Trainers' Handbook

One WASH Plus Learning Materials in support of the One WASH National Programme

Open WASH

Contents

OpenWASH Trainers' Handbook

Welcome to the Trainers' Handbook for OpenWASH. This Handbook has been prepared by The Open University's OpenWASH team to provide guidance for teachers and trainers in how to use the OpenWASH modules.

1 What is OpenWASH?

The OpenWASH project was designed to create learning resources that provide a core curriculum for teaching and learning for the water, sanitation and hygiene (WASH) sector in Ethiopia. The primary focus for the programme of study is water and sanitation in urban settings. It is a forward-looking programme that has been developed in expectation of the increasing demand for suitably qualified employees that will arise from the expansion of WASH provision throughout Ethiopia.

OpenWASH is a component of World Vision Ethiopia's 'Urban WASH' programme and is led by The Open University UK. 'Urban WASH' is part of UNICEF's 'One WASH Plus' programme, which is funded by UK aid from the UK Government as a contribution to the Ethiopian Government's One WASH National Programme (OWNP). The OWNP is a multimillion-dollar collaborative programme that aims to bring comprehensive improvement to water and sanitation provision across Ethiopia. The programme document identifies 'capacity gaps at all levels as one of the most pervasive threats to the successful implementation of the program' (OWNP, 2013). OpenWASH aims to contribute to filling those capacity gaps.

The original concept for OpenWASH was inspired by the Ethiopian Health Extension Programme. In 2010/2011, a team of Open University academics worked with Ethiopian health experts to prepare a set of modules that are now used successfully throughout Ethiopia to train Health Extension Workers. In developing the OpenWASH resources, we have followed many of the principles, and learned from the experiences of the health programme.

OpenWASH resources consist of five modules and this Handbook. They provide a set of innovative and flexible learning resources designed for people engaged across a range of positions and levels in the WASH sector. Primarily, the aim is to provide a curriculum for students who are training to work in the sector. The modules can also be used for in-service training of new employees and by more experienced practitioners seeking to improve knowledge and skills in specific areas. The material could also contribute to training of community members, rural WASH committees (WASHCOs), school parent teacher associations (PTAs), women's groups, youth groups, and others.

This Handbook provides guidance on some of the ways that the modules can be used, including as the basis for:

- face-to-face classroom teaching
- short residential courses
- blended or distance learning with tutor support
- independent or group study.

The modules are designed primarily as printed publications but will also be available online as Open Educational Resources (OER) under a Creative Commons licence. This means that they are free to download, adapt and use within the terms and conditions of the licence. The online version of the modules can be found at http://www.open.ac.uk/ido.

The modules are written in English and will be translated into Amharic, Oromo, Tigrigna and Somali.

2 OpenWASH modules

The OpenWASH materials have been arranged into five content areas called modules. The titles of the five modules are:

- *Ethiopia's One WASH National Programme*

- *WASH: Context and Environment*

- *Urban Water Supply*

- *Urban Sanitation and Solid Waste Management*

- *Urban WASH: Working with People*.

The modules can be used individually or in combination. They are designed to 'stand alone' and they do not cross-refer to each other. You can use one or more modules in any combination as a programme of study, according to your requirements. They can be studied in any order. The Learning Outcomes for the five modules are included in the Appendix.

The modules have been written by Ethiopian expert authors with the support of experienced members of Open University academic teaching staff. The style of writing follows pedagogic principles and techniques for distance learning that have been used over many years in Open University courses. This means that the modules are designed for independent learning by someone who is reading and studying on their own. They have several features that are designed to ensure active learning by the student. Using these techniques creates greater flexibility because the modules are more resilient to variations in the resources available for teaching and learning in a classroom context. It enhances their value as the basis for training because the approach puts the 'teacher in the text'. In practice, the modules can be used in a combined approach that is partly face-to-face teaching in a classroom and partly independent study. They can also be combined with practical training, work experience or other learning activity.

3 Module components

Each module consists of fifteen study sessions. Each study session is designed for approximately two hours of independent study time and follows a standard template. This provides users with a familiar framework and so makes it easier to plan study activities. The main components of each study session are as follows:

- a *title* that concisely and clearly describes the session contents

- an *introduction* that lays out what will be covered in the study session

- *learning outcomes*, each tested by at least one SAQ (see below)

- *core content*, text with illustrations, diagrams, graphs, examples etc.

