

Roles and responsibilities of the design development team

The personnel: guidance notes

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Section 1

Introduction

In this activity learners select and match up the roles and responsibilities of the design and development personnel in Construction and the built environment (CBE). They then review a range of responsibilities for each member of the team and their contribution to sustainable development.

The resource uses a traditional model of contractual procedures. Learners should be aware that there are other design and contracting arrangements, for example 'design and build' contractors, and that some employers utilise multi-tasking professionals.

You will be using a range of teaching and learning approaches, but there is a particular focus on learners:

- making requests and asking questions
- improving and reflecting on discussion skills
- reflecting on their learning and skills.

Make the learners aware that they are developing their personal and learning skills as well as gaining new knowledge. This helps them to become more 'expert' learners.

Learning objectives

Vocational objectives

- be able to identify the key roles and responsibilities of those involved in the design and development process
- be able to specify their contribution to sustainable development

Literacy, language and numeracy (LLN) objectives

- SLd/L2.4 Support opinions and arguments with evidence.
- SLc/L1.2 Make requests and ask questions to obtain information in familiar and unfamiliar contexts.

Learning outcomes

When they have completed the activity learners should:

- be aware of the roles and responsibilities of personnel involved in the design process
- be aware of the personal, learning and thinking skills they are using.

Learning outcomes for teachers

After completing these activities teachers should be able to:

- understand the importance of embedding LLN into vocational learning
- facilitate active learning activities
- understand the importance of giving specific and timely feedback
- reflect on and evaluate the teaching and learning experiences in the activities
- encourage learners to talk about their learning experience and learning skills.

Resources required

- Roles and responsibilities card sort.
- Roles and responsibilities video clips
- Interactive whiteboard, if available.

Starting points

Learners will need discussion skills at Level 1. The activity aims to move learners on to discussion and listening skills at Level 2. Learners will also need information and communication technology (ICT) skills at Level 1 to be able to access the internet. The learners will be asked to read a document that they have found to pick out the main points which is also a Level 1 task. They will build to Levels 2 and 3 by synthesising and presenting information in their own words, both verbally and in writing.

Suggested approaches (Indicative timing: 40 minutes)

Stage 1 (Individually or pairs) (Indicative timing: 20 minutes)

Learners should view each film clip and decide the role title of each individual. This could be done by learners writing their answer on a mini white board and displaying it at an appropriate time. Draw learners' attention to clues provided in the clips by pausing or replaying the video as they occur.

After each role has been successfully identified, pause the video and discuss the main responsibilities of the role and the contribution each may have to sustainable development. The results should be recorded on Learner sheet1. If you have undertaken this activity after the wheel of design and development activity learners should establish where each role would fit into that process.

Ask learners to:

- review the video clips and name the role portrayed
- discuss and agree potential responsibilities each role may have for sustainability
- discuss where each role may be involved in the design and development process using the wheel of design as a point of reference.

Stage 2 (in pairs) (Indicative timing: 20 minutes)

This stage builds on the activity above and broadens the range of roles. Each group of learners should be given a set of roles and responsibilities cards.

The cards should be sorted into the following four categories:

- job role title
- role within the construction process
- responsibility within the construction process
- contribution to sustainable development.

Learners should place the job role titles in a row and then match the remaining roles and responsibilities to the titles. They should then compare their results with another pair and come to a consensus. Each group of four should then join with another group of four and repeat the process. The process of comparison and consensus is continued until there is a shared group answer. This is then checked in a whole group plenary. This is a process known as snowballing. Alternatively, you can facilitate a question and answer session to agree the correct matching sequence.

The new roles and responsibilities can then be added to Learner sheet 1.

Stage 3

Ask learners to add new vocabulary to their glossary.

Ask learners to reflect on their LLN skills using the Learner reflection sheet.

Extension activities

This activity could be extended to deepen or broaden your learners' understanding of the topic by extending the range of roles involved or getting input from local professionals in the roles given.

Learner Sheet 1

Roles and responsibilities

After you have seen the videos and discussed with your group write down:

- which role you think each person has in the design and development
- what you think are the main responsibilities or tasks that person does in their role
- what contribution they can make to sustainable development.

Role title	Main responsibilities or tasks	Contribution to sustainable development

Section 2

**Reflect on teaching and learning
Learner reflection sheet**

How are my discussion and learning skills?

Name.....

Date.....

Activity 2: The personnel

	Skill When I was identifying the different roles and responsibilities did I:	I do this well	I'm okay at this	I need to work on this
SLd/L2.4	think through the reasons before talking about them?			
	support my opinions and arguments with evidence?			
SLc/L1.2	ask for information when I wasn't sure of the answer?			
What action can I take to improve my reasoning skills?				

Learning approaches How good am I at:	I do this well	I'm okay at this	I need to work on this
working individually?			
contributing to group work?			
listening to other people?			
making helpful suggestions to other learners?			
accepting suggestions about how to improve your work?			
giving clear verbal explanations?			
asking clear questions?			
using the internet to select information?			
making notes that use key words?			

Turn the page

I learn best by:

I find it difficult to learn when:

I could improve my learning by:

Next time I will:

Teacher reflection sheet

How confident am I to embed LLN?

You may wish to read the information about the importance of LLN in Section 3 before completing this self assessment.

Was I able to help learners to:

I do this well	I'm okay at this	I need to work on this
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value the development of LLN by making them aware of the skills they were using at different stages of the activity?

complete the self assessment of their LLN skills after each activity?

