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## School-based Models of Initial Teacher Education:<sup>1)</sup> —A UK Perspective in Context—

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What I would like to do in the next 20-30 minutes is to explore with you the structure of initial teacher education courses in the United Kingdom, and to link that to in-service training of teachers in the UK. And then to raise some questions which I think illustrates some difficulties and problems with models of in-service training and education in my country. And having been very interested in the Chinese and the Iranian experience, and knowing quite a lot of is going to talk about as far as Germany is concerned, I think you will find that many of the education issues that we are dealing with are very similar. It doesn't matter whether we are from China, Germany, Japan, Iran, or from the United Kingdom, we all have the same kind of common problems and themes that concern us as educators.

I want to begin by illustrating to you how teachers are trained in the UK, and there are several different routes into teaching. First is a university based route, there students will enter the university at the age of 18, they will stay for three years, they will complete a degree in a subject: English, history, mathematics, geography, whatever subject they choose, and after they have completed three years, then they will stay in the same university and do a one year post-graduate certificate in education and 70% of that full-time one year course is in school. Only 30% is in the classroom. 70% of their time there are in an elementary or high school learning how to teach. And I will explain in a moment or two what they study.

The second route which is the route that the majority of young people in the UK follow is to go to a specialist school or college of education like your institution and once again they go for three years, and at the end of that 3 year period, they leave with a degree in education and a subject from the English national curriculum; English, mathematics, science, history, geography, music, art, design and technology, physical education and religious studies. And they will go into an elementary school to become teachers. They have what is called qualified teacher status, they have a license, which enables them to teach, and they have studied education for three years.

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Those students that go through the first route where they do a three-year university degree normally teach in high schools as subject specialists. Those students that go to a college of higher education normally go to an elementary school where they have to teach ten subjects, and not just one subject.

The third route is what is called the graduate teachers scheme. This means that, having completed three years of undergraduate study and having got their degree, a graduate student can go straight to a secondary school and during a one-year course teaching in the school, they are supported by a university professor and they are supported by experienced teachers working in the school. So this route is entirely completely in school. Once they have received their teaching license, what we call qualified teacher status and are working in school, the next stage in their professional development is to go into what we call in-service training or "INSET". Unlike Japan, forgive me if I'm wrong, in-service training in the UK is voluntary.

Teachers do not have to do in-service training if they don't want to. So in the UK you have elementary and high schools, teachers in their 30s, 40s and 50s who have never done any in-service training and don't want to do any in-service training. They don't have to it's not part of their contract. Those teachers what do decided that they wish to do in-service training normally do so at a university or college when they take what we call an award-bearing course. They study for perhaps one semester for a year or two years, and they may get a certificate of a diploma for a Masters degree or in some cases a PhD. after three or four years of study. But it is completely voluntary and it is usually conducted in a university department of education where the teacher goes to the university. This does not mean that school-based training is not considered important in the UK, but rather than school-based training being a part of in-service training, it is a very very important part of their graduate training.

Initial teacher training for undergraduate in the UK must follow a national curriculum. And there are nationally agreed training standards that every teacher must meet before they teach in an elementary school or high school. These are set by the government in consultation with educators. So what this means is that the 104 teacher education universities in England, the standards are exactly the same. It doesn't matter where you live or work in the country; you have to follow the same set of standards.

When they're learning to be teachers, our students have three elements in their course. What we call pedagogic studies, subject studies, and school-based training. And every student follows those three elements. The pedagogic studies element of those degrees is located within a framework of what we call "reflective collaboration". Lining the heart of what our students have to do is the development of them as individual reflective classroom teachers. And this is an issue which runs through everything they do everything they do in pedagogic studies, where they are taught how to plan lessons and how to evaluate them, how to organize and manage their classrooms, how to resource their teaching for learning, and how to differentiate learning for pupils of different

abilities. If you have children who are very gifted at reading and writing, how do you plan teaching activities for them? In the same classroom you will have students who have children who have problems with reading and writing, how do you plan activities for them? All this is done within a framework where the key is not the teacher as a teacher; the key is the pupil as a learner. So when you're planning your teaching, you're not thinking about you as a teacher, you're thinking about "what are my pupils learning?" And all the time we say to our students "what are your children learning?" "How do you know?" and "How can you reflect upon your teaching so you can be sure that you're children are learning?"

