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ABSTRACT

Using British research related to the Open University's Postgraduate Certificate in Education (OU PGCE), a preservice teacher education program, this paper considers how open and distance learning (ODL) programs are evolving quality assurance systems and procedures across a range of elements, including student teacher assessment. The paper explores how high-quality provision and outcome standards of students are assured in a high-volume, highly dispersed program with over 2,000 school-based contexts for practice each year. Section 1 presents an overview of some ODL teacher education programs. Section 2 discusses quality assurance issues for ODL preservice teacher education. Section 3 focuses on assessment (an example of high quality in an open learning preservice education program). Section 4 examines issues related to improving program quality. The paper concludes that three factors (course materials with their common structure; the competence model with its open, shared, and moderated assessment; and the program support and monitoring network of the Open University) all combine to maintain the quality and integrity of the course and qualification. An appendix presents an OU PGCE competence and professional qualities model. (Contains 7 figures and 20 references.) (SM)





High quality and new standards: an open learning contribution to the improvement of pre-service teacher education

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Introduction

Who would argue against the proposition that all school pupils have a right to be taught by competent teachers irrespective of where and how those teachers were educated and trained? By 'competent', we mean that teachers have the necessary and sufficient subject and pedagogical knowledge to promote pupil leaning at the highest level and are able to demonstrate this through effective teaching in the classroom. Yet there seems to be many obstacles to the achievement of this worthy aim:

- not all who subscribe to the above aim would agree on how the descriptors of 'competent' and 'sufficient' should be defined as a valid description of the complex teachers' role;
- even accepting the criteria of what may constitute competence, can those criteria be assessed reliably in the different school environments and multiple contexts in which pre-service student teachers work?
- and given that an institution may indeed settle on its own valid and reliable assessment
 procedures, would those procedures be acceptable to other teacher educators working in
 different institutions, in a different economic and political context and with their own
 particular notion of what is a desirable and acceptable teacher performance for entry to
 the teaching profession?

Jaap Tuinman, the ex-Dean of the Faculty of Education at Simon Fraser University is critical of the prospects of the higher education community coming together, even within just one department, to agree on answers to some of the above questions:

"The unwillingness of education faculty members to agree on content and approach to a particular course makes a shambles of the concept of a university curriculum and a mockery of the idea that teacher education entails the preparation for a profession" (Tuinman, 1995 p114)

In the United Kingdom, the government has taken a lead in specifying, with ever greater delineation, the criteria for what constitutes competence, specifically identifying standards that all newly qualified teachers must demonstrate (see Macintyre, 1991, DFE, 1992, DFEE, 1997). Recently (TTA 1998) there has been a move to specify input as well as outcomes in defining a national curriculum for pre-service teacher education.

This paper, drawing on research and development relating to the Open University's Postgraduate Certificate in Education (OU PGCE), a pre-service teacher education programme, considers how open and distance learning programmes are evolving quality assurance systems and procedures across a range of programme elements, including assessment of student teachers. In particular, it explores how high quality provision and outcome standards of students are assured on a high volume, highly dispersed programme with annually over 2000 school-based contexts for practice.

There may be lessons for how we may move towards valid and reliable assessment of teacher performance in a range of different teacher education contexts, in various types of schools and in the variety of education systems around the world.

A brief overview of some open and distance learning teacher education programmes.

Teacher education open and distance learning (ODL) programmes have a long and successful history but it is only in recent years that the techniques have been applied to the preparation of pre-service teachers and the complexities of assessment of school-based practice.



