



# Excellence and Innovation in Initial Teacher Training

## A case study approach



Arolygiaeth Ei Mawrhydi Dros Addysg  
A Hyfforddiant yng Nghymru  
Her Majesty's Inspectorate  
For Education and Training in Wales

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**BUDDSODDWR MEWN POBL**  
**INVESTOR IN PEOPLE**

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## 1. Introduction

'The Learning Country', published in August 2001, sets out the Welsh Assembly Government's aspirations for education and training in Wales. The main principles are that:

- high standards and expectations and progressively improving outcomes must feature for all learners;
- the interests of learners must override all others;
- barriers to learning must be recognised and steadily overcome to the benefit of learners' access and participation;
- every encouragement must be given to ensuring that academic, technical and vocational learning pathways have parity of esteem;
- inequalities in achievement between advantaged and disadvantaged areas, groups, and individuals must be narrowed in the interests of all;
- innovation must be supported consistently to enable providers to use ICT to transform teaching and learning and to customise and refine learning experiences tailored to the needs, aspirations and potential of individuals;
- the informed professional judgement of teachers, lecturers and trainers must be celebrated with proper regard to clearing the way to unleash the capacity and expertise of practitioners;
- policy and programme development must be undertaken on the basis of partnership and encouraging genuine commitment to work across organisational boundaries with partners playing to one another's strengths;
- provision for education and lifelong learning must also reflect wise use of money;
- policy for education and training must be evidence-based; and
- the agenda for lifelong learning must be applied in ways that reflect the distinctive needs and circumstances of Wales.

In 'A Winning Wales', published in January 2002, the Welsh Assembly Government sets two key targets in relation to education. They are:

- to reduce the proportion of adults of working age without qualifications to one in 10; and
- to increase the proportion of adults of working age with a level 4 qualification to over three in 10.

To ensure that these principles and targets are translated into reality, Wales needs teachers of the highest calibre. Teachers in the 21st century will need to have excellent knowledge of the subjects they teach and to have excellent teaching skills. They will also need to be responsive to the changing needs of the learners whom they teach. This means that they will need to keep abreast of developments in their subject, in learning and in technology. To help learners acquire the skills to live and work in a rapidly changing society, teachers will need to help learners find out about what it means to learn and how they learn. They will need to encourage learners to see learning as a lifelong activity that is enjoyable and worthwhile in itself. Teachers will need to be learners as well. They will need to continue to develop their understanding of teaching throughout their career. They will be instrumental in developing the vision of education for future generations. They will need to develop good research skills to help them make informed decisions about how best to help their pupils learn.

'Reaching Higher - Higher Education and the Learning Country' describes in more detail the strategy through which the higher education sector can contribute to the Welsh Assembly Government's aspirations as set out in 'The Learning Country'. One of the four main principles is to 'inspire and enable individuals to develop their capabilities to the highest potential levels throughout life, so that they grow intellectually, are well equipped for work, can contribute effectively to society and achieve fulfilment.'

In the light of these principles and targets the purpose of this report is to:

- take stock of the achievements of higher education institutions in initial teacher training between 1996 and 2001;
- celebrate and share information about the excellence we have seen;
- share information about the innovations that are taking place in initial teacher training; and
- recommend the ways in which initial teacher training in Wales can be further improved to meet the principles and targets set out in the Welsh Assembly Government's agenda.

We have drawn on a wide range of evidence from the last inspection cycle. In addition, during the summer of 2002, we have visited seven of the institutions involved in teacher training.

This report is set out in sections: the next section provides an overview of the main findings, the third looks at excellence, the fourth looks at innovation and the fifth offers recommendations as to ways forward. Greater detail of certain case studies is given in Appendix 1. (We explain what we mean when we refer to 'excellence' and 'innovation' as set out at the beginning of sections two and three respectively).

## 2. Main findings

### 2.1 Excellence

The case studies in this section of the report focus on aspects of provision awarded the highest grade in inspection grade 1.

**The good and outstanding features are:**

- ✓ excellent course design that provides a good balance between theoretical and practical work;
- ✓ excellent quality documentation that underpins the quality assurance processes;
- ✓ high and consistent expectations of the trainees;
- ✓ a clear focus on pupils and learning;
- ✓ training that models effective teaching that motivates pupils;
- ✓ structured opportunities for the trainees to try out key teaching strategies within a supportive environment;
- ✓ well thought out opportunities for trainees to experience working with pupils in age-ranges other than those they are training to teach;
- ✓ excellent opportunities for trainees to share their particular knowledge and expertise with peers and serving teachers during training;
- ✓ assessment processes and related tasks that are effectively integrated into the course; and
- ✓ the effective contribution of serving teachers to all aspects of the course.

## 2.2 Innovation

The case studies in this section of the report focus on innovation.

### The good features are:

- ✓ the early identification of gaps in trainees' subject knowledge and the development of a range of support mechanisms, including distance learning, through which trainees can update their knowledge;
- ✓ the integration of Y Cwricwlwm Cymreig across all subjects;
- ✓ the good practice in developing trainees' linguistic and teaching skills in Welsh;
- ✓ the good practice in developing trainees' personal and subject skills in ICT through the subject and the supportive action taken by a higher education institution to ensure greater equality of opportunity for trainees in respect of ICT on school experience;
- ✓ the development of on-line resources and guidance that can be accessed at distance by trainees, college and school staff;
- ✓ the continuing development of partnership between higher education institutions, local education authorities and schools through a range of activities that broaden trainees' experience;
- ✓ the development of short, flexible 'taster' courses for prospective initial teacher trainees and the growing contribution made by higher education institutions to new teacher training routes aimed at widening access;
- ✓ the contribution of higher education institutions to developing both initial teacher trainees' and serving teachers' skills in using and undertaking evidence-based educational research; and
- ✓ the contribution that higher education institutions are making directly, for example through the provision of degree level courses, and indirectly, for example through their work with school staff in initial teacher training, to the continuing professional development of serving teachers.