- *key terms* that are highlighted and defined

- *in-text questions (ITQs)*, short questions with answers immediately following

- a *summary*, which includes a numbered list of key points covered in the study session

- at the end of each study session there are between three and six *self-assessment questions (SAQs)* – students attempt the questions independently, but also learn from the provided answers which are provided at the back of the module.

The structure creates a learning pathway for the student that links the components in a narrative route through the text. They can track the introduction of a topic and a statement of the corresponding goal in a learning outcome, through the relevant section of core content to the summary points and SAQs at the end. Table 1 describes some of these components in more detail and highlights the reasons why they are included in each study session.

Table 1 Purpose of study session components.

Component	Description	Purpose
Learning outcomes	A set of statements that indicate what students should have achieved by the time they have completed a particular study session.	Learning outcomes are the goals. They are important tools for both teachers and students. For teachers, learning outcomes provide a way of making it clear to students what they are expected to have accomplished by the end of a study session. Learning outcomes indicate a knowledge outcome (what the teacher wants students to know) or a skill outcome (what the teacher wants students to be able to do). For students, learning outcomes highlight what is expected of them. Outcomes provide a way for students to assess their own learning. For example, students should be encouraged to turn learning outcomes into questions and see if they can answer them.
Key terms	Important terms, highlighted in bold type, that students should be familiar with by the time they complete the study session.	Students can often feel overwhelmed by the number of ideas, concepts and principles that they encounter in a lesson. The highlighted terms are the words and concepts that they really need to focus on and understand by the end of the study session. In the printed modules, the key terms are listed together at the back. In the online version, a glossary is also provided.
Core content	Text authored by experts, covering the topics outlined by the module title and learning outcomes.	OpenWASH modules provide new teaching material and can also reinforce or complement existing teaching and curriculum. Teachers in a classroom setting should integrate this material into a lesson, and not just read out the text to a class. Instead, teachers are 'learning guides', creating lessons that comprise short talks and activities based on the OpenWASH materials (see Section 5).
In-text questions (ITQs)	Brief questions embedded within the core content that learners are expected to complete as they read through the modules.	ITQs encourage students to pause in their study and briefly reflect on what they have learned. The ITQs are based on preceding sections of the study session or may refer back to earlier study sessions in the same module, or invite students to consider how their own experiences are relevant to the topic. This reinforces prior learning and encourages students to reflect on what they have read. Some ITQs could be used as triggers for class discussion.
Summary	A brief overview of the main concepts covered in the study session.	The summary brings together the key ideas and concepts from the different parts of the study session. For teachers, the summary (and any subsequent discussion) can be used to recap important ideas and concepts at the end of the lesson.
Self-assessment questions (SAQs)	Another set of tools for learners and teachers to use to evaluate learning achievements in the session.	We outlined above how students should be encouraged to transform learning outcomes into questions that can help them assess their learning. That task is essentially completed for them in the SAQs that appear at the end of each session. They can be used to test the student's knowledge of the material. At least one SAQ tests the student's understanding of the key terms introduced in that session.

The consistent length of the study sessions is intended to make it easier to plan your schedule for study. Note that the module total of 30 hours of independent study is intended to be a guide only. This will obviously vary depending on the mode of study, depth of learning, individual capability, etc.

4 Assessment

Assessment can be used to support learning. It does not only demonstrate achievement and 'passing' a course. It also:

- acts as a powerful tool for teaching

- coupled with feedback from the teacher, helps students to improve their learning and achieve better outcomes

- is a source of encouragement and builds confidence.

The OpenWASH modules incorporate two types of informal assessment: in-text questions (ITQs) with answers in the main text, and self-assessment questions (SAQs) where answers are provided but these are separated from the questions. Students should answer these questions to help reinforce their studies and assess their own progress.

ITQs are intended to engage the student in 'active' reading. This reinforces learning more effectively than giving information passively. Students can cover the answer in the module to hide it and attempt their own answer first, or they can simply read the answer given.

SAQs provide an opportunity for students and for you as the teacher to assess progress. Students should be encouraged to write their answers to SAQs in their own words and then compare them with the answers provided. The SAQs help students to see what they have learned well and identify what they may need to revise or ask you about. You can use SAQs to assess student progress by checking their written answers and also by incorporating the questions in classroom teaching (discussed in more detail in Section 5).