University-level distance learning institutions were established in the 1930s, using correspondence tuition. Many teachers used these programmes to upgrade their subject knowledge, but in the early 1970s with a dramatic increase in 'Open University' institutions using a new multiple-media approach, student numbers soared. For example, the UK Open University began undergraduate education programmes in 1971 and classroom teachers reached a level of 40% (24 000 students) of the total undergraduate cohort as they converted their college teaching diplomas into first degrees with a consequent increase in salary. Such undergraduate courses, through their emphasis on subject and educational theory, avoided the complexity of assessment of classroom teaching. Open and distance learning in-service programmes were particularly popular in developing countries such as Zimbabwe (Matshazi, 1992), Kenya (Odumbe, 1992), Pakistan (Robinson, 1993). The Chinese Television Teachers College in the early 1990s was supporting 200 000 teachers per year to up-grade their qualifications (McCormick, 1992). More than 40 developing countries have established ODL programmes to update under qualified teachers. Such in-service courses continue to be an extremely important means of providing cost-effective teacher education in both the developed and developing world (Leach & Lita 1996, Hobbs et al 1997, Moon 1997).

However, these courses were similar to the undergraduate courses of earlier years in that their assessment strategy did not place the school as the principalsite for learning and assessment.

In February 1994, the first cohort of 1000 student-teachers began their studies for a new national, open and distance learning, pre-service teacher training and education programme at Britain's Open University. Assessment is premised on a competence-based model and therefore the school becomes a key player for training and assessment.

Thus, in this short overview, three generations of open and distance learning teacher education models can be determined. The first generation provided tuition in general educational theory assessed in isolation from the classroom. The second generation drew on classroom practice to inform the assessment of 'projects' related to the practice of a school teacher. The third generation courses, significantly, use the school as a site for learning and require a combination of assessment procedures to assess knowledge, understanding and also competence in the practice of teaching. (Moon, 1996)

But, can mass education programmes using ODL methodology be of high quality? Do the teachers improve their knowledge, understanding and teaching skills? Evaluation studies around the world are very encouraging:

If success in written examinations is accepted (as it is for all professions) as evidence of improved knowledge, then distance in-service training is very effective (Hawkridge, 1993)

When first confronted with distance education it is only natural to wonder whether its quality is equal to that of ordinary college or university. [...] Mid-Sweden college has made a comparison of the completion rates of traditional university education and distance programmes in the municipalities in the region. [...] the rate was shown to be equally high for ordinary and distance students - in some cases the latter was higher. (Asplund and Björne, 1995)

Quality Assurance: Issues for ODL pre-service teacher education

The Open University's Post Graduate Certificate in Education (OU PGCE) is an example of the third generation of teacher education models. A brief outline of the OU PGCE programme will set the scene for the quality assurance issues that need to be addressed.

The OU PGCE programme was designed to provide a new pre-service teacher education route that would provide access to qualified teacher status for new sections of society,



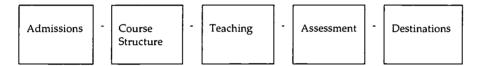
primarily mature graduates embarking on a second career. It was also designed to deliver high student numbers (7.2% of national graduate pre-service training in 1996) particularly in 'shortage' subjects such as science and mathematics, cost effectively.

The programme structure was therefore designed as part-time (18 months) home-based study using materials in a range of media and requiring school-based practice in local schools. The model operates nationally with a regional infrastructure and local tutor-based support.

The programme statistics are as follows: The programme began in 1994 with the first students graduating as qualified teachers in 1995. Each year 1000 new students are recruited to nine subject/phase specialisms. School-based practice takes place generally on a one student: one partner school basis. Each year the programme works with 1000 different schools, with 1000 mentors and 1000 school-based co-assessors. 70% of schools and school staff are new to the programme each year. For 6 months of the year there is an overlap between two cohorts doubling student and school numbers. To date over 3000 teachers students have qualified to teach on the programme.

The quality assurance procedures developed need to assure high quality provision and outcome standards across all the components of the programme (see fig. 1) and provide information for continual improvement ie procedures serve a monitoring and evaluative function. The scale of the programme and the variability of school contexts for training and assessment are the critical issues to address in developing such procedures.

Fig 1 Quality assessment across all course components



The quality assurance procedures linked to the programme have been refined through a continual process of evaluative research leading to the establishment of a set of key principles for assuring high quality in open and distance learning programmes. These principles are:

- explicit outcomes
- prescribed common frameworks
- triangulated evidence
- interconnected procedures
- systematic monitoring -indirect, direct and in response to structural 'triggers'

These principles, we believe, can contribute to a wider debate on methods to ensure high quality in pre-service teacher education.