### 3. Excellence in initial teacher training

Excellence in initial teacher training is achieved when there is a shared expectation among trainees, tutors and school mentors that they will work together to develop trainees' knowledge and skills so that they will become teachers of the highest calibre. Courses need to be well designed. They need to provide opportunities for all trainees, from whatever their starting point, to attain competence and, in many cases, to go well beyond it. Typically, these courses are characterised by consistent high quality training that include opportunities that engage trainees' enthusiasm and creativity.

The case studies which follow focus on those aspects of courses which were awarded a grade 1 (good with outstanding features) during the inspection of initial teacher training departments in higher education institutions, or they give an overview of features which contributed to a course being awarded a grade 1 overall.

**The good and outstanding features of the case studies that follow are that:**

- ✓ course design ensures a good balance between theory and practical work and between the training in subject knowledge and teaching methodology;
- ✓ effective partnerships with schools provide opportunities for the respective partners to contribute their expertise;
- ✓ there is systematic coverage of the important issues;
- ✓ auditing, early identification and support with issues relating to trainees' subject knowledge is built into the courses;
- ✓ Y Cwricwlwm Cymreig is integral to course content;
- ✓ assessment processes link effectively to course content and methodology;
- ✓ detailed documentation underpins standardisation and quality assurance;
- ✓ there is a focus on pupils' learning and there is encouragement for trainees to produce teaching and learning resources that are creative and that will engage the learners' interest;
- ✓ tutors model good teaching practice;
- ✓ trainees actively engage in the college-based training sessions through discussion and analysis of teaching methods;

Excellence and Innovation in Initial Teacher Training  
A case study approach

- ✓ trainees are given opportunities to contribute their expertise;
- ✓ opportunities are included for trainees to learn about risk assessment in theory and practice; and
- ✓ trainees have opportunities to experience phases of education other than the one for which they are training to teach.

## Case studies:

### 1. Attaining all round excellence\*

The primary science course is of an excellent standard overall. Key features include a good balance between theory and practical work and between training in subject knowledge and teaching methodology. There is a strong emphasis on progression and continuity of key scientific concepts by highlighting pupils' misconceptions. They re-enforce Y Cwricwlwm Cymreig well through placing science in a meaningful local, national or international context for pupils. Tutors present assessment as an integral part of teaching and learning. They integrate regular and detailed references to recent research and inspection findings into lectures throughout the course. All the work is linked effectively to school practice and to the experience gained by trainees during their school placements. Tutors have the highest expectations of trainees and they encourage them to have the highest expectations of themselves.

### 2. Developing learners' motivation and participation\*

This course provides excellent opportunities to develop resources that will engage the pupils' enthusiasm and engage them in active learning. Trainees produce teaching packs that include a variety of learning activities. Tutors encourage trainees to be creative when deciding upon the structure and content of the packs. There is a strong emphasis on Y Cwricwlwm Cymreig. Tutors encourage trainees to use ICT to produce the pack as well as include ICT within it. The presentations are formally assessed and the trainees are given excellent written feedback. Tutors work closely with the school-based mentors to ensure that there are opportunities for the trainees to use their pack during their school placement.

### 3. Developing secondary trainees' understanding of the primary school\*

This case study focuses on the 'artist-in-residence' aspect of the PGCE Art. This project is now an established part of secondary trainees' art course. As a result of the trainees' work with primary pupils, two participating schools have exhibited at Tate Modern and Artworks 2000. The 'artist-in-residence' project in a primary school gives the secondary trainees important opportunities to use their strengths and share their subject knowledge with serving teachers without an art and design background. This helps to build trainees' confidence. They develop an understanding of primary school ethos, as well as issues of continuity and progression across key stages 2 and 3. Pupils are able to participate in art forms that are new to them and to display their finished work in the college.

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\*Greater detail of case studies marked with an asterisk is given in Appendix 1

#### **4. Developing subject knowledge and technology skills**

The PGCE music course is of an excellent standard overall. This case study focuses on the application of information and communications technology (ICT) in music lessons. Trainees' may have limited subject knowledge of this area of music on entry to the course. Tutors provide excellent support through tutorials in which they actively engage trainees. For example, the tutor pre-recorded a backing track. To start, the trainees played their own instruments and improvised over the backing track that the tutor had prepared. The tutor worked through a series of activities with the trainees that replicated the series of activities that he might use when teaching school pupils. The trainees then considered the activities they had worked through from a pupil's point of view, focusing particularly on what the learning outcomes might be. The trainees and the tutor had a productive discussion about the relative merits of the software packages that could be used. The trainees then used software to compose a backing track that they could take into school and use with pupils.

