

Background and rationale

Aston Swann commissioned this MirandaNet research programme, with the support of the British Computer Society, to identify the effectiveness of the European Computer Driving Licence (ECDL) for Educators – ICT skills training in context.

In differentiating the dedicated ECDL for Educators courseware from other generic ECDL courseware this formative evaluation has also, fascinatingly, raised other factors that impact on the learner's complete ECDL experience.

According to BCS records, educators are one of the largest single groups who undertake ECDL, so this evaluation is timely. It aims to identify:

- Whether the fact that the ECDL for Educators courseware is tailored for teachers encourages participation;
- What benefits the ECDL qualification has in relation to the continued professional development of teacher learners;
- How using ECDL for Educators courseware has raised the ICT knowledge of participating teachers;
- How using ECDL for Educators courseware has raised the standard of teaching using ICT;
- How perceptions of the professional uses of computers changes during the training course;
- What kind of learners the teachers are, their preferred learning methods and levels of satisfaction?

Factors influencing the “experience” of each candidate were:

The ECDL syllabus - an international syllabus set by the ECDL Foundation Ltd.

The ECDL qualification - comprising seven modular tests taken at accredited Test Centres.

The ECDL tests - selected by each Test Centre from a variety of accredited test providers.

The ECDL courseware - selected by each training provider from a variety of accredited training materials.

Data was gathered through questionnaires and concept maps given before and after the course and also through telephone interviews with a selection of participants and trainers. Case studies were used to explore issues that emerged from survey data.

Initially one hundred teachers taking the ECDL for Educators programme in two schools and four local education authorities were invited to contribute to the evaluation. A further 30 participants were invited to contribute to the later stages of the evaluation.

The ECDL for Educators courseware

“ECDL for Educators” is a unique suite of ICT training programmes with exercises and exemplars solely developed in context for the ICT skills training needs of teachers in schools and colleges working towards the ECDL qualification.

The flexibility in the ECDL for Educators programme enables participants and tutors to vary the route through the materials to suit their needs.

Learners work in the live application, at their own computer using the ECDL for Educators courseware.

Participants are positive about the ECDL for Educators courseware, especially praising the clear step-by-step instructions and the useful tips. All interviewees agree that it includes all they need to know in order to gain the ECDL qualification, and much more besides.

Research figures indicate that the ECDL for Educators programme has been significant in raising participants' confidence with ICT.

The ECDL testing procedure

The ECDL tests are selected by each Test Centre from a variety of accredited ECDL test providers. Each ECDL module test is either marked by the computer, which gives immediate feedback on candidate's performance, or marked manually.

The pedagogy that underpins the computer-marked ECDL testing software differs between test providers, ranging from simulation to live application testing.

All tutors, and with hindsight, most participants recognised the value of taking practice tests to become familiar with the test environment and requirements.

Further investigation into the area of testing for educators is recommended.

The ECDL qualification

The courseware is based on the international **syllabus** set by the ECDL Foundation Ltd. The ECDL **qualification** comprises seven modular tests and is taken at accredited Test Centres. The seven ECDL modules can be studied and tested in any order:

- 1 Concepts of IT
- 2 Using the computer and managing files
- 3 Word processing
- 4 Spreadsheets
- 5 Database
- 6 Presentations
- 7 Information and communication

Most respondents valued the ECDL qualification and felt more confident using a computer in the classroom as a result of the training. This desire for accreditation reflects increasing accountability within the profession.

Teacher training pedagogy

Although the main reasons that the individual educators gave for doing the training were wanting to improve computer skills and to gain a recognised qualification, it is clear from the respondents' emphasis on the importance of ICT skills for their jobs that the contextualisation adds an important layer which other generic skills courses are not able to offer. Also, from interviews with the licensees, it is clear that they were keen to be part of this pilot because the ICT skills have been contextualised.

Educators who do not attend taught sessions or workshops are more likely to encounter problems ... and are, typically, experienced users of ICT who skim quickly through the ECDL for Educators courseware to check that they have the required skills.

Training providers prove flexible in their approach to the training. Most participants experience a blended learning approach, with taught sessions to introduce each module, optional workshop sessions with individual and group support, and guided self-study to practice and extend skills.

Training delivery is quality assured by Aston Swann's Teacher Trainer Implementation and Support day and recognised by the Quality ICT Service Providers Naacemmark for ICT Education Resource Development

Incidental factors & findings

- It is significant that within the group that was surveyed the course has attracted people with higher levels of ICT competence than the researchers expected. Also, analysis of their perceived ICT skills ratings at the end of their training shows that participants' confidence in their ICT skills increased in nearly every case
 - The ECDL for Educators course appeals equally to men and women. The gender divide apparent at the start of the training does not appear to have been sustained and has not had a significant impact on the outcomes
 - Educators in mid career are more likely to be attracted to the ECDL for Educators training programme than those nearer the beginning or end of their teaching career
 - The participant's commitment is the most important factor; with interview evidence showing that participants who successfully complete the ECDL for Educators programme also have good support in school
 - Information gathered from an ITT institution indicates that the ECDL for Educators programme is a useful optional course for students wishing to prove that they meet the required standards in ICT
 - Personal benefits are listed as time saved, improved presentation, sharing news and information with friends and family, personal enjoyment and the enthusiasm of pupils.
-

Does it make a difference?

- The research indicates that the ECDL for Educators programme has been significant in raising participants' confidence with ICT
 - Those whose ICT skills confidence ratings were in the low or mid range of scores at the outset all made good progress and caught up their more confident colleagues, finishing with confidence ratings in the high range by the end of their training
 - All who engaged with the ECDL for Educators training increased their confidence in using ICT and gained new ICT knowledge; including those who had previously rated their ICT skills and experience highly
 - Participants are positive about the ECDL for Educators courseware, especially praising the clear step-by-step instructions and the useful tips. All interviewees agree that it includes all they need to know in order to gain the ECDL qualification, and much more besides.
 - Increasing confidence is likely to lead to greater use of ICT in the classroom, and this is borne out by more than eight out of ten questionnaire respondents saying they will use their new skills in the classroom
 - The examples and exercises in the ECDL for Educators courseware and the guidance provided by tutors helps them to apply their new learning in educational contexts and to increase their awareness of ICT uses at school and at home
-

Progression

During the period of this formative evaluation Aston Swann were awarded the Naacemark for ICT Education Resource Development

Recognition in the National Qualifications Framework of the BCS IT User Certificates that incorporate the ECDL modules, now means the qualification attracts school performance indicator points (in England).

ECDL courseware in context for the 14-19 age group is undergoing accreditation as the ECDL for Education – Student Programme.

The ECDL Foundation has developed a range of "ECDL Advanced" qualifications and is developing ECDL Specialised qualifications for "Multimedia", "Image Processing" and "Web Publisher".