



Higher National Unit specification: general information

Unit title: Tutoring Numeracy in Adult Literacies

Unit code: FL55 35

Superclass: GB

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Unit purpose

This Unit is designed to enable candidates to develop the skills and knowledge required to plan, prepare and deliver numeracy teaching and learning taking account of the prior knowledge and skills of the learner, their possible previous negative experiences of numeracy, learning activities, teaching and assessment strategies, and available resources.

On completion of the Unit the candidate should be able to:

- 1 Prepare to tutor numeracy.
- 2 Plan and negotiate effective numeracy learning and teaching.
- 3 Deliver effective numeracy learning.
- 4 Assess the effectiveness of numeracy learning and teaching.

Recommended prior knowledge and skills

Access to this Unit is at the discretion of the centre. However candidates would normally be expected to have gained a qualification in PDA: ITALL or have at least 2 years' prior experience as a practitioner in the area of adult literacies.

Credit points and level

1.5 Higher National Unit credits at SCQF level 8: (12 SCQF credit points at SCQF level 8*)

**SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

General information (cont)

Core Skills

There may be opportunities to develop the Core Skills of *Problem Solving, Communication and Information and Communication Technology* at SCQF level 6, and *Numeracy* at SCQF level 5, in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

Context for delivery

If this Unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes.

This Unit may be delivered alongside the HN Unit *Contexts of Adult Literacies*. Alternatively, it may be delivered as a stand-alone Unit.

Assessment

This Unit is assessed by oral or written accounts, a reflective diary, evaluative report, course proposal and an observed practice session including lesson plans, records, individual learning plans and copies of resources used. The candidate can complete these during her/his study for the award as and when she/he is ready to do so. Assessment may be completed in time set aside from work or in the candidate's own time. This Unit can be assessed in conjunction with the following Unit *Contexts of Adult Literacies in Scotland*.

Higher National Unit specification: statement of standards

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The sections of the Unit stating the Outcomes, Knowledge and/or Skills, and Evidence Requirements are mandatory.

The Outcomes will be assessed holistically. Evidence Requirements and Assessment Guidelines for these Outcomes will appear after Outcome 4.

Where evidence for Outcomes is assessed on a sample basis, the whole of the content listed in the Knowledge and/or Skills section must be taught and available for assessment. Candidates should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

Outcome 1

Prepare to tutor numeracy.

Knowledge and/or Skills

- ◆ What numeracy means in the context of adult literacies
- ◆ Analysing the effective numeracy tutor
- ◆ Exploring the relationship between *An ALN Curriculum Framework for Scotland* and the Curriculum for Excellence, making specific reference to numeracy and mathematics
- ◆ Engaging learners and helping to overcome anxieties and barriers regarding numeracy
- ◆ How additional support needs can affect a learner's perception of numbers and the relationships between numbers
- ◆ Opportunities for tutors to share practice/source knowledge
- ◆ How the language of numeracy can affect learners' understanding

Outcome 2

Plan and negotiate effective numeracy learning and teaching.

Knowledge and/or Skills

- ◆ Developing, through negotiation with learners, group and individual learning plans for numeracy
- ◆ Developing, with learner involvement, a lesson plan that includes group activity
- ◆ Arranging the learning environment to complement the planned learning and teaching approaches and activities
- ◆ The advantages and challenges of working with groups of adult numeracy learners
- ◆ The purpose and role of initial assessment
- ◆ Use background information (or information about learners' previous experiences) for planning resources and working towards learning goals
- ◆ Plan learning activities and teaching strategies that support learners with additional support needs

Higher National Unit specification: statement of standards (cont)

Unit title: Tutoring Numeracy in Adult Literacies

- ◆ Plan learning activities that use a social practice approach
- ◆ Learners' different learning styles

Outcome 3

Deliver effective numeracy learning.