#### **5. Scaling the heights\***

The outdoor activities course is unique in Wales and provides high quality training. The trainees selected have already demonstrated a strong commitment to young people, have experience of teaching or working outdoors and have a personal enthusiasm for the outdoor environment. The main focus of the course is on the organisation and the running of safe, enjoyable and educational outdoor activity programmes, for schools and at outdoor residential centres. Trainees participate in such activities as hill walking, camping, rock climbing, orienteering and canoeing. As well as developing the trainees' knowledge and skills to a high level, the courses build on their willingness to learn from others and to work effectively as part of a team. Trainees willingly take on extra commitments and some gain extra qualifications. There are very effective links between the college, the schools and the outdoor education centres.

#### **6. Training for health and safety**

There is growing concern among teachers about health and safety aspects of activities taking place outside school. This case study focuses on the excellent practice in one higher education institution where tutors prepare trainees to take pupils out on field visits for science through practical experience. In the third term of their course, all trainees with their tutors go to a secondary partnership school. Here the trainees have practical experience of organising science field trips for groups of Year 9 pupils. Tutors and school-based staff support the trainees in planning and carrying out field trips. The field trips focus on a theme, such as the study of the structure of a bridge or the life to be found on the seashore. Tutors ensure that trainees pay excellent attention to the procedures that have to be followed when taking a field trip. Tutors also pay close attention to ensuring that the trainees are clear about identifying the intended learning outcomes in science.

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\*Greater detail of case studies marked with an asterisk is given in Appendix 1

## 4. Innovation in initial teacher training

This section of the report looks at innovation in initial teacher training with the aim of sharing information about promising developments that are taking place.

Innovation refers to those activities where initial teacher trainers aim to improve and/or enhance their provision through particular projects. It may be in response to an area of development that the higher education institution has identified itself. It may be in response to areas identified for improvement during inspection or it may be in response to the Welsh Assembly Government's agenda for education and training.

By its nature, innovation is developmental. The best innovation is carefully planned, monitored, evaluated and modified in the light of evaluation. Where innovation has been successful, the aim should be to embed it into provision.

All initial teacher training providers in Wales are active in seeking to improve their provision. Some have attracted funding from the Higher Education Funding Council in Wales for specific initiatives, while others are undertaking this work without additional funding.

The case studies that follow are grouped to represent key issues and national priorities that higher education institutions are addressing.

### **The good features of the case studies that follow are that:**

- ✓ support is offered to trainees in shortage subjects prior to entry onto the initial teacher training course;
- ✓ the particular needs of foreign nationals who enter the teaching profession in the United Kingdom are recognised;
- ✓ a variety of methods are used to support trainees' development of subject knowledge, such as allocation of a tutor prior to the course, grouping of trainees with complementary subject knowledge, peer-tutoring, distance learning packages and study visits;
- ✓ there is collaboration between higher education institutions and their partnership schools in working to recruit suitable candidates for teacher training; and
- ✓ colleges are developing flexible, supported and open learning 'taster' courses to help widen access to recruitment.

#### 4.1 Supporting trainees in improving their subject knowledge

The Standards for Initial Teacher Training put particular emphasis on trainees developing their subject knowledge so that they can teach the national curriculum with confidence. For a Bachelor of Education degree with Qualified Teacher Status (B.Ed with QTS), subject knowledge is addressed in parallel with training. Those studying for a Post Graduate Certificate in Education with Qualified Teacher Status (PGCE with QTS) already have degree level knowledge of the subject they wish to teach. However, although they have subject knowledge, this may not be closely matched to the subject knowledge required to teach the national curriculum. Mature trainees may have completed their first degree some years ago and therefore their knowledge may be dated. The following case studies refer to PGCE courses. They look at the ways in which some colleges are addressing the issue of match of subject knowledge to national curriculum requirements.

#### 7. Summer induction programmes\*

In the summer, a few higher education institutions across Wales hold face-to-face accredited induction programmes for potential trainees in certain secondary subjects. These courses aim to help the candidates who have the potential to be teachers, but whose subject knowledge is incomplete, non-standard or dated, to update their knowledge, and to widen access to the profession. For example, the mathematics course is designed to improve the subject knowledge of those with less than half of their degree in mathematics. The modern foreign languages course helps to introduce foreign nationals, often modern foreign languages teaching assistants, to the British education system.

One higher education institution has produced a self-study package to support trainees in improving identified weaknesses in subject knowledge on primary and secondary courses. Tutors put many of the training resources and materials on the college intranet for easy access. These are reviewed and adapted each year. Trainees are often placed in self-study support groups. The groups include trainees with complementary subject expertise. The trainees benefit from peer-tutoring and sharing knowledge. This arrangement helps trainees develop their teaching skills and their analytical skills.

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\*Greater detail of case studies marked with an asterisk is given in Appendix 1

## 8. Supported distance learning\*

At interview, tutors identify the gaps in subject knowledge of candidates who are applying to train to teach religious education. Often, trainees do not have enough knowledge of all six major world religions to be able to teach about them confidently. The higher education institution has therefore written six distance-learning modules, each one focused on one of the world religions. A condition of being accepted on to the course is that trainees without enough knowledge must complete the distance-learning modules prior to starting their training. The understanding that the trainees have developed through the academic study prior to the course is further strengthened by practical experience early on in the course. Tutor and trainees visit London for a week of intensive visits to a wide range of places of worship of different religions and sects. This approach to developing subject knowledge and training models aspects of good practice that trainees might adopt with their pupils.

## 9. Taster course for mathematics

This case study focuses on the collaboration between a Welsh higher education institution and a distance learning university. The course is aimed at those with a degree who are considering training to teach mathematics. Each higher education institution contributes its particular strengths to the project. The candidate receives a distance-learning module through which he/she can improve their knowledge. There are three stages to the course. Each stage focuses on a different secondary key stage. The tutor supports the candidate with module through a combination of face-to-face, telephone and electronic communication. A facilitator supports the candidate in school.

