Appendices

Appendix I: Glossary of most commonly used terms

Term	A definition (one of many out there!)
Active learning	Active learning concerns itself with "creating an environment where students can take charge of their learning, see relevance in it and engage in it, instead of having information just delivered to them" (Walsh & Inala, 2010)
	Active learning is…"anything that involves students in doing things and thinking about the things they are doing" (Bonwell & Eison, 1991)
	It involves providing opportunities for learners to meaningfully talk and listen, read, write and reflect on the ideas being studied.
Andragogy	Andragogy is the art and science of adult learning, thus andragogy refers to any form of adult learning (Kearsley, 2010)
Assessment for Learning	Assessment *for* Learning (formative assessment): Information about what a learner knows, understands and is able to do is used by both the trainer and the learner to determine where learners are in their learning and how to achieve learning goals.
Assessment of Learning	Assessment *of* Learning (summative assessment) can be simply described as evaluating, subsequent to learning (Harris and Bell 1989) or judging and describing what has been achieved.
Cognitive skills	Cognitive skills are the core skills your brain uses to think, read, learn, remember, reason, and pay attention. Working together, they take incoming information and move it into the bank of knowledge you use every day in life. The brain's cognitive skills include long- and short-term memory, auditory processing, visual processing, processing speed and logic & reasoning.
Deep learning	Deep learning involves the critical analysis of new ideas, linking them to already known concepts and principles, and leads to understanding and long-term retention of concepts so that they can be used for problem solving in unfamiliar contexts. Deep learning promotes understanding and application for life.
Intended learning outcome	An intended learning outcome should describe what learners should know or be able to do at the end of the course that they couldn't do before.
Learner-centred education	Learner-centred education is a pedagogical approach which gives learners, and demands from them, a relatively high level of active control over the content and process of learning. What is learnt, and how, are therefore shaped by learners' needs, capacities and interests. (Schweisfurth, 2014)
Reflective practice	Reflective practice is, in its simplest form, thinking about or reflecting on what you do. It is closely linked to the concept of learning from experience, in that you think about what you did, and what happened, and decide from that what you would do differently next time.
Self-directed learning	Self-directed learning is a form of study in which learners have the primary responsibility for planning, carrying out and evaluating their own learning experiences (Merriam and Caffarella, 1991) As a product, the aim 'is to make the subject a continuing "inner-directed", self-operating learner' (Robbie Kidd, 1985)
Surface learning	Surface learning is the tacit acceptance of information and memorization as isolated and unlinked facts. It leads to superficial retention of material for examinations and does not promote understanding or long-term retention of knowledge and information.
Taxonomy	Taxonomy is simply a word for a classification.

Appendix II: AuthorAID Research Writing Workshop Agenda

Intended learning outcomes

By participating fully in this four-day workshop, learners will be able to

1. Describe the key ethical issues in research and publishing
2. Balance different factors to select an appropriate target journal for their work
3. Define the focus and contribution of their paper
4. Write a working abstract for their research paper
5. Develop the body of their research paper including the key elements
6. Develop a strategy to achieve publication success

Day one

D1-S1:	Introductions and learning agreement	(45 min)
D1-S2:	Establishing the right mind set to be a research author	(45 min)
	20 min break	
D1-S3:	Research and publishing ethics	(60 min)
	60 min lunch break	
D1-S4:	Defining the focus and contribution of your paper	(90 min)
	30 min break	
D1-S5:	Identifying appropriate target journals	(60 min)
	End of day reflection	(30 min)

Day two

	Morning review	(30 min)
D2-S1:	Manuscript guidelines given by journals	(60 min)
	20 min break	
D2-S2:	Structure of a typical scientific journal article	(45 min)
	60 min lunch break	
D2-S3:	Writing a working abstract of your paper	(120 min)
	30 min break	
	End of day reflection	(30 min)

Day three

	Morning review	(30 min)
D3-S1:	Citations and references	(30 min)
	20 min break	
D3-S2:	The methods section of a research paper	(60 min)
	60 min lunch break	
D3-S3:	The introduction section of a research paper	(60 min)
	30 min break	
D3-S4:	The results and discussion section of a research paper	(60 min)
	End of day reflection	(30 min)

Day four

	Morning review	(30 min)
D4-S1:	Figures and tables	(45 min)
	20 min break	
D4-S2:	Developing a publication strategy	(90 min)
	60 min lunch break	
D4-S3:	Q&A session	(45 min)
	Closing the workshop	(30 to 60 min)

For more information, see the AuthorAID Research Writing Toolkit

Appendix III: AuthorAID training workshop guidelines

To be inserted once located by Ravi

Appendix IV: Why should you reflect on your own training practice?

