Assessment for Learning:
What have we learned from our Minerva Project?

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Note to Reader:
*This paper has been written as a series of propositions. It serves
as a background paper. The workshop also includes
presentations from the partners.*

Background

1. *Internetbased Assessment* (IBA) has been a three-year project (2002-4) within the Minerva Programme of the European Commission. The project has been co-ordinated from Umeå University (Sweden), with development partners in England and Belgium (Sussex and Ghent universities, respectively) and a commercial partner, Orantic, the Swedish distributor of *Questionmark* software.

2. The project built on two innovations: (1) the development of software that can be used in test construction; and (2) developments in the field of testing and examinations that, in short, are described as 'alternative assessment'.

3. Alternative assessment is devoted towards *support for* learning rather than the *measurement of* learning.

4. It is characterized as an alternative to standardized, norm-referenced, multiple-choice testing.

5. It typically claims the following features:

   - *Student involvement in setting goals and criteria for assessment*

   - *Use of higher level thinking and/or problem solving skills*

   - *Contextualisation in real world applications*

   - *Use of specified criteria, known in advance, which define standards for good performance.* (adapted from McLellan, 2004, p. 312)

6. Our project has been a response to the Minerva rationale of linking *on-line education* (ICT) with *open and distance learning* (ODL).

7. We received funds to develop a dimension of on-line and distance education - *assessment* - that has received relatively little attention.

8. Our project diverged significantly from conventional practice. It has NOT attempted to develop materials; instead, it has sought to develop the *competences* and *capabilities* of teachers and students. In short it has been a 'competence development' project.

9. We developed materials *in* and *through* practice rather than *for* practice. We have focused, therefore, simultaneously on development, adoption and dissemination.

10. Moreover, the project *developers* are also included among its *end users*. We also intend to continue using what we have developed, and developing what we have used.

11. The materials that we describe in this workshop relate to the consequences or outcomes of our competence development activities.

[Partner Presentations]

What have we learned?

12. The formal evaluation strategy associated with the Minerva programme derives from the premises of the so-called New Public Management (cf. Power, 1999). It focuses on the difference between two features of the funded project: What did it promise? And what did it deliver?

13. The discrepancy between these two aspects of the project is the basis of the summative judgement made by EC auditors.

14. Typically, final reports from Minerva projects are a direct response this audit requirement. They are careful accounts of what development teams have produced.

15. In addition, it is sometimes naively assumed that putting products on-line (or on a compact disk) is the same as *dissemination.* It is assumed, somehow, that such products are without equal and that, therefore, they sell themselves.

16. Even if such materials have been *generated, i*t is difficult to establish in what sense, if at all, they have been *delivered*, *disseminated* or *communicated*.

17. Indeed, if the developed materials are teachers, what do these concepts mean?

18. Insofar as we characterise the infrastructure, platform or theory of our work in constructivist terms (cf. Roos & Hamilton's *constructivist theory of assessment*2004; and Crossouard & Pryor's *The use of the internet for teaching learning and assessment at the university of Sussex*, 2004), we have tried to use the same framework in preparing this report.

19. *Internetbased Assessment*, therefore, is different from many other development initiatives.

20. This presentation, then, focuses on a different question: What have we *learned* about on-line and distance education through our experiences with *Internetbased Assessment*?

21. For the sake of this workshop, we would like to present our learning in terms of three themes.

22. The first theme is a consequence of the EC requirement that the Minerva programme focuses on development, not research. Our question: What is the research that underpins our development activities?

23. Our second theme relates to the issue 'what is a project'?

24. Our final theme is the relationship between the learning society and the *learning economies* that also characterise current versions of the learning society.

What research assumptions underpin the Minerva programme?

25. There is no unity in the Minerva 'programme' (other than the association of ICT and ODL). Each project is left to justify itself, both in its original proposal, and in its activities.

26. In the case of *Internetbased Assessment,* we felt that ideas drawn from 'alternative assessment' could be harnessed, on the one hand, to developments in commercially-available software and, on the other hand, to the educational goals of the European Commission.

27. The key problem is that the *educational* goals of the EC have moved beyond the modernist, technical rationalist and behaviourist assumptions that sustained assessment practices since the modern catechism took shape around 1540. As a result, developers do not know whether they are expected to produce modern versions of the catechism (e.g. as 'multiple choice testing') or whether they should aim at something else (e.g. taking account of ideas associated with alternative assessment)?

28. A fog surrounds current initiatives in educational development, including the Minerva programme. This fog has nothing to do with the Internet but, in another sense, it has everything to do with the organisation of *on-* or *off*-line learning and/or, *open* or *distance* education.

Relevant quotations

29. 'Distance education is the field which has most vigorously adopted new technologies' yet seems to be the area that is 'most in need of educational theories' (Nordkvelle, 2004, p. 427). OR

30. 'In spite of the booming literature on ICT and education, there is almost no discourse on the subject. In other words, despite the large and often contradictory variety of approaches and attitudes in the field and in the literature, there is almost no systematic discussion'.
(Aviram& Tami, 2004, p. 1).

31. Within this context ['making the best use of a store of knowledge'] it would be necessary to reflect more deeply on ways of learning and organising learning' (European Commission, 2000, p. 20)

32. 'Successful use of the new content and services depends to a large extent on the quality of teaching and the commitment of teachers' (EC, 2002, p. 4).

What is a project?