The course is open to candidates regardless of the higher education institution to which they might finally apply. Flexibility in the timings of the taster period in a school is vital as many of the potential trainees are mature people. At the end of the period in school, the tutor discusses with the candidate his or her experience and the level of their subject knowledge and advises them as to their best course of action.

### 4.2 The Welsh dimension

The case studies in this section focus on the development of trainees' understanding and knowledge of Y Cwricwlwm Cymreig and the Welsh language. Among the countries of the United Kingdom, Wales is the only one that has two languages of equal status. The inclusion of Y Cwricwlwm Cymreig and the Welsh language help pupils to appreciate the culture and the community in which they are growing up. This provides a good foundation through which they can develop their understanding of different cultures.

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\*Greater detail of case studies marked with an asterisk is given in Appendix 1

**The good features of the case studies that follow are that:**

- ✓ trainees are introduced to the Welsh language and Welsh culture early on in their training;
- ✓ Y Cwricwlwm Cymreig is well integrated into the course and features consistently across all subject areas;
- ✓ courses are designed, not only to consider issues that are specifically Welsh, but also focus on Wales and its relationships to the wider world;
- ✓ trainees' progression is well supported through the structure of the course, additional tutoring and the enthusiasm of the tutors;
- ✓ the need to provide more teachers who can teach through the medium of Welsh in secondary schools is being addressed; and
- ✓ mentors are developing their knowledge in relation to Y Cwricwlwm Cymreig through partnership with higher education institutions.

**10. Y Cwricwlwm Cymreig\***

The approach of one higher education institution to Y Cwricwlwm Cymreig is sophisticated and well articulated. Y Cwricwlwm Cymreig features consistently across all subject areas. Trainees start by considering aspects of Welsh life and culture in their local area before developing a national and international perspective. Trainees refer to county office records and libraries in Ireland and Wales and they discuss historic and modern stereotypes in seminars. Finally, an international and worldwide perspective is introduced through, for many trainees, a study visit to Ireland or Botswana.

The English course takes good account of Y Cwricwlwm Cymreig. It features in all aspects from the interview to final examination. It influences the choice of texts and topics for study. It considers non-standard forms of English and groups discuss dialects with reference to the use of Welsh and English in Wales. Some tutors have written teaching resources to introduce geographical concepts through Welsh settings to pupils in key stage 1. A further resource pack introduces pupils in key stage 2 to key ideas about sustainable development through the study of five contrasting places in Wales.

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\*Greater detail of case studies marked with an asterisk is given in Appendix 1

## 11. Learning Welsh\*

All primary Bachelor of Arts (BA) trainees in Year 1 of their course follow a compulsory element of Welsh as a second language. The provision is firmly embedded within existing programmes. There are about 30 trainees in a class. There is a 'buddy' scheme in place and there is a drop-in facility to provide additional support when needed. The programme is well structured and target setting for individuals underpins progress. Where trainees present additional needs, the higher education institution has been swift to respond. The programme is also effective in modelling the skills needed to teach Welsh as a second language. The higher education institution is very successful in promoting Welsh in a traditionally anglicised part of Wales and to many trainees who come from England. In recent years there have been many more trainees studying Welsh.

## 12. Supporting trainees teaching through the medium of Welsh

This case study focuses on a pilot project to provide extra support for those trainees in secondary schools teaching through the medium of Welsh. The pilot took place from September 2000 to June 2001. It involved five higher education institutions, 15 secondary schools and 47 trainees representing 15 subject areas. A key feature of the project was the extra support trainees received through a language tutor in each higher education institution and a language mentor in each school. The extra support given to the trainees consisted of language tutorials, observations of their lessons with feedback focusing on their language skills and documentation designed to help them improve their language skills. Trainees also completed set additional assignments and their language development was assessed. The outcomes of the project are that trainees improved their personal skills in Welsh and the vast majority gained confidence in their ability to teach through the medium of Welsh. The project resulted in useful resources and provides a good basis for further development.

### 4.3 The use of information and communications technology to support learning

It is becoming essential for teachers to be able to use ICT for personal and administrative purposes as well as to support pupils' learning. Advances in technology are taking place at a very fast rate. Trainees need to gain confidence in handling technology during their initial teacher training courses so that they can make the best use of a variety of technology in the classroom as serving teachers. They need to develop their own personal skills and be able to make the best choices as to the type of technology that will support teaching and learning.

The following case studies focus upon the strategies some colleges are employing to develop trainees' personal ICT knowledge and skills, as well as developing their understanding of its use in the classroom.

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\*Greater detail of case studies marked with an asterisk is given in Appendix 1

**The good features of the case studies that follow are that:**

- ✓ there is strategic leadership from senior management in relation to ICT;
- ✓ there is a policy that is well articulated and implemented;
- ✓ ICT is embedded into each subject line;
- ✓ course design enables progression and, in one case, there is an end product that trainees can share with one another and take as a resource into their first teaching post;
- ✓ trainees develop their personal ICT skills as well as the subject application of ICT;
- ✓ ICT skills are an assessed component of the course and there are shared criteria;
- ✓ trainees acquire skills in one subject area that they can adapt and apply to other subjects;
- ✓ it is recognised that schools are at different stages of development in relation to ICT and action is taken to try and ensure trainees' equality of opportunity for this aspect of training; and
- ✓ there is an increasing use of e-mail to support learning and share good practice.