Knowledge and/or Skills

- ◆ Teaching numeracy using a social practice approach
- ◆ Manage a group of learners working at different levels
- ◆ A range of effective numeracy teaching strategies
- ◆ Learning strategies and learning activities which challenge and motivate learners
- ◆ Selecting, using and evaluating numeracy teaching resources, including technology
- ◆ Demonstrating an ability to explain mathematical language
- ◆ Using appropriate strategies for learners with additional support needs
- ◆ Employing strategies to develop learners' ability to learn and study
- ◆ Ensuring that resources, approaches, strategies and activities meet diverse learning needs
- ◆ Using integrated numeracy approaches
- ◆ Encouraging critical understanding and application of numeracy by learners, including the development of financial capability

Outcome 4

Assess the effectiveness of numeracy learning and teaching.

Knowledge and/or Skills

- ◆ Awareness of the different purposes of formative and summative assessment
- ◆ Applying methods of assessment that reinforce learning, such as questioning skills
- ◆ Encouraging learners to reflect on their learning
- ◆ Options for accrediting numeracy

Higher National Unit specification: statement of standards (cont)

Unit title: Tutoring Numeracy in Adult Literacies

Evidence Requirements for the Unit

Candidates will be required to provide performance evidence to demonstrate their knowledge and skills in the form of:

- (a) Observed tutoring practice session or sessions in the candidate's work setting with a group of at least four adult numeracy learners which, in total, should last a minimum of one hour but no more than two hours, demonstrating:
- ◆ planning and negotiating numeracy learning with a learner
 - ◆ effective use of a range of numeracy teaching strategies and learning activities
 - ◆ competence at managing the group
 - ◆ an ability to teach learners of differing abilities and who have differing learning needs
 - ◆ the development of learners' ability to learn, study and become more reflective
 - ◆ a social practice approach to numeracy learning and teaching
 - ◆ strategies to encourage learners to have a more critical perspective on their numeracy learning
 - ◆ effective assessment of learning using oral or written methods
 - ◆ effective use of the selected or devised learning resources

The evidence could be presented in video or similar format or assessed in real time with the assessor present.

- (b) A group lesson plan in writing for at least four learners for a minimum of six hours of numeracy tuition, or three consecutive learning sessions, one of which should be the observed practice session as detailed in (a) above. The lesson plans should specify the teaching strategies (what the tutor will do), the learning activities (what the learners will do) and the resources chosen to support these activities, as well as how the learning will be assessed.
- (c) Individual learning plans in writing for each member of the group accompanied with an overarching group learning plan in writing, showing evidence that the learner is central to the negotiation of long and short term learning goals.
- (d) A reflective diary of between 1,250 and 1,500 words, or an oral presentation/video of 10–15 minutes which should include:
- ◆ an evaluation of the three sessions included in (b) and (c) above
 - ◆ reflection on the success of the teaching strategies and learning activities selected for these sessions
 - ◆ justification of the choice of resources used during these sessions
 - ◆ comments on how effective these sessions have been in helping learners overcome their barriers to numeracy learning and in helping the learners work towards achieving their goals
 - ◆ comments on how their practice has been influenced by their understanding of Curriculum for Excellence and the ALN Curriculum Framework and the resonances between the two

Higher National Unit specification: statement of standards (cont)

Unit title: Tutoring Numeracy in Adult Literacies

- ◆ reflection on the skills and qualities they have developed as an effective numeracy tutor and an identification of any goals for future professional development

The reflective diary will be an outcome-focused and honest account which clearly links the reflection to the candidate's practice. It can be in written or oral form.

- (e) An evaluative report of between 1,250 and 1,500 words, or an oral presentation/video of 10–15 minutes which should include:
- ◆ describe strategies to develop learners' ability to learn and study
 - ◆ discuss potential barriers to effective numeracy learning and the strategies and techniques by which these barriers may be overcome
 - ◆ discuss the purposes and forms of assessment in relation to numeracy learning
- (f) A course proposal in writing of 250 to 500 words. Candidates should devise an integrated programme of learning, embedding numeracy teaching and learning within a practical context. Candidates may base this on a course delivered within their own organisation or can create something entirely new. The format of the programme proposal is flexible but, where possible, should reflect the systems in use within the candidate's own organisation.