33. IBA was not a unified project based on an international division of labour (e.g. with different countries manufacturing different components). Mindful of the EU principle of subsidiarity, it was a federal project,. It worked, nonetheless, to a common set of ideas (see above, 1-3).

34. It differs from conventional development projects. It was not conceived of as a 'satellite' (extra-terrestrial) or 'off-shore' project – at a distance from the day to day world of on-line education. In short, it was not a 'one-off experiment' (EC, 2000, p. 7), but part of a wider process of planned change. An 'alternative' approach to development was adopted. It was planned and executed as a bottom-up development project. It sought not so much to develop materials as the *competences* and *capabilities* of teachers and students.

35. The project has also generated - as part of its evaluation activities - a shared set of insights.

36. Such a project, where teachers and students are developed has, as already noted, re-examined innovation theory. In what sense, can teacher development be delivered, disseminated or communicated?

37. The conventional *delivery* strategy is that materials and 'the success factors for *best practice*' (EC, 2002, p. 5) can be *cloned*, despite the instability of the field (cf. the earlier EU document which noted that it had been 'difficult…to get actual practice and technology to dovetail when the situation is unsettled and diversified', EC, 2000, p. 4).

38. Minerva projects are also expected to give attention to the *dissemination* of their materials. This is a different metaphor, unlike *delivery*. Literally, *dissemination* implies the planting of seeds that, under suitable conditions, *germinate*.

39. If delivery implies the existence of a *receiver*, dissemination implies the relevance of different *contexts* or breeding grounds.

40. Finally, there is also a tacit assumption that delivery and/or dissemination lead to communication. Needless to say, our experience of developing teachers, like the conventional form of a Minerva project, misses these different senses of a *development* project.

Relevant Quotations

30. 'The first part describes how difficult it is to get actual practice and technology to dovetail when the situation is unsettled and diversified'. (European Commission, 2000, p. 4)

31. 'Quality-wise it is still complex to analyse actual practice because it is constantly changing, because of the diversity of a huge number of **one-off experiments'** (European Commission, 2000, p. 7)

32. 'Analysing practice does not always receive enough attention from the various players involved' (European Commission, 2000, p. 7).

The learning society and its learning economies

41. Privatisation has been a feature of European public education over the last 30 years - a consequence of impact of neo-liberal policies advanced by agencies like OECD and the World Bank. Innovations associated with these neo-liberal policies are sometimes described in terms of the New Public Management.

42. E-learning is not only an educational process, it is also an industry. Publicity for the Online Education conference in Berlin (2004) exhorts potential customers to 'take part … and keep pace with the international e-learning industry!'

43. Such economies regard learning as a private 'good' and are run according to methods and assumptions drawn from private industry and services.

44. In turn, the learning economy embraces the production and marketing of *commodities*. Its production activities are managed according to market-related principles.

45. But there are two problems with this model. First, can (or should) education be *reduced* to commodities; and secondly, can online education - as a technology - *compete* with other educational technologies, economies or regimes (e.g. quality assurance, and human resource management) that also prevail in higher education.

46. In this last respect, innovation becomes an economic question.

47. Further, all kinds of informal economies/regimes/technologies have an impact on educational practice. For example, the only institution that does NOT take part in the national Net-university in Sweden, is also the institution that has the highest salaries.

48. This last point is perhaps the most important to our argument. We have attempted to develop teachers; we have encountered problems (described in the partners' contributions to this workshop); and we have tried to account for these problems. Yet, the most important issue that we have learned from our work and discussions is that assessment, like any other aspects of pedagogy, does not stand alone. It is embedded within 'webs of significance' (Geertz, 1973, p. 5) that are spun around wider human interests and processes (e.g. EC conceptions of 'E-learning', 'tomorrow's education' and the 'Bologna process').

49. Thus, to evaluate our Minerva project it is insufficient to focus merely on our products; it is also necessary – adapting Geertz' notion of 'thick description' – to engage in a 'thick' evaluation. That is, to include other dimensions of current practice (including those described above).

50. We have only scratched the surface.

51. Insofar as each of the partners is committed to the educational practice of *support for learning,* we hope to continue our development efforts, locally, nationally, and internationally.

Relevant Quotations

52. 'At the end of February 2003 the Fathom consortium, made up of such prestigious organisations as Columbia University, the University of Michigan, the University of Chicago, the London School of Economics, the British Library, the British Museum, the London Science Museum, Cambridge University Press, the New York Public Library…announced the end of its foray into e-learning' (Kearney, 2003).

53. Reports by Bracey (April, 2004) and Ohanian (April, 2004) from the Educational Policy Studies Laboratory at Arizona State University (http://edpolicylab.org). focus on 'virtual schools', devised by a technology enterprise *Knowledge Universe,* which has penetrated the US market for 'home education'. Ohanian comments: 'K12 [the package developed for home instruction] uses software to provide book-keeping, not to facilitate learning….the computer with its slow PDF files and freeze-up screens, gets in the way of presenting lessons rather than enhancing them' (p. 30).

54. The University of Lund (Sweden) has a Centre for Innovation, Research and Competence in the *Learning Economy* (CIRCLE, www.circle.lu.se).

55. When David Hamilton logged onto www.directgov.uk to check for information on the on-line university experiment in the UK, its search service was 'temporarily unavailable' (8th June, 14.30hrs). He subsequently found a report from BBC News (9th June, http://news.bbc.co.uk/1/hi/education/3791001.stm) where a senior politician described the failed UK e-university an 'absolute disaster' since among other things, it only attracted 900 applicants.

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