

Planning for sustainable development

Where should the development be located?: guidance notes

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Section 1

Introduction

This is the third of a series of activities that focuses on the importance of sustainability and consultation in the planning process. In this activity learners identify areas on a map suitable for developing either a public or private sector construction site. Learners identify the site of their choice and then say why they have chosen the location, making specific reference to sustainability in the built environment.

The activities take place over a number of sessions. This needs careful planning to ensure continuity and to get the most out of the tasks. Each session builds on the last. You will find an overview of the activities in the full Teacher* notes document, with indicative timings to help you.

You will be using a range of teaching and learning approaches, but there is a particular focus on using, improving and reflecting on discussion skills, giving feedback and using collaborative working techniques. 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.

We have included sheets for you and your learners to record your reflections on using these activities in Section 2.

* We use the word 'teacher' as a generic term to include teachers, tutors, trainers, lecturers and instructors in the further education (FE) system.

Learning objectives

Objectives for learners

Vocational objectives

This activity is designed to be carried out in pairs. Learners:

- select a suitable area for construction using a scenario
- list reasons explaining the choice of location.

Literacy, language and numeracy (LLN) objectives

- SLd/L2.1: Make relevant contributions and help move the discussion forward.
- SLc/L2.3: Express clearly statements of fact, explanations ... using appropriate style and vocabulary.
- SLr/L2.4: Respond to criticism and criticise constructively.

Learning outcomes for learners

After completing these activities learners should:

- understand the impact of construction activities on the environment
- have developed an awareness of the importance of the planning process.

Learning outcomes for teachers

After completing these activities you should be able to:

- practise embedding LLN into the vocational learning process
- use active learning methods
- reflect on and evaluate your teaching experience
- encourage learners to talk about their learning experience.

Resources required

- Sustainability importance cards.
- Sticky notes.
- Flip chart paper and pens.
- Local area plan which includes a map.
- Markers or map pins for map work.
- White board and markers.

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 orally and in writing.

Suggested approach (Indicative timing: 60 minutes)

This is a group activity that asks learners to identify areas on a map suitable for developing a public or private sector construction site. Learners identify the site of their choice and then say why they have chosen the location, making specific reference to sustainability in the built environment.

Give learners **Learner sheet 1**.

Use a map of your local area. Give each group a marker or map pin to place on their map.

Before you start (indicative timing: 5 minutes), discuss with learners what makes an effective discussion. Group members should:

- make sure that each person understands the purpose of the discussion
- ask each other for information and clarification
- listen carefully to what others say
- pick up and develop the points that other people make
- draw out reluctant contributors
- summarise the understanding and decisions of the group.

Write these points on the board.

Stage 1 (Pairs) (Indicative timing: 5 minutes)

There are two scenarios that have been prepared. You can find these on **Learner sheet 2**. Let learners choose, or you can allocate the scenarios.

Ask learners to read through the scenario and identify any vocabulary that is new to them. They should find out the meaning and add it to their glossary.

Stage 2 (Individuals and groups) (Indicative timing: 20 minutes)

Ask learners to look at the list of factors that are important for sustainability (Activity 2). Using the chosen scenario, ask learners to consider the location for their development on the map provided.

Learners should make notes about their chosen location.

- How does it fulfil the requirements of the brief?
- How does it address the issues of sustainability in the environment?
- How will it be of benefit to the local area?

Stage 3 (Individuals within groups) (Indicative timing: 20 minutes)

Ask each group to choose a spokesperson(s) to explain their choice of location. Each group should be allowed to finish their explanation without interruption.

Tell the listeners that they will need to ask one question or challenge one statement from each explanation.

After each group has explained their choice of location, give each of the other groups two minutes to confer. Each group can either ask one question or challenge one aspect of the choice of location of the group giving the explanation. Try to ensure that more than one person in each group either asks or answers a question.

Stage 4 (Whole group) (Indicative timing: 10 minutes)

Review the points that have been raised by the groups. Point out that planning is an important aspect of every construction project and is not only linked to improving sustainability.

Review the learning methods that have been used and ask the learners for feedback.

Ask learners to assess their discussion skills for this activity using the **Learner reflection sheet**.

Learner sheet 1

Where should the development be located?

In this activity you will be asked to locate a public or private sector development in an appropriate place. You need to pay particular attention to sustainability in the built environment when you make your decisions.

Stage 1 (Pairs)

Read through the scenario and identify any vocabulary that is new to you. Find out the meaning and update your glossary.

Stage 2 (Individually or in groups)

Look back at the list of factors that you considered to be important in terms of sustainability. Using the scenario, make notes about your choice of location.

- How does it fulfil the requirements of the brief?
- How does it address the issues of sustainability in the environment?
- How will it be of benefit to the local area?

Be prepared to explain why you have chosen this location.

Stage 3 (Individuals within groups)

Choose a spokesperson(s) for your group. Explain your choice of location to the other groups.

When it's your turn to listen to other groups, note down one question or comment that you would like to make. Each group of listeners will be given the opportunity to ask one question or make one comment. Make sure it is not the same person both giving the explanation and asking questions!

Stage 4 (Whole group then individually)

Discuss whether this was a good way of learning about sustainability. Evaluate your discussion skills using the **Learner reflection sheet**.

Learner sheet 2

Scenario 1

The client, a local entrepreneur, has decided to purchase a 2,000 square metre industrial unit, to act as a packaging and dispatch unit with a collection point. The client has not yet decided whether she would like a new build or a fully refurbished existing building. The client is happy to purchase an existing building within the current location. She insists that the following must be accessible to the business or alternatives suggested:

- good road links
- rail transport
- good car parking
- shops.