They then have to choose the second element, which is the subject specialism, which comes from the English national curriculum. And normally, students choose one of English, mathematics, science, or information technology, which is called the core curriculum in the UK. The government considers those four subjects to be most important, and all students are supposed to be experts at the teaching of all four of those subjects. In their three-year course, 70% of their study will focus on those four subjects. They also have to learn, particularly elementary school teachers, how to teach what we call the foundation curriculum. They must teach history, geography, music, art, physical education, religious education, design technology. And about 30% of their time is spending on that. So what they leave with in terms of their subject and knowledge, is they leave with depth in teaching English, mathematics, science, and information technology, and they leave with breadth, in terms of being able to teach the other subjects as well. So they are curriculum experts in these areas but they also have knowledge and understanding of how to teach these other subjects.

The third element is school-based training, which is a very important aspect of teacher preparation in the UK. This is normally based around collaborative teaching, collaborative planning, and collaborative evaluation. In each of the three years that the students are learning how to be a teacher, they will spend one day per week across each year working in a primary or secondary school in a group. This here is a Monday, so every Monday all our first, second and third year students are in school every Monday for both semesters. They are working in a group from 4-6, they are teaching collaboratively in a classroom. They are supervised by a class teacher who we have trained to do that job. And people like me go in once every two weeks to make sure that everything is okay. But the training of our students in classroom pedagogy and classroom practice is undertaken by classroom teachers who have come to the university and have done a course in how to teach students.

In addition to spending one day each week across a year, each year they will also spend between six and twelve weeks in a school completely. So the first year will do one day a week and then they will do a six-week block of time. The second year, will do one day a week, and eight-week block. The final year students, one-day a week and twelve weeks. And in that final year, in that twelve-week final school experience, they take complete responsibility for the class. The class teacher is

not there. The class teacher is not there. The class teacher will put their head through the door, are you okay, do you need anything. But for that final block practice for our third year students, they have the entire responsibility. Sometimes as an individual, but more often as a pair, as two students sharing and planning a class. We make sure they live together, or they live near each other. They come to school together, they plan, they evaluate, one teaches, the other one observes. And they organize it that way.

Then, the school-based teaching learning adaptation process, as I said, this is the responsibility of a school-student mentor who is trained by the university to support student learning. So people like Mataba sensei, Mohammad Avani or myself, we don't have to get in our cars and drive to 15 schools and see 25 students in England. We train the teachers to do that job for us, which means we can research and write. What's very very important when students are preparing activities is that they have a very clear sense of what the learning outcomes going to be. And they are always asked "what are your pupils going to learn in terms of knowledge, skills and concepts?" So, when I go in to school occasionally to supervise, they don't let me go anymore since some of students call me the "Terminator" . I think they felt I was a bit too strong with them.

And the last time I went I met a student who said to me "My children are going to write a story" So I said "Excellent. And how are you going to teach this?" And the student explained how they had organized the room, the group activities. And then I asked the question which students and teachers often find difficult to answer, which is "why are you doing this?"

"Dr. Crawford, what do you mean?"

"Well, your children are going to write a story, why? What's the learning? What's the knowledge? What will they know at the end of the lesson that they don't know now? What skills will they experience, what concepts will they develop?"

And what we try to do is to move our students away from thinking about themselves as being teachers, to get them thinking about facilitators of pupil learning. And that's a big step for some students. So, we insist there are very clear structured learning outcomes. They must plan for learning. They must think about the task, its organization and management, the pace of the lesson.

"Do I talk too quickly?" "How long do I speak for..." "How long do I give the children to work?"

They think about the level, the age of the children must be taken into account, the difficulty of the idea must be taken into account. And they think about the content, And we insist that the task and the organization must reflect what the learning is going to be. It's very important that they plan their activities so that the children have opportunities to demonstrate their learning. Then we ask them to think about resourcing for learning: "Are you going to use text books, video or film?"

"Are you going to have an outside speaker?" "How does this integrate with the learning?" "How are you going to deliver it? Sometimes as an individual or as a group"

And this always involves peer observation and review, again with the focus on pupil learning. So when a teaching session is being reviewed and the teacher is being told, given feedback and

information. The conversation does not concentrate only upon issues such as: “you spoke for too long” ; “You didn't speak long enough” , “Your voice was too low/too high” ; “You spoke with your back to the audience and the children couldn't hear you.” That is related to the impact that has upon pupil learning. So your performance as a teacher is very closely linked to the affect it had on what your pupils learned and how they learned it. And then, discussion always involves student teachers and school-based mentors and always sets targets. At the end of a review session, we don't sit for an hour and talk about teaching activity and then say “thank you very much, let's go for lunch?” We say now, three targets for the next time you teach this. You need to do A, B and C. And in your next plan we wish to see evidence that you have used the reflection points to set yourself targets for your professional development. It's very highly structured, and it's very clear, and the documentation students are provided with is also very clear.

