Graduate Programmes and Research at NIE

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The re-organisation of NIE has established a Graduate Programmes and Research Office. The function of this office is to promote research at NIE as well as being responsible for the development of the many graduate programmes offered by NIE.

Since the formation of NIE in 1991 as part of Nanyang Technological University, the Institute has established a sound research record. This research has usually reflected the interests of an individual or a group of colleagues. The result of these endeavours is that the academic staff at NIE has published extensively and has been well represented at international conferences. There has been a steady increase in both the number of students pursuing graduate programmes and in the number of graduate programmes offered. Academic staff will continue to undertake research that is of personal interest to them and that is relevant to the educational context of Singapore. This is central to any University.

However, after 10 years of operation it is time to reflect on the future direction of research at NIE. In addition to research undertaken by individuals or groups, the question arises as to whether NIE should establish a defined research agenda. The remainder of this article will focus on this reflection.

If the Institute is to excel and be recognised as a major research centre that will be recognised on the international scene as a leader, NIE needs to identify niche areas. In identifying these niche areas we must be cognisant of the fact that NIE exists within the context of education in Singapore and these areas should reflect this context. Based on this consideration we have identified 4 niche areas that will be at the core of NIE's research agenda.

They are Mathematics, Science and Language (English and Mother Tongue) Literacies and, Information and Communication Technology.

(a) Mathematics and Science

The recent TIMSS and the TIMSS retest results show that Singaporean students did extremely very well in Mathematics and Science relative to their international counterparts. Continued high levels of performance in these subjects are a key to the future success of Singapore and, in fact, for any country, in a global industrial society.
A concentrated effort in research to maximise our students' potential in learning mathematics and science must continue to be emphasised.

(b) Language
This area is of particular importance within a society such as Singapore. For any country to be economically successful, communication skills in English are essential since it is the lingua franca of international commerce. However, in an ethnically diverse society such as Singapore, where English is not the Mother tongue for many students, the issues of bilingual education take on specific importance. Mother tongue is central to the cultural values and identity of a society. For these reasons research into effective language instruction, both English and Mother Tongue, is the other focus of the research agenda.

(c) An Information and Communications Technology environment

Pedagogical Research at NIE

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NIE's re-organisation was designed to focus the new structure to be programme driven. The organisation is built around the key thrusts of any Institute of Education, undergraduate and postgraduate programmes and research, rather than around Schools (Science, Education, Arts and Physical Education) as in the previous structure.

The major function of the office of Educational Research is to promote graduate work at the National Institute of Education, and as the title of the position implies the focus is on education research.

This includes both postgraduate Masters programmes, specifically those by coursework and dissertation, and encouraging research by academic staff.

Currently, NIE offers seven coursework Masters programmes, such as the MEd, MEd (Mathematics Education) and MA (Applied Linguistics) are designed primarily for schoolteachers. Other programmes, such as the MA (Applied Psychology), MA (Educational Management), MSc (Instructional Design and Technology) and MSc (Exercise and Sports Studies) serve both the needs of school teachers as well as other professionals working in education and industry. The present enrolment in all these programmes is over 400. Specific details on these programmes are available via the NIE website: www.nie.edu.sg. Currently the MEd is under review and the possibility of offering specialisations for teachers within the MEd is under consideration.

Academic staff members at NIE, like any University Staff, are actively involved in research. However, in addition to the usual situation where academic staff members pursue their own research interests, often with colleagues from other educational institutions, there are two initiatives that are particularly important for the future of educational research in Singapore.

The first initiative was the establishment of the Educational Research Fund by the Ministry of Education. This fund is designed to "support research in areas of strategic educational interest, and whose findings could be used to guide policy-making." As with most research the specific projects are proposed by academic staff and reflect their own interests and skills, but the focus is on issues within Singapore. Such an initiative is important to the future of educational research in Singapore since it signals a commitment at the highest level to foster collaborative research between NIE, MOE and the schools to address fundamental issues of concern for Singapore's educational system. This issue of the NIE Researcher contains reports on some of these projects.

The second initiative is the development of a research agenda for the NIE. NIE is currently working on an overall framework for a pedagogical research focus. This is a 10-year plan designed to identify niche areas where NIE can...