
Geography: Physical Environments

SCQF: level 5 (6 SCQF credit points)

Unit code: J2ED 75

Unit outline

The general aim of this Unit is to develop the learner's geographical skills and techniques in the context of physical environments. Learners will draw on knowledge and understanding of various aspects of the physical environment through the study of a variety of landscape types in the United Kingdom.

Learners who complete this Unit will be able to:

- 1 Use a range of mapping skills in geographical contexts in the United Kingdom
- 2 Draw on detailed knowledge and understanding of physical environments and weather in the United Kingdom

This is available as a free-standing Unit. The Unit Specification should be read in conjunction with the *Unit Support Notes* which provide advice and guidance on delivery, assessment approaches and development of skills for learning, skills for life and skills for work. Exemplification of the standards in this Unit is given in the *Unit Assessment Support*.

Recommended entry

Entry to this Unit is at the discretion of the centre. However, learners would normally be expected to have attained the skills, knowledge and understanding required by one or more of the following or equivalent qualifications and/or experience:

- ◆ National 4 Geography Course or relevant component Units
- ◆ National 4 Environmental Science Course or relevant component Units

Equality and inclusion

This Unit Specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence. For further information, please refer to the *Unit Support Notes*.

Standards

Outcomes and Assessment Standards

Outcome 1

The learner will:

- 1 Use a range of mapping skills in geographical contexts in the United Kingdom by:**
 - 1.1 Interpreting geographical information from two sources to explain in detail any patterns which are found; one of the sources must be a map and the other source must relate to the area shown on the map
 - 1.2 Presenting geographical information, in detail, in at least two ways, one of which must be a map or a map based diagram

Outcome 2

The learner will:

- 2 Draw on detailed knowledge and understanding of physical environments and weather in the United Kingdom by:**
 - 2.1 Describing, in detail, one key feature found in one landscape type in the United Kingdom
 - 2.2 Explaining, in detail, the formation of one landscape feature found in the United Kingdom
 - 2.3 Explaining, in detail, the factors affecting weather in the United Kingdom
 - 2.4 Giving detailed descriptions of the possible land uses and a detailed explanation of a possible land use conflict and a possible solution for one landscape type in the United Kingdom

Evidence Requirements for the Unit

Assessors should use their professional judgement, subject knowledge and experience, and understanding of their learners, to determine the most appropriate ways to generate evidence and the conditions and contexts in which they are used.

Evidence is required to show that the learner has met the Outcomes and Assessment Standards.

The landscape types studied can be chosen from:

- ◆ glaciated upland
- ◆ upland limestone
- ◆ coastal landscapes
- ◆ rivers and valleys

Learners need only be assessed in one the context of one landscape type in order to demonstrate achievement of the Assessment Standards. Good teaching and learning will provide appropriate depth and breadth through the study of at least two landscape types.

A range of mapping skills may be developed in this Unit such as: location; direction; scale; relief patterns; identification of landforms and physical characteristics; and identifying land use and weather. A range of maps can be used in this Unit, which should include Ordnance Survey maps where appropriate.

Assessment evidence can be drawn from a variety of activities and presented in a variety of formats, including, for example, presentations, posters, written responses to questions, and participation in group tasks. All of the evidence does not need to be from the one activity, but can be assembled from a variety of tasks and assessments.

Evidence may be presented for individual Outcomes or gathered for the Unit.

Exemplification of assessment is provided in the *Unit Assessment Support*. Advice and guidance on possible approaches to assessment is provided in the *Unit Support Notes*.

Assessment standard thresholds

If a candidate successfully meets the requirements of the specified number of Assessment Standards they will be judged to have passed the Unit overall and no further re-assessment will be required.

The specific requirements for this Unit is as follows:

- ◆ Assessment Standards 1.1, 1.2, 2.2, 2.3, and 2.4 must be achieved.

It should be noted that there will still be the requirement for candidates to be given the opportunity to meet all Assessment Standards. The above threshold has been put in place to reduce the volume of re-assessment where that is required.

Development of skills for learning, skills for life and skills for work

It is expected that learners will develop broad, generic skills through this Unit. The skills that learners will be expected to improve on and develop through the Unit are based on SQA's *Skills Framework: Skills for Learning, Skills for Life and Skills for Work* and drawn from the main skills areas listed below. These must be built into the Unit where there are appropriate opportunities.

