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ABSTRACT

DART: Assisting Academic Tutors to meet the needs of disabled students within the Engineering disciplines

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This paper focuses upon Loughborough University's HEFCE sponsored Strand 2 project, DART (Disabilities: Academic Resource Tool), which seeks to enhance the experience of disabled students within Engineering by developing a web-based auditing and diagnostic tool for use by academics. In the UK, under the Special Educational Needs and Disabilities Act (SENDA) 2001 Higher Education Institutions have to make all reasonable adjustments to ensure disabled students have access to all aspects of the curriculum. This places additional burdens upon academic staff who may have little knowledge or experience of the needs of such students. The DART tool provides academic tutors with a ready made and instantly accessible resource to access general advice on the needs of students with a specific disability, and specific advice on how the needs of such students can be met within a range of learning and teaching contexts. It also includes a number of student case studies to provide academics with a more holistic awareness and appreciation of the needs of disabled students, and the barriers that can limit successful access to the curriculum.

In addition to describing the design, development and primary features of this tool, this paper highlights the initial findings of a qualitative survey of engineering students with a range of disabilities done as part of this project. The paper details the students' experiences and examines critically the methods used by both the students, their academic tutors, and disability support staff to help resolve or ameliorate the difficulties encountered by these students. Attention is given to a range of learning and teaching contexts including lectures, group-work, laboratory work, fieldwork, site visits, resource-based learning and assessment. Barriers to effective access to the curriculum are identified and examined. Moreover, this paper offers, on the basis of the experiences noted and the barriers identified, advice to academics on how to respond more effectively to the needs of disabled students in Engineering.