Assessment: an example of high quality in an open learning pre-service education programme

Berliner (1988) and Furlong et al (1988) have described a progression from 'novice' to 'expert' which has influenced the way the OU PGCE programme team designed the structure of its pre-service programme.

Progressively, students move from the position of observer and helper of experienced practitioners, through collaborative, teaching towards solo teaching.



In forming the assessment policy, the programme team drew extensively from the work on teacher competence assessment (for example Whitty and Willmott (1991), Harvard and Dunne (1992), Moon and Shelton Mayes (1993)) However, many elements of the Open University PGCE were developed in consultation with members of the profession itself and this was particularly the case for the assessment model. Groups of teachers contributed to its structure, including some of the first school mentors required to "operationalise" the concept. The assessment strategy is based on a set of 'competences' and 'professional qualities' and students are required to provide evidence, in their portfolio, demonstrating each element of both components by the end of the course.

The OU PGCE programme team drew on the principles outline above to develop a rigorous model of assessment. In doing so the programme team has access to extensive data that is used to inform development.

explicit outcomes. The adoption of a competence -based assessment model provides an
explicit statement of outcomes for students and assessors; for self-assessment, formative
and summative assessment. The OU PGCE programme team took a wide definition of
competence, following Whitty and Willmott (1991):

"competence is wider than merely an ability to perform a task satisfactorily, encompassing intellectual, cognitive and attitudinal dimensions as well as performance"

We would also concur with their observations that competence approaches may have a number of benefits: demystification of teacher education; a clearer role for the partners in the training process; greater confidence of employers in what beginning teachers can do; and clearer goals for the students. Critically, for a high volume, widely dispersed programme, an explicit assessment outcomes model provides a shared set of standards underpinning all assessment processes.

The Open University PGCE describes the teaching process in terms of five area of teaching competence:

- A Curriculum/subject planning and evaluation;
- B Classroom/subject methods;
- C Classroom management;
- D Assessment, recording and reporting;
- E The wider role of the teacher.

These areas are further divided into about 5 subcategories. For example:

A2 identify diversity of pupil need in the context of appropriate strategies for ensuring continuity and progression.

Taken overall, the framework describes 22 elements of competence. However, the programme team considers that teaching is not only concerned with exhibiting certain teaching competences. It is also necessary that the competences exist within a framework of the professional qualities appropriate to the teaching profession. Evidence of teaching competence, should also illustrate professional qualities such as: commitment to professional values; effective communication; appropriate relationships; effective management. Both teaching competences and professional qualities are explicitly set out as assessment outcomes. This ensures both dimensions of assessment drive formative assessment and hence training, as well as summative assessment.

• common prescribed framework. The variability of school context and national coverage requires a tightly prescribed framework that all involved in training and assessment 'sign



up' to. This provides an entitlement to training and assessment for students and sets the criteria by which internal and external monitoring is carried out.

The common prescribed framework extends to: centrally produced but regionally delivered training programmes for assessors; a distance learning "Mentor Training Programme" which supports the mentor and the school co-assessor; an assessment reporting framework for mentors and tutors; detailed school-based assessment activities structured through common school experience guides and assessment guides; and a structured professional development portfolio of evidence structured by the competence and professional qualities model.

The production of common and published text materials ensures a consistency of approach from year to year. We agree with Tuinman (1995, p114):

"To use claims of academic freedom [by education faculty] in order to escape what is in effect an implicit contract to teach a certain segment of the university curriculum is not acceptable".

- triangulated evidence. Assessment, formative and summative, is carried out by students, tutor and school staff. Student self-assessment against the competences are submitted alongside school-based assessment and tutor assessment. All school-based evidence is assessed by mentor and a senior member of staff acting as internal co-assessor. A prescribed evidence base to support assessment judgements is required from students and assessors. All sources of evidence and judgements are cross-referenced within monitoring undertaken by programme team.
- **comprehensive monitoring.** Assuring the standard of student assessment is achieved by interconnecting direct and indirect modes of monitoring.