This is a model that is adopted in many universities in the UK. Because one of the central government aims for educators is that they are reflective practitioners. So, the focus in the UK is not let them learn how to become reflective practitioners after they have finished their initial training through in-service education, it's an integral part of their three-year degree. It underpins everything that they do. So by the time they go into school we don't have to teach them how to be reflective, because they've done it for three years. We don't have to teach them about pedagogic studies, because they know all about pedagogy because they've done it for three years.

In-service training, phase two, is usually organized by universities and colleges, and it's usually taught by professional experts in universities, and also by classroom teachers I've invited into the classroom to teach. Universities advertise their courses, and teachers must register as students to study at university, and most in-service courses at the UK take place in the evening or on the weekend. It is an extra responsibility if you are a teacher in England. And they last from one semester to two years. So my university has over 400 courses for serving teachers and teachers pick and choose which ones they wish to do. In addition, a prefecture, or what we call a local education authority will also manage in-service education. And the courses that a local education authority runs, are targeted specifically to issues which are of national or regional concern. So the prefecture might say: “many of our children are not very numerate” or “many of our children cannot read very well.” Therefore our in-service courses will focus upon literacy and will focus upon innumeracy.

A third model is school-based INSET. This is where an individual head teacher or group of teachers in school will decide that there is an issue or problem in their particular school that they need to solve. And they would approach somebody like me to construct a program for them, which I would then go in to teach. The difficulty with in-service education in the UK is that individual teachers and individual schools have to pay for it. So, it can ... For example if I was invited to go to a primary school or a high school to do a one-day workshop on lesson planning, for example, my university would charge that school 1,000 pounds. What is that in yen? It's a lot of

money. They would say “Yes, Dr. Crawford can come and work for you that day, but we are charging you because we are in the marketplace” .

The INSET training model is very similar to the undergraduate training model. The identification of a need. An issue a theme or problem that is of national concern. Teaching innumeracy, Something that has come from a local education authority or schools or parents. The needs of individual teachers that are outside national and regional priorities are unlikely to be supported. So if I am primary or secondary school teacher, and I am very interested in learning to be a better teacher of art. And I go to see my head teacher and say “there’s a wonderful teacher training course and it costs 500 pounds. Can I go?” The head teacher will probably say “no” . Because it’s 500 pounds and art is not a priority at the moment. If it was maths or English or science I would probably say “yes” . But art, no. Most people can teach art without any training. Or history or religion or music. So you could be an individual teacher who wishes to upgrade their skills but cannot have the opportunity because it’s too expensive or because what you want to do is not considered a priority by the school.

Then after delivery of a program in an individual school or a consortium of schools delivered by expert trainers, usually senior teachers in schools or by somebody from a school of education or faculty of education.

The next stage is to cascade those new skills into the school culture, school management and the school routine. That’s very difficult. It’s very important but very difficult. Because one of the difficulties with INSET in the UK is because it is largely an individual exercise, you must try to insure that the teachers in your knowledge and your understanding impacts upon the whole school. Otherwise teachers just go into their classroom, close their door, and teach as they have always taught. And so it has to be cascaded. You have to make sure that the teacher goes back into the school and holds staff meetings or curriculum development workshops telling the rest of her colleagues what they have learned. We always go back to schools and evaluate the outcomes of the improved levels of knowledge and skills, and the development of teaching competencies. We always to back after we have done a course to the schools three months later to assess the impact of what we did inside classrooms. That helps teachers, but it also helps us to make sure we are offering our clients, because they are paying us, what it is that they actually need.

The central government also helps to develop what is called a “research-based professional” in the UK. The government is very interested in creating teachers as classroom researchers. On the undergraduate level, we develop their skills as being reflective classroom teachers, and at the In-service level, the government provide what they call a “Best Practice Scholarship” . Which means that individual teachers in the UK can apply for a grant for 2,500 pounds for one year to develop their teaching in their school? And it may be that a school has decided that they wish to explore the teaching of geography from a pedagogical didactic perspective. And there may be four or five teachers who wish to do that. They can apply and if they are successful they get 2,500 pounds

each. So they get 12,500 pounds, and they do a research project for a year, and they use somebody like me, from the university department as a consultant. I go in and look at their work and analyze it. And do they pay me? Yes they pay me, because my university will want the money.

