Assessing the Value of Professional Body Accreditation of Computer Science Degree Programmes: A UK Case Study

Tom Crick
Swansea University
Swansea, UK
thomas.crick@swansea.ac.uk

Tom Prickett
Northumbria University
Newcastle upon Tyne, UK
tom.prickett@northumbria.ac.uk

James H. Davenport
University of Bath
Bath, UK
masjhd@bath.ac.uk

Alastair Irons
Sunderland University
Sunderland, UK
alastair.irons@sunderland.ac.uk

ABSTRACT

This poster presents a model for the value provided by professional body accreditation of computer science degree programmes in the United Kingdom (UK). We introduce how one large UK professional computing body – BCS, The Chartered Institute for IT (BCS)– addresses degree accreditation, as well as recent changes to content and process. Whilst comparable accreditation regimes exist in a number of other jurisdictions, we provide the opportunity for exploring future extensions to, and the portability of, the UK model.

CCS CONCEPTS

• **Social and professional topics** → **Accreditation**; *Computing education programs*; Employment issues.

KEYWORDS

Accreditation; Professional Body; Curricula Design

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Background Research. The value of professional body degree accreditation regimes as a kite-marking exercise (or to support a globally-portable and recognised workforce) remains high [6]. Equally, the respective national (or otherwise) regimes are criticised as: being unnecessarily bureaucratic and constraining innovation [5]; generating revenues streams in their own right rather than for the benefit of a discipline or wider society [6]; or colonial and paternalistic in nature [7]. The value provided by one such accreditation (BCS) regime was assessed by the views of UK higher education institutions (HEIs) by: canvassing as part of 18 formal accreditation visits (from September 2018-September 2019); workshops run between November 2018 and November 2019 as part of the operation of BCS Academic Accreditation Committee (AAC); and survey-based feedback gained from BCS Academic Assessors, attendees of the 2020 ACM Computing Education Practice Conference [4] and the readership of ITNow [3], the 'the voice of the BCS' which publishes articles on all aspects of computing and IT.

The Proposed Model The following are the value of accreditation: Raising output standards, essentially performing a kite-marking function; employ internationally-recognised standards and memoranda (e.g. Seoul Accord, Washington Accord, EQANIE) to promote the global parity of computer science education and the mobility of graduates; ensuring curricula relevance e.g. coverage of cybersecurity [2], team working and professional environment; identifying and disseminating practice highlights either directly [1] or by other means [4] ; promoting Industry relevant curricula; accrediting work experience in degree programmes; and responding to criticism (reduce administrative burden, promote innovation, etc). Generic criticisms of professional body accreditation regimes not withstanding, the feedback to date is broadly supportive of the proposed model.

Future Work. The next step is to compare and contrasts the model to that used in other jurisdictions and assess portability. The value of accreditation is linked to the value of membership and registration with a professional body, the enhancement of this value to students, graduates, early career professionals and academics is currently being explored by the BCS.

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