**13. Planning for the use of information and communications technology\***

The senior management give the highest priority to ICT. The approach adopted is well thought out and articulated. It is based on trainees developing their ICT skills within their specialist subject sessions. All aspects of the ICT national curriculum for initial teacher training, including their personal ICT skills, are covered within subject teaching. The training provides trainees with a wide range of good ideas for using ICT in teaching. Trainees often use these ideas in partnership schools. Tutors recognise the variability of schoolbased training in ICT. They have tried to overcome this by identifying and working with mentors and departments who are particularly experienced in using ICT. For example, tutors work with mentors to:

- produce training materials, including CD-ROMs;
- deliver part of the sessions in the higher education institution;

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\*Greater detail of case studies marked with an asterisk is given in Appendix 1

- arrange for pupils to come to the higher education institution for ICT lessons; and
- arrange for trainees to go to the schools to observe good use of ICT.

All trainees have college e-mail addresses so that they can access the college from home and school. The higher education institution also supplies on-line support to the mentors. A web site includes much of the partnership documentation in electronic format, as well as the examples of trainees' lesson plans and video extracts of lessons with an accompanying commentary.

The higher education institution has plans to develop their ICT provision further by:

- providing Internet access in each subject base room on the higher education institution site;
- buying laptops and portable projectors for trainees and schools to borrow; and
- including training on the interactive whiteboard in the course.

#### **14. Applying information and communications technology in primary teaching\***

Year 3 trainees on a Bachelor of Arts degree with Qualified Teacher Status (BA with QTS) in primary education follow a module of work in science on the use of ICT and multimedia. This is a 10 week course that is supplemented by additional workshops. Trainees attend these workshops on a voluntary basis to receive extra support. Prior to starting on this aspect of work in Year 3, trainees have developed a range of ICT skills to enable them to produce effective on-screen worksheets for pupils. A key feature is the use of electronic links to graphics and text. Trainees then apply these skills in Year 3 to complete an assignment on 'The Virtual Trail' for key stage 2 pupils or 'The Interactive Story Book' for key stage 1 pupils. Two members of staff support the course.

The objectives for this piece of work are:

- to enhance the trainees' ICT skills through subject application;
- to increase their knowledge of the national curriculum in science; and
- to develop teaching effectiveness.

All trainees on the course have produced good software packages. Course evaluation shows that trainees value the breadth of skills and experience they develop through involvement in this work.

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\*Greater detail of case studies marked with an asterisk is given in Appendix 1

#### 4.4 Developing partnership

Partnerships with schools, local education authorities and between teacher training providers, internal and external to Wales, greatly enhance initial teacher training. They help to ensure that knowledge and good practice is shared for the benefit of the trainees. Through this means trainees can experience working in schools with different ethos and observe a range of different teaching styles. The case studies that follow look at the way in which colleges are developing their partnerships.

**The good features of the case studies that follow are that:**

- ✓ trainees have an opportunity to plan together and to participate in extra-curricular activities;
- ✓ extra-curricular work is part of the assessed work of the course;
- ✓ effective partnerships have been developed between higher education institutions, their partner schools, trainees and, in one case, a local education authority;
- ✓ awareness has been raised among trainees, higher education institution tutors and school mentors of their respective roles in supporting trainees' professional development; and
- ✓ there is better consistency in the way the profiling system is used which in turn has led to a greater consensus regarding standards.

#### 15. Extending teaching opportunities in science\*

The town in which one higher education institution is situated holds an annual science festival. As part of the festival, many trainees studying for the Bachelor of Education degree with Qualified Teacher Status (B.Ed with QTS) give talks about science to primary school pupils. They select a topic that they can present in an interesting way and that will make an impact on primary school pupils. Trainees have access to the college facilities and college staff who help them with the preparation. Trainees write an account of their experience including an evaluation. These accounts and evaluations form a part of the trainees' assessed work for their course. The trainees gain a great deal from the experience. They focus on establishing a good relationship quickly with unfamiliar pupils and conveying key scientific points in a short time. Many of their accounts of their experience are well written and many reflect well and in detail on their experience.

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\*Greater detail of case studies marked with an asterisk is given in Appendix 1

## 16. Working with the local education authority and its schools

In one area, the higher education institution and the local education authority have formed a partnership to work together to co-ordinate their work in the area. Senior colleagues from the higher education institution and the local education authority meet regularly to discuss their strategic plans and how they can help one another to implement these plans. Higher education institution staff have contributed substantially to in-service courses arranged by the local education authority. The local education authority values this contribution. Through their involvement in in-service courses, higher education institution staff have gained useful and deeper knowledge about the schools in their area. They have forged close links that help to underpin their initial teacher training courses. Local education staff and teachers from the local schools have, in turn, contributed to the college's initial teacher training courses. They enrich the trainees' experience by bringing first-hand and current experience to the training.

## 17. Strategies to improve partnership

This case study focuses on a two-year project (February 2000 - May 2002). The aims of the project are:

- to improve the quality of training and assessment and the standard of teaching competence of primary initial teacher training trainees through the use of professional development profiling;
- to develop professional development profiling more closely to match the format of the Career Entry Profile;
- to use the profile as one mechanism to promote continuity and progression between trainees college-based and school-based experiences;
- to trial materials and evaluate the outcomes; and
- to disseminate the project outcomes.