There is a range of complementary, indirect monitoring. All schools reports and tutor reports are monitored by the programme team for : compliance with the common prescribed assessment guidance; grading accuracy; match with evidence; and quality of information. The outcome of the indirect monitoring is a critical indicator in initiating direct monitoring and continual tracking of individual students, schools, tutors.

For example:

- Unsatisfactory grades on tutor-marked assignments is an important indicator of possible school-based weakness as the assignments are specifically designed to integrate schoolbased experience with theory. Fig 2 illustrates programme monitoring of tutor-marked assignments for a single cohort (1997).
- Non- attendance at mentor briefing for assessment, results in additional direct school visits (Attendance was 67% nationally in 1997)
- Grading inaccuracy by tutors and mentors focuses staff development.
- Unsatisfactory student gradings leads to progress review sessions for students with supplementary mid-course support or, if necessary, de-registration.

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fig. 2

Tutor marked Assignments	1			2			3			4						
	Satis facto		Unsa facto		Satis facto		Unsa facto		Satis facto		Unsa facto		Satis facto		Unsa facto	
Grading	78	99 %	1	1%	95	99 %	1	1%	91	94 %	6	6%	80	94 %	5	6%
Reporting Comments	73	92 %	6	8%	89	93 %	7	7%	88	91 %	9	9%	77	91 %	8	9%
Feedback to Students	77	97 %	2	3%	96	100 %	0	0%	94	97 %	3	3%	84	99 %	8	9%

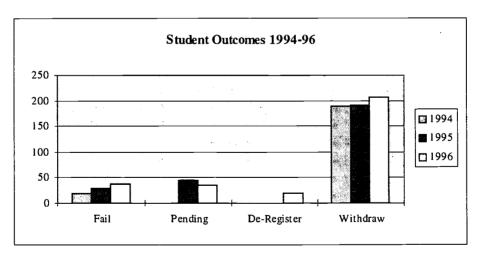
Reviewing outcomes from this range of indirect and interconnected monitoring leads to prioritisation of direct monitoring which is undertaken by programme team working in regions. The use of systematic indirect monitoring to drive direct monitoring is critical in assuring the quality of a large, geographically dispersed, student and school population.

Alongside this systematic indirect and direct monitoring there is random direct monitoring of tutors, schools and students. An analysis of random direct monitoring is used to confirm the adequacy of systematic procedures.

Finally, external moderation of student outcomes by external examiners completes the range of quality assurance procedures.

An analysis of student assessment outcomes (see fig 3) year on year show changing numbers of students in categories: fail, pending, withdrawal, which can be examined against changes in procedures e.g. the introduction of de-registration procedures. This provides evidence that quality assurance procedures are operating appropriately during the course to identify students making limited progress against the assessment criteria.

fig. 3 Student assessment outcomes



Quality Issues: Improving the quality of the programme

The extensive data collected year on year in relation to assessment is used, not only to assure quality of student outcome standards, but significantly to identify areas for



development of the programme. Most commonly this leads to internal refinements in procedures, but the extent of the data available from a large population raise wider issues for assessment of teacher quality.

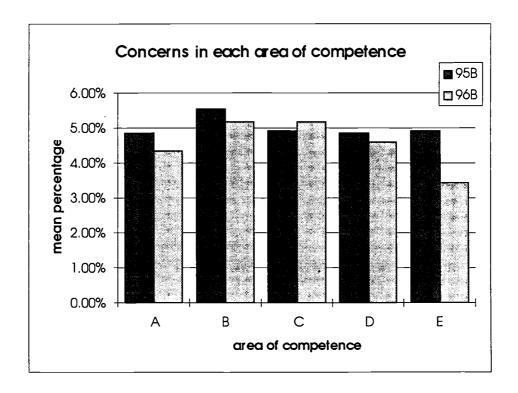
A brief example of refinement to programme procedures is:

• In 1995, an analysis of 1000 summative school reports led to changes in assessment strategy focusing on staff development relating to target setting for career entry induction.