Note that in the printed version of the modules, the SAQ answers are all included at the back of the book. In the online version, the answers appear below the question by clicking on the 'Reveal' button. You may think that providing the SAQ answers makes it difficult to use the questions to assess progress because the students could easily just copy the answers, but in practice, good students will soon realise that there is nothing to be gained by copying. You will soon recognise the answers that have been copied!

For formal assessment, you and others may wish to develop further assignments based on the OpenWASH modules. These could be designed to meet criteria and test learning outcomes set by an accrediting institution or organisation. For example, the assessment could be linked to the required Units of Competence of a specific Ethiopian Occupational Standard.

5 Using OpenWASH modules for classroom teaching

Student success with the OpenWASH modules relies on the following teaching practices:

- ensuring students successfully achieve the learning outcomes of the study session

- encouraging students to discuss the topics together

- encouraging students to think how they could apply what they learn in a work context.

In the classroom you need to decide how you can make best use of the modules. Remember that they are designed for independent study, so you do not have to include everything in your classroom session. You can use the modules to guide study time outside the classroom and for homework. Use lesson time for activities, discussions, challenging topics, practical exercises, questions, developing examples and scenarios, and relating the content to your local context.

Before you start using the modules there are practical matters to consider. You will need to adapt your lesson plans according to answers to these questions:

- Do you have enough printed copies of the OpenWASH module to give to each student, and one for yourself? Or could they access the material online?

- Will your students manage and be motivated to study the materials independently outside the classroom?

- Are there other components of the training to consider, such as formal assessments, practical sessions, etc.?

- Do you have access to a computer and projector for PowerPoint presentations, or internet access? Can you make use of audio or video material, on DVD or via the internet, to support your teaching?

Another practical point to be aware of is that students will need a dedicated Study Notebook to capture their notes and reflections, and record answers to SAQs. Students may need support and encouragement in using their notebooks. You should stress the value of students keeping all their relevant notes in one place so they can easily be referred to when needed. If students are studying on their own for some of the time, you should encourage them to write down any questions that occur to them so that they can be raised with you or in class later.

We suggest you consider the following general points when planning your teaching:

- The study sessions have been designed to build on one another, so you should teach them in the order that they are presented.

- Although they are all approximately the same length, some study session topics might be more challenging for students than others, so you should consider how to build in more time for those sessions.

- Students will get the most out of the materials if you guide them through the most important principles, ideas and concepts in the modules.

- Build in time for students to share and discuss their thoughts during lessons. This is just as important as setting aside time to go over the written materials.

- Consider getting the students to work together in small groups rather than individually, and think creatively about activities and exercises that could be suitable for group work.

- Reading text to students or getting the students to read the text in class is likely to be the least effective teaching or learning strategy.

5.1 How do I create a lesson from the OpenWASH modules?

There is no set approach for delivering the content in a lesson. The structure of your lesson – what you teach, the materials that you use – is likely to depend on a range of factors in your institution.

However, the OpenWASH team believes that you will have the most success in using the materials if you do the following:

- Base each lesson on one study session. We have assumed a two-hour lesson time, so you may need to adapt this. For example, for one-hour lessons, you could split one study session into two halves, or you could select any particularly challenging or interesting parts and leave other parts for students to read outside the classroom.

- Make sure you are completely familiar with the material in the study session and have an understanding of how it fits into the module as a whole before the lesson.

- Consider what you want students to focus on during the teaching session and what you may want students to work on outside the lesson (either before or after the teaching session).

- Take sections of the core content and turn them into short talks lasting approximately 10–15 minutes. You probably need three or four of these short talks for a two-hour lesson. These will work best if there is an activity or exercise between each talk that will keep students engaged.

- Develop activities and exercises that relate the topics to your location and relate to the students' own experiences. Incorporate these between your short talks on the core content.

- If you have the facilities, you could produce accompanying PowerPoint slides that you can put up on a screen, or give students handouts. Alternatively, make a list of the key ideas and concepts that you can write on a board and talk through in the class.

5.2 Basic lesson plan

In this section of the Handbook we provide details of a basic lesson plan in three parts that has been designed to engage students and maximise their learning from a complete OpenWASH study session. Table 2 summarises the three parts and they are described in more detail below.

Table 2 Basic lesson plan.