1 Literacy

1.1 Reading

2 Numeracy

2.3 Information handling

4 Employability, enterprise and citizenship

4.6 Citizenship

5 Thinking skills

5.3 Applying

5.4 Analysing and evaluating

Amplification of these is given in SQA's *Skills Framework: Skills for Learning, Skills for Life and Skills for Work*. The level of these skills should be at the same SCQF level of the Unit and be consistent with the SCQF level descriptor. Further information on building in skills for learning, skills for life and skills for work is given in the *Unit Support Notes*.

Appendix: Unit support notes

Introduction

These support notes are not mandatory. They provide advice and guidance on approaches to delivering and assessing this Unit. They are intended for teachers and lecturers who are delivering this Unit. They should be read in conjunction with:

- ◆ the *Unit Specification*
- ◆ the *Unit Assessment Support packs*

Developing skills, knowledge and understanding

Teachers and lecturers are free to select the skills, knowledge, understanding and contexts which are most appropriate for delivery in their centres.

Approaches to learning, teaching and assessment

The aim of this section is to provide advice and guidance to centres on:

- ◆ opportunities to generate naturally occurring evidence through a range of teaching and learning approaches
- ◆ approaches to added value
- ◆ approaches to developing skills for learning, skills for life and skills for work

This section provides suggestions and examples of how learning and teaching might be approached in the Geography: Physical Environments Unit.

Personalisation choice and inclusion

The Unit identifies four landscape types, one of which should be chosen for learning and teaching. This creates ideal opportunities for learner-led and teacher-led personalisation and choice.

The United Kingdom focus further promotes choice through the case-study areas used. Candidates may consider landscape types that are local to them, or they may choose to consider landscape types taken from a wider geographical area.

Personalisation and choice are key components of Curriculum for Excellence. Enjoyment and enthusiasm for the subject can be maximised by giving learners the freedom to choose landscape types and/or case study areas. By using learning and teaching techniques, such as co-operative learning, there is the potential for a single class cohort to investigate different landscape types independently, then to engage in peer teaching. This style of approach would also support meaningful assessment of individuals' knowledge and understanding as well as embracing the four capacities.

Considerations for teaching and learning

This section gives some topics that might be considered when planning the delivery of the Geography: Physical Environments Unit.

- ◆ choosing the landscape type
- ◆ inclusion of basic Earth science
- ◆ the case for fieldwork
- ◆ suggestion of resources and organisations

Choosing the landscape types

Centres should give real consideration of how best to identify the landscape type that will be studied:

- ◆ Glaciated uplands
- ◆ Upland limestone
- ◆ Coastal landscapes
- ◆ Rivers and valleys
- ◆ Any other UK landscape type

Inclusion of basic Earth science

Learners understanding of landscape types will be enhanced through an understanding of Earth science at an appropriate level.

- 1 Glaciated uplands requires learners to appreciate:
 - ◆ past climate change of glacial and interglacial periods
 - ◆ landscape weathering (such as freeze-thaw weathering)
- 2 Upland limestone requires learners to appreciate:
 - ◆ rock classification (what is a sedimentary rock),
 - ◆ formation of carboniferous limestone in shallow tropical seas,
 - ◆ role of glacial erosion in exposing limestone to weathering,
 - ◆ landscape weathering (such as freeze-thaw weathering)
- 3 Coastal landscapes requires learners to appreciate:
 - ◆ role of rock type (and hardness) on landscape type
 - ◆ role of geological strata controlling cliff shape and form,
 - ◆ how sea level change might impact on coastal landscapes
- 4 Rivers and valleys requires learners to appreciate:
 - ◆ how different rock types erode
 - ◆ role of relative rock hardness in landform formation

Although these topics may at first appear potentially challenging, the core concepts are embedded in much of the Earth science teaching currently delivered in upper primary and lower secondary (Curriculum for Excellence levels 2 and 3).

Inclusion of aspects of Earth science also supports holistic learning when the topics for the Global Issues Unit are considered. If teachers/lecturers are considering the delivery of the climate change or environmental hazards in particular then coverage of basic Earth science will be both worthwhile and complementary.

The case for fieldwork

Fieldwork should be seen as a key element of geographical learning. It can be used to reinforce map skills, build independent research skills and expand the learner's understanding of landscapes and weather in the United Kingdom.

Fieldwork should be seen within the context of outdoor learning, a key component of a Curriculum for Excellence. Teachers/lecturers might consider fieldwork at a range of levels; from the immediate school grounds which can be accessible within the normal teaching timetable, to local day trips and residential opportunities within the Scotland and the United Kingdom.