However, an example of the potential of the data to inform a wider debate follows from an analysis of data on summative assessment of students against the competence model:

• All students receive summative assessment profiles completed by tutors and mentors identifying concerns for the individual student in relation to the 22 competence subcategories. The analysis of the summative profiles is used by the programme team to assure standards in final assessment i.e. any concerns identified by the mentor and tutor form the basis of subsequent additional assessment by faculty staff for those identified individuals. But a subsequent analysis of 'concerns' for the total cohort (see figs. 4, 5, 6 and 7) yields rich data on the differences of assessment perceptions between the different players. In this case, analysis indicates that mentors' concerns lie in those competences linked to the development of methods for teaching strategies; that tutor and mentor patterns of concern differ; and there are differences in assessment performance between student-teachers of different subjects. The thrust of development of the programme is therefore directed to addressing this issue, reviewing training and assessment guidance for mentors and student curriculum in these specific areas.

fig 4 Final assessment concerns flagged in each area of competence (See Appendix for key)





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fig 5 Final School Mentor assessment concerns in each sub-element (See Appendix for key)

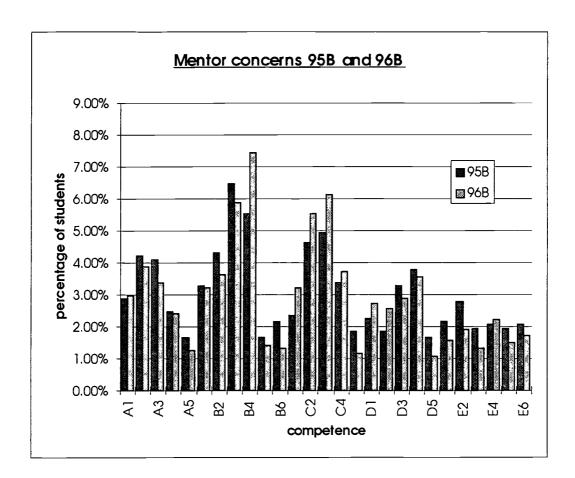




fig 6 Final OU Tutor Concerns in each sub-element (See Appendix for key)

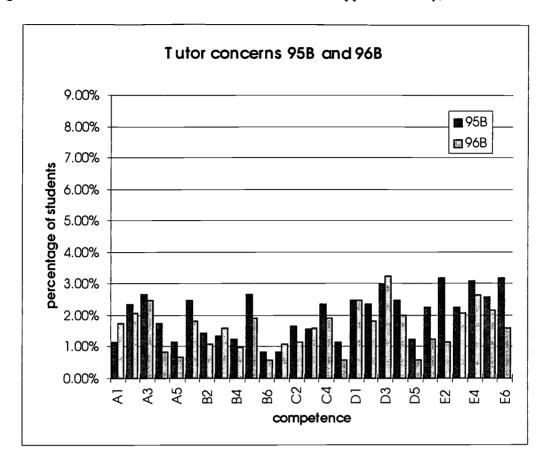
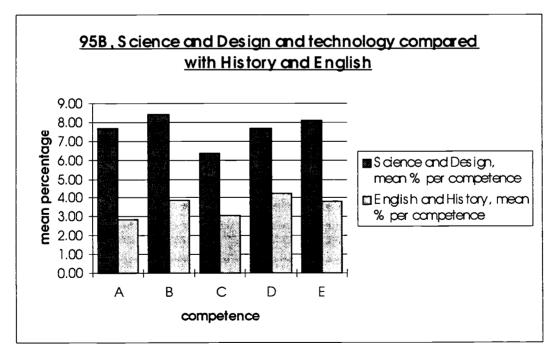


fig 7 Comparing final assessment concerns for Science and Technology student-teachers with those for History and English student-teachers.