	Part 1: Introducing the lesson	**Part 2: Core teaching and learning**	**Part 3: Summary and learning reflection**
Purpose of this part of the lesson	Set out the main objective of the lesson. Highlight the terms that students should understand by the end of the lesson. Outline what students should have learned by the end of the lesson.	Present information, concepts and principles. Engage students in exercises and discussions to assess whether they can apply the information encountered.	Present an overview of the information covered in the lesson. Provide an opportunity for students to reflect on their learning in relation to the learning outcomes of the study session.
Study session components to be used in this part of the lesson	Key terms Learning outcomes	Core content In-text questions (ITQs)	Summary Self-assessment questions (SAQs)
Suggested timings for a two-hour lesson	10 minutes	90 minutes (divided into shorter sub-sections)	20 minutes

Part 1: Introducing the lesson

This section outlines ways in which the topic, learning outcomes and key terms associated with each OpenWASH study session can be integrated into the introduction to the lesson. The introduction:

- summarises the purpose of the lesson

- highlights some of the key concepts and principles that students will be exploring.

For example, the information in Table 3 is taken from Study Session 1 of the *Ethiopia's One WASH National Programme* module.

Table 3 Summary of Study Session 1 in the module Ethiopia's One WASH National Programme.

Study session title/topic	'Why do we need the OWNP?'
Learning outcomes	1.1 Define and use correctly all of the key terms. 1.2 Explain the importance of WASH to human health. 1.3 Explain the importance of WASH to education and economic development. 1.4 List the reasons why the OWNP is needed. 1.5 Explain the overall aims of the OWNP.
Key terms	• WASH • water supply • safe water supply • adequate water supply • accessible water supply • sanitation • hygiene • faecal–oral transmission • child-friendly WASH services • One WASH National Programme • Consolidated WASH Account.

When thinking about how to integrate the topic, learning outcomes and key terms into a lesson, consider the following ideas:

- Spend five to ten minutes introducing the session.

- Write the topic on the board for the class to see. Ask the group why they think this topic is important. Suggest students read the introduction section of the study session before they answer to help them to think about why it is important.

- You could ask a few quick starter questions to stimulate discussion and get students to think about their background knowledge of the topic.

- Write the key terms and/or learning outcomes on the board for the class to see and keep them visible throughout the lesson. As the lesson progresses, cross them out or tick them off when they have been covered.

Part 2: Core teaching and learning

When constructing your lesson plan, consider the following tips:

- Prepare your short talks in advance. Assuming you have allocated 90 minutes of a two-hour lesson to the core teaching, make sure you have broken this time down into three or four subsections from the core module content. During your talks, encourage students to ask you questions if they do not understand something. This will help them to remain engaged.

- Break up the talks with activities. Try to ensure students do something different every 15–20 minutes to keep their attention focused on the topic. Avoid a long lecture or a group activity that takes a long time as this will make students feel bored.

- Use the in-text questions (ITQs) to prompt discussions, either for the whole class together or in small groups. You could give different discussion topics to different groups and get them to share their discussions with the whole class at the end.

- You don't have to fit everything into the suggested two-hour lesson. Students can be instructed to complete homework, either beforehand to bring to the lesson or afterwards.

Part 3: Summary and learning reflection

The final section of your lesson will focus on the summary section and self-assessment questions (SAQs). We suggest it would be most effective if you split it into three parts:

1. Recap the learning outcomes covered by the session – try turning these into questions and asking students to raise their hands if they think they can answer them. This is a really good way of easily evaluating how students have understood the lesson and the concepts and ideas covered.

2. Go over each of the main points made in the summary. You could try modifying some of these points to include the word 'not' and asking students if the statements you make are true or false. Again, this is a way of evaluating how students have engaged with the concepts and ideas presented in the lesson.

3. Go through the SAQs with the students, or ask them to work on their own or in groups to answer these questions. You don't need to go through all the questions, but they are excellent tools for evaluating students' engagement with the lesson content. You can compare the answers from students with the Notes on the SAQs at the back of the book and discuss how they may differ. You could also devise some alternative questions of your own, especially if you can relate them to your local area and the students' experience. If you want to leave time for class discussion about the SAQs and their answers, you may need more than the 20 minutes suggested in Table 2 for Part 3 of your lesson.

Finally, remember that a lesson plan is a proposed course of action – in the classroom you may need to change and alter your plan according to your students' needs. Remember to capture these changes in a revised plan so that you or colleagues know what is likely to work best for students next time.

