Facilitators' Notes: Online Course in Research Writing

Course title	Online Course in Research Writing
Length of the course	The course spans 5 weeks, and participants are expected to spend 2 to 3 hours per week on the course.
Purpose	Participants learn how to write a research paper for publication in a peer-reviewed journal.
Participant profile	Early-career researchers in developing countries
Number of participants	Ideally 30 to 40
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Date	20 September 2013

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Introduction

E-learning became a formal part of AuthorAID at INASP in 2012, after a successful pilot phase in 2011.

As of August 2013, we have conducted 5 online courses, including the pilot course, on AuthorAID Moodle (http://www.authoraid.info/moodle/), our e-learning platform. So far, 161 researchers from more than 30 developing countries have completed our courses. On average,

we have about 35 participants in a course and 90% of those who enrol in a course complete it. Feedback from participants has been positive and encouraging.

The courses are hosted on AuthorAID Moodle, and they can be exported to another Moodle system. For example, they can be exported to the Moodle system maintained by a university, and staff at that university can adapt or modify the content to suit their needs and offer the course directly to their faculty or students without any involvement from AuthorAID or INASP.

We are also happy to collaborate with others, especially those from our partner countries, in developing and running new courses on AuthorAID Moodle.

Why you should consider teaching research writing online

Teaching research writing is generally considered an important professional activity in academia throughout the world. In developing countries this activity can make a big difference, for research done by developing country researchers is often not published for various reasons. Training on research writing can help these researchers publish their work in peer-reviewed journals so that it reaches a global audience.

If you have an interest in scientific communication, teaching an online course in research writing may be a great way to work towards making this activity a part of your job or career profile. By helping build research communication capacity, you will be making a valuable contribution to both the researchers you train as well as your institution or region.

One of the advantages of teaching online is that you may not have to take significant time off your regular responsibilities while facilitating an online course. You can even travel during the course as long as you have a laptop and an Internet connection. Learners in an online course also enjoy the same advantage: they can study in their spare time (evenings, weekends, etc.). They do not have to apply for leave or permission to take a course, as they might have to before attending a workshop spanning one or more days. Because of this flexibility in teaching and learning online, you can reach a great number of learners through online courses.

Many people are concerned about whether online learning is as effective as classroom learning. At AuthorAID we think both can be effective, based on our experience conducting workshops and online courses in research writing.

We hope that you will be encouraged to teach research writing online after going through this document. If you would like to instead conduct workshops on research writing, please consider apply for our workshop grant or use the free e-resources on the AuthorAID website.

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Experience, equipment, and time needed for course facilitation

Required experience and skills
- Experience publishing as a first author in reputable journals
- Expertise in research writing and up-to-date knowledge of scholarly publishing
- Ability to teach through writing, including the use of hyperlinks to relevant sources
- Word processing skills (formatting documents, making comments in the text, using track changes, etc.)

Desirable experience and skills
- Experience using Moodle or another virtual learning environment as an administrator or teacher
- Spreadsheet skills (formatting spreadsheets, setting up content for data analysis, using pivot tables, etc.)
- Membership in editing or publishing societies[1]

Equipment needed
- Desktop or laptop computer (a laptop is essential if the facilitator intends to travel while the course is going on)
- Genuine version of Windows (XP or later version), Mac OS, or GNU/Linux
- Genuine version of Microsoft Office (2003 or later version) or a recent version of LibreOffice / OpenOffice[2]
- Up-to-date anti-virus software (especially if you're using Windows)
- Reliable Internet connection (does not have to be a high-bandwidth connection because AuthorAID Moodle is relatively light and the courses do not have images or videos)
- Up-to-date version of Mozilla Firefox web browser (this seems to work best for Moodle, although Internet Explorer, Chrome, and other browsers should also be okay)

Time for course facilitation
The facilitator will have to monitor the discussion forum ideally on a daily basis and evaluate the participants' work at certain points in the course. The time for facilitation varies from one week to another and the facilitator can certainly be involved in other things during the course.

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[1] For example, the Council of Science Editors, European Association of Science Editors, World Association of Medical Editors, Committee on Publication Ethics, or any other local, regional, or international body that promotes ethical and responsible scientific communication.

[2] In this case, there could be some compatibility issues when opening and reviewing the assignments that the participants submit, and the facilitator should have the technical expertise to deal with and resolve any problems without inconveniencing the participants.

Below is an estimate of the course facilitation effort for one of our recent courses. Only one facilitator was involved in the course.