Then we have the General Teaching Council, and I do recommend you go this website — it's in English. The General Teaching Council is an organization in the UK that runs workshops and offers advice about how teachers might become researchers in their own classrooms using action research models. And action research has a long tradition in the UK going back to the mid-1960s, with the work of John Elliot and Bob Stenhouse for example. And so most teachers in the UK are aware of what action research is about, and the General Teaching Council has a number of aims which they wish to try to insure that members of the teaching profession understand what it means to be a reflective practitioner and a researcher. Constantly thinking about their teaching, constantly trying to improve, constantly trying to improve the quality of the learning environment and what their children are learning. So to gain professional knowledge and understanding, to develop new pedagogical strategies, how to be researcher, very important, the development of analytical frameworks for understanding classroom action and collaborative research. Many teachers in the UK are very good practitioners, but they do not know why they are teaching what they're teaching because they are so stressed. They spend so much time teaching that they don't always know what their doing.

Problems associated with INSET are that it's voluntary; they don't have to do it. It costs. Teacher stress. We heard from the Chinese case this morning, and I read Mohammad's paper about stress in Japanese teachers. Many teachers are stressed. They have to go in the evenings. "I'm so exhausted; I've got 150 essays to mark. I don't want to go to an in-service training." The changing nature of government demands means that the priorities change from year after year which makes it difficult to get any cohesion. Developing a whole school approach is important. The development of a structured long-term career path is a problem. Much of the in-service training is around subjects and management and organization not enough around pedagogy. And INSET programs in the UK are strong on practical advice but weak on theoretical issues. And I don't believe that you will change what a classroom teacher does in their classroom until you change how they think about education. If you change how they think about education, you have a chance of changing what they do in their classroom.

## **Q&A, and Discussion**

**Q:** Mr. Crawford, Would you please give an example?

**A:** You may find a classroom teacher who is interested in improving the quality of children's writing. Because they've have noticed that children don't write very well. So, they would identify that as a problem, but before they could improve the quality of their teaching, we would expect

them to identify what are the central issues in teaching children how to write, though reading some of the literature. Perhaps by going to other schools to see what other teachers are doing. To then develop a plan of action, in consultation with myself or another tutor, that is based upon what we know about theories of child development and theories about how children learn. How children learn best. Because we don't believe you can be an effective teacher until you know something about child development or theories about how children learn. Because the practical approaches that you may introduce into your classroom may be inappropriate if you do not understand about how children grow socially and intellectually.

So we would suggest to them that one part of their theoretical approach would be to know about children and how they learn. And the other part would link into research strategies: how to observe children in classroom, how to collect and analyze data, how to use data as a way of improving teaching. So there is the theoretical approach in terms of child development, and the development of writing skills in young children, together with the ability to be a reflective researcher. Sometimes we tell teachers to "observe your children" which is fine. But if you don't know what you're looking for, and if you don't know about the skills of observing critically in classrooms then you're wasting your time. There are a thousand other examples of how it works.

**Q:** I'm just curious why I didn't know there's any participation from the department of education when it comes to in-service training. To my curiosity, if costs are a problem in providing such education in England, then how much more in third world countries. I'm very glad to say that in the Philippines; at least the department of education takes part specially in providing massive school-based training. Although I can't speak about how effective it is.

**A:** Higher education and in-service training in the UK is funded by the central government. But they do not give an institution or school so much money and say "spend it as you wish". You have to apply for the funding and the government will have a list of issues why are of national concern and they prioritize those when they distribute the funding. So if I wanted to learn how to teach shop or woodwork or metal work, I could never get money for that. If I wanted to improve the mathematical skills of my children, the government would say "yes" because that's a national priority. The government does have what we call a "hands off" approach in the UK to a certain extent. Because the teaching profession in the UK has always had a tradition of independence, and central government has always been distanced from what goes on in schools and universities. That gap is now closing, and the government is focusing on two key words: standards, and accountability. Standards in terms of checking up nationally on what schools are doing and what colleges are doing; and accountability in making the teaching profession accountable to the government, to parents, and to the local community for the money that the government gives them.

So while the government is involved at the level of funding, they also prioritize those areas of in-



service training, and they can change on a year-by-year basis. So for example, the huge ones at the moment is literacy, innumeracy, and information technology. Why? Because the government is interested in the way in which economically, the UK seems to struggle against other economies in the world where their children have better basic skills in reading, writing, and mathematics. There is no direct central government control, but they do control in another way, by telling you what you can spend the money on, and then asking you to account for how you spent the money. Not only financially but in terms of what impact has your work had on teaching and learning in the school. And impact evaluation is a very powerful concept in the UK at the moment. The government will not just give you money to go away and spend. They will come after you and demand detailed research reports that illustrate that you have improved standards so they are getting value for money.