Scenario 2

The local authority has secured funding to develop a new leisure complex. The proposals incorporate a swimming pool, gymnasium, bowling alley, library, cinema and cafeteria.

Consider the following criteria in locating the complex:

- public transport
- car parking
- good road links
- impact on the local community (noise, light pollution and so on)
- environmental impact.

Section 2

Reflect on teaching and learning

Learner reflection sheet

How are my discussion and learning skills?

Name..... Date.....

Activity 3: Where should the development be located?

	Skill	I do this well	I'm okay at this	I need to work on this
SLd/L2.1	Did I make relevant contributions and help move the discussion forward?			
	Did my comments help the group to come to a solution?			
SLc/L2.3	Did I express clearly what I wanted to say?			
	Did I use the correct vocabulary?			
	Did other people understand what I was saying?			
	Did I make sure that my points were logical?			
	Did I look at other people when I spoke?			
SLr/L2.4	Did I respond to criticism and criticise constructively?			
	Did I listen to other people's criticism without getting angry?			
	Was I helpful when I made comments on other people's ideas?			
What action can I take to improve my literacy and language skills?				

Learning approaches	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 oral explanations			
Asking clear questions			
Using the internet to select information			
Making notes that use key words			

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 in my ability to embed LLN?

Was I able to help learners to:		I do this well	I'm okay at this	I need to work on this
SLd/L2.1	• make relevant contributions and help move the discussion forward?			
	• make comments to help the group to come to a solution?			
SLc/L2.3	• express clearly what they wanted to say?			
	• use the correct vocabulary?			
	• make sure that their points were logical?			
	• look at other people when they spoke?			
SLr/L2.4	• respond to criticism and criticise constructively?			
	• listen to other people's criticism without getting angry?			
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
Show the learners that I value the work on LLN.			
Liaise with LLN or Mathematics specialists.			
Work with a Subject Learning Coach.			
Work with other people who are teaching my subject to plan how to embed LLN.			
Have relevant 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.			
<p>The action I will take to improve embedding of LLN in my teaching is:</p>			

How confident am I in using these approaches?

If you have adapted these resources and used different approaches please edit this sheet accordingly. You may find it helpful to read Section 3 before doing this self-assessment.

Teaching and learning approaches or activities Do I make an effort to:	I do this well	I'm okay at this	I need to work on this
• make discussions more effective?			
• use vocationally relevant examples?			
• use graduated tasks?			
• encourage learners to reflect on the development of their personal, learning and thinking skills?			

How can I help my learners to become 'expert' learners?	I do this well	I'm okay at this	I need to work on this
I allow my learners to seek for information rather than giving it to them.			
I encourage my learners to explore and discuss information.			
I construct activities so that learners are confident to work independently.			
I work with a Subject Learning Coach to explore methods and approaches which will make learners more independent.			
I use a wide range of active learning methods.			
I get regular feedback from my learners about how they learn most effectively			
I explain to learners the methods I am using and why they are effective.			
I show my learners how to plan effectively.			
I give timely and specific feedback to learners about their work.			
My learners have personalised learning plans which help them to know what they should be doing inside and outside the classroom.			
I will take these steps to enable my learners to become more 'expert':			

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 these activities, 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. Focus on developing one or two skills at a time. Your LLN specialist will also be able to advise you on other strategies and approaches.

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. This can contribute to your CPD activity for the year.

Ask learners to self-assess their performance using the **Learner reflection sheet**. They can also set targets for improvement.

Glossary

The glossary is a feature of all the materials developed for Construction and the built environment (CBE) in this phase. We have included a glossary that you can adapt.

A range of technical terminology is used in planning sustainability. 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 one of the following websites to help them in developing their glossaries:

www.esd.rgs.org/glossarypopup.html
www.greenconstruction.co.uk/glossary/default.asp

Co-operative learning

Most of the activities use co-operative learning. Learners work in pairs, teams and opposing groups. The teacher acts as the 'guide on the side'.

The tasks are structured to allow learners to explore information and to seek for meaning; in this way 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.

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

Planning learning in multiple environments

Learners need to use their experience from visits to construction sites, general knowledge and research from the internet to complete these activities.

A visit to a site, or from a planning officer or designer involved in planning, will make the learning experience more meaningful.

Experiential learning

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.

Activity 4 asks groups to look at the planning process from the standpoint of another person or opposition group. This activity should lead to affective (feeling) as well as cognitive (thinking) learning.

Assessment for learning

Giving specific and constructive feedback on how to improve in each task will enable learners to progress more effectively. It will also have a profound influence on learners' motivation and self-esteem (John Hattie, 2002).

There are opportunities for you to become involved in a learning conversation with individuals and groups to help them to identify where and how to focus their efforts.

Assessment for learning does not need to be teacher led. These activities include self-assessment and peer feedback which are both powerful forms of assessment for learning

Reflect on the teaching and learning approaches used in this activity

You could use the **Teacher reflection sheet** when planning, or after using the activities in these resources. This enables you clearly to identify areas in which you may need development. You can use the instruments outlined below to plan and record the development of these skills. This can contribute to the development of your skills within the framework of the new overarching professional standards for teachers in the further education system.

The new professional standards can be downloaded from the 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/Lifelong Learning UK website, supporting the workforce delivering Diplomas, www.teach14-19.org provides an online interactive training needs analysis for teachers of Diplomas.

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 Subject Learning Coach or another colleague and encourage your learners to give you feedback on the use of the approaches and the development of your skills.

Reference

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.