

School of Mathematics and Statistics

Module MAS302

Undergraduate Ambassadors Scheme

2013/2014

Information for Teachers



MAS302: Undergraduate Ambassadors Scheme

Information for Teachers

Contents:	Page:
1. Introduction	3
2. Overview	3
3. The role of the undergraduate	5
4. The undergraduate's preparation before they come to the school	6
Appendix A. Example of end of course assessment form	7
Appendix B. Contacts and resources	9

1. INTRODUCTION

Thank you for participating in this scheme and agreeing to take one of our undergraduates into your classroom. We hope that you and your pupils will find their presence helpful.

This document is intended to give you an overview of the scheme and provide more detail about the nature of the relationship you will have with the University and the undergraduate. There is a list of useful contacts and resources in Appendix B. If you are in any doubt about any aspect of the scheme, you should contact one of the course co-ordinators without hesitation.

You may have been involved in previous 'student-tutoring' schemes. This scheme differs in that undergraduates will receive academic credit for their involvement. We hope this will bring greater focus to their interaction with you, and allow you to set specific goals and targets with them. The school visits in the module will run during the spring and early summer terms of 2014.

2. OVERVIEW

A small group of third year undergraduates will take a module called '**Undergraduate Ambassadors Scheme**' as part of their degree. The co-ordinator of the module is Dr Paul Mitchener, a member of academic staff from the School of Mathematics and Statistics at the University of Sheffield. Participating undergraduates will be paired with you, a maths teacher in a school, and will spend a few hours on one day each week in your school for a period of about ten weeks.

The aim of this scheme is to provide you with a knowledgeable and enthusiastic 'extra pair of hands' who will offer practical assistance in the classroom and help to engage pupils in science, technology, engineering and maths (STEM subjects). It provides an opportunity for more pupils to get individual attention in the classroom from young people who are passionate about STEM subjects and who are good role models for pursuing these subjects beyond school. At the same time, the module provides an opportunity for final year undergraduates to gain valuable transferable skills through first hand experience of STEM education. In Sheffield we are pioneering UAS with mathematics in the first instance.

The undergraduate will have certain objectives (see Section 3 below), but our aim is to make the scheme easy to implement whilst minimizing any additional demands on your time. The extent of your role will be as follows:

Before the module commences:

- To meet or speak over the telephone with one of the university module co-ordinators to discuss briefly ways in which you can make most effective use of the undergraduate and help them to achieve his or her objectives (only required for new link teachers);
- To meet with the undergraduate before the end of the autumn term 2012, to discuss their aims and objectives, their role and what will be expected of them, and to outline the areas of teaching to be covered during the spring term. The undergraduate will contact you directly to arrange a convenient time with you for this meeting;
- To agree with the undergraduate a suitable time for their weekly visit, as soon as school and university timetables are available.

During the module:

- The level and nature of the interaction you have with the undergraduate will be largely up to you. However, you will be a source of guidance and advice to the undergraduate, and it is expected that you will provide some level of briefing to the undergraduate about each forthcoming lesson, e.g. ten minutes at the end of the preceding lesson or in a phone call or email the day before. Students will also need a little time to discuss their Special Project and may need classroom time to carry it out.
- One of the university module co-ordinators will want to arrange to be present at **one** of the undergraduate's visits in the latter part of the module in order to aid the assessment process. They will contact you in advance to agree a convenient day to do this.

After the module:

- At the end of the module, you will be asked to complete a brief assessment of the undergraduate's performance and progress during the term. An assessment form is included in Appendix A. It includes space for a brief comment on the planning and delivery of a 'Special Project' carried out by the undergraduate during the term (see Section 3 below). Your assessment of the undergraduate's performance is moderated by the module coordinators and will constitute 15% of the total mark given to the undergraduate for this module.

The module co-ordinator will be available to you to discuss progress or address any problems throughout the course, and might also request a meeting with you to discuss the progress of the undergraduate.

3. THE ROLE OF THE UNDERGRADUATE

The undergraduate's activity in the classroom will develop during the term largely at your discretion. Initially the student will need to study your interaction with pupils and the approaches you take to the introduction and development of topics and concepts, and they may want to discuss specific situations with you. We would expect them rapidly to become more involved, possibly working with small groups on specific topics or activities, or in setting up practicals or demonstrations. As the undergraduates gain experience and confidence they could be asked to take a more responsible role such as taking all or part of a lesson or using equipment to demonstrate a principle in front of a class. All of this will depend on you, the undergraduate, the class and the subject.

Additionally, you might feel that there is an opportunity to involve the undergraduate in activities with pupils outside the classroom, such as a Maths Club, participation in the PopMaths Quiz, a trip to the university, or with a talk about undergraduate experiences, careers, etc.

In order to comply with insurance cover for the scheme it is of course important that you never leave the undergraduate alone with any pupils under any circumstances. This is also important in ensuring that both undergraduates and pupils are protected from any unfair accusations.