They do not provide as you said in the Philippines money for large-scale school-based training. They don't give money directly to schools. They give money to local education authorities or to universities who have to bid for it. We have to write to them and say this is what we'd like to do. And they say "yes" or they say "no" . And of course they've cut the money down significantly.

**Q:** I would like to ask Professor Crawford to make some concluding remarks.

**A:** There are a number of issues regarding the initial training of teacher and the in-service training of teachers where it does not matter from what countries we come from we all have similar issues and similar problems and themes. Although there are different educational systems with different structures, once you get past the politics of how a system is organized, and you move into the classroom with individual teachers and children, we share common themes and common ideas about teaching and learning, and I think that we have a lot to learn from each other.

If I could contrast some of the national case studies we've had between Japan, the UK and Germany, I think that there are some interesting possibilities for further development and further collaboration, because despite the different structures, I think that we have a set of common problems. One interesting comparison that emerged for me today was the positioning of the development of action research and being a reflective teacher, and there seem to be two different ways of doing this in our nations. In some nations, the development of pedagogic skills, and the development of reflexivity seem to be part of in-service training, after the teacher has qualified and left their institution. And it seems to be an important part of their professional development. In other nations it's part of their initial education. For example, in the UK it's part of their initial training and in Japan it's part of their in-service training.

Governments always have to decided priorities regarding funding and issues to be focused upon within a national educational debate. And in-service training in the UK, and in some respects similar to Germany, can be quite fragmented. It is voluntary. You don't have to do it. So what the

government in the UK have decided to do is to invest heavily in the initial training to insure by the time teachers are ready to begin work in school they are already reflective practitioners. And therefore that is not such a necessity in in-service training where teachers can focus upon quite narrow and specific tasks.

The other comparison I'd like to draw upon is an issue that has been very important in the UK, and that is the relationship between theory and practice. The relationship between teachers wishing their training at undergraduate and in-service level to be practical and classroom oriented, and in some respects to be divorced from academic theory. As we heard in China this large gap was pointed out between classroom teacher and educational theory and research. If you speak to most teachers in the UK, they will tell you they're not interested in educational research—at all. Because it has no impact upon what they do in their classroom. They are much more interested in going to an in-service course where at the end of the day they are given the pack to take away to their schools the next morning that they can use. They are not terribly interested in somebody like me, standing there and saying “how do you think about being a teacher?” “Let's change your attitude/values so that we can change your practice” . “No. I'm too busy. I'm too stressed. I don't want to get involved in that” . Just give me something that will help me cope, and survive inside my classroom when I have a 150 student essays to mark when I get home. And I think one very interesting area of research is to close the gap between practical classroom-based work and research, and to “demystify” research. Teachers when you say research say “awww” . That sounds theoretical and complicated and a lot of work. Actually research is very simple and doesn't have to be difficult and complicated, and I think that people like us make it complicated sometimes, by talking abstractly and theoretically about ideas.

And I think a third issue, which is not something happening very often in UK or Germany is implementation strategies; ensuring that the investment in initial teachers or in-service education makes long-lasting differences inside classrooms. For me I think those three themes came out strongly today. How do we get teachers to think critically about their work within a context where the demands placed upon them for being a teacher are so severe? Secondly, how can we get teachers to think about children's learning, and not so much what they do as a teacher? And thirdly, how can we get them to see the relationship between they do as a teacher and what their pupils learn? Because sometimes that relationship is not always clear. I meet many teachers who I observe teaching in classrooms, and I say, “How do you think it went?” and they say “I think my planning was good. My resources were good. I didn't speak for too long. My writing on the board was fine” . And I say “Great. You've not mentioned the children.” “What do you think the children thought? Did they learn anything? How do you know?” Action research and developing the skills of being critical practitioner will enable teachers to answer those questions. For me, not only do teachers at the moment not answer those questions, they don't even ask those questions, because they're moving on to their next lesson and next class.

From a structural level, I think that education systems cannot legitimately ask teachers to do in-service course, be reflective practitioners, to think about pupil learning, unless they provide an environment in which teachers are able to do that. And my approach to this is to teach more about less. I'm much more interested in depth of thinking and depth of analysis than I am in breadth. I'm much more interested in the idea that if you teach more about less, you get into the details of didactics and pedagogy and classroom practice. Unfortunately, particularly in the primary schools where teachers have to teach ten subjects, I think that's a major problem. A research agenda? Teachers as researchers. Teaching teachers not only how to research, they need the methodological skills to research their own practice, but teaching teachers how to ask questions about their work and pupil learning. And the more workshops and practical seminars we have, which links theory and practice, the stronger the teaching will be, and the better quality of pupil learning we will have.

