

Future directions in STEMM for people with disabilities: STEMM Disability Advisory Committee Conference – March 2016

Common themes and opportunities for progression

In March 2016, the STEMM Disability Advisory Committee hosted an event to share and discuss best practice in the provision of support to people with disabilities in Science, Technology, Engineering Maths and Medicine (STEMM) while making the transitions through education and employment. It investigated the role learned societies and professional bodies can play in complementing these pathways to progression.

This event brought together people with disabilities and those working with them: employers, career advisors and many others involved in supporting their transition within STEMM education, and into the world of work or apprenticeships. Attendees were given an opportunity to share and discuss best practice and to develop plans and tools to enhance the support they access or provide, as well as suggesting further activity for professional bodies and learned societies to become more effective in this vital area.

The programme included a keynote address from Phillip Connolly, Policy Development Manager from Disability Rights UK, a panel Q&A session with expert representatives from various participant groups, delegate discussion groups, and a networking session where delegates made contacts to develop their work.

The importance of having teachers, colleagues and employers who value and support staff who need to work flexibly is paramount to achieving greater diversity. Joined up services all the way through progressive stages of education and employment are vital to aid the transition and progress of confident, appropriately skilled individuals. Accessible student services and inclusive corporate attitudes are crucial to the creation of environments that support disclosure. Both individuals and companies must understand the benefits of implementing reasonable adjustments to enable diversity and make the most of everyone's differences.

During discussions between delegates, issues and barriers to making progress were discussed. These included:

- Pinch points exist in services and support between school and university, as well as university and the workplace
- Often there is a shortage of information and awareness around services and support
- There are perceived barriers to inclusivity posed by some degree accreditation requirements
- There will likely be consequences of cuts in funding, such as Disabled Students Allowances, which are yet to be realised.

To make progress on these issues, communication is key. Consultation between stakeholders will help disseminate good practices that work and increased

communications with minority groups and disabled people is needed to gather case studies and a more detailed understanding of requirements for specific disabilities. Fundamentally, solutions must be driven by those who need them. There should be *'no decisions about me without me'*.

Arising out of the discussion groups, various solutions were raised about how services and support could be improved through more collaboration, developing partnerships and solution sharing to address some of the barriers that still exist. Below we have summarised some of the suggestions that were made at the conference for further consideration by the various stakeholders.

Schools could think about:

- Identifying and promoting disabled STEMM role models
- Developing STEMM specific peer buddy schemes (current students in STEMM subjects who themselves have disabilities)
- Ensuring that careers advice to disabled people includes STEMM subjects, pre-GCSE
- Promoting STEMM skills and apprenticeships to disabled young people
- Increasing accessibility to STEMM qualifications and careers and encouraging debate around standardised language and terminology.

University STEMM departments could consider:

- Having disabled people acting as role models and helpers on open days, and dedicating a section of the open day for disabled students' issues
- When undertaking outreach to local schools, ensuring that disabled young people are a target group and providing information to promote STEMM courses and careers
- Implementing peer-to-peer mentoring schemes for disabled students that are supported through training, awareness and development and embedded into university practice
- Working with university central disability services to enable them to better understand the specific requirements of STEMM subjects
- Working with employers to develop more inclusive curricula and skills, based on real work requirements.

Learned societies, other Professional, Statutory and Regulatory Bodies (PSRBs) could:

- Survey disabled members to gain further insights into the barriers they have experienced
- Raise awareness of the issues involving disabled members, through newsletters, calls for papers and events etc
- Use journey mapping techniques to look at membership processes step-by-step to identify potential barriers
- Highlight positive examples of disabled people's success in education and employment within STEMM subjects, for example, by gathering case studies, such as those presented in *Parent, Carer, Scientist* by The Royal Society¹.

STEMM employers could discuss how to:

- Use senior-led transparency and sharing to influence positive change in attitudes and culture
- Support and inspire more accessible work placements by drawing on the experiences of disabled people
- Support more inclusive and accessible apprenticeships
- Work towards kite marks that recognise employers with outstanding achievement in inclusion and accessibility
- Include disability as a specific area of focus for their Inclusion and Diversity strategies
- Collaborate further with disability charities to help them better understand STEMM skills.

Government could consider how to encourage:

- New research into new technologies suited to those with disabilities (such as 3D printing) and support training to improve employability
- More disabled people into STEMM work and apprenticeships
- The provision of fully joined-up services, offering support across both the transition from school to higher education and from education into employment
- Building science capital and helping to change cultural and social attitudes.

Although these recommendations are presented by a stakeholder group, the key to real progress is, and will continue, to be collaborative approaches that span different education and career stages. We welcome discussions with specialists in disability support, particularly those active within STEMM communities, to help to inform our future activity in this area.



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