The project team comprised of the project director, who is also the head of primary initial teacher training, four higher education institution tutors, four school-based mentors, two local education representatives and two primary trainees. The team produced:

- a handbook for trainees detailing the professional profiling system;
- guidelines for the higher education teaching team in the use of the profile;
- guidelines for the school-based mentors; and
- production of bilingual materials.

The team disseminated their work to other partner schools and other higher education institutions providing initial teacher training through training events and seminars. They produced interim and summative reports including details of monitoring and evaluation. The key outcome of the project was that the team improved the consistency in support for trainees' professional development.

#### 4.5 The development of other routes into teaching

For young people in Wales to be inspired, value education and achieve the best that they can, Wales needs to attract and retain the very best teachers. Initial teacher training in Wales has traditionally been delivered in higher education institutions spread throughout Wales. This means that initial teacher training is available to only those who can travel to those centres. There are many people who have the potential to be teachers but who, for a variety of reasons, are unable to take advantage of the traditional routes into teaching. Widening access to teacher training is of great importance if Wales is to be able to attract the best into teaching. Many of the people who are attracted to more flexible routes in to teaching are mature people. Many have often worked in other jobs or trained for other professions initially: some may come from overseas. All bring a wealth of experience to teaching from their former working lives. They help to diversify the teaching force and provide pupils with different role models. The two case studies that follow look at how some higher education institutions have recognised this need and are engaged with others in Wales in either providing or supporting non-standard routes into teaching.

#### The good features of the case studies that follow are that:

- ✓ there is a route that enables people to carry out most of their study at home;
- ✓ there is access to on-line materials for those following traditional teacher training courses that enables some flexibility;
- ✓ there is access to Welsh-medium materials;
- ✓ there is development of a clear rationale for the higher education institution's involvement in the Graduate and Registered Teacher Programme (GRTP);
- ✓ there is involvement of the higher education institution in all stages of the trainee's experience on the GRTP route;
- ✓ a member of staff is appointed to co-ordinate the higher education institution's involvement GRTP; and
- ✓ there is an emphasis on quality assurance.

## 18. Supporting training through web-based materials

A group of higher education institutions providing initial teacher training in Wales is working together to develop a supported open and distance-learning course to enhance traditional initial teacher training provision. Each of the three higher education institutions involved in the project contributes by preparing the materials for a subject area or education and professional studies. Web-based materials are available in both Welsh and English. They comprise a wide range of teaching materials that can be accessed by trainees and mentors in schools. These are then electronically available to trainees across the collaborating institutions. Careful timetabling enables there to be joint training sessions between both the traditional and distance-learning trainees. Distance-learning trainees undertake school experience as other trainees and are supported by a subject mentor.

## 19. Widening participation

This case study focuses on the role played by one higher education institution in the Graduate and Registered Teacher Programme (GRTP). This is aimed at widening the routes through which people can qualify to teach by offering a school-based training route. It has particular importance for helping to maintain the supply of teachers in shortage subjects. Many schools have had experience of teacher training through their association with teacher training higher education institutions in Wales. However, the best training plans will ensure that the trainee has opportunities beyond their immediate training placement. Schools may therefore draw upon expertise from the local education authority, other schools and initial teacher training departments in higher education institutions.

One higher education institution has appointed a member of staff to coordinate this aspect of partnership in initial teacher training. In this partnership, the higher education institution gives priority to supporting men wishing to enter primary teaching, trainees from under-represented groups, such as minority ethnic groups, those with appropriate qualifications in shortage subjects, and highly experienced and suitably qualified classroom assistants. The higher education institution liaises with the school to ensure the suitability of the candidate. It helps the school and the trainee in completing the audit, the school in devising a training plan and assuring quality by regularly visiting the school to observe the trainee and discuss progress with staff. Initial teacher training tutors from the higher education institution visit the trainee on a regular basis. The higher education institution asks its external examiner for the particular phase or subject to visit the trainee in the final stage of their training. The external examiner observes the trainee teaching, reviews their written work and discusses the trainee's work with the school-based mentors and college-based tutors to verify the final judgement.

## 4.6 Wider professional development

The case studies in the previous sections have focused on innovation directly linked to initial teacher training. The following case studies focus on research that enhances the content of initial teacher training courses and, in some cases, contributes to the professional development of serving teachers. Tutors in initial teacher training are well placed to undertake evidence-based research. In the course of their work, they develop research skills that they pass on to the trainees and serving teachers. They help them to interpret the evidence base and they help trainees and teachers to think through how practice can be improved and standards raised.

### The good features of the case studies that follow are that:

- ✓ staff have linked their own research interests to underpin the work that they do in initial teacher training and continuing professional development;
- ✓ college staff model good research practices and support both trainees and serving teachers in developing evidence-based research skills;
- ✓ the teacher research action group looks at issues that have practical outcomes for teachers and pupils in the locality;
- ✓ research is being further developed with a view to informing school policies and the practice of serving teachers;
- ✓ the continuing professional development portfolio is wide ranging and builds on initial teacher training;
- ✓ the Certificate of Professional Development in Education (CPDE) provides a 'next step' qualification for those in the early stages of their professional development;
- ✓ the CPDE is modular and offers flexibility in meeting students' needs;
- ✓ the physical education conference provides serving teachers and trainees with graphic and vibrant models of good practice in the teaching, learning and assessment of physical education in the primary school;
- ✓ they present good opportunities for teachers to discuss and evaluate aspects of performance in physical education;
- ✓ it is a good example of effective partnership between the schools and the higher education institution; and
- ✓ there are plans to develop the project further by offering a similar conference to other schools.