**Q:** ICT in teaching is one of the newest innovations in teaching. How the UK addressed it, the government channeled all resources on initial training investment. But there are teachers who don't know about these innovations.

**A:** As far as ICT (information communication technology) in the UK every student in every department will do a course. It is a priority. Our first year students in many universities the UK will speak 6 hours a week for a year on ICT which they will relate to curriculum and development and how they use ICT when they teach mathematics and English and geography. As far as those teachers who have been teaching for 10-15 years and look at a keyboard and faint because this technology is concerned. That is a problem. What the UK government did in 1990 in invest heavily in information technology in elementary and secondary schools, so there are now at least 4 of 5 computers in every classroom in every school in the UK. Some of them have got dust on them because they haven't been used but they're there.

What also helps because ICT is a national priority is that local education authorities have adopted a whole school approach to curriculum and development, in the same way that Fredrick was talking about a pedagogy practice day. Educational advisors who are experts in ICT would go to a school and spend 2 or 3 days there, and the school would close, all staff would be expected to be there. Another way it is done with clever-head teachers and clever principals, is that because all newly qualified teachers in the UK have to have a mentor and experienced teacher to take them through their first two years of their teaching career. Many schools deliberately appoint new young teachers to come into the school because they are experts in ICT, and they ask them to lead in-service training courses. Another issue is that often children know more about ICT than their teachers do. And often teachers can learn a lot from their pupils about computer technology and how it works.

It goes back to a crucial issue mentioned by other speakers today, is that lying at the heart of developing ICT or any other new initiative is the question of teacher self-confidence and credibility. And the idea of making things which first appears difficult, simple. For me, that's what good teachers do. They take difficult ideas and they make them simple for people to understand. Often if you have a teacher teaching for 10 to 15 years, they may feel unsure about changing their practice or about using ICT. One of the issues is implementation strategies. In order to change teachers' classroom practices you have to change what they believe in. Teachers have to come to value ICT or another new initiative. They have to see it has a practical impact upon their work inside the classroom and that in some respects will make their lives easier. You have to demystify the whole idea of technology, and it takes a long time. It takes two or three years before a new initiative can be integrated into a school system, let alone into an individual school.

And this is for me part of the problem our educational systems share. The pace of educational change is so quick; we never get the time to embed new initiatives into our school system before another one appears. So, in the Philippines it might be ICT, in two years time it might be civic education, and so on. Although teachers tend to stay where they are politics change and priorities change. If we understand that, then one area to work in is improving self-perception, self-confidence, sense of well-being and worth, and providing them with practical and intellectual tools they need to cope with change. Coping with change is difficult. People are basically conservative—they don't like change very much. Rather than focusing on how to integrate ICT or French, etc, we start with teachers, and how to get teachers to start to be creative and not to fear change. About managing stress, and not feeling that if they don't know something people are going to think they're stupid. There's nothing worse than to go to an in-service course where somebody like me is talking, and sit there thinking "I don't understand what's going on here". And you don't want to admit is because people will criticize you. What I try to say to my students is that "you are a person in teaching. A teacher, So when I analyzing your work, or introducing a new topic, it has nothing to do with you as an individual, it's about your role as being a teacher. Because teachers take criticism very personally. If you criticize a teacher they think you're criticizing them.

The answer to your question is "I don't know." It takes time. It takes patience. It takes very careful planning and a great deal of thought to make it work, and we should not be in a hurry to implement new initiatives without thinking it through. For me in-service education is like throwing a stone into pond and watching the ripples get bigger and bigger. That's what teacher learning is like. You start small, and it gets bigger and you get much more confident. It's about getting teachers to see that teaching is not a job like a car mechanic or a hairdresser. It's a profession, and it has an academic and theoretical basis that you must link with the practical basis. And it's about not being afraid of making mistakes. And teachers are terrified of making mistakes? Why? Because of complaints from parents, head teachers, regional authorities, etc. Teaching is not

a science. It's an art.

**Q:** Which is more important, "Subject" or "Student" ?

**A:** The focus in UK for 25 or 30 years has moved from teaching subjects to teaching children. And the two are not the same. So, they do go together, but they're not the same. We don't have a situation where a gifted academic with an honor's degree in history who goes into a classroom but cannot teach. Does not know how to communicate with pupils. Does not know how to make their lessons stimulating or exciting or how to motivate children. And what we try to get our students to do through focusing on the practical aspects of teaching is to introduce what I call the WOW factor. This is when a lesson has finished and a group of children go "wow! That was interesting. The material was at our level. We were treated with respect, the teacher and resources were interesting. It was well planned." I could be the best historian in the world but may not be able to communicate my subject. That's why we focus on practical aspects. Another reason is that as a teacher you are going to spend most of your professional life being with children.