It follows that once our 'stage act' has become routine, it is all too easy to take things for granted and slip into a pattern. Why should we as trainers reflect and change?

1. Reflection can increase our competence and understanding and increase our self-esteem, self-confidence, enthusiasm and, ultimately, job satisfaction.

2. As professionals, we have a moral responsibility to update our knowledge and skills and do our best to improve the quality of learning in the classroom.

3. We should model good practice in learning.

4. No two learning situations are the same. Our role is to maximise the learning experience by matching the strategies, materials and resources to the specific context.

5. Finally, we live in a rapidly changing world. Changes in terms of policy and practice are constants. Reflection and refreshment of ideas is essential.
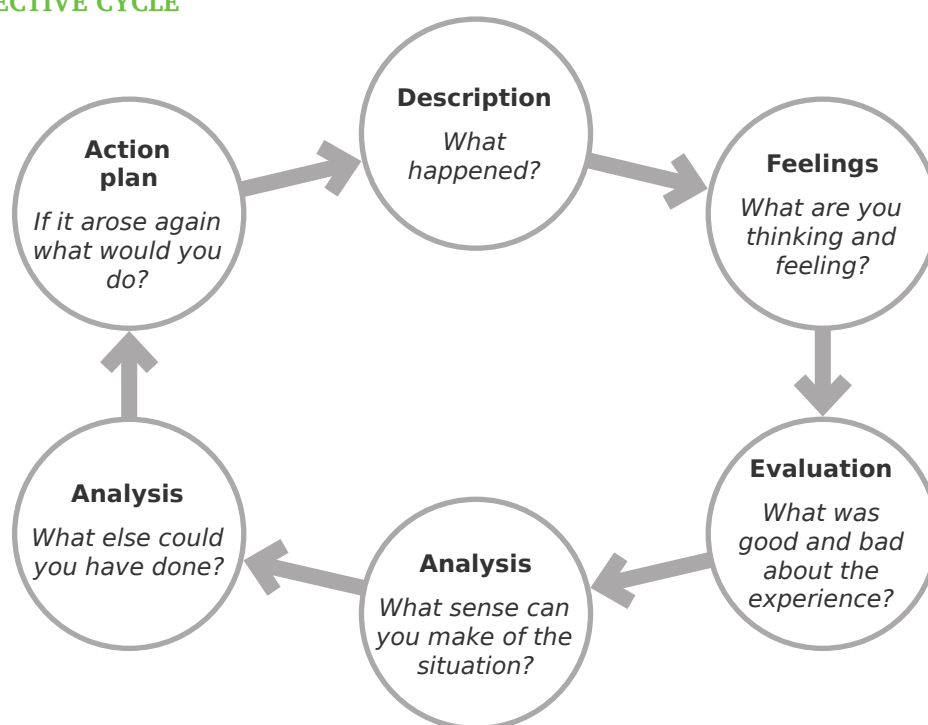
Gibbs' Reflective Model

There are many models of reflective practice, just one model is introduced here very briefly. Many people find that they learn best from experience. However, if they don't reflect on their experience, and if they don't consciously think about how they could do better next time, it's hard for them to learn anything at all.

This is where Gibbs' Reflective Cycle is useful. You can use it for yourself (and your learners) and it can help people make sense of situations in the learning process, so that they can understand what they did well and what they could do better in the future.

Professor Graham Gibbs published his reflective model in his 1988 book "Learning by Doing." It's particularly useful for helping people learn from situations that they experience regularly, especially when these don't go so well. There are six stages in the model: Description, Feelings, Evaluation, Analysis, Conclusions and Action. See the graphic overleaf.

GIBBS' REFLECTIVE CYCLE

Gibbs, 1988.
(From Wikimedia Commons: https://commons.wikimedia.org/wiki/File:Steph_Gib_Model.jpg)

Appendix V: Example of an electronic self-reflective checklist

N.B Trainers **are not expected to select all of the questions** in this checklist as that would be far too much! It is recommended that trainers select around five to six questions which are relevant and/or of interest to reflect upon at any one given time. Think about the areas you would like to improve upon.

Main facts about the particular session	
Date:	Topic of session:
Place:	Time:
Number of participants:	
Overall, how did I feel this session went:	
One of my very best Fine OK Could have been better!	
Other: Not at all happy about his one!	
Example questions to capture my reflections (*choose **at least five** questions to focus on at any one time*)	My responses, reflections and planning ideas
What did I like most about the way the session went? Why is this?	
What worked least well at this particular session? Why was this? What can I do in future sessions to minimize the chance that similar things will happen again?	
How well do I now think that I *started* this particular session? Have I learned anything about how best to start this kind of session? How may I now fine-tune the beginning of a similar session?	
How effectively did I explain the ILOs to participants? Which of these outcomes seemed to be most important to them? With hindsight, can I adjust the ILOs to be more relevant to future participants at similar sessions?	
How much did the participants know already about this topic, on average? Was this more than I expected or less than I expected? How would I adjust the content of a future session to fine-tune it better to what the participants are likely to know already? How can I find out what they already know?	

