Enhancing Learning and Teaching Experience for International Students in Computing Subjects

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In recent years, higher educational institutions in the UK have witnessed a significant rise in international students pursuing postgraduate studies, particularly in computing related degrees. This trend is the topic of a current research project funded by the Council of Professors and Heads of Computing (CPHC). The project, entitled 'Enhancing Learning and Teaching Experience for International Students Studying Computing', has found that many UK universities now see a higher enrolment of international students in MSc computing programs (e.g., Cybersecurity, Software Engineering, Artificial Intelligence) compared to home students. Whilst international students thus form a main part of the postgraduate student body, preliminary findings, based on in-depth interviews with 31 students, suggest that much can still be done to enhance their learning and teaching experience, and their career readiness.

This workshop provides a forum for educators and researchers, across the UK higher education sector, to exchange ideas and share experiences on how to enhance the learning and teaching experience of international postgraduate students in computing subjects. The workshop is centred around systematically capturing current programmes and support offered to this group of students, identifying specific challenges as well as existing resources in place to support these students, including their effectiveness and benefits.

The three key focus areas for the workshop are:

- Recruitment and retention of international students.
- Learning and teaching.
- Career support and readiness.

The starting point of this workshop is a presentation by the workshop organisers, providing a status of the three key focus areas above, based on in-depth interviews with 31 international students from 8 different universities across the UK, supplemented by interviews with academics and supporting staff.

Following this, the event consists of a mix of short presentations and roundtable discussions. This part is focused on contributions that address the challenges and opportunities faced by international computing students, with a focus on innovative solutions and best practices and touching on one or more of the following areas.

(1) *Recruitment and retention.* The main aim here is to understand the level of support provided to international applicants in the decision process as well as the non-academic support provided throughout their studies.
(2) *Learning and teaching.* Here, the focus is to look at current provisions to highlight and promote good practice as well as addressing areas for improvement. The following aspects are of particular interest.
   (a) Evaluating effectiveness of existing programmes and resources designed to support international postgraduate students in computing (e.g., preparatory courses, peer mentoring schemes and cultural competency workshops).
   (b) Developing innovative didactical approaches, teaching methods, and assessment strategies specifically tailored to the needs of this student population.
   (c) Exploring the use of technology and online resources to enhance communication, collaboration, and learning for international students.
(3) *Career support and readiness.* The focus is support targeted at international students. This can be work experience opportunities, offered during their studies, or specific initiatives to support their job hunt and career aspirations. Some main aspects to be considered are listed below.
   (a) Understand current provisions offered to prepare international postgraduate students for employment.
   (b) Explore placement and internship opportunities for this group of students.
   (c) Identify the needs and expectations of international postgraduate students in terms of employment readiness after completion of their degree.

The workshop output is a comprehensive report by the workshop organisers. This report is shared with the CPHC Learning Development Group and also all participants of the workshop, to ensure the outcomes and findings can benefit the wider UK higher education sector. Ultimately, our hope is that the workshop outcomes will contribute towards improving the quality of education in postgraduate computing courses, and other subjects, across UK higher education institutions.