

Unit 15: Work-related Experience in the Environmental Sustainability Sector

Unit code:	Y/602/5984
QCF Level 3:	BTEC National
Credit value:	10
Guided learning hours:	60

● Aim and purpose

This unit gives learners the understanding and skills needed to identify, prepare for, participate in and review work experience with an environmental sustainability focus. The unit is suitable for full-time and part-time employed learners who are interested in developing innovative approaches to sustainability at work and in the wider community.

● Unit introduction

In this unit learners will develop an understanding of the role of sustainability at work and in the wider community. Sustainable methods and approaches can be identified and applied to all areas of education, work and communities, allowing learners to become proactive in finding sustainable solutions to issues that arise whilst working in these areas.

Learners will become aware of the range of environmental responsibilities at work and in the community and the roles available within these settings. Learners wanting to progress to employment within the environmental sustainability sector require an understanding of sustainable issues and the experience and benefits of working in an environmentally sustainable way.

Work-based experience can be gained by learners through a number of routes, for example as part of an industrial placement whilst at their centre of learning, while working on a planned daily or weekly basis in the centre's commercial and/or educational facilities, or while undertaking voluntary work in the community. Experience can also be gained by being a member of a group of learners invited to carry out practical work, such as setting up a sustainable project aimed at resolving issues in the wider community or at work.

Work-based experience involves more than activities in a work environment. Talking to, listening to and watching those with experience of particular industries and/or situations is a valid way of learning about the work involved and what is required of the employee.

The unit develops learners' abilities to identify improvements related to environmental impact and sustainability in a workplace and to develop generic employability skills. The unit also gives learners the opportunity to reflect on their personal experience and identify further training needs and employment opportunities.

● Learning outcomes

On completion of this unit a learner should:

- 1 Understand the importance of applying a sustainable approach to the world of work
- 2 Be able to prepare for a sustainable work-related experience in the environmental sustainability sector
- 3 Be able to undertake a work-related experience in the environmental sustainability sector
- 4 Be able to review a work-related experience in the environmental sustainability sector.

Unit content

1 Understand the importance of applying a sustainable approach to the world of work

Responsibilities: government legislation; employer; employee

Sustainable methods: cost-effective; cost-reduction; reducing environmental impacts; waste reduction eg monitoring, recycling; improving efficiency; sustainable management; environmental responsibility; social responsibility; integrating sustainable practice; sustainability commitment

Barriers: issues; identify; quantify

Importance of sustainable methods: identifying possible solutions; applying solutions eg reducing costs, reducing waste, monitoring, improving efficiency, sustainable management, responsibilities, commitment

Impact at work: identifying; measuring; quantifying eg time based, amounts, results, reductions, savings; cultural eg staff morale, attitudinal, actual change

Opportunities at work: careers in the environmental sustainability sector eg noise engineer, ecotoxicology analyst, environmental planning/management, wind farm design technician, sustainability projects manager, corporate responsibility communications manager, corporate social responsibility analyst, marketing manager, energy consultant, environmental sustainability adviser; progression opportunities; opportunities across other sectors

2 Be able to prepare for a sustainable work-related experience in the environmental sustainability sector

Selection and application: identification of sustainable work-related aspirations; identification of sustainable work-related activities; relevant documents eg curriculum vitae, letter of application

Interview skills: punctuality; personal appearance and hygiene; body language; knowledge about employer

Methods of communication: effective communication eg importance, face-to-face, telephone, memo, formal letter, presentation, preparation; knowledge of the role interviewing for

Preparation for a work-related experience: identifying and selecting the appropriate resources to carry out the work-related experience; reliability; attendance; punctuality; commitment; use of initiative; cooperation; sensitivity; health and safety (risk assessment, policies and procedures in the work setting, safe methods for manual handling, emergency procedures, security of the workplace)

Targets, aims and objectives: Specific, Measurable, Achievable, Realistic, Time-bound (SMART); completed eg safely, thoroughly; feedback

3 Be able to undertake a work-related experience in the environmental sustainability sector

Work-related experience: within the environmental sustainability sector or related sector

Record keeping: reasons for; eligibility, accuracy, timing, information required eg location or tool recording, date, time, maintenance information

Personal diary: recording activities; aims; outcomes; achievements

4 Be able to review a work-related experience in the environmental sustainability sector

Presenting evidence: type eg personal daily log, diary, portfolio of evidence, Individual Learning Portfolio, blog, wiki

Improvement: identification of improvements eg operational, political, legal, commercial, resources, financial, environmental, physical; evaluation of proposed improvements; justification of proposed and/or actual improvements; continuous improvement at all levels of a business or organisation (importance, benefits); cost savings