Therefore, it makes sense that you spend most of your training being with children. Because they are who you're going to work with. We do it with some days and blocks of school training, because we understand that the experience of being in a classroom good and bad, help improve your self esteem and confidence. "I can do this. I may know my subject but I can also teach my subject." That doesn't mean we ignore theory. What it means is that the theory of practice is theoretical approaches to the practical implementation of being a teacher. The practice of theory is in your classroom, implementing your knowledge and understanding how children learn of child development, how you teach a child with special educational needs, or one that is partially sighted, behavioral problems, etc. And linking all of the experience you've been given over three years into your first year of teaching. What this means is on the first day of their career as a teacher, a new graduate can go into that classroom open the door, and know what they're doing. It's a practical occupation but linked with theory. I don't know how you can do it any other way. I don't know how you can have someone who is an expert in a subject and go into the classroom and teach. In Germany in the gymnasium, for example, there is hardly any pedagogic training in German secondary education.

**α ; (Jerve)** You want to know why the teachers are so stressed in practice. There are many points I agree. There is one more point the work in education never has an end. To be a professional teacher you must find an end in your work. That's difficult, because you have to stop without finishing the work. That's a big reason for stress. In Germany most teachers work alone at home preparing their lessons. It is important they learn to do this together. The more you learn teaching means teaching children and not subjects, you recognize the task of caring for each child. The

third stress point is that it's impossible, 40 children 80 children. You can't care for each child. But what have we to do to prepare for this problem?

**A:** Now maybe in the year 2000 I think the focus point is the individuality of children. Perhaps there are many different conditions, but for in-service training in the year 2000, probably to take care of the individual goals of children. In the past the focus has been largely on the subject-the contents of learning. And we can agree on the individual growth of children. If you don't have the experience to take care of one child, then you cannot take care of the whole classroom. It is important to know policy direction and the contents of the subject, and theory of individual growth.

**Jerve:** It is interesting for me that our thinking seems very similar and I'm careful, because there must be some differences because we have different cultures. The thinking about in-service training of teachers is connected to the thinking of understanding of teaching, which is very near to the idea of open-classroom learning, or "learner-based learning" . A question for me is how we can teach the students in the university this method of "learner-based learning" . So we need methods that are learner-based. Another point is that practice and theory to teach and to teach about teaching must be very close and you are looking for a way to bring it together with action research. In Germany there is a never-ending discussion and tension. One says we need theoretical study first, then do practice, the other says we must do like in the UK, we must combine theory and practice from the first day. We have the problem of some teachers who want to become university professors and think that they can do this if they don't care about practice. I think it's terrible thinking, so we have to fight to-keep practice-oriented study.

Another point is the relationship from the good lesson to a content teacher is important against stress, but you have stress to make a good lesson because you have to change your thinking about learning. If you can change your thinking about learning you can be a good content teacher.

**Crawford:** I wanted to agree with everything that you said, and I thought that the difficulty, was I think we need teachers of pedagogy. I think we need pedagogues as apposed to subject experts. The difficulty in becoming a professor of pedagogy, is what it is? It is not maths, not history. Because pedagogy cuts across subject boundaries, it has low status and low esteem. I also agree with your issue that university professors cannot teach their pupils about active learning unless they actually practicing active learning in their classrooms. I did a session at a university nearby, and I spoke for 35 or 40 minutes, and then asked for questions. Nothing. Not a single word. That did surprise me. I wanted students to be involved in their learning and be active and I think they found that difficult. I don't blame them. That's simply not the way they learn in this particular culture. I do think there ought to be as part of a freshman degree course in university called

“teaching and learning,” or “learning how to learn” , an introduction to learning so that all undergraduate students are actually taught what it means to learn, how you learn, different learning styles, how you answer and ask questions. It's particularly vital for intending teachers that those kind of basic pedagogical principles are embedded in all the work they do.

**α:** We have similar situations for teachers, but what is important is the requirement and subjects? Her second point is that it is not enough to have experienced for increasing skills as a teacher, each country has practicum school and they are not taught about technical skills or lesson plans. University education for teachers should be more practical oriented.

**Jerve:** Now my university is required by the government to offer such a course. Four years undergraduate and two years for orientation course for Masters.