## 20. Using evidence-based research

In one higher education institution there is a strong emphasis on evidence-based research. Tutors see their research as directly underpinning their work with trainees and serving teachers. Many of the higher education institution's staff have published research, including work on boys and literacy, how pupils and trainees learn and the continuing professional development of mentors and teachers. Much of the research work is carried out in local schools. Up-to-date research in teaching and learning informs subject training sessions. In some cases, trainees contribute to publications.

The college encourages the most able trainees to develop beyond the standards for the award of qualified teacher status. These trainees can complete two modules at master's level by meeting additional criteria and providing a more extensive review of the research literature in their final assignment. Tutors also work closely with mentors on research. Tutors, in collaboration with another college nearby, have set up a teacher action research group. The group includes representatives from the higher education institutions, the local education authority, local headteachers and representatives from further education colleges. An action research project into the role of the headteacher aimed to improve leadership and management skills and, in turn, improve pupil achievement.

The higher education institution also runs a school-based Master of Arts in Education (MA Education) programme. This has proved very successful. One school judges the impact of the participation of its teachers to be improved relationships with pupils, a better definition of the head of year's duties, an improvement in teaching materials and policy documentation and the development of new teaching and management skills. The professional development of staff at master's level has contributed to the school achieving an Investors in People award and to the school winning a Welsh Secondary Schools Association award.

## 21. Meeting teachers' needs in continuing professional development

The higher education institution's portfolio for continuing professional development includes:

- a Master's programme in Education (MA (Ed));
- the Certificate of Professional Development in Education (CPDE) that leads to the Diploma of Professional Development in Education (DPDE);
- a range of consultancy work in primary and secondary schools; and
- a number of regular non-accredited activities, including an updating course for supply teachers.

Through the DPDE and MA (Ed) the higher education institution is responding to identified priorities within the Welsh Assembly Government's agenda for education - for example, equal opportunities, diversity and developing teachers as researchers. This work also impacts on Education and Professional Studies (EPS) in the BA (Ed) programme.

The higher education institution is involved with a good number of partners, including local education authorities and specialist education services. The impact of the continuing professional development on teaching and learning in schools is monitored and evaluated. Local education authority officers and headteachers report that the work undertaken by participating teachers has had a positive impact on school improvement.

## **22. Supporting pupils with a family member in prison\***

A school in an initial teacher training partnership with a higher education institution saw the need to provide support for a pupil that had a family member in prison. Tutors from the higher education institution agreed to work on an action research project with the school to find ways that could effectively support the pupil and their family. The tutor and the school have used their experience to develop materials aimed at enabling teachers to support better pupils in this circumstance. The higher education institution is developing its research profile and its links with relevant organisations in relation to this issue. It is also considering providing in-service courses for serving teachers.

## **23. Dissemination of best practice**

One higher education institution, in collaboration with an initial teacher training institution in England, held a one-day conference for practising teachers of physical education in primary schools. The aim of the conference was to share good practice in physical education at key stage 1 and key stage 2. Six teachers from the colleges' partner schools taught lessons in dance, gymnastics and games for delegates to observe. The lessons formed part of a unit of work being taught in their school. Teachers from 110 other schools attended as observers. At the end of each session there were opportunities for teachers to discuss and evaluate aspects of performance in each specialism. The teachers received model lesson plans and assessment guidance showing links with the national curriculum requirements. Apart from the serving teachers who attended the conference, the higher education institution invited those training to teach physical education to attend. They were able to develop their understanding of teaching physical education to this age range through observation and discussion with the teachers.

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\*Greater detail of case studies marked with an asterisk is given in Appendix 1

## 5. The way forward - Recommendations

'Reaching Higher and the Learning Country' urges higher education institutions '*to compete and meet the standards of the best, not only as they are now, but in the future.*' The case studies in the third and fourth sections of this report exemplify the commitment of initial teacher training providers to quality provision and improvement. However, inspection evidence shows that there is room for further improvement, particularly in relation to the trainees' teaching skills. In order to provide a teaching force that is well equipped to provide high quality education in the 21st century and to fulfil the aim stated above, initial teacher training providers will need to build on the good work being achieved by:

- ensuring that they develop a well articulated and shared vision of teachers they aspire to produce and the training that trainees will receive;
- ensuring that national priorities, such as widening participation, tackling disaffection and underachievement, ensuring equal opportunities, celebrating diversity and developing pupils understanding of sustainable development, are taken into account;
- ensuring that all elements of the course and their inter-relationships are planned coherently so as to ensure the vision can be attained;
- ensuring that all parties to the partnership have high expectations of themselves and the trainees;
- ensuring that courses are evaluated on a regular basis to ascertain progress against the goals set;
- comparing provision with similar initial teacher training courses, both across Wales and in other countries of the United Kingdom and aspiring to match the best;
- continuing to develop partnerships and collaboration in the higher education sector so as to maximise expertise, share good practice and avoid duplication; and
- continuing to support and develop routes into teaching that widen access to the profession.

## Appendix 1: Further details of case studies

This section contains further details of the case studies that are marked with an asterisk in sections 2 and 3.

### 1. Attaining all round excellence

- A range of study guides and additional subject knowledge clinics are available to the trainees.
- There is good coverage of the proposed national curriculum for initial teacher training in primary science.
- Sessions make good use of the audio-visual aids and information technology.