Assessment Guidelines for the Unit

Assessment for these Outcomes can be undertaken during a suitable course of study or in the candidate's work context. Assessment work may be completed in time set aside from work or in the candidate's own time.

The Evidence Requirements in (b) and (c) above, relating to planning learning, use documentation and other evidence that anyone working with groups of learners should be producing. This may also apply to (f), if the candidate is writing up a real course they have delivered.

All evidence should be relevant to interaction with Adult Literacies Learners.

An exercise for candidates where the principles, processes and procedures of assessment are discussed may help to develop knowledge in this area. Candidates may also gain insight into barriers to learning and motivational techniques via discussion with others.

Course proposals should be produced in the context of the candidate's work setting to assist with authenticity and relevance of content.

'Technology' includes computer programmes and the internet but also mobile and other technology such as audio or digital cameras, calculators, pocket gaming technology.

Higher National Unit specification: support notes

Unit title: Tutoring Numeracy in Adult Literacies

This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 60 hours.

Guidance on the content and context for this Unit

This Unit has been designed for candidates who are already working within the field of adult literacies. The Unit is designed to increase the candidates' knowledge of numeracy tutoring and enable the candidate to use a variety of approaches to empower, motivate and support learners to develop their numeracy skills.

The principal context will be the teaching environment. Candidates will need to have access to a minimum of a group of four learners. These learners need not all be working at the same level or on the same topics.

The following list of topics gives a suggested content for a taught programme. The list is neither prescriptive nor exhaustive and should be used as a guide only.

Outcome 1: Prepare to tutor adult numeracy

- ◆ Defining numeracy in the context of adult literacies
- ◆ The qualities of an effective numeracy tutor
- ◆ The skills of an effective numeracy tutor
- ◆ The causes and impacts of anxiety and barriers to numeracy learning, including additional support needs
- ◆ Methods of dealing with anxiety and barriers to numeracy learning

Outcome 2: Plan and negotiate effective numeracy learning and teaching

- ◆ Learner involvement, including barriers to involvement
- ◆ Communicating with other professionals to facilitate learning
- ◆ Creating an individual learning plan
- ◆ Lesson planning
- ◆ The learning environment
- ◆ Planning to eliminate barriers to numeracy learning
- ◆ Negotiating learning programmes with learners

Higher National Unit specification: support notes (cont)

Unit title: Tutoring Numeracy in Adult Literacies

Outcome 3: Deliver effective numeracy learning

- ◆ Designing learning plans to include the requirements of outside agencies' numeracy tests, for example, the Police Entrance Test or the Army (BARB) entrance test
- ◆ Numeracy learning using a social practice approach
- ◆ Selecting appropriate numeracy learning activities
- ◆ Designing numeracy learning activities
- ◆ Using ICT for numeracy learning
- ◆ Working with a diverse group and using differentiation to ensure teaching meets everyone's needs
- ◆ Strategies to develop the learning, study and reflective skills of learners
- ◆ Integrated numeracy approaches
- ◆ Critical perspectives to numeracy
- ◆ Integrating numeracy teaching into vocational areas
- ◆ Challenging and motivating learners
- ◆ Scaffolding on learners' existing knowledge

Outcome 4: Assess effectiveness of numeracy learning and teaching

- ◆ The purpose of assessment
- ◆ Methods of assessment
- ◆ Catering for special requirements in numeracy assessment
- ◆ Catering for assessment requirements of outside agencies for example the Police and Army
- ◆ Routes to numeracy accreditation
- ◆ Consolidating and reinforcing learning
- ◆ Providing oral and written feedback
- ◆ Reflecting on own practice
- ◆ Reflecting on methods of evaluation
- ◆ Learner evaluation of learning session and becoming a reflective learner

Guidance on the delivery and assessment of this Unit

This Unit can be delivered on a standalone basis or as part of a taught programme for practitioners preparing to work with adult literacies learners. Outcomes 1–4 can be delivered sequentially, as Outcomes 1, 2, 3 and 4 will be assessed holistically. Candidates must be working with a group of learners in order to produce assessment evidence for this Unit; these learners may differ in terms of ability level and their choice of numeracy topics.