Fieldwork opportunities, at any level, are a powerful way of building the four capacities into the curriculum. The Education Scotland Outdoor Learning (OL) resources are an excellent starting place to explore generic issues of learning and teaching outdoors. Every local authority will also have a nominated OL contact who will be able to give local advice or suggestions.

Skills and experiences of gathering quality data safely, at an early stage in a Geographer's education, will give them the best possible chance of progressing in the subject.

Suggestion of resources and organisations

This section gives a limited list of organisations and sources of information which teachers/lecturers may find useful. This is far from being exhaustive. Hopefully it gives a few new avenues which may help to update and invigorate learning, teaching and assessment across National level Geography Units and beyond.

UK national parks

Examples include:

- ◆ Cairngorm National Park
- ◆ Loch Lomond and The Trossachs National Park
- ◆ Yorkshire Dales National Park

Both Scottish national parks have worked closely with the National Nature Reserves and Education Scotland to produce a wealth of resources for Scottish Schools.

For upland limestone landscapes teachers/lecturers may find the Yorkshire Dales National Park Authority particularly useful.

Scotland's Geoparks

Geoparks are territories with exceptional Earth heritage that are using it to promote sustainable development. There are currently two in Scotland and others in England, Wales and Northern Ireland:

- ◆ Northwest Highlands Geopark
- ◆ Geopark Shetland
- ◆ The European Geopark Network

Other stakeholders who can reinforce Geography learning

There are many organisations outwith schools/colleges that are enthusiastic to be involved in the delivery of education. The Physical Environments Unit Outcomes give ideal opportunities for engaging with activities which support the curriculum. In some cases these organisations may also be interested in visiting schools/colleges.

This list suggests just some of the organisations who may be able to offer a real-life perspective on issues of land use, conflict and management:

- ◆ Royal Society for the Protection of Birds — charity and major Scottish landowner
- ◆ Scottish Natural Heritage — government body responsible for many rural issues
- ◆ John Muir Trust — charity and landowner
- ◆ BP — global energy company with a range of educational materials

Other possible sources of information to support learning are:

- ◆ Education Scotland: Outdoor Learning
- ◆ Thinking through Geography (for thinking skills activities)
- ◆ British Geological Survey
- ◆ Geological Society — Rock cycle education materials

The above lists are not exhaustive. Local agencies are often the most appropriate.

Approaches to assessment and gathering evidence

Assessment is an integral part of learning and teaching in Curriculum for Excellence. Learners should be encouraged to set their own learning objectives, assess the extent of their existing knowledge and be encouraged to review their own progress.

Learners learn best when they:

- ◆ understand clearly what they are trying to learn, and what is expected of them
- ◆ are given feedback about the quality of their work, and what they can do to make it better
- ◆ are given advice about how to make improvements and are fully involved in deciding what needs to be done next, and who can give them help if they need it

Teachers and lecturers should:

- ◆ share learning/assessment criteria
- ◆ provide effective feedback
- ◆ encourage peer and self-assessment
- ◆ question effectively using higher order questioning when appropriate

Tasks should be created that allow for personalisation and choice. Learners should be given the opportunity to choose a topic that has interested them and they should be encouraged to choose a variety of relevant sources to research and also method of presentation that suits them in order to facilitate personalisation and choice.

. Learner log books could be created in order to record pupil achievement in the Outcomes on a regular basis, in order to provide evidence which satisfies completely or partially a Unit or Units.

Teachers/lecturers should use inclusive approaches to assessment that take into account the specific needs of their learners. Teachers/lecturers should use appropriate content, resources and assessment materials that recognise the achievements and contributions of different groups.

A variety of methods of assessment should be used to gather evidence such as extended writing, source evaluation, pupil presentations, role play, investigation work and creation of various media that will allow learners and teachers to establish their next steps.

Approaches to the generation of evidence for assessment purposes through teaching and learning

Geography: Physical Environments lends itself to a range of different approaches to teaching and learning which themselves have the potential to generate a wide range of assessment methods. This range and flexibility should allow teachers/lecturers to

embed the concepts of personalisation, choice and inclusion into their evidence gathering.

. The examples given here are:

- ◆ *Assessment for Learning* approaches to map skills
- ◆ Landscapes and Rural Management: case study approach
- ◆ Integrating weather to create holistic assessment approaches
- ◆ Examples of *Thinking Skills* approaches
- ◆ Incorporating GIS into teaching, learning and assessment
- ◆ Complementary Certification — The John Muir Award

***Assessment for Learning* approaches to map skills**

Centres may find it appropriate to view map work from a skills based approach. This can be particularly powerful with a mixed-ability cohort with varying levels of prior knowledge. A skills test can be a starting point with activities attached to those questions the candidate did not achieve. This way, learners identify their own weaker areas and complete tasks appropriate to their understanding.

