



Technology Teaching in Classrooms with Students with Diverse Backgrounds

Sheetal Narayan

School of Computing and Information Technology
Unitec New Zealand
Auckland, NZ
snarayan2@unitec.ac.nz

With the changing New Zealand demographics and the arrival of International students, classrooms are continually becoming more diverse with students of different backgrounds, experiences and language abilities. With this diversity come new challenges, not only for academics but also for the students.

This poster will identify teaching strategies that can be implemented in information technology classes to accommodate for the non English Speaking background (NESB) students while catering for the needs of the students whose first language is English. It is proposed in the *computing education* thread of the NACCQ conference.

A survey was undertaken in the School of Computing and Information Technology at UNITEC New Zealand to identify how students feel about the issues surrounding classrooms with students of diverse background. The results suggest that all students feel strongly about the emergence of a large number of students who do not have English as their first language. A number of teaching strategies have also been identified through this research. These strategies are:

- Use of audio and visual techniques by educators: students of all backgrounds (both the NESB student and the English as a first language student) feel that combining audio and visual techniques together in all classes will enhance their learning experience.

- Hands-on-approach: most of the students feel that computing should be taught as a more hands on approach with students actually doing what they are learning. The traditional method of giving lectures creates difficulties for NESB students as they try to interpret and concentrate at the same time.

- Use of technology: generally, students thought that tutors should be using more technology to teach

computing courses. Use of e-mails and discussion boards were brought up as NESB students have more time to think about what they want to say and take part in discussions. NESB students' discussion is hindered if it happens in the classroom (face-to-face) as they cannot interpret and discuss at the same time.

- Team work: It has also been brought up that team work should be encouraged. Mixing NESB students with English as first language students will encourage the NESB students to participate and discuss more in the classroom. Teamwork will also build confidence in the NESB students as they will be communicating more with English speaking students in their group without being confrontational. For the English as a first language student, it will promote cultural awareness, which will be healthier for the classroom.