I PURPOSE

The TEG provides monetary support for scholarly projects that investigate and aim to improve teaching and learning practices. The grant is intended to promote reflective and outcomes-based teaching and learning.

The TEG will support the following types of projects:

<table>
<thead>
<tr>
<th>Type</th>
<th>Category</th>
<th>Project Period</th>
<th>Maximum Grant amount per project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Improvement Projects</td>
<td>Short-term projects and activities that will enhance teaching and learning</td>
<td>1-year (Aug 2018 – Jul 2019)</td>
<td>$10,000</td>
</tr>
<tr>
<td></td>
<td>Long-term projects – more extensive and longitudinal projects that will significantly enhance teaching and learning</td>
<td>2–3 years (Aug 2018 – Jul 2020/2021)</td>
<td>$25,000</td>
</tr>
<tr>
<td>Education Conference</td>
<td>Financial assistance for paper presentation of project at education conferences or in education track of a disciplinary conference, subject to acceptance of abstract by conference</td>
<td>For education conferences held between Aug 2018 – Jan 2019 [Subject to availability of funds] Application will open in Dec 2018 for education conferences that fall between Feb–Jul 2019</td>
<td>$5,000</td>
</tr>
</tbody>
</table>

II ELIGIBILITY

Application is open to all faculty teaching members of NUS, working either individually or in small groups, whether inter-departmentally or inter-faculty.

III THEME

It is often said that teaching is more an art than a science, and that it cannot be rigorously evaluated: that the evidence is easily ‘fake-able’. Yet rigorous evaluation is important if the University is to reward high quality teaching since it has a significant impact on student learning. So, what does good teaching look like and how do we recognise it when we see it? What is strong evidence of good teaching?

As part of this year’s Teaching Enhancement Grants (TEG), we are calling for high quality projects that will investigate the evaluation of teaching achievement and quality at NUS. A portion of the funds available will be reserved for proposals that investigate, and propose actionable plans for, how the University could improve the ways in which teaching is evaluated.

Projects should focus on one or more of the following four Evaluation Domains:

1. peer review of teaching, which includes the official Peer Review of Teaching system
2. indirect evidence of student learning, which includes the official Student Feedback system that is intended to capture students’ experience of teaching
3. direct evidence of students’ learning
4. self-reflection, through the requirement for a Teaching Portfolio
We are looking for proposals that will have:

- concrete outputs, in the form of actionable plans to improve current ways of collecting evidence of teaching achievement
- positive outcomes, in connecting with the research-intensive academic culture of NUS, ensuring greater acceptance in the community of measures to evaluate teaching, and increased quality of the evaluations
- longer term, positive impact on the quality of teaching at NUS and appreciation of its value as a central element of academic practice at the University

Beyond this special focus theme, we also have an open category. Under this category, we welcome proposals in all areas of teaching and learning. Such areas include, but are not limited to, adult education, mentoring of teaching, novel approaches to teaching, tracking the impact of learning, assessment practices, use of technology, experiential learning, and residential learning.

IV SELECTION CRITERIA

a. 30% or more of the TEG budget will be set aside to fund proposals that are related to the theme. Proposals that are not related to the theme (i.e. open category) will also be considered but subject to merit and availability of funds.

b. TEG proposals should identify a problem relating to actual teaching and learning practice, propose a specific course of action for addressing this problem, and formulate a plan for evaluating the project. In other words, proposals should be written in a way that is similar to proposals involving any other research. They should (i) be problem based and hypothesis driven, (ii) build on prior, related research relevant to the topic, (iii) be oriented to educational practice, and (iv) have a clear and rigorous plan to collect and analyse, whether quantitatively, qualitatively, or through a mixed-methods approach, direct evidence of the impact of the project on student learning using actual work done by students. Investigators should collect direct evidence of impact on learning. While surveys of how students felt about the intervention can provide useful evidence, it will remain at most indirect. Given how important an evaluation plan is, and the specialized nature of such evaluation, investigators are strongly encouraged to consult with CDTL academic developers prior to proposal submission in order to formulate a plan (see below, Section VI, a).

c. Relevant and adequate literature review must be included in the proposal, both to help provide a rationale for the study and a theoretical framework for the proposed project to ensure that it contributes to or advances teaching and learning in higher education. Proposals that do not properly situate the project by means of a literature review and a theoretical framework will not be considered.

d. The educational outcomes of the proposals should go beyond surveying students’ perceptions or satisfaction levels. Evaluation methods that measure higher orders of student learning evidenced in terms of improved skills levels/understanding/application are preferred.