What was the best/ worst thing about the training room at this particular session? Why did this really help/not help the session? What can I do next time for future sessions?	**To what extent did I manage to get participants *learning by doing* during this session?** How could I have built in more participant activity?	**What was my own best moment at this particular session?** Why do I feel good about this particular aspect? What can I do to lead to more such moments at future sessions?	**What did the most 'difficult' participant do at this particular session?** What can I do to address such behaviours at future sessions, if they occur again?	**How much feedback did the participants get on their learning during this session?** How much of this feedback was from each other rather than just from me?	**Did I manage to include opportunities for participants to deepen their learning by explaining things to each other during the session?** Could I do more of this next time?	**How well do I think I closed the session? Did I end it with a whimper or a bang?!** Was I rushed towards the end of the session, trying to get through everything on my agenda? What would I do next time round, with hindsight, to make sure that a future similar session ended really positively?	**How well did participants feel that they had achieved the intended learning outcomes at the end of the session?** How would it be useful, with hindsight, to adjust the intended learning outcomes for a similar session next time around?

Appendix VI: Short viewings and readings

Points of reflection:

- What do you think of what you have read and/or watched?

- What are the implications for your own research writing training practice?

Teaching Teaching and Understanding Understanding:

Don't worry there is not a typo in the title! It is a series of three short-films about teaching at university and higher-level educational institutions. It is based on the "Constructive Alignment" theory developed by Prof. John Biggs. The films deliver a foundation for understanding what a teacher needs to do in order to make sure all types of students actually learn what the teacher intends:

http://www.youtube.com/watch?v=6Ngc9ihb35g, http://www.youtube.com/watch?v=SfloUd3eO_M, http://www.youtube.com/watch?v=w6rx-GBBwVg

Life After Death by PowerPoint:

This is a light hearted look at the design of PowerPoint presentations by comedian Don McMillan and has proven a popular resource for educators around the globe see his skit here: https://www.youtube.com/watch?v=KbSPPFYxx3o

Navigating the Bumpy Road to Student-Centered Instruction:

In their helpful article (http://www.ncsu.edu/felder-public/Papers/Resist.html) Richard M. Felder and Rebecca Brent explore the change from a lecture-based classroom to a more student-centred learning environment.

Learning styles and the importance of critical self-reflection:

The belief in learning styles is so widespread, it is considered to be common sense. This presentation challenges this belief via research findings, explaining how/why the belief in learning styles is problematic, and examining the reasons why the belief persists despite the lack of evidence https://www.youtube.com/watch?v=855Now8h5Rs

Lectures Aren't Just Boring, They're Ineffective, Too, Study Finds:

A 2014 study found that undergraduate students in classes with traditional stand-and-deliver lectures are 1.5 times more likely to fail than students in classes that use more stimulating, so-called active learning methods http://www.sciencemag.org/news/2014/05/lectures-arent-just-boring-theyre-ineffective-too-study-finds

Education research denialism in university STEM faculty:

This short blog touches on how science and engineering faculty often don't believe in education research and stick to their own teaching methods: https://smallpondscience.com/2016/04/04/education-research-denialism-in-university-stem-faculty/

A researcher discovers teaching:

This is a link to a short article on how a researcher discovered teaching from the Science magazine: http://science.sciencemag.org/content/352/6282/262?utm_campaign=email-sci-toc&et_rid=34811806&et_cid=400756.

Phil Race - Assessment, learning and teaching in higher education:

Phil Race is an independent educational developer and writer, with a particular interest in how people learn best. He works with teaching staff to help them optimize the learning experience of their students, and with students to help them get the most from their teachers. His website is an interesting and useful one to explore, particularly the resources which you can download for free. See Making Small-Group Teaching Work, for example in his downloads section https://phil-race.co.uk/downloads/

Appendix VII: Reflection questions

Reflect on the following three questions and make brief notes at the end of each session. You will be invited to share some of your reflections with the rest of the group during the course of the workshop.

1) Why did the trainer choose to run the session in this way, how else could s/he have done it?

2) What specific strategies can you adopt in order to maximise your learning related to this particular session?

3) What are the core conditions for effective face-to-face training workshops?