Learners aiming to gain National 5 level unit should be comfortable with a range of map skills. These skills should include:

- ◆ compass directions
- ◆ scale and distance
- ◆ contour and relief patterns
- ◆ identifying location using grid systems, including Ordnance Survey grid referencing
- ◆ identifying landforms, characteristics and land uses
- ◆ specialist thematic mapping skills associated with weather systems, such as synoptic charts

It might be reasonable expect candidates to be comfortable with both four-figure and six-figure grid references. Candidates would also be expected to comprehend complex specialist maps, such as detailed synoptic charts.

Many of these skills are obtained earlier in a learner's education. Teachers/lecturers may therefore find the *Assessment for Learning* approach is an appropriate way to refresh and reinforce map skills as well as providing evidence for assessment purposes.

One example of such an approach would be to set the learners a short refresher test with specific questions assessing specific map skills. Learners, with guidance from teachers/lecturers then agree on success criteria before marking their assessments and deciding whether or not their understanding of each of the skills is sufficient. Where a learner's understanding of a particular map skill is deemed to be lacking, then the teacher/lecturer (or peer group) can provide support.

A repeat attempt of the refresher test would then assess levels of understanding after revisiting the necessary areas.

Map skills that have not previously been developed by learners could be delivered in whole class activities and incorporated into the assessment test.

It should be remembered that map skills are the key skills element for this Unit. To help bring this alive for learners it might be appropriate to combine map skills with some GIS

applications. This GIS might take the form of class demonstrations — showing classes how data can be presented alongside mapping, whole class activities — where data collected as a class is fed into the GIS to produce a final class product, so giving ideal opportunity of peer and class assessment. With learners who are achieving well in the map skills element of the Unit, and perhaps fieldwork activities, individual GIS work may work as a form of differentiation. See GIS section below for exemplification of possible approaches.

An alternative/complementary approach to assess map skills may be to embed them within the landscape type section. For example, to deliver the learning and teaching for rivers and their valleys, learners might follow a river from source to mouth identifying features, characteristics and land uses using an OS map. Using map skills to accurately describe the course of a river would therefore provide assessment evidence for elements of the Unit requirements

Landscapes and rural management: case study approach

An important aspect of the Geography: Physical Environments Unit is the understanding of land uses, possible conflicts that might arise, and the management of these conflicts within the selected landscape types.

This creates a situation where case studies and role play can be used for effective learning and teaching, and ultimately the collection of assessment evidence. Within Scotland alone we have a wealth of land use examples that can be used here. Here is just one suggestion of how this could be applied in the classroom where glacial uplands, **or** rivers and their valleys has been chosen as a landscape type:

Examples of land use

Using Cairngorm National Park as a focus, learners identify the wide range of land uses within the glaciated upland area which includes several major Scottish rivers, including the Spey and the Dee.

Possible conflicts/land management issues

Learners begin to assess different pressures on the landscapes. Learners should be encouraged to progress their understanding of more complex conflicts. Tourism-related conflicts can be a successful starting point, considering the issues around ‘honey-pot’ settlements such as Aviemore. At this level, this becomes more complex as we begin to examine issues such as the leisure developments on Cairngorm Mountain, pressures of renewable energy developments in the area, settlement and road expansion as the popularity of the area as a year-round destination increases.

Management of these conflicts/challenges

Learners research the different organisations involved in the area. These might include the CNPA, landowners such as the RSPB, interest groups representing conservation groups, sporting organisations and local industry/chamber of commerce.

Learners may visit the area first hand or use a combination of media sources to conduct virtual fieldwork, displaying their findings in programmes such as *Google Earth*.

Learners might be encouraged to examine neighbouring issues such as diversification on Glenlivet Estate (owned by the Crown Estate, so opening up greater debate on land management issues).

Assessment

Creating a role-play scenario might assess learners understanding of the issues and allow greater depth of understanding to be developed.

Learners might be set a complex scenario of being a decision maker deciding on the access issues around the Cairngorm summit, or whether planning permission for a new housing development should be granted. This could assess their relative understanding of land management issues.

Role-play scenarios can also be adapted to suit/challenge the learners. The final product might be a written report, an oral presentation or more original end-product.