e. Proposals that do not display scientific rigor in terms of conceptualization, planning and collection of evidence will not be considered. Proposals that focus only on technology, whether hardware or software, and only pay limited attention to pedagogy will not be sufficient.

f. The following criteria will be considered in the evaluation and selection of proposals:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
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<tbody>
<tr>
<td>Research Problem (20%)</td>
<td>• Identification of the learning problem/challenge situated in the learning environment</td>
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<tr>
<td></td>
<td>• Clear articulation of the research question</td>
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<tr>
<td>Literature Review (20%)</td>
<td>• Review of the current literature associated with this problem</td>
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<td></td>
<td>• Connection with theory (where appropriate)</td>
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</tbody>
</table>
Method (20%)
- Appropriate and well-thought out methodology/approach
- Discussion of the type of evidence that will be collected to measure real learning enhancement in students’ skills, attitudes, and/or behaviours
- Discussion of any existing local data and how it influences the evaluation method adopted (where appropriate)

Significance (40%)
- Discussion on how the project will change/influence teaching practice and/or student learning

Budget is not a criterion for deciding the quality of the proposal. However, PIs should submit an appropriate budget plan that will be effective in maximizing the benefits/outcomes of the project.

g. Where necessary, applicants’ clarifications on their proposals may be sought through emails and/or chat sessions.

h. The following criteria will be considered in the selection for Education Conference grants:
   i. Scholarly depth of the conference paper/research work
   ii. Reputation/standing of the education conference
   iii. Potential of the work to impact student learning/experience in NUS
   iv. Potential of the work to influence thinking/practice
   v. Potential of publishing the work in teaching & learning/education journals

Presentation of papers based on projects undertaken with a TEG grant will be accorded higher priority, while lower priority will be accorded for applications by past recipients who have not disseminated their previous conference papers/research. Applicants who have been funded in the last three years may not be funded due to the limited budget.

Where necessary, to aid evaluation, submission of extended versions of the abstracts/draft papers may be required.

V USE OF THE GRANT

a. Funds awarded for Learning Improvement Projects can be used for the following:
   - Engaging part-time manpower (such as student research assistants to assist in compilation of data and analysis, etc.);
     Details on NUS Student Work Scheme for NUS Undergraduate & Graduate Students can be found at [http://www.nus.edu.sg/cfg/employers/post-job](http://www.nus.edu.sg/cfg/employers/post-job). [Please use the recommended hourly rates at [https://share.nus.edu.sg/corporate/policies/hr2/compensation/NSWS-pay-rate.pdf](https://share.nus.edu.sg/corporate/policies/hr2/compensation/NSWS-pay-rate.pdf)]
   - Materials to build prototypes / models
   - Purchase of teaching equipment, software, etc. specifically required for the project/activity. Applicants should be able to produce quotations when called upon to back up the cost of these budgeted items [Note: the ownership of the equipment, software purchased using TEG funding may stay with CDTL after completion of the project so that these assets can be channeled to other research projects/activities]

b. The following items will not be supported for funding:
   - Consumables such as stationery, ink cartridges printing/photocopying of teaching materials, reference books, hard disks, USB flash drives, etc.
   - Equipment that is available in the department/faculty, such as personal computers, laptop, video camera, mobile phones, existing software such as SPSS, etc.
   - Publication costs
   - Costs for organizing symposium workshops
   - Costs for training of staff or engaging professional expertise to train staff
   - Development of teaching materials/textbooks linked to a specific module or a set of modules that do not have a strong pedagogical component
   - Costs for secretariat support
   - Field trips for students
c. The use of the Education Conference Grant will be subject to the existing University guidelines on Academic Staff Conferences. ([https://staffportal.nus.edu.sg/iw/resources/staffportal/hr2/docs/benefits/policy-on-leave-matters-financial-assistance.pdf](https://staffportal.nus.edu.sg/iw/resources/staffportal/hr2/docs/benefits/policy-on-leave-matters-financial-assistance.pdf))

d. It is possible that partial TEG funding will be provided for selected projects/activities and support from departmental or other sources of funding may be required.