Personal development plan: objective setting by self and by employer; reason for monitoring and review; education and training opportunities eg educational, training institution, work based; value of induction and experience; ways in which individuals develop at work; individual contribution to the business or organisation's aims and to teamwork; initiative; self-motivation; flexibility and responsiveness to change; reflection on own attitudes and relationships; recognition

Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
P1 explain the importance of using sustainable methods at work or in the wider community [IE1, 2, 3]	M1 compare and contrast sustainable methods used by a selected organisation	D1 assess the impact at work or in the wider community of using sustainable methods
P2 evaluate suitable career and progression opportunities within the environmental sustainability sector [IE4]	M2 justify suitable career opportunities within a selected environmental sustainability work setting, including opportunities for progression	
P3 select an appropriate work-related experience and complete the application process [SM1, 2]		
P4 demonstrate appropriate interview preparation and skills as an interviewee [EP1, 4, 5]		
P5 prepare for a work-related experience, identifying relevant targets, aims and objectives [SM3, 5; RL2]	M3 prepare for a work-related experience explaining valid targets, aims and objectives	
P6 undertake a selected appropriate work-related experience [SM1, 2, 3, 4, 5, 6, 7; EP4]		

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
<p>P7 present validated evidence of activities and achievements during a work-related experience [RL5]</p>	<p>M4 explain strengths and areas for improvement of a specified work-related experience</p>	<p>D2 evaluate specified work-related experience, including personal skills and future opportunities</p>
<p>P8 review own work-related experience, identifying strengths and areas for improvement [RL5, 6]</p>		
<p>P9 prepare a personal development plan to demonstrate how own performance in a work-related setting could be improved. [RL5, 6; SM1, 2]</p>	<p>M5 explain contents of self-designed personal development plan.</p>	<p>D3 justify personal development plan to improve performance in a work-related setting.</p>

PLTS: This summary references where applicable, in the square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

Key	IE – independent enquirers CT – creative thinkers	RL – reflective learners TW – team workers	SM – self-managers EP – effective participators
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Essential guidance for tutors

Delivery

Tutors could use a wide range of techniques including lectures, discussions, seminar presentations, work placements, visiting speakers, site visits and practicals, internet and/or library-based research and learners' personal and/or industrial experience. Delivery should stimulate, motivate, educate and enthuse learners, with a clear and consistent focus throughout on environmental sustainability.

Work-related placements should support the exploration of environmental sustainability through the roles undertaken and be monitored regularly to ensure the quality of the learning experience. It would be beneficial if learners and supervisors were made aware of the requirements of this unit before any work-related activities are agreed or take place, so that naturally occurring assessment evidence opportunities are identified and relevant evidence can be collected. For example, learners may have the opportunity to identify and suggest sustainable improvements through their work activities. Assessors should complete observation records and/or witness statements to confirm criteria achieved. Guidance on the use of observation records and witness statements is provided on the Edexcel website (www.edexcel.com).

Ideally, learners should be given the opportunity to gain work-related experience in the environmental sustainability sector through a number of routes: for example as part of an industrial placement whilst at their centre of learning; while working on a planned daily or weekly basis at the centre's commercial and/or educational facilities; while undertaking voluntary work in the community or as a member of a group of learners invited to carry out practical environmental sustainability work. Health and safety issues relating to working within the environmental sustainability sector must be raised and reinforced, and risk assessments must be undertaken before practical activities take place.

Tutors should consider integrating the delivery and assessment for this unit with other relevant units that learners are taking as part of their programme of study. Learners must be given supported time to plan and review their own development.

Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way in planning the delivery and assessment of this unit.

Topic and suggested assignments/activities and assessment
Introduction and overview of the unit.
Assignment 1: Environmental Sustainability and the World of Work (P1, P2, P3, P4, P5, M1, M2, M3, D1)
Tutor introduces the assignment brief.
Theory: identification and introduction to the different opportunities to apply environmental sustainability at work in a range of pathways and careers. Include environmental sustainability responsibilities and methods.
Research: career opportunities and progression within a chosen sector identifying the environmental sustainability requirements, knowledge, skills and attributes for a range of industries and sectors.
Evaluate: impacts at work.
Theory: introduction to and discussion on interview skills. Test and practise interview skills for a range of industries.
Role play: interview skills for a range of industries.

Topic and suggested assignments/activities and assessment

Assignment 2: Undertake Work-related Experience and Review (P6, P7, P8, P9, M4, M5, D2, D3)

Tutor introduces the assignment brief.

