FLEXIBLE NUMERACY ACCREDITATION THROUGH OCN

Joy Joseph, City of Bristol College, UK

Abstract

Examples of open college network units to Accredit Foundation Numeracy, that are flexible, with options for group work and choice of topic.

Summary

OCN = Open College Network

Works on principle of peer-group validation

Appropriate for Basic Skills (inc Learning Difficulties) up to University Entrance

Network members are Further Education College and other providers of Adult Education.

You can	(i)	negotiate to use a suitable scheme belonging to someone else
or	(ii)	write your own, & submit it to a panel of colleagues from other organisations

It's a system of Units of Credit, at 4 levels. Entry Level and Level One are the ones relevant to Numeracy, as Level 2 is roughly equivalent to GCSE (General Certificate of Education).

One Credit Unit should represent a notional 30 hours of study (contact + individual) for the average learner in the target group (so more would be expected of more able students for the "same" reward, if written for different sets of learners).

Units can be designed to accredit specific courses, or as ours is, to be available as an on-tap option.

Our scheme was designed on a "pick'n' mix" model, in 10 hour modules, so students can put together a package of any 3 modules at the same level to get a credit.

eg. Student A: Add + Take (1); Mult + Div (1); Intro to Fractions (1) = 1 Credit at Level One

Student B: Using Money (1); Intro to % (1); Decimal Nos (1) = 1 Credit at Level One

Student C: Number (E) ; Using Money (E); Metric Meas (E) = 1 Credit at Entry Level

Most of our modules were written for both levels - the content is often similar, but range of numbers, complexity, and level of independence expected would differ.

We included a lot of the standard arithmetic topics, plus others to add variety and interest or encourage groupwork. A couple of topics were specifically designed for a short "returners" course I teach, but others can still use them if they wish.

Additional units can be submitted at any time.

We are free to choose our own assessment methods. Ours include

* students' written work or computer print-out,
* witness reports of activities undertaken or discussions which demonstrate understanding,
* self reporting of practical application of skill in "real world",
* Successful participation in game or quiz (English meaning, not US which we call "test") which demonstrates skill/understanding.

So assessment of the numeracy is not dependent on literacy skills or formal testing.

Evidence is collected in a portfolio.

Tutors assess their own modules, and there is a system of internal & external moderation.

Most of the paperwork is internally designed, so can be kept simple.

PLUS POINTS:

* your're in control - can assess WHAT you want, HOW you want, WHEN you want
* freedom to match assessment style to teaching/learning style
* no exams
* no need to cover irrelevant topics to meet the needs of a scheme
* you can accredit quite small chunks of learning

MINUS POINTS:

* writing your own scheme is a lot of work
* the recognition process can be time consuming, especially if revisions are required
  unfamiliarity/lack of comparison with other certificates
* can't judge from certificate what skills are included, or to what standard, unless tutor provides a summary

There follow examples of two topics that would not appear in a syllabus. (E) = Entry Level; (1) = Level One

Number Games (E)

5 Learning Outcomes

On completion of this block of work, the learner will be able to

1 take part in a simple number game for 2 or more players

2 follow and learn the rules

3 introduce the game to someone else

4 evaluate the game as a learning activity

6 Assessment Criteria

Working co-operatively and with support, the learner will have

1 experienced 4 different types of simple number game (in terms of skills practised or materials used)

2 followed and learned the 'rules' of each game

3 introduced a game they have learnt to another player

4 described what number or other skills have been practised or developed during the playing of the games

Number Games (1)

5 Learning Outcomes

On completion of this block of work, the learner will be able to

1 take part in a range of number games

2 evaluate the games as learning activities

3 design a new number game, or adapt an existing one; trial, evaluate and modify it if necessary

6 Assessment Criteria

1a learners will have participated in games that require a range of skills and materials

1b each learner will demonstrate the ability to assimilate the rules of several different types of game

2 learners will evaluate the games by
a) identifying what kind of number skills are being used
b) distinguishing games of skill from games of chance
c) deciding whether a game is successful as an enjoyable/interesting learning activity

3a in inventing a new game, or adapting an existing one, learners will demonstrate the ability to produce a set of rules that can be followed by other players

3b having tested their game out in practice, learners will evaluate it according to the criteria set out above

NB Where desired by the student, games could be designed for and trialled with their children

Group Profile (E)

5 Learning Outcomes

On completion of this block of work, the learner will be able, with support, to

1 make a simple group profile according to various characteristics chosen by members of the group

2 present the profiles using a variety of simple methods of graphical representation

3 interpret graphs produced by others in terms of group characteristics

6 Assessment Criteria

1a the characteristics to profile will be negotiated within the group. These should be feasible, of interest and acceptable to the rest of the group

1b each member of group will be responsible for collecting data for at least one characteristic

2a all learners will produce at least 3 profiles, using more than one method eg table, simple block/bar/picto graph, Venn diagram, pie chart (pre-drawn circle with regular intervals marked may be used at tutor's discretion)

2b all counts should be checked for accuracy by an appropriate method

2c all graphs should be accurate representations of the data gathered

2d all graphs must be clearly labelled

3 learners will demonstrate either orally or in writing the ability to interpret simple profile graphs produced by other members of the group

Group Profiles (1)

5 Learning Outcomes

On completion of this block of work, the learner will be able to

1 make a group profile according to various characteristics chosen by members of the group

2 present the profiles using a variety of methods of graphical representation

3 interpret graphs produced by others in terms of group characteristics

4 compare similar characteristics of 2 groups

6 Assessment Criteria

1a the characteristics to profile will be negotiated within the group. These should be feasible, of interest and acceptable to the rest of the group

1b each member of group will be responsible for collecting data for at least one characteristic

2a all learners will produce at least 3 profiles, using more than one method eg table, block/bar/pictograph, Venn diagram, pie chart (at this level graphs should show axes & scales, and pie chart angles should be calculated and measured, though a formula for this may be given)

2b all counts should be checked for accuracy by an appropriate method

2c all graphs should be accurate representations of the data gathered

2d all graphs must be clearly labelled

3 learners will demonstrate either orally or in writing the ability to interpret profile graphs produced by other members of the group

4 learners will use the graphs to describe similarities and differences between two groups