### VI SUBMISSION OF PROPOSALS

a. [Pre-submission] For the purpose of assisting applicants in formulating their proposals, in particular evaluation plans, applicants may schedule a consultation with CDTL (point-of-contact: Mr Alan Soong cdtsska@nus.edu.sg) to review their preliminary/draft proposal.

b. Proposals are to be submitted using the appropriate prescribed forms and uploaded via the TEG submission portal as indicated below by the closing date, 23 Apr 2018 (Mon):

<table>
<thead>
<tr>
<th>Category</th>
<th>Prescribed Form</th>
<th>TEG submission portal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Grant</strong></td>
<td>Appendix A, <a href="https://vessel.nus.edu.sg/cdtl/teg/docs/project-grant-application.docx">https://vessel.nus.edu.sg/cdtl/teg/docs/project-grant-application.docx</a></td>
<td><a href="https://vessel.nus.edu.sg/cdtl/teg/">https://vessel.nus.edu.sg/cdtl/teg/</a></td>
</tr>
<tr>
<td>(short-term &amp; long-term)</td>
<td></td>
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<tr>
<td><strong>Education Conference Grant</strong></td>
<td>Appendix B, <a href="https://vessel.nus.edu.sg/cdtl/teg/docs/education-conference-grant-application.docx">https://vessel.nus.edu.sg/cdtl/teg/docs/education-conference-grant-application.docx</a></td>
<td></td>
</tr>
</tbody>
</table>

### VII TIMELINE

<table>
<thead>
<tr>
<th>Date</th>
<th>Deadline for submission of proposals/applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>23 Apr 2018</td>
<td></td>
</tr>
<tr>
<td>End Apr-early May 2018</td>
<td>Review of proposals by TEG Review Panel</td>
</tr>
<tr>
<td>May - early Jun 2018</td>
<td>TEG Review Panel interviews with short-listed applicants Notification of outcome of proposals Chat sessions with successful applicants for clarifications and refinements to proposal Acceptance of grant by successful applicants</td>
</tr>
<tr>
<td>Jun - Aug 2018</td>
<td>Application to NUS Institutional Review Board (IRB) by successful applicants/principal investigators (PI) for studies involving human subjects Notification of IRB review approval/exemption Creation of project funding WBS Release of awarded TEG funds to project WBS under PI Commencement of projects</td>
</tr>
</tbody>
</table>

### VIII INSTITUTIONAL REVIEW

a. All research conducted by NUS staff involving the use of human subjects or personal data must be reviewed and approved by the NUS Institutional Review Board (NUS-IRB) **before** the Principal Investigator (PI) commences the study/research.

b. The PI can apply for:
   - Full IRB review
   - Expedited review
   - Exemption from full IRB review
Normally, education research can be exempted from full review. PIs need to apply for either exemption or expedited review and NUS-IRB will determine the type of review, based on the information provided in the NUS-IRB application. PIs may refer to the NUS-IRB guidelines at http://www.nus.edu.sg/irb/guidelines.html for research that can be exempted from full IRB review or contact IRB at irb@nus.edu.sg for clarification.

Other useful links:

Post Award

a. The awarded funds will be provided in a project WBS to be drawn by the PI for the research project. PIs should note that all funds awarded must be utilized in accordance with existing NUS financial guidelines and any grant approval guidelines determined by the TEG Review Panel.

b. The grant validity period will be 1 year for short-term projects or 2–3 years for long-term projects. The grant will no longer be valid after the completion date of the project.

c. The PI should make every effort to execute the project in accordance with the accepted proposal and to complete it by the project completion date. The PI is required to submit request for variation to the budget plan, change of scope or extension of the project to CDTL. Such requests should be supported by justifications and accompanied by evidence of satisfactory progress. Requests to increase the research grant will not be considered. The total period for grant extension shall be capped at 6 months, unless there are compelling reasons to extend for a longer period.

d. If the PI is unable to continue with the project (e.g. PI’s employment contract is expired), the PI may submit a request to CDTL to allow the Co-PI to take over the project. In the event that there is no suitable person to take over the project or the change of PI is not approved or it is no longer possible to proceed with the project, CDTL reserves the right to terminate the funding for the project.

Deliverables

a. Recipients of the Project Grant will be expected to submit a final report (2000–3000 words) and Statement of Account for the project upon completion of their project to CDTL within 1 month after the project completion date. A progress report will be expected for the long-term research projects at the half-way point. The project WBS should be closed within 2 months from the project completion date. Any unutilized balance funds from the grant will be returned to the University OOE WBS.

b. Recipients of the TEG grants may be invited to share the educational outcomes of the project/paper presentation with colleagues through CDTL workshops, Campus Conferences and/or publications. Where appropriate, PIs are encouraged to publish their research in AJSotL (Asian Journal of the Scholarship of Teaching and Learning) or other international journals.