6 Using OpenWASH modules for short residential courses

The OpenWASH modules can also be used as foundation materials for short residential courses in a college or other training centre. This could be two or three days over a weekend or a four- or five-day course during the week, run as a single event or a series, depending on how much material you want to cover. For example, you could base a week-long course on a single OpenWASH module or spread it over two or three weekends that included other practical activities as well. The consistent structure of the OpenWASH modules, with 15 two-hour study sessions in each module, facilitates planning and adaptation to different timings and schedules.

We suggest that the approach to using the modules for short courses is similar to that for classroom teaching and requires lesson planning combined with other activities. It is important to provide a variety of activities so that students continue to be motivated and engaged with the materials. The OpenWASH modules provide the text-based foundation of knowledge that you can combine and enhance with hands-on activity and group work.

Time management is always important for training activities, but especially so if you have limited time and are working to a tight schedule. To make best use of the time available, you may want to provide copies of the modules to students before the course starts and ask them to work through particular sections or answer some of the SAQs beforehand. When you meet at the training centre, you and they will have already made a start with the programme. This will enable you to focus on group activities and practical exercises that cannot be undertaken individually. This optimises the value of the programme of study and makes best use of the time available.

7 Using OpenWASH modules for blended or distance learning

As noted earlier, the OpenWASH modules are written using tried-and-tested techniques for distance learning. Distance learning students study independently, usually in their own home or workplace. Blended learning is a combination of distance learning with a mix (blend) of other learning resources and experiences. These may include residential courses, fieldwork, practical training or other learning activities.

Students who are studying by blended or distance learning are usually combining study with full or part-time employment, so they have to fit their study into non-working hours, for example at weekends and in the evenings. The benefit is that they continue to earn money and fulfil their commitment to their employer at the same time as completing their studies. It also means that they have to study on their own, so they will need considerable encouragement and help to keep motivated. An important principle of effective distance or blended learning is that students should not feel isolated. They require support that, most importantly, is provided by a dedicated tutor who can give clear guidance throughout their studies.

Students also need support in other ways such as a proper induction to the study programme and opportunities for communication with other students. The recommended pattern for distance or blended learning students is to study mostly on their own, but also to meet regularly in a study group with their tutor and other students.

Using OpenWASH modules in a blended or distance learning programme therefore requires the appropriate organisational structure to be established to provide this essential support. Some of the key components of such a programme include the following:

- *Modules*: All students will need their own copy of the OpenWASH modules to keep with them for studying in their own time.

- *Tutors:* Tutors need to be selected and appointed to support the students in their learning. We recommend a ratio of 10–15 students to one tutor in a study group. (The tutor role is explained in detail below.)

- *Study programme*: The programme should establish a schedule (see below) and criteria for successful student completion. This will require assignments and other assessments to be developed, as well as effective record-keeping and administrative procedures. The programme needs to be aligned with policies and procedures of the training institution and other interested parties.

- *Schedule for study*: This should take account of study time available for working students and consider how many study sessions they could reasonably fit in around their employment in a week or month. For example, if students are working full time, then six to eight hours a week, which equates to three or four study sessions, may be reasonable. Time required for other activities, such as practical activities to accompany the modules, should also be considered.

- *Study Support Meetings*: Students need to meet their tutor and other students regularly to get the most from their studies. Planning these meetings requires suitable locations to be identified and agreed. The meetings could be held in a college, bureau office or other appropriate venue. The frequency of Study Support Meetings should be linked to the study schedule, but we suggest that they should be at least once a month. Students and tutors need to travel to these meetings, which can also influence their location and frequency.

- *Support for the tutors*: Tutors need to understand what the students are studying, how they are studying it and what support they need, so the tutors themselves must be informed, trained and supported. This will involve regular direct interaction between tutors and their supervisors and those who are leading the study programme. Tutors will also need guidance for Study Support Meetings and assessments, and for any other experiences to be offered to the student.

Note that this is not an exhaustive list but indicates the main resource requirements for a blended or distance learning programme. The tutor's role is central to the process so we have described this in some detail in the following sections.

7.1 The role of the blended or distance learning tutor

If you have been appointed as a blended or distance learning tutor, this section of the Handbook will help you understand what is expected of you in that role.

