

Learning and Teaching Conference 2012

Abstract 6C

Supporting Graduate Teaching Assistants in two STEM areas

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Graduate Teaching Assistants (GTAs) are increasingly used to deliver a wide range of undergraduate teaching. In STEM subject areas (Science, Technology, Engineering & Mathematics) this has been predominantly in lab practicals, however GTAs may also be involved in marking assignments, leading tutorials or supervising undergraduate research projects. The Boyer Commission (2006) reports on the importance of adequate support for GTAs, especially those engaged in teaching First Year undergraduate students, where student retention may be an issue. This study, in Life Sciences and Physics, aims to look at the perceptions of the role of GTAs, by staff, First Year and other undergraduate students and the GTAs themselves, with a view to identifying how best to support the GTAs in all aspects of their teaching.

Using a mixed methods approach of survey and focus group, the data gathered will inform how best to support GTAs to develop effective teaching strategies, have a better understanding of teaching methodologies and encourage engagement with the scholarship of teaching at a discipline-specific level. It will also identify the problems of trying to foster a scholarly attitude towards teaching and learning at a school level. The University of Glasgow's Learning & Teaching Strategy of enhancing Graduate Attributes and the Vitae Researcher Development Framework (2010) Domain D (Engagement & Impact) are addressed by addressing GTAs' requirements in order to enhance their teaching roles.

The outcome of enhanced support benefits all stakeholders; by developing support for GTAs who teach in STEM subject areas, as there is some evidence from North America that their research skills may also improved (Feldon et al, 2011). Increased GTA confidence also improves the learning experience for undergraduates (Boyer Commission, 2006; Hanson & Overton, 2010).

References

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Hanson, S. & Overton, T. (2010) "Skills required by new physics graduates and their development in degree programmes" HEA Physical Sciences Subject Centre.

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Outcomes

- Understand the role of the Graduate Teaching Assistant in Life Sciences and Physics, and how they are perceived by undergraduate students
- Explore the issues of pursuing learning and teaching at a school level
- Appreciate how GTAs can contribute to teaching and learning