The resource pack which accompanies this Unit contains examples of worksheets and background material which the trainer can use to assist the candidates in their understanding of how to plan, prepare and deliver numeracy learning and demonstrate effective tutoring skills. Materials in the pack can also assist candidates in their understanding of assessment and evaluation processes.

Higher National Unit specification: support notes (cont)

Unit title: Tutoring Numeracy in Adult Literacies

Candidates may want to discuss ideas around what numeracy is and is not, and, in addition, discuss ideas about what the skills and qualities of an effective numeracy tutor might be and how a tutor might overcome anxieties about maths amongst learners whilst breaking down barriers to learning. *An ALN Curriculum Framework for Scotland* can provide information about scaffolding techniques to use with learners, as well as examples of individual learning plans and how to use different learning approaches. Candidates may want to complete an exercise which involves drawing up an individual learning plan and a lesson plan, and discuss how to give feedback to learners as well as what constitutes feedback itself.

There may be opportunities to provide evidence for assessment that could be used for the Unit *Contexts of Adult Literacies in Scotland*. For example, Evidence Requirement (a) 'Link principles to practice by producing a written account of a lesson /course plan using the social practice approach ...' in Outcome 2 of the *Contexts of Adult Literacies in Scotland* Unit could be based upon the group lesson plan produced for Evidence Requirement (b) for Outcomes 2, 3 and 4 of this Unit, and could also be linked with Evidence Requirement (a) for Outcome 1 of this Unit: 'Provide an example of a numeracy learning activity in the context of social practice'.

Similarly, the Evidence Requirement for part (c) of Outcome 3 of the *Contexts of Adult Literacies in Scotland* Unit: 'Provide an analysis of the range of professional development opportunities available to adult literacies tutors, which would be most appropriate and how they could be accessed.', could be incorporated into the reflective diary produced for Evidence Requirement (d) for Outcomes 1, 2, 3 and 4 of this Unit.

If these Units are undertaken jointly, it is recommended that one of the contexts and/or settings described for Evidence Requirement (c) of Outcome 2, in the *Contexts of Adult Literacies in Scotland* Unit, is based on the group that will be used for the observed practice session for Outcomes 2, 3 and 4 of this Unit.

Opportunities for developing Core Skills

- ◆ All elements of the Core Skill of *Problem Solving*, that is Planning and Organising, Critical Thinking and Reviewing and Evaluating will be developed and enhanced as candidates undertake the Unit. Identification and assessment of factors impacting on providing the most effective learning experience will involve a high level of critical thinking. Reflecting on own practice and designing teaching strategies which allow on-going opportunities for review and adjustment will be of critical importance.
- ◆ The ability to calculate and convey complex information on the use of resources and timescales involved is an aspect of competence.
- ◆ Candidates should be familiar with effective and responsible use of *ICT* equipment and software applications in the design and production of materials to support the learning process. The need to develop efficient systems of recording, coding and storing information for the ease of reference, such as log books, diaries and folders should be emphasised.

Higher National Unit specification: support notes (cont)

Unit title: Tutoring Numeracy in Adult Literacies

- ◆ Candidates will have opportunities to develop a sophisticated level of Oral Communications skills in questioning, giving information and responding to others in the most appropriate way to progress learning. Signposting key points and adapting register style to the needs of learners is integral to achievement. Analysing and responding to others using a range of verbal and non verbal communication techniques will be critical to successful performance and best practice when communicating and working with others.
- ◆ Maximising opportunities to enhance negotiation with learners as far as is appropriate by offering encouragement, demonstrating, explaining and adapting behaviour to maximise the strengths of all involved in the learning process will be integral to the tutoring role.

Open learning

This Unit is suitable for open and distance learning delivery. The assessment strategy and guidelines described in this specification must still be applied if this method of delivery is chosen.

Disabled candidates and/or those with additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website www.sqa.org.uk/assessmentarrangements.