Supporting, encouraging and motivating your students

Your role as a tutor is to facilitate the students' learning from the OpenWASH modules by providing support, encouragement and guidance that will help your students to develop their abilities. In other words, you are not your students' teacher – your role is to:

- help your students to manage their learning experience

- help them to keep on schedule

- help them to submit assignments on time

- provide feedback on their progress

- help them to feel confident and positive about their learning

- encourage them when they feel they are falling behind

- explain concepts they find difficult to understand.

Crucial aspects of your role are motivation, creating mutual respect and providing an environment where your students feel confident that they can talk to you (and each other) about their learning and any difficulties they may have.

Motivation provides the driving force for students to tackle the difficulties and challenges that are associated with their learning. Motivation is particularly important when students have many other demands on their time. Your students will be motivated if they have a clear vision of their personal goal. Motivation is also influenced by students' self-perception and their belief in their own learning ability. Your students will feel motivated if they understand that their learning is important for themselves as individuals, for future qualifications and employment, and for providing a better quality delivery of WASH services to all.

Each student brings their own past experiences to their study. These experiences will have shaped their perception and attitude towards both learning and assessment. Keep in mind that previous learning experiences may have been negative for some of your students. To overcome the fear of failure, students need a supportive environment where they can take risks in their learning and make mistakes, question or challenge, and 'have a say'. This is helped by an atmosphere of 'unconditional positive regard' towards your students, one that is non-judgemental and accepting.

Learning Agreement between you and your students

Establishing a good relationship between you and your students is very important. In the best situations there is mutual respect: you can trust the students to do their best to learn from their study of the OpenWASH modules, and the students can trust that they will be supported by you during their time as a student. To help develop this high level of trust, you should be clear about what you expect from the students. You should also make it clear what the students can expect from you as their tutor. Sometimes this process is called a Learning Contract or Learning Agreement.

In the first Study Support Meeting, it is helpful to discuss this with the students and make two lists: one of the responsibilities that you expect them to fulfil and another of the support that they can expect from you. Each student should write the agreed lists in their Study Notebook, and then you and the student should sign this Learning Agreement. If any problems arise later, either in the student's progress or the study support they receive from you, both you and the student can make reference to this signed agreement.

Study Notebooks

It is important for each student to have a dedicated Study Notebook for their OpenWASH studies, as mentioned earlier in the context of classroom-based teaching. This is even more important for distance learners, and part of your role is to encourage the students to use their notebooks routinely throughout their study. Their Study Notebook should be used to record:

- the date on which they completed each study session

- any notes they made while studying it

- their written answers to the SAQs for that study session

- any queries that they want to raise with you

- if appropriate, a record of the practical training or other learning activities that they have completed.

Each student should record their activities in a way that suits them personally. Some may use an exercise book, while others may prefer a loose-leaf file or folder. In either case make sure that they continue to be systematic in recording all the required material for the whole time that they are studying.

When you meet your students at Study Support Meetings, you should ask to see their Study Notebooks, and in particular they should show you their answers to the SAQs. This will enable you to check their understanding of the study session and offer support when needed. This activity also gives the students an opportunity to ask you about any issues that have arisen for them since your last meeting.

Marking assignments and providing feedback to students

If the programme of study you are teaching includes formal assessment, then an essential part of your role is to mark assignments and give feedback to students on their performance in their written work. This is an important way of providing them with personal learning support. It provides an opportunity to build the teaching and learning relationship with your students. You can assess whether the student has met the learning outcomes for each study session or module, and you can measure the student's understanding and progress through the curriculum. You can give the student encouragement for what they have done well, and advice and guidance about how they can improve.

Providing feedback on written assignments enables you to:

- praise the good points in their answers

- explain why marks have been lost or gained

- explain anything that your student has not understood

- provide examples and refer students to particular pages in the module, where necessary

- help your student attain the learning outcomes for each study session and/or module

- be flexible in your responses to the different learning needs of each student

- help every student to identify their strengths and weaknesses.

It is important for students to have written feedback from you on their assignments, rather than just verbal comments, so that they can read it in their own time. You should write your comments on each script as you mark it, using local language if you feel this will be more helpful to students than writing your comments in English.

But what feedback is useful to students? Your feedback should:

- be returned promptly (for example, at the next Study Support Meeting) while they can still remember what they wrote in the previous assignment

- be supportive and encouraging

- offer more than just corrections – you should respond to good points and ideas in the assignment, and indicate why they are good

- help students to develop skills such as structuring an answer

- suggest how to improve (for example, 'you also needed to explain the reasons for your answer')

- help the student to take forward skills and ideas to the next assignment and beyond

- encourage the student to become more skilled at self-assessment.