A learning and assessment strategy, similar to the one outlined, lends itself to further development by comparing the Scottish situation with a similar tourism hotspot in another part of the world (for example the Canadian Rockies or New Zealand Alps). Such developments take a holistic approach to Geography and builds links with some topics in Geography: Global Issues Unit.

By building a comparison between UK and Global examples, centres can produce a combined assessment which provides evidence of more than one Outcome or Unit.

Integrating weather to create holistic assessment approaches

Outcome 2 of this Unit is focused on the understanding of landscape types and the issues surround land use and land management and weather.

Content that teachers/lecturers may consider appropriate includes:

- ◆ measuring and recording the elements of the weather
- ◆ factors affecting weather, such as latitude, altitude, distance from the sea
- ◆ air masses that affect the UK
- ◆ how air pressure affects weather conditions in the UK
- ◆ weather conditions associated with the passage of frontal systems

It might be appropriate for parts of this Outcome to be covered when working through the landscape types. For example, if learners are considering different land users in the Scottish Highlands then an investigation of the factors that affect the weather (and in turn affect the land use) would be very appropriate.

Some background to weather conditions and systems may be required but this will also depend on how centres have addressed the Curriculum for Excellence level 3 and level 4 Outcomes. Where prior knowledge and understanding is being assumed, teachers/lecturers must remember that not having completed Curriculum for Excellence Outcomes should not represent a barrier to achieving Units at this level.

The temptation with this Outcome is to treat it separately from the other Physical Environment Outcomes, so creating a weather Unit 'within a Unit'. Centres may find that engagement and enthusiasm for the Unit is increased if this is kept to a minimum with the knowledge being applied to real weather scenarios within the landscape types being studied. Centres may also find that, as mentioned above, much of the general weather knowledge and understanding has been gained at Curriculum for Excellence level 3 and 4 experiences and outcomes and therefore only reinforcement and revision are required for some of the concepts.

Landscape type	Weather concepts that could be embedded in learning and teaching
Glaciated uplands	<ul style="list-style-type: none"> ◆ Upland temperature range resulting in freeze-thaw weathering ◆ Impact of altitude on temperature change ◆ Impact of relief on rainfall ◆ Use case study to reinforce weather variations across UK ◆ Impact of weather conditions on land uses such as farming, recreation (ie skiing), forestry, settlement and transport
Upland limestone	<ul style="list-style-type: none"> ◆ Upland temperature range resulting in freeze-thaw weathering ◆ Impact of altitude on temperature change ◆ Use case study to reinforce weather variations across UK ◆ Impact of weather conditions on land uses such as farming, recreation, settlement and transport
Coastal landscapes	<ul style="list-style-type: none"> ◆ Storm conditions associated with air pressure impacting on rates of erosion and deposition ◆ Impact of weather conditions on land uses such as farming, recreation (ie holiday resorts), settlement and transport
Rivers and valleys	<ul style="list-style-type: none"> ◆ Differences in weather conditions along the river course (ie upland source versus coastal river mouth) ◆ Role of snowmelt in river flow/seasonal usage ◆ Changing river flow due to changing conditions, such as a passage of frontal system (and how this may impact of landform formation — waterfalls, meanders, floodplains) ◆ Impact of weather conditions on land uses such as farming, recreation (eg water sports), settlement and transport

The most obvious links are with weathering rates impacting on landforms and the impact of weather on human land uses and resulting conflicts.

Examples of *Thinking Skills* approaches

Geographical education develops strong skills in reasoned debate and thinking as well as information recall (as acknowledged in *Skills for learning, Skills for life and Skills for work*). The inclusion of conflicting land uses and rural management strategies within Physical Environments lends itself to explore the learners' thinking skills and create excellent opportunities for evidence gathering.

Thinking skills strategies have been popular in Geography for many years, particularly after the publication of David Leats's [*Thinking through Geography*](#) series.