In order for the undergraduate to gain **academic credit** from the module, they will have to:

- Keep a weekly journal of their experiences and activities during the course. The undergraduate may wish to keep this journal confidential;
- Submit a written report to the department at the end of the module. This will be based on their journal and should give a critical account of their experiences during the module;
- Plan, prepare, create the materials for and report on a Special Project. The project may be a novel method of presentation appropriate to a topic (e.g. a 'lecture' or a classroom debate), a particular experimental demonstration, or an extra-curricula activity (e.g. helping to run or set-up an after-school club or arranging a trip to the undergraduate's university department). This should be seen as a 'climax' to the undergraduate's placement with you, allowing them to practise some of the skills they have acquired and may involve the preparation of special materials. The choice of the project will need to be agreed with you and may follow a suggestion of yours, an original idea of the undergraduate's, or originate elsewhere. The

module co-ordinators may also have some involvement in the choice of project, although this may well be only minor. The undergraduate should be able to deliver the project in the classroom or with a small group of pupils before the end of the module. We would particularly ask you to draw the undergraduate's attention to any safety issues that you think are relevant.

- Give a presentation to University staff and other undergraduates that have taken part in this module, on their experiences and their Special Project.

The written reports and the presentation will be assessed by the University department. Together with the assessment form that we request from you (see Appendix A), this will form the basis of a mark for the module.

4. THE UNDERGRADUATE'S PREPARATION BEFORE THEY COME TO SCHOOL

- Undergraduates will be selected to take part in this module through an interview process conducted internally in the university;
- Once they have been selected they will be required to pass a Disclosure and Barring Services (DBS) check;
- They will receive a day of training that will provide them with an introduction to working with children and conduct in the school environment. The undergraduate will also be given an introduction to relevant elements of the National Curriculum and its associated terminology (e.g. 'Key Stage 3' etc.), and the level of teaching in which they will be participating;
- After their initial meeting with you, the undergraduate will be expected to draw up a plan of action and a list of targets for the term. They will also conduct their own research and background reading on topics you have identified;
- Undergraduates taking this module who have passed the DBS check and completed the training day will also automatically become Science and Engineering Ambassadors (SEAs), (see www.setnet.org.uk for more information).

If you have any questions or concerns about any aspect of this course, please contact the course co-ordinators.

APPENDIX A – End of course assessment form

**University of Sheffield
School of Mathematics and Statistics
Module MAS302**

2013/14

Teacher Assessment Form

Undergraduate's Name:

Your report, after moderation, comprises 15% of the undergraduate's assessment for this unit, and so your care and cooperation is most appreciated. Please comment constructively on both strengths and weaknesses, as appropriate, under each of the headings below, but bearing in mind that your comments may be seen by the undergraduate. You may make particular reference to the issues and attributes listed in brackets, or any others which you consider relevant. You may continue on a separate sheet if you so wish.

1: The undergraduate's general approach and attitude (including attendance, enthusiasm, responsibility in dealing with agreed actions, initiative, the quality of working relations with school staff, disposition and attitude towards pupils and willingness to learn from the placement experience):

2: The undergraduate's appreciation of key educational issues (including grasp of pedagogic principles such as the importance of planning and preparation, understanding of learning aims and outcomes, recognition of specific issues such as learning differences and health and safety requirements, grasp of principles of the National Curriculum and appreciation of the teacher's role):

3: The undergraduate's aptitude and potential as a teacher (including oral & written communication skills, presentation skills, ability to use material at an appropriate level, use of and responses to questioning, adherence to syllabus & learning aims & outcomes and contribution to any extra-curricular activities):

4: The undergraduate's 'special project' (including its appropriateness, originality, relevance to the curriculum, value to the school and reception by pupils):

5: Any other general comments:

Please indicate below the integer mark out of 100 that you feel is appropriate for the student, based on the following interpretations:

- 85+** Exceptional performance in all areas
- 70 – 84** A very high level of performance in almost every area
- 60 – 69** A high level of performance overall but with some development required
- 50 – 59** Good performance overall but requires development in a number of areas
- 40 – 49** Adequate performance but significant work required in a number of areas
- 0 – 39** Inadequate performance overall with areas of significant concern

I recommend this student be awarded an overall mark of:

Teacher's Name.....

Signature.....

Date.....

Thank you for completing this form.

APPENDIX B - Contacts and Resources

Course co-ordinator:

Dr Paul Mitchener
School of Mathematics and Statistics
University of Sheffield
Hicks Bulding
Sheffield
S3 7RH

Tel: 0114 2223858
Email: P.Mitchener@sheffield.ac.uk

Undergraduate Ambassadors Scheme:

National Manager: Brian Lockwood
5 Meadway
Selby
North Yorkshire
YO8 4FU

Tel: 01757 210865
Email: Brian.Lockwood@uas.ac.uk
Web: www.uas.ac.uk

STEMNET: Science, Technology, Engineering and Mathematics Network
Web: www.stemnet.org.uk

Students into Schools: (Another credit-giving 'student-tutoring' scheme)

Web: www.ncl.ac.uk/sis/

Criminal Records Bureau:

Web: www.direct.gov.uk/crb