Using a positive tone and setting up a 'dialogue' in your written feedback is important. If students don't like reading your comments, they won't learn anything. A relaxed and personal tone shows that you feel involved too, and encourages and creates trust and mutual respect.

Many students will be anxious about writing an assignment, particularly the first one, and may leave it to the last minute and then be short of time. Some students find it difficult to keep focused on answering the questions and instead write about what they find interesting, or answer a different question. You could talk to them about these issues in a Study Support Meeting. If you do find that they misinterpret the assignment, you can show them in feedback how to analyse the questions by adding comments about how you would have approached the questions and formulated your answer.

Facilitating student groups and Study Support Meetings

Working in groups can enhance the achievement of specific tasks and help students to develop individual skills and confidence. We have therefore included some guidance on how you can help your students get the most out of their study group and the Study Support Meetings.

A major objective is for you to create the atmosphere in group meetings that will encourage everyone to relax and feel comfortable working together in the study group. The ways in which you encourage relationships and communication within the group can greatly affect the students' experiences. It can help your students in their personal engagement with the learning materials and enable them to become more independent of you. In this respect, your principal aim is to cultivate skills of independent learning in the students and to facilitate that process rather than be the source of their knowledge.

At the first Study Support Meeting, you should therefore check that your students know each other and then give them a chance to share their expectations, concerns and questions – with each other and with you. The rules for the group should be established, such as listening to each other, and ensuring everyone has an opportunity to say how they are getting on with the learning materials.

The number of students who are able to attend the Study Support Meeting may vary from time to time. However, the following characteristics are most frequently mentioned in evaluations of effective learning groups, even if there are only two or three people present:

- a climate of acceptance and respect for one another

- openness of communication

- listening is valued as much as talking

- everyone takes responsibility for their own learning and their own behaviour

- problems and conflicts are faced openly and constructively

- the tutor is responsible for encouraging and facilitating active participation by all the students

- clarity in the setting of tasks, activities and deadlines

- everyone's contributions are acknowledged and valued.

There will be many things to do at each Study Support Meeting, so you are advised to plan the two or three hours available so you can make best use of the time. For example, during that time you will need to:

- invite students to raise any queries or misunderstandings with the current study sessions or assignment

- review each student's Study Notebook

- for formal assessment, give back the scripts from the last assignment with your marks and feedback comments

- discuss any issues arising from the last assignment

- provide guidance and support as needed

- collect scripts for the next assignment from each student.

You may also want to plan some group activities or discussions, perhaps based on SAQs or sections from the current study sessions.

Part of your role as blended learning tutor is being prepared to intervene if one or more students are experiencing difficulties. However, it is important not to dominate the discussions in the group. It can be difficult to let go of the traditional authority of 'the teacher' and there is a certain amount of security in standing at the front and doing the majority of the talking. But it is important that you establish a supportive role from the start that enables your students to become confident and independent learners. This emphasis on facilitation can broaden and enrich your role as well as benefit the students.

Record keeping of students' progress

One of your responsibilities as tutor is to keep accurate records of your students' progress. This will be mainly in relation to:

- written formal assignments submitted by your students according to the schedule for the programme of study

- your students' attendance and participation in the Study Support Meetings.

You will need to comply with the administrative processes and systems of your study programme.

Managing your time

Part of your role as a tutor is to help your students with their time management. They will need to find time for study between their work and other commitments, and may look to you for advice on how to manage this.

Similarly, you need to find time to fulfil your various tasks as a tutor. You should be familiar with the contents of each module, including the ITQs and SAQs. In addition, you should allow sufficient time for marking assignments, writing feedback comments on each script and for planning Study Support Meetings. Be sure to allow yourself enough time to undertake these responsibilities according to the schedule for study.

8 Using OpenWASH modules for independent and group study

OpenWASH modules can also be successfully used for people studying on their own. Sharing the learning experience with other students and having the support of a tutor is extremely valuable, but it is not essential. Independent study may be most appropriate for you if you want to improve your skills and knowledge in a particular subject area. It has the benefit of flexibility and allows you to accommodate other demands on your time.