History of changes to Unit

Version	Description of change	Date

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General information for candidates

Unit title: Tutoring Numeracy in Adult Literacies

What this Unit is about

This Unit is about the knowledge and skills you need to develop in order to plan, prepare and deliver effective numeracy tutoring, taking account of adult learners' prior knowledge and skills, their possible previous negative experiences of numeracy, their learning needs and goals methods of learning, teaching and assessment and available resources.

This Unit is assessed by oral or written accounts, a reflective diary, evaluative report, course proposal and an observed practice session including lesson plans, records, individual learning plans and copies of resources used. You can complete these during your study for the award as and when you are ready to do so. Assessment may be completed in time set aside from work or in your own time. This Unit can be assessed in conjunction with the following Unit *Contexts of Adult Literacies in Scotland*.

You will learn how to:

- ◆ Reflect on what numeracy means in the context of adult literacies
- ◆ Reflect on numbers in a historical and social context
- ◆ Analyse the effective numeracy tutor
- ◆ Explore the relationship between *An ALN Curriculum Framework for Scotland* and the Curriculum for Excellence, making specific reference to numeracy and mathematics
- ◆ Engage learners and help to overcome anxieties and barriers regarding numeracy
- ◆ Reflect on how additional support needs can affect a learner's perception of numbers and the relationships between numbers
- ◆ Reflect on how the language of numeracy can affect a learner's understanding
- ◆ Reflect on opportunities for tutors to share practice/source knowledge
- ◆ Create, through negotiation with the learners, an individual learning plan that includes numeracy learning goals
- ◆ Create, with learner involvement, a numeracy lesson plan
- ◆ Arrange the learning environment to complement the planned learning and teaching approaches and planned activities
- ◆ Reflect on the advantages and challenges of working with groups of adult numeracy learners
- ◆ Develop your awareness of the role of initial assessment
- ◆ Use learning strategies and learning activities which challenge and motivate learners
- ◆ Use background information (or information about learners' previous experiences) for planning resources and working towards learning goals
- ◆ Use learning and teaching approaches that support learners with additional support needs
- ◆ Develop your awareness of additional support needs including, but not exclusive to, dyslexia, dyscalcula, dyspraxia, scotopic sensitivity, Asperger's Syndrome, ADHD and how they affect the learner
- ◆ Plan learning activities and teaching strategies that support learners with additional support needs
- ◆ Develop your awareness of guidance and progression for learners, including learners with additional support needs
- ◆ Teach numeracy using a social practice approach

General information for candidates (cont)

Unit title: Tutoring Numeracy in Adult Literacies

- ◆ Use a range of effective teaching strategies
- ◆ Select, use and evaluate resources that develop numeracy learning, including technology
- ◆ Demonstrate an ability to work with a group of learners of differing abilities
- ◆ Demonstrate an ability to explain the use of mathematical language
- ◆ Demonstrate an ability to use appropriate strategies for learners with additional support needs including, but not exclusive to, dyslexia, dyscalcula, dyspraxia, scotopic sensitivity, Asperger's Syndrome, ADHD
- ◆ Employ strategies to develop the learners' ability to study and learn
- ◆ Ensure that resources, approaches, strategies and activities meet diverse learning needs
- ◆ Use integrated numeracy approaches
- ◆ Encourage critical understanding and application of numeracy by learners, including the development of financial capability
- ◆ Develop an awareness of the different purposes of formative and summative assessment
- ◆ Develop an understanding of accrediting learning
- ◆ Apply methods of assessment that reinforce learning, such as questioning skills
- ◆ Encourage learners to reflect on their learning
- ◆ Identify methods of assessing the longer-term impact of numeracy learning
- ◆ Develop an awareness of options for accrediting numeracy

On completion of the Unit you will ...

- ◆ Be prepared to tutor numeracy
- ◆ Be able to plan and negotiate effective numeracy learning and teaching
- ◆ Be able to deliver effective numeracy learning
- ◆ Be able to assess the effectiveness of numeracy learning and teaching