Checking course content before the course (hours)	2
Number of weeks	5
Number of participants	25
Reading forum posts made by participants (hours/day)	0.3
Total time - reading posts (hours)	7.5
Number of posts written by the facilitator during the course	48
Average time to write a post (hours)	0.4
Total time - writing posts (hours)	19.2
Number of assignments submitted (80% of participants)	20
Average time to evaluate an assignment (hours)	0.4
Total time - evaluations of assignments (hours)	8
Number of announcements made by the facilitator during the course	10
Time to write an announcement (hours)	0.5
Total time - writing announcements (hours)	5
Private interaction – for resolving course queries, etc. (hours/week)	0.5
Total time - private interaction (hours)	2.5
Tracking student progress (hours/week)	0.5
Total time - tracking progress (hours)	2.5
Total time - Setting up course completion sheet (hours)	3
Time - Generating certificate (hours/participant)	0.1
Total time - Generating certificates (hours)	2.5
Time - Sending certificate (hours/participant)	0.1
Total time - Sending certificates in individual emails (hours)	2.5
Total time spent in facilitating the course (hours)	55
Average hours/week over the 5-week period	11

Participant selection

INASP takes the issue of participant selection very seriously and firmly believes that selecting the right people to attend training is one of the most important contributors to training being successful and having maximum impact. There are many factors that feed into an individual being right for a particular training and it is important to establish the characteristics of your ideal participant in advance of any selection. INASP advocate using a competitive selection process whenever possible.

For online courses we have so far selected participants directly through an open application process. We start with an application form hosted on SurveyMonkey or AuthorAID Moodle.

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(Some past application forms can be made available to you if you would like to see them or use them.) An application deadline is set and a call for applications is posted on our website and circulated to discussion lists.

When making selections, we favour applicants who seem like they would benefit from the course in the immediate future. For the research writing course, this usually means participants who are currently working on a research paper or expect to write one soon.

We also strive to maintain a good gender balance in our courses.

After participants are selected, they are emailed with instructions on how to enrol in the course on AuthorAID Moodle.

Below is an overview of the selection process for the first online course we conducted in 2012. This can be used as an example for devising selection processes for future courses.

After we announced the course on the AuthorAID blog and discussion list, 310 people from various countries submitted applications in the 3-week application period. We exported the applications into a spreadsheet, where we used a pivot table to select the participants. We first shortlisted only those applicants who were involved in a research project; there were about 250 of them.

Then, we looked for researchers working in the "hard" sciences (health, life, physical, and formal sciences), who had not published any papers in journals, and who were aiming to write a paper in the next 3 to 6 months. Thirty-four applicants met all of these criteria.

Next, we looked for researchers who had already published papers in journals. Given the large number of these researchers, we added a criterion: their primary professional responsibility should be research and not teaching, administration, or something else. Also, they should have been looking to write a paper within the next 3 months (not 3 to 6 months, the criterion used in stage 1). Twenty applicants met all of these criteria.

These 54 applications were invited to enrol in the course, and 43 of them decided to enrol.

We did not put out a call for applications for the second course because there were a large number of qualified researchers left in the pool of applicants who applied for the first course. We relaxed some of the criteria mentioned above and found enough participants for the second course.

Course outline

The online course in research writing is 5 weeks long. The below figure – a screenshot from an actual research writing course – presents the structure of the course.

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News forum
General Discussion Forum
Course Description
Introductory Lesson: Learning Guidelines
Copies of the lessons

7 October - 13 October

Lesson 1: Approaching a Writing Project
Lesson 2: Publishing a Paper in a Journal

14 October - 20 October

Lesson 3: The Title and Authorship
Lesson 4: Tables and Figures

21 October - 27 October

Lesson 5: Citations and References
Lesson 6: The Abstract and Introduction

28 October - 3 November

Lesson 7: The Methods Section
Lesson 8: The Results Section
Assignment 1: Submit an Abstract

4 November - 10 November

Lesson 9: The Discussion Section
Assignment 2: Analyse Published Research Papers
Course Feedback

Notes on facilitating the course are in the next section.

Future facilitators are advised to gain access to the research writing course by contacting Ravi Murugesan (rmurugesan@inasp.info) and then spending a few hours going through all the lessons in a demo research writing course (which is available) and looking around AuthorAID Moodle.

Facilitators' responsibilities during the course

On the day the course begins, we activate the discussion forum and news forum. On the latter, we make a post with some information on the flow of the course, the initial lessons being

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available, etc. The news forum is for such posts, and participants cannot directly make a post here.

The discussion forum is for everyone. In our experience, many participants keenly use the forum to ask questions, share their views and experiences, and respond to others' posts.

We usually see a lot of posts with introductions in the first few days. Then we start to see questions on the course material. The ability to ask questions and get responses – whether from the facilitators or fellow participants – is one of the most useful aspects of the course.

At least one of the facilitators must make sure that forum posts are attended to in a timely way.

> If you will be facilitating the course by yourself for the first time without an experienced facilitator to support you, please ask Ravi if you can see the discussion forums of past online courses to get a feel of what kind of questions come in and how they are answered.

If there are two facilitators – one a general one and the other a subject-area specialist – the former could be the primary facilitator, answering most of the questions and generally being a moderator. If there are questions specific to the subject at hand, the second facilitator could jump in.