If you are studying independently you can choose to select particular study sessions from the modules according to your needs and wishes, but be aware that this type of self-managed learning requires dedication and discipline. You should set a timetable for study and use a dedicated Study Notebook. We recommend that you make use of the ITQs and SAQs to assess your own learning and that you record your answers before looking at the notes provided.

8.1 Group study in the workplace

Another approach to using the modules is a combination of independent study with some elements of distance learning. This can be particularly useful in a work-based context.

If you are the supervisor or leader of a group of staff, these modules provide a convenient way of providing training without sending them away for a residential course, which may be expensive and

take them away from their jobs. You can set them the task of studying one or more of the OpenWASH modules or part of a module within a set time. The only resources required would be copies of the relevant modules (or internet access). You could also consider adapting the content to your specific work situation, or setting tasks for your group of staff to link their study to their work activities.

Your role, as their supervisor, is similar to the role of the distance/blended learning tutor. If you are considering using the modules in this way, we recommend that you read Section 7. You will need to allocate some time for discussion and feedback sessions with your group of staff, but this will be significantly less than conventional training. Your staff will improve their skills and knowledge, and they will also have the benefit of support from you and from their colleagues who are studying with them.

8.2 Group study in the community

You could use the modules to provide training for community groups such as WASHCOs, the Health Development Army or school-based clubs and associations. You should select specific study sessions or parts of study sessions according to the needs of the particular project or enterprise. To develop the materials and adapt them for this purpose requires both aspects of the classroom teacher's role in planning the session, and aspects of the distance learning tutor's role in supporting the group in their activities. The learning outcomes, key terms, ITQs and SAQs should all be used in this context to ensure the group gets the most out of the training session.

9 Conclusion

This Trainers' Handbook can only provide a brief summary of possible ways of using the OpenWASH modules but has set out the main options to help you plan your training programmes. We hope that, whichever way you use them, you find the modules to be valuable learning resources that provide enriching and rewarding experiences for you and your students.

Appendix: Learning Outcomes for the OpenWASH modules

Ethiopia's One WASH National Programme

- Discuss the background and challenges for WASH in Ethiopia, explain why the OWNP was needed and how it will address the challenges.

- Describe the aims, components, scope, processes and funding of the OWNP.

- Understand the roles and responsibilities of different ministries and other stakeholders in the OWNP, and the relationships between them.

- Explain how the OWNP is being implemented and managed.

- Describe the contribution of the OWNP to development in Ethiopia and the implications for the future.

WASH: Context and Environment

- Describe the impacts of our actions and behaviour on the environment in which we live, and identify ways in which we can all contribute to creating a better environment.

- Understand the patterns of change and underlying trends in population, climate and urbanisation, and how these may affect progress in WASH.

- Describe the water cycle, the importance of a safe water supply, and the relationship between water resources and human activities.

- Explain the effects of pollution on the natural environment and on human health, and how this influences waste disposal options.

- Describe the national and international policy context for the WASH sector in Ethiopia.

Urban Water Supply

- Describe the technologies available to provide safe drinking water in urban settings and the main challenges associated with them.

- Understand the characteristics and requirements of services provided and managed by a water utility.

- Explain the regulatory, operational and economic issues related to piped water supply services to households and water points.

- Describe how water emergencies can be managed, including the treatment, storage and handling of drinking water in the home.

- Describe options for private sector engagement in provision of urban water supply and related services.

Urban Sanitation and Solid Waste Management

- Understand the principles of sanitation and the sanitation ladder.

- Describe the technical options for liquid waste management in urban and peri-urban settings.

- Explain the waste management hierarchy and identify opportunities to minimise solid waste production.

- Describe the complete process for both liquid and solid waste management, including collection, storage, transportation and treatment.

- Understand the role and potential of private sector engagement in solid and liquid waste management.

Urban WASH: Working with People

- Describe the characteristics of urban communities and how they can affect behaviour and environmental responsibility.

- Explain the importance of social accountability and community involvement for effective and sustainable WASH services.

- Discuss the different approaches that are available to influence people's behaviour in the home, in schools and other institutions, and in the wider community.

- Plan and undertake community engagement activities to achieve sustainable change in WASH behaviour.

- Explain how monitoring and evaluation should be used to assess impact of WASH interventions.

References

One WASH National Programme (2013) Available at: http://www.cmpethiopia.org/media/ownp_project_document (Accessed 8 July 2015).

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