshop feedback, this may not be applicable for SOTL work.

The measures of impact of SOTL work are better assessed through measures such as the number of faculty involved in SOTL work, presentations, publications in professional and academic media and student feedback of teaching and course etc. Studies and reflections from faculty members on their teaching, as evident from this SUTD pedagogy newsletter, would be one such measure.

We also take a qualitative feedback approach to gain a deeper understanding on what works and what does not, since our reason for feedback is developmental rather than evaluative.

LSL also conducts self-evaluations of its own works. Two of the projects that we are currently working on are:

- 1. A study of educational development centres in Singapore
- 2. A study on the impact of the graduate teaching course on conceptual beliefs and practices of teaching assistants.

In addition to this, LSL also participates in various conferences to share insights on teaching and learning. In general, we believe that reflective, evidence-based and community oriented development practices benefit practitioners and lead to continual learning, improvement and excellence.

Our hope is that such a community-oriented, self-developmental approach, practiced at multiple levels in the university will inspire our students to take a similar approach and therefore excel and contribute.

The way forward is towards excellence, through continual learning.

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### ABOUT THE AUTHOR

Dr. Nachamma is Program Director of Learning Sciences Lab. She teaches the graduate course "Teaching at SUTD: Engaging the learners". Her research interest includes student-centered learning, technology-enabled learning and faculty educational development.