The 4th and 5th weeks of the course will present more work for the facilitators: we have to evaluate the abstracts most participants generally submit. If you are a general facilitator, give overall comments on clarity, completeness, etc. If you are a subject-area facilitator, feel free to critique the content. You may do the evaluation within the same document containing the abstract submitted by the participant.
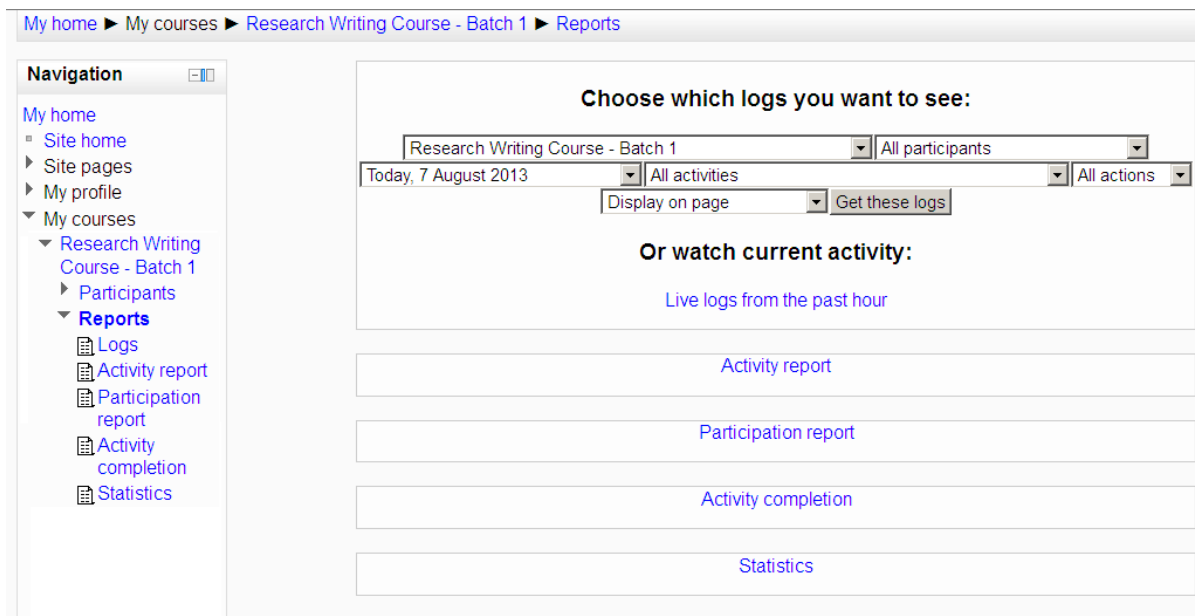
If there are two or more facilitators, the evaluation work will need to be discussed in advance – who will do which evaluations, what the evaluations should focus on, etc.

The final week of the course has a relatively light assignment: participants have to enter some characteristics of published research papers they look up. Near the end of this week, we download this information and do some quick analysis to present averages and extremes.

Lead facilitator's responsibilities once the course ends

Immediately after the course ends, we download a report from Moodle with the completion data, determine who has completed the course (and with what grade), and issue certificates.

To download completion data, click the course name in the navigation menu on the left, click Reports, and then click Activity completion:

(continued on the next page)

Then you will see something like this:

First name / Surname	Poll on keeping in touch ?	Introductory Lesson:	How to complete your profile	Introductions	Lesson 1: Approaching a ...	Assignment 1: Submit an ...	Lesson 2: Publishing a ...	Lesson 3: The Title and ...	Lesson 4: Tables and Figures	Lesson 5: Citations and ...	Lesson 6: The Abstract and ...	Assignment 1: Submit an ...	Lesson 7: The Methods Section	Lesson 8: The Results Section	Lesson 9: The Discussion ...	Assignment 2: Analyse ...	Course Feedback ?
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First name: **All** A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Surname: **All** A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Page: 1 2 (Next)

- Download in spreadsheet format (UTF-8 .csv)
- Download in Excel-compatible format (.csv)

The names of the participants are in the leftmost column, and this has been deleted in the above image because the data is from an actual course.

The above screenshot is from Mozilla Firefox. On Chrome, the columns are not formatted so clearly – this is one reason Firefox should ideally be used for work on AuthorAID Moodle.

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While the table shown above gives a broad picture, it's not of much use. The data must be downloaded and analysed. See the 2 links under the table. They both yield the same files, although the second link – Excel-compatible format – is more appropriate if you use MS Excel.

After downloading the spread sheet, we do a number of things to format and analyse it. These intricate details are beyond the scope of this document, and facilitators are advised to contact Ravi for support.

Finally, course completion certificates are emailed to the participants who completed the course and who gave feedback. We typically do this within a few days of the course ending so as to not keep the participants waiting. Sometimes there are a few participants who complete the course but do not give feedback. We do not send course completion certificates to them until they have given feedback.

The data on course completion is to be shared with the INASP monitoring and evaluation team (write to Ravi for the contact information), who may follow up with the participants in the future to assess the outcomes and impact of the course.

Next steps

It is likely that you will need substantial support before you can facilitate an online course, especially if you are to be a lead facilitator. INASP staff can provide this support if you would like to do any of the following:

- Embed AuthorAID or INASP online courses at your university or institution in one of INASP's partner countries: http://www.inasp.info/en/network/country/
- Be a co-facilitator or lead facilitator on one of AuthorAID's or INASP's online courses.
- Contribute to developing new online courses or customizing existing courses.

Please get in touch with Ravi Murugesan (rmurugesan@inasp.info) to discuss collaboration.

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