By encouraging thinking skills and reasoned argument in the classroom environment, teachers/lecturers can assist learners in fulfilling many of the skills of the Geography Course, in particular:

- ◆ research and use information collected from a range of sources about geographical issues
- ◆ interpret and evaluate information from a range of sources, including maps

Teachers/lecturers may be particularly interested in the thinking skills techniques of:

- ◆ **Living graphs:** where theoretical graphs are annotated with real life scenarios, so bringing the concept to life. For example, a graph of stream flow or storm hydrograph might be produced then comments relating to events pre-flood, during the flood and post-flood must be added. By including comments that can be added to several parts of the graph the learner must justify their decision, so allowing the teacher/lecturer to check both their understanding of the concept and their evaluating and reasoning skills.
- ◆ **Mysteries:** where a scenario is given to learners along with a pack of cards, each containing a piece of information which may or may not be relevant to their understanding of the scenario. With no right or wrong answer, this technique is particularly strong for developing a learner's skills of reasoning and evaluating. Mysteries can prove a successful way of rounding of a land use conflict or land management issue. When combined with extended writing and a clear set of success criteria, this can be a successful way to produce a holistic and detailed assessment tool.

After any of these activities learners might be asked to produce a piece of work that can form part of their assessment evidence. This might be a written piece, a short justification, an annotated graph, a presentation, or other end-product.

Incorporating GIS into teaching, learning and assessment

Geographic Information Systems (GIS) represent a powerful tool to engage learners with applied map skills. It also represents another potential form of assessment/collating evidence of a learner's knowledge and understanding. GIS does not however need to be overly complex.

In its simplest form a GIS is just the combining of maps (geospatial data), data (perhaps statistical collected during fieldwork) and database entries. There are many commercial GIS companies who are producing software for schools. A simple GIS can also be created with Google Earth:

Pictorial GIS

When plotting a series of waypoints in Google Earth, all sorts of data can be attached. For example, something as simple as pictures can be uploaded to show landscape types, land uses and weather conditions. These pictures might come from a field trip or form a virtual field trip in the classroom. Teachers/lecturers may find Digital Explorer helpful.

Graphical GIS

Using a combination of Google Earth and Google Graphs, bar graphs and choropleths can be located onto a mapped surface. This makes a relatively simple graphing task far more impressive to look at and more engaging, particularly for learners with an interest in IT. For example, river width measurements could be plotted as bar charts on a Google Earth mapped surface. This requires waypoints to be added which also has the potential to introduce learners to the use of GPS when collecting field data. This is a technique that has been very well used by the Field Studies Council — Kindrogan Centre.

These are just two examples of how free, down-loadable software can be used to reinforce map skills, introduce GIS and build enthusiasm and engagement in Geography. Google products are just one of many possibilities for these types of activities.

Teachers/lecturers may find that expecting learners to produce their own GIS is beyond what is expected at National 5 level. At this level it may be appropriate for the GIS to be used for demonstration purposes and to illustrate the geographical tools that are used in a range of business and employment opportunities. This approach will further link National 5 level Geography with the Skills for learning, skills for life and skills for work.

Centres may also expect candidates to be able to critique the benefits and challenges of using GIS technology to process and display maps and geographical data. Showing an understanding of the role and capability of GIS in relation to map skills and geographical data would represent excellent evidence for assessment purposes.

Complementary certification — The John Muir Award

Teachers/lecturers may find that incorporating complementary certification within their core curriculum aids learning and teaching as well as greatly increasing enjoyment and enthusiasm levels of learners. One such example would be the John Muir Award (JMA) scheme.

The JMA involves participants *discovering* a wild place, *exploring* it, *conserving* it and then *sharing* what they have found. This has clear parallels with the Physical Environments Outcomes, where discovering is the classroom learning, exploring is conducting fieldwork, conserving may involve fieldwork with an outside agency, so further understanding landscape management issues.

The final key element to fulfil the JMA is that participants share their experiences and findings with others. As well as the wider school community, centres might use the JMA as a way of building relationships with outside agencies, such as local visitor centres, charities or conservation bodies. Tasking learners to produce a piece of work which will be seen by the wider public commonly results in a far better, more carefully produced end-product.

This end-product can be a strong assessment tool to gauge understanding of landscapes, land use and management issues, provided teachers/lecturers are clear in their success criteria.

The independent certification that learners gain through these types of schemes is strongly compatible with the wider aims and objectives of Curriculum for Excellence. There are also strong links with Skills for Work (in particular 4.6 Citizenship

Combining assessment within Units

Assessment could be combined in this Unit by holistically assessing all the Outcomes of the Unit in a single assessment. When assessment within the Unit is holistic, teachers and lecturers should take particular care to track the evidence for each individual Outcome.

Administrative information

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Superclass: RF

History of changes to National Unit Specification

Version	Description of change	Authorised by	Date
1.1	Unit Support Notes added. Assessment standard threshold added.	Qualifications Manager	September 2018
2.0	Unit code updated	Qualifications Manager	July 2019

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