**A:** I often think it is dangerous for any country to import another countries' education system because culturally they are different. But I do believe that if you are a committed educator, there are a number of general teaching and learning principles that hold well regardless of which country you come from. In that respect there are nations across the world that has a lot to learn from each other. There are things about the Japanese educational system, for example, that would be pretty good in Britain.

If I can be controversial, I think you could make a case for completely re-thinking teacher education at the undergraduate level (in Japan). I think to introduce one educational system into another is doomed to failure as I'm sure the Americans are going to find in Iraq. But I do think that in a sense we spend too much time about policy and structure. When we get past all that, organizing, managing, delivering and evaluating teaching and learning is pretty straightforward. And it need not be difficult if we all share a common sense of what our goal is. If our goal is to empower our children individual development, to make them citizens contributing to a democratic society in a variety of ways, then we all should be able to share our experiences in how to make that journey. I think there are commonalities in lesson planning and evaluation. In structural terms of the relationship between undergraduate education and post-graduate in-service training, my impression is that in China it's 4 +2, in Japan it's 4 +1, and in Germany it's 2 and a half plus 1 and a half. Whereas in Britain it's integrated. It's three years and it's locked together. The pedagogy and subject knowledge are part and parcel of the same thing and they aren't separated out. You don't learn your subject and then how to teach afterwards. You learn to teach your subject as you go along.

**Jerve:** We are not able to give you a blueprint. Because what we have heard today that is important is that in-service training must be oriented on the local education problems a situations. We can think about an exchange experience, but we cannot take ... .We have to develop our own

system. But I'm very impressed with the UK system too because it's integrated. I think we in Germany can learn from that because the system is separated. And I think it's also very important to look for possibilities for join theory and practice. But we don't need practical learning like handicraft. In studying to be teacher theory and subject knowledge is important. But students need to recognize that theory isn't anything without practice, and practice only works on the basis of a theory. It's important to get theoretical knowledge.

**Frederick:** I think most of us are focused on our respective tasks. I keep on mentioning integration. My primary interest is ICT but I was reminded by these sessions that everything we implement in the field should always reflect the theories and philosophies in education. I'm very interested in reading about your philosophies.

**Q:** I'm studying history of education which has nothing to do with the classroom itself. How do British people think about (pedagogic studies)? My impression is that teacher training in the UK is highly organized but under construction in terms of in-service training. I'd like to know the reasons why teacher training is not so? In Germany compared with UK.

**A:** The question is what constitutes pedagogic studies and whether students in the UK study the philosophy, history and psychology, and sociology of education. The simple answer is "no they don't" . They used to. When I started teaching I taught classes in the history of education and sociology and philosophy of education. Those courses were abandoned 20 years ago simply because the government at the time, Margaret Thatcher, decided such subjects really didn't do teachers much good. What they needed to do was focus their attention on the practical aspects being a teacher through pedagogic studies. So most of the studies teachers take in the UK focus on lesson planning, lesson evaluation, differentiating the curriculum, teaching children with special needs, assessing, recording, reporting, dealing with parents, marking work, dealing with discipline, how you teach groups, classes, a very practical approach. My criticism is that pedagogy is not just a practical exercise. It's also theoretical-there are theoretical principles underpinning it. And my students don't get enough of it. I would love to teach my students the philosophy and sociology of education but it doesn't happen anymore.

**Q:** Do you agree with this policy?

**Crawford:** I've never agreed with any conservative government in my country as long as I've been alive. I'm a socialist, I'm proud to admit that. I think this kind of approach of education has a danger of moving into a region where we "train" teachers. I don't think we train teachers I think we educate them. Training and education are two very different things. So I get myself into



trouble for saying this and I get letters from the government.

**Jerve:** In Germany we have both. We have general pedagogic anthropology and philosophy, and it's nearly the same as didactic and methodic in the study. The reasons for the unstructured in-service training. One reason is the federal system. Each state makes its own curriculum and has to develop their concepts of in-service training. That's one reason. The other reason is the knowledge about the importance of in-service training has no long tradition. So, we concentrated on the first part of training and study and the preparation time and life-long learning. We recognized as an important thing today. If I understand correctly, experienced teachers don't have interest in practice learning? You need self-reflection, which is not easy, and it's not fun.

**Crawford:** Experience by itself is useless. What matters is the right kind of experience. We all know experienced teachers who are just not very good teachers, even though they have lots of experience.

**Jerve:** The way across lesson study is a good way because we concentrate your observation and your experience and you have a way to reflection.

Thank you!

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