SLd/ support opinions and arguments with evidence?

L2.4 think through the reasons before talking about them?

SLc/ make requests and ask questions to obtain detailed L1.2 information?

My key improvement targets are:

What would help me to embed LLN into my teaching?

I do this well	I'm okay at this	I need to work on this
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Show the learners that I value the work on LLN.

Liaise with LLN or maths specialists.

Work with a Subject Learning Coach (SLC).

Work with other people who are teaching my subject to plan how to embed LLN.

Have knowledge of the LLN core curriculum.

Look at the National Research and Development Centre for adult literacy and numeracy (NRDC) research which shows how other teachers have done it.

Attend a staff development session on LLN.

Participate in a Skills for Life project that is focusing on embedding.

I will improve my embedding of LLN in my teaching by:

Reflect on active learning methods

If you have adapted these resources and used different approaches please edit this sheet accordingly. You may wish to read section 3 before doing this self assessment.

Teaching and learning approaches or activities How confident am I at:	I do this well	I'm okay at this	I need to work on this
using technology?			
encouraging peer explanation?			
facilitating snowball or pyramid groups?			
enabling peer review and feedback?			
encouraging learners to reflect on the development of their personal, learning and thinking skills?			

My key improvement targets are:

Section 3

Guidance on teaching and learning approaches Literacy, language and numeracy (LLN)

Recent research has found that programmes that embed LLN lead to a 16% improvement in retention and achievement of vocational qualifications (Helen Casey et al, 2006).

In this activity, learners will have the opportunity to develop their speaking and listening skills. Tell learners about the skill(s) to be developed in each activity and give specific guidance on how to improve. The notes on each activity help you to do this. Ask learners to self-assess their performance using the Learner reflection sheet. They can also set their own targets for improvement. Focus on developing one or two skills at a time and review these on a regular basis. Your LLN specialist will also be able to advise you on other strategies and approaches.

Always try to find naturally occurring opportunities to work on LLN, where learners can immediately appreciate the relevance and importance of the skills they are learning to use.

As part of your continuing professional development (CPD) you can evaluate your own confidence to embed LLN into your teaching. Use the Teacher reflection sheet to do this and create an action plan for improvement. This could be done with your SLC or with the help of your LLN specialist.

Glossary

The glossary is a feature of all the materials developed for CBE in this phase. We have included a glossary that you can adapt.

A range of technical terminology is used both for the design and development of a construction project and for the personnel involved. You can work with learners to develop personalised glossaries. Value the glossary by reviewing it on a regular basis. You may also want to refer learners to the following websites to help them in developing their glossaries:

<http://www.esd.rgs.org/glossarypopup.html>

<http://www.greenconstruction.co.uk/glossary/default.asp>

Planning learning in multiple environments

In these activities learners can use their experience from visits to construction sites and their own general knowledge. You may want to encourage them to undertake internet research in preparation for, or as an extension of, these activities.

A visit to a construction project, or architect's office, or guest speaker from one of the professionals identified in these activities would make the learning experience more meaningful.

Co-operative learning

Most of the activities use co-operative learning. Learners work in pairs and groups. The teacher acts as the facilitator.

By allowing learners to explore information and to seek for meaning, a deeper and more lasting learning takes place. Co-operative learning has been found to improve information acquisition, higher-level thinking skills, interpersonal and communication skills.

The co-operative learning techniques used in this series of activities are:

- agreeing ground rules
- team discussion
- explanations by teams
- asking and answering questions.

Think carefully about pairing and grouping learners. For example, place those with reading difficulties with those who are more proficient.

Experiential learning

Some of the learner activities in this resource are experiential. Learners are engaged in work-related experiences that allow them to make discoveries and to experiment. They can construct meaning and develop their understanding. Experiential learning leads to affective (feeling) as well as cognitive (thinking) learning. It can be a powerful approach for developing empathy and changing attitudes

Multi-sensory learning

The learner activities in these resources use multi-sensory learning. By designing a learning experience where learners use more than one of their senses, we make it richer and more motivating. The learner is more likely to remember after a multi-sensory experience

Learners are engaged by using interactive resources and other media including:

- card sorts
- coloured pens
- video.

Reflect on the teaching and learning approaches used in this activity

You can use the Teacher reflection sheet to reflect on the teaching skills you have used in this activity. This can contribute to the development of your skills within the framework of the new overarching professional standards for teachers in the lifelong learning sector.

The new professional standards can be downloaded from the Lifelong Learning (LLUK) website, www.lifelonglearninguk.org/standards/new_prof_standards.html

The Institute for Learning website, www.ifl.ac.uk, can provide:

- a description of the CPD process
- a place for teachers to keep a record of their activities and achievements.

The joint Training and Development Agency for Schools/LLUK website supporting the workforce delivering diplomas, www.teach14-19.org can provide an online interactive training needs analysis for teachers of Diplomas.

You could use the Teacher reflection sheet when planning, or after using the activities in these resources. This enables you to identify clearly areas in which you may need development and, using the instruments outlined above, plan and record the development of these skills.

If you have adapted these resources and used different approaches you can edit the Teacher reflection sheet accordingly. You should undertake this reflection and development with your SLC or another colleague and encourage your learners to give you feedback on the use of the approaches and the development of your skills.

Bibliography

Casey, Helen, et al (2006) *"You wouldn't expect a maths teacher to teach plastering..." Embedding literacy, language and numeracy in post-16 vocational programmes – the impact on learning and achievement*. NRDC, London.