Conclusion

The course materials with their common structure; the competence model with its open, shared and moderated assessment; and the programme support and monitoring network of the Open University all combine to maintain the quality and integrity of the course and qualification. In addition, the procedures for ensuring quality deliver a rich database for evaluative research linked to ongoing development of the programme.

- Development work with thousands of teachers nationwide and across subjects helps to create a shared set of criteria of what constitutes successful teaching. By continued dialogue in mentor briefings a consensus emerges which increases validity in teacher assessment.
- The very open nature of the competence criteria, shared by school mentor, Open University tutor, faculty staff and student helps to satisfy concerns over reliability of judgement.

By these methods the thousands of students qualifying to teach through the programme, working in a range of contects throughout the UK and parts of Continental Western Europe can be assured of a high quality experience wherever they are located. The indirect and direct assessment procedures combine to assure only teachers who "have the necessary and sufficient subject and pedagogic knowledge" receive qualified teacher status.

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Appendix

OU PGCE Competence and professional qualities model

Teaching Competences

A Curriculum/subject planning and evaluation

Demonstrates an ability to:

- Al apply subject and curriculum knowledge (including national curriculum) appropriate for the subject and whole curriculum.
- A2 identify diversity of pupil needs in the context of appropriate strategies (methods) for ensuring continuity and progression
- A3 plan and critically evaluate at the level of pupil activity, a lesson, sequence of lessons and scheme of work, for whole class, groups and individuals, with due regard to how pupils develop and learn.

B Classroom/subject methods

Demonstrates an ability to:

- B1 implement a range of teaching and learning strategies appropriate to pupil needs and tasks, including whole class, group and individual set tasks.
- B2 respond flexibly to the needs of pupils and classroom circumstances.
- B3 use language and other means of presentation in a clear and stimulating manner at individual, group and class level.
- B4 motivate pupils and maximise potential
- B5 support pupils in developing cross-curricular dimension and skills.

C Classroom management

Demonstrates an ability to:

- C1 establish a physical environment suitable for teaching and learning.
- C2 create a social environment conducive to teaching and learning.
- C3 organise classroom time effectively
- C4 manage resources appropriately, including IT.

D Assessment, recording and reporting

Demonstrates an ability to:

- D1 select and implement appropriate strategies and systems for formative assessment.
- D2 select and implement all aspects of summative assessment relevant to the task.
- D3 promote pupils' capacity for self and peer assessment and evaluation
- D4 record and report effectively



E The wider role of the teacher

Demonstrates an ability to:

- El play a full role in teaching teams.
- E2 play a full role in the life of the school.
- E3 support pupils in their personal, social, spiritual, moral and cultural development.
- E4 provide effective partnerships with parents and governors
- E5 liaise effectively within the wider school community.

Professional qualities

Commitment to professional values

Teachers demonstrate this quality by personal example and through their role in school by, for example:

- respecting and valuing pupils as individuals in order to promote personal growth and autonomy;
- acknowledging their own role and responsibilities and the roles and rights of other individuals and groups in the educational process;
- understanding and implementing equal opportunities principles and practices;
- managing and resolving complex ethical responsibilities and value conflicts;
- engaging creatively in continuing professional development, including self-evaluation, recognising one's strengths and limitations;
- contributing to school and wider debate about school development and improvement.

Effective communication

Teachers demonstrate this quality by personal example and through their role in school by, for example:

• communicating in a form and manner which is clear, sensitive, varied in style and medium, and appropriate to different audiences and purposes.

Appropriate relationships

Teachers demonstrate this quality by personal example and through their role in school by, for example:

- developing collaborative relationships with pupils, parents, colleagues and other professionals;
- showing the ability to empower others.

Effective management

Teachers demonstrate this quality by personal example and through their role in school by, for example:

showing an ability to act in independent manner, use initiative, and to prioritise.

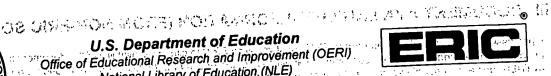




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