### 2. Developing learners' motivation and participation

- Trainees work in pairs or groups of three to produce teaching and learning packs.
- Recent project packs have focussed on planning a potential new route for a famous rally competition through a local forest and on developing a ski slope at a local beauty spot.
- The feedback focuses on both the quality of the project and the content of the presentation.

### 3. Developing secondary trainees' understanding of the primary school

- Trainees undertake this experience in the very early stages of their training.
- Those who wish, can work in a special school.
- Tutors pair trainees with complementary skills and expertise.
- Tutors try to match the trainees to the needs expressed by the schools.
- The paired trainees attend school three days a week for six weeks.
- The higher education institution works with 20 schools per year on a rolling programme so as to allow all its partner schools opportunities to participate.
- At a later stage in the course, trainees draw on this experience to inform their understanding of issues relating to pupils transferring from the primary school to secondary school, both in general and subject specific terms.
- The college is also developing its web site to exhibit pupils' work to a wider audience.

## 5. Scaling the heights

- The course is offered either as one half of a joint main method course or as a single main method course.
- There is a limited number of places on the course as there is only a limited number of schools that can offer school experience.
- Trainees have technical competence in at least one outdoor activity and preferably hold a qualification from a national body - for example, mountain leadership or kayak instructor.

## 7. Summer induction programmes

- The programmes last six weeks. The Higher Education Funding Council in Wales (HEFCW) funds these programmes.
- The training pack for the primary topic on electricity includes instructions and equipment for trying out simple practical experiments. The packs refer to a wide range of other resources, including CD-ROMs, websites, video, textbooks and commercial study guides.
- The training resources and materials are reviewed and adapted each year.
- In modern foreign languages, foreign nationals pair with trainees who have English as a first language to help each other improve their pronunciation, fluency, accuracy, vocabulary and grammar in their second language.

## 8. Supported distance learning

- The modules are studied in conjunction with set texts. Trainees complete four self-assessment questions and four formal assignments that are assessed by the tutors.
- Trainees receive feedback prior to the start of the course. The work is at a level equivalent to the first year of an undergraduate degree.

## 10. Y Cwricwlwm Cymreig

- Trainees visit different parts of Wales for project work. Some trainees come from Ireland. This provides an opportunity in one history module to look at the connections of Wales to the wider world. Trainees study Irish immigration to Wales after the famine in 1840, for example, to the town of Llanelli. Trainees refer to county office records and libraries in Ireland and Wales and they discuss historic and modern stereotypes in seminars.

## 11. Learning Welsh

- Trainees follow Cynllun Colegau Cymru at either level 1 or level 2 in Year 1 and progress to level 3 or level 4 in Year 2 according to their ability and aptitude.
- At present 30 hours are allocated during the first semester, that is the trainees study Welsh for three hours each week for a period of 10 weeks.
- They follow the course for 36 hours in the second semester, that is six hours each week for a period of six weeks. The provision is firmly embedded within existing programmes.
- The programme is also effective in modelling the skills needed to teach Welsh as a second language.

## 13. Planning for the use of information and communications technology

- Trainees explore a variety of computer programmes and resources, including software that enables pupils to design spreadsheets, use simulation programmes and find information from CD-ROMs.
- Trainees consider the merits of various web-based materials.
- Trainees critically evaluate the lesson and the work forms part of an assessed assignment.

## 14. Applying information and communications technology in primary teaching

- As part of their preparatory work, trainees identify and prepare a 'Word' template appropriate to the age of the pupils they are teaching. They produce a diagrammatic map of the trail with the activity points marked. They then create text on the template file to describe the route from activity point to activity point, drawing attention to any interesting details encountered along the way. Each activity point has a hypertext link to another 'Word' file containing the digital photograph of that site. The photograph files are linked to other files that have scientific questions with a link to additional files that will provide information with the answers and a feedback mechanism. There is also a link to a teacher's information page with additional background information, including national curriculum references, guidance and additional follow-up activities for pupils.

- One trainee, for example, has developed a programme of activities for key stage 2 pupils on forces. The ICT programme sequence starts with a photograph of a playground with swings, climbing frames, slides and a seesaw. Pupils are directed on screen to one of the five points of scientific interest - for example, the seesaw. They click on this and are linked to different files containing questions on the seesaw and other files with background information. Pupils answer the questions in the blank spaces provided on screen and are then provided with feedback on whether or not to move to the next site or whether to re-visit the point they are on.
- The course director evaluates each project using criteria that are known by all. Feedback from trainee evaluation questionnaires shows that they value the breadth of skills and experience developed through involvement in this work.

### **15. Extending teaching opportunities in science**

- Working in pairs the trainees plan an input of about 30 minutes, including time for questions.
- Higher education institution staff organise the timetable with local schools so that each school has its own time slot.
- The pupils are organised into groups. The sessions are run simultaneously and each pair of trainees runs their session twice to different groups of pupils.

### **22. Supporting pupils with a family member in prison**

- The tutor gives trainees an overview of how she became involved in the issue, the resources that are currently available, a summary of the problems that face the children of prisoners and some case studies. She addresses with her trainees the issues of how to identify that a pupil's relative is in prison, what changes in behaviour and performance there might be, how a teacher should respond to a child or parent that confides in them, what the procedures are, who the teacher informs, what support is available for teachers and schools and how a school could develop a multi-agency approach to supporting prisoners' children and their families.