Theory: introduction to and discussion on the preparation, undertaking and reviewing of environmental sustainability work-related experience. Individual learner research activities and preparation tasks.

Practical application of a range of environmental sustainability work-related experiences.

Discussion on the benefits of and reasons for maintaining and presenting work-based records, including a personal diary.

Look at a range of methods for maintaining and presenting records including a personal diary. Learner activity to prepare templates.

Learners undertake work-related experience in the environmental sustainability sector. Collate evidence via: portfolio of evidence, observation records, witness testimony, personal diary.

Review of work-related experience and reflection on possible improvements.

Review of work-related experience and reflection on personal development opportunities. Learners devise a plan for their own personal development.

Review and evaluation of the unit. Learners draw conclusions about the success of their experience.

Assessment

For P1, learners need to research sustainable methods that can be applied at work or in the wider community, explaining the importance of using such methods. Assessment evidence could be in the form of a report or article. Learners should support their explanation with appropriate reasons and examples.

For M1 and D1, learners will have researched wider community methods and work in environmental sustainability and they should compare and contrast methods used by a selected organisation of their choosing (M1). Learners need to assess the impact of using these sustainable methods (D1), presenting their findings appropriately.

For P2, learners need to evaluate suitable career and progression opportunities within the environmental sustainability sector. Learners are expected to focus on one industry or community-based role of interest to them and explore all areas and opportunities for using environmental sustainability. Evidence could be in the form of a presentation or report on the industry or area of their choice.

For M2, learners need to justify suitable personal career and progression opportunities within the chosen sector of environmental sustainability. Learners should select a range of opportunities that might be suitable and of personal interest to them. Evidence could be through a presentation session where different learners are encouraged to cover different industry careers and possibilities.

For P3, learners need to select an appropriate work-related experience based on their research and evaluation and apply for the given role. Tutors need to ensure an appropriate and realistic application process is available for learners.

For P4, learners need to demonstrate appropriate interview preparation and skills as an interviewee. This could be assessed by a tutor within a role-play setting. Evidence could be in the form of a DVD/video of learners undertaking role play, supported by appropriate assessor observation records to confirm learners' achievement.

For P5, learners need to prepare for their work-related experience, identifying relevant targets, aims and objectives that are relevant to that particular setting and role and then, for P6, undertake the work-related experience.

For M3, learners need to independently prepare for a work-related experience, explaining valid targets, aims and objectives. Evidence could be recorded in a work-based diary, enabling learners to easily reflect on their performance later.

For P7, learners could keep a practical work-based diary together with other validated records of activities undertaken and personal achievements. The diary must demonstrate how the learner has prepared for a work-related experience, identifying targets, aims and objectives. The work-based diary must also support the recording of activities and achievements while undertaking the work-related experience.

For M4, learners need to explain their work-related experience through at least two strengths and at least two areas of possible improvement. Evidence could be captured through a work-based diary.

For D2, learners need to evaluate their specified work-related experience, detailing how their experience related to the personal skills they have developed and whether they met their targets, aims and objectives. Future opportunities and areas of improvement should also be detailed.

For P8, learners need to review their work-related activities and achievements (P7), including identifying strengths and areas for improvement. Authenticated photographic or witness statements could support learner's work-based diaries.

P9 focuses on learners' personal development and learners should present ideas for improvements in their own performance that could be practically applied to this work-related setting in the future.

For M5, learners could design and give a presentation that explains the contents of a self-designed personal development plan. If presentations are chosen as the assessment method, assessors should complete appropriate observation records to confirm achievement.

For D3, learners need to justify their personal development plan to improve performance in a work-related setting. Evidence could be drawn from within the practical work-based diary, enabling learners to justify their plan and make recommendations for future work in the environmental sustainability sector.

Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the pass, merit and distinction criteria in the assessment and grading grid. This is for guidance and it is recommended that centres either write their own assignments or adapt any Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
P1, P2, P3, P4, P5, M1, M2, M3, D1	Environmental Sustainability and the World of Work	You wish to pursue a career in the environmental sustainability sector. Research the importance of using sustainable methods, evaluate the career and progression opportunities and select and prepare for an appropriate work-related experience.	Portfolio of evidence. Interviews. Witness statements. Observation records.
P6, P7, P8, P9, M4, M5, D2, D3	Undertake Work-related Experience and Review	Undertake work-related experience in the environmental sustainability sector. Maintain a practical diary noting personal achievements and activities. The diary should show a review of your work.	Written reports/portfolio of evidence. Diary/blog. Observation records. Witness statements. Personal development plan.

Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

This unit forms part of the BTEC Environmental Sustainability sector suite. This unit has particular links with the following units in the BTEC Environmental Sustainability suite:

Level 3
Understand the Principles of Sustainable Development
Sustainable Communities
Science for Environmental Technicians
The Business Environment
Sustainable Facilities Management

Essential resources

Learners need supervised access to appropriate work-based sites and work-related experience in the environmental sustainability sector. Appropriate sites must be checked for health and safety.

Employer engagement and vocational contexts

The focus of this unit is on practical aspects of work-related experiences and will provide learners with a range of interview and practical work-related skills. Centres are encouraged to create and develop links with local communities, organisations and businesses that can offer access to work-related experience in the environmental sustainability sector and which might also be able to offer guest lecturers, visits, webcam updates or other methods to share activities with learners.

Indicative reading for learners

Textbooks

Fagan A – *Brilliant Job Hunting: Your Complete Guide to Getting the Job You Want* (Prentice-Hall, 2010)
ISBN 9780273743972

Innes J – *The Interview Book: Your Definitive Guide to the Perfect Interview* (Prentice-Hall, 2009)
ISBN 9780273721758

James J – *You're Hired! Interview: Tips and Techniques for a Brilliant Interview* (Trotman Education, 2009)
ISBN 9781844551781

Jay R – *Brilliant Interview: What Employers Want to Hear and How to Say It* (Prentice-Hall, 2007)
ISBN 9780273714903

Mills C – *You're Hired! CV: How to Write a Brilliant CV* (Trotman, 2009) ISBN 9781844551774

Woods C – *Everything You Need to Know at Work: A Complete Manual of Workplace Skills* (Prentice Hall, 2002)
ISBN 9780273661634

Websites

Acre Recruitment	www.acre-resources.com
Department for Environment, Food and Rural Affairs	www.defra.gov.uk/sustainable/government
Engauge	www.engaugeonline.co.uk
Environment Job.co.uk	www.environmentjob.co.uk
Green Jobs	www.greenjobsonline.co.uk
<i>Guardian Jobs</i>	jobs.guardian.co.uk
Health and Safety Executive	www.hse.gov.uk
Lantra Sector Skills Council	www.lantra.co.uk
PathFinder International	www.pathfinder.co.uk
<i>Student Times</i>	www.studenttimes.org

Delivery of personal, learning and thinking skills

The table below identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit.

Skill	When learners are ...
Independent enquirers	evaluating opportunities in the environmental sustainability jobs market
Reflective learners	preparing for a work-related experience and reflecting on targets, aims and objectives presenting validated evidence of work-related activities and achievements reviewing their work-related experience, identifying strengths and areas for improvement preparing a personal development plan
Self-managers	selecting an appropriate work-related experience preparing for their work experience undertaking a work-related experience maintaining their own records of activities and experiences reviewing their experiences and preparing a personal development plan
Effective participators	going through an interview process taking part in a work-related experience.

Although PLTS are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
Independent enquirers	finding out about sustainable methods and researching the environmental sustainability jobs market
Effective participators	taking part in class discussions to identify opportunities for work-related experience
Self-managers	finding out about sustainable methods and researching the environmental sustainability jobs market identifying opportunities for work-related experience in the environmental sustainability sector.

● Functional skills – Level 2

Skill	When learners are ...
ICT – using ICT	
Manage information storage to enable efficient retrieval	carrying out research into careers and progression opportunities
ICT – finding and selecting information	
Select information from a variety of sources to meet requirements of a complex task	researching career opportunities in the environmental sustainability sector
ICT – developing, presenting and communicating information	
Enter, develop and refine information using appropriate software to meet requirements of a complex task	<p>setting targets, aims and objectives</p> <p>setting goals with success criteria for personal development and work</p> <p>producing presentations</p> <p>maintaining a personal diary</p>
Mathematics – representing	
Choose from a range of mathematics to find solutions	using mathematics within work-related experiences, for example calculating resource efficiency measures
Mathematics – analysing	
Apply a range of mathematics to find solutions	using mathematics within work-related experiences, for example calculating resource efficiency measures
English – Speaking, Listening and Communication	
Make a range of contributions to discussions in a range of contexts, including those that are unfamiliar, and make effective presentations	<p>demonstrating interview skills as an interviewee</p> <p>giving presentations</p>
English – Reading	
Select, read, understand and compare texts and use them to gather information, ideas, arguments and opinions	researching the environmental sustainability jobs market
English – Writing	
Write a range of texts, including extended written documents, communicating information, ideas and opinions, effectively and persuasively	<p>producing reports</p> <p>maintaining a personal diary throughout the work experience</p> <p>preparing a personal development plan.</p>