Teacher Education and the Teaching Career in an Era of Lifelong Learning

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TEACHER EDUCATION AND THE TEACHING CAREER IN AN ERA OF LIFELONG LEARNING

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INTRODUCTORY NOTE

This paper, prepared by Professor John Coolahan, was commissioned by the Education and Training Policy Division in support of the Education Committee's activity *Lifelong Learning for Teachers* for its 2000-2001 Programme of Work. This activity provided background work for launching a new OECD activity *Attracting, Developing and Retaining Effective Teachers* in March 2002. The overall objective of this work is to provide policy makers with information and analysis to assist them in formulating and implementing teacher policies leading to quality teaching and learning at the school level. The activity is intended to: (i) synthesise research on issues related to policies concerned with attracting, recruiting, retaining and developing effective teachers; (ii) identify innovative and successful policy initiatives and practices; (iii) facilitate exchanges of lessons and experiences among countries; and (iv) identify policy options. The final synthesis report is to be published in 2004. Detailed information about the activity is provided in the following internet site: www.oecd.org/els/education/teacherpolicy

ABSTRACT

This paper attempts to position the teaching career within the context of the changing policy paradigm of lifelong learning. The paper locates the emergence of this policy within some of the fundamental social and economic changes which are re-shaping contemporary society. It emphasises that society's requirement of a highly educated, well trained, committed and effective teaching force was never more urgent. While the demands being made of teachers have been increasing greatly, there are disturbing indications that in some countries key factors needed to underpin a qualitative teaching profession are under stress. The paper reviews problems, trends and developments in key areas affecting teacher education and the teaching career, from recruitment to conditions of work. The final section of the paper proposes guidelines for action to ensure that a systematic and coherent policy prevails to support the teaching career into the future. The paper concludes that a robust and comprehensive policy for the teaching career needs to be a priority for governments, and that the teaching profession should be consulted on policy formulation and implementation.

RESUME

Le but de ce rapport : *La formation et la carrière des enseignants à l'ère de l'apprentissage à vie*, est de positionner la carrière enseignante dans le contexte évolutif de l'approche de l'apprentissage tout au long de la vie. Le rapport situe l'émergence de cette approche politique parmi certains changements sociaux et économiques qui refondent la société actuelle. Il souligne que le besoin d'un corps enseignant de qualité, bien formé et impliqué n'a jamais été aussi urgent pour la société. Tandis que les exigences sur les enseignants s'accentuent, nous observons que dans quelques pays, certains facteurs clés nécessaires à un enseignement de qualité sont en péril. Ce rapport examine les problèmes, les tendances et les changements dans des domaines clés ayant un effet sur la formation et la carrière des enseignants, depuis le recrutement jusqu'aux conditions de travail. La section finale propose des directives à engager de façon à ce qu'une politique systémique et cohérente prédomine dans le soutien futur à la profession enseignante. Le rapport conclue qu'une politique énergique et complète doit être une priorité pour les gouvernements et que la profession enseignante doit être consultée lors de la formulation et la mise en place des décisions politiques.

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1.   As a new century and a new millenium open it is very significant that many key international organisations and national governments have identified lifelong learning as the animating strategy for educational policy for the new era. A great deal of analysis and interpretation of societal change and development have led to the conclusion that a paradigm shift is required in traditional educational planning. This is to ensure that the challenges of a significantly changed era in civilisation can be responded to by the adoption of a lifelong learning policy.

2.   In the course of the nineties a striking degree of consensus emerged that lifelong learning was the way forward. In January 1996 the OECD Ministers for Education issued a Communiqué on Lifelong Learning. In his introduction to this the chairman of the ministerial group stated:

> We are all convinced of the crucial importance of learning throughout life for enriching personal lives, fostering economic growth and maintaining social cohesion.

Significantly, he went on to add "and we have agreed on strategies to implement it ... The target may be ambitious, but we cannot afford not to work towards it" (OECD, 1996, p.21). The Ministers accepted lifelong learning for all as the guiding principle for policy strategies that will respond directly to the need to improve the capacity of individuals, families, workplaces and communities continuously to adapt and renew. The communique outlined a focussed programme for action in the promotion of lifelong learning, which was developed in the OECD Report, *Lifelong Learning For All.*

3.   The year 1996 also witnessed the publication of the Report of the UNESCO Commission on Education in the Twenty-first Century — *Learning: the Treasure Within.* The issue of lifelong learning formed a core theme, and the report identified lifelong learning as the key response to the challenges of the new century, stating:

> A key to the twenty-first century, learning throughout life will be essential for adapting to the evolving requirements of the labour market and for better mastery of the changing time-frames and rhythms of individual existence. (UNESCO, 1996, p.100)

Repeatedly, this theme is stressed in the report which also emphasises that lifelong learning is in close harmony with the concept of the learning society.

4.   The European Commission issued its first education white paper in 1995 entitled, *Teaching and Learning: Towards the Learning Society.* In December 1996 the Ministers of Education of the European Union adopted the document "A Strategy for Lifelong Learning" as the framework of reference for the European Commission and for member states on educational policy issues. This approach was also

endorsed in the European Commission's Study Group report *Accomplishing Europe Through Education and Training* (1997). This report postulated the view that the concept of lifelong learning had the potential to change radically traditional views of education and the schooling systems. It stated:

> Lifelong learning holds the potential to change the public's entire understanding of education. It will provide an awareness that education and training are continuing processes, without, however, being diverted from the need to make special efforts for younger people. Many analyses of contemporary and future social and cultural models underline the need for this wide all-encompassing view of education as a developing, lifelong process. (European Commission Study Group, 1997, pp.107, 108)

In an E.U. *Memorandum on Lifelong Learning (2001)* it is stated, "Lifelong Learning must become the guiding principle for provision and participation across the full continuum of learning contexts. The coming decade must see the implementation of this vision." (p.3)

5.   During the late nineties many national governments issued policy papers on lifelong learning. As well as the politicians, groups of economists, industrialists, trade unionists and educationalists have embraced the concept of lifelong learning. It is a rare phenomenon to find such a convergence of viewpoints between key protagonists of political and social decision-making, but it provides a valuable bedrock for consensual action and augurs well for significant progress to be made over coming years.

6.   While many policy considerations are involved, the move towards lifelong learning is essentially a people-centred movement. It reflects a deeply humanistic concern that learning be seen to be integrated as a continuing feature of human experience from the cradle to the grave. The different stages of the life-cycle are being reinterpreted, with greater emphasis on humans as learning beings, all through their lives. The demands of the emerging knowledge-based society place a premium on human intelligence, adaptability, flexibility, creativity and various social and occupational competences.

7.   To convert aspirations for lifelong learning into reality is a historic challenge which will require sustained attention, inspiring leadership and appropriate resourcing. It calls for very significant adjustments, shifts in understanding, policy emphases, implementation strategies and communication. Inherited and habituated patterns of procedure need to be altered and an openness to innovation and new partnerships fostered. Nowhere is this more significant than in education and training which need to be at the cutting edge of societal change. It is predominantly through the educational process that people can be enabled to develop the knowledge, attitudes and skills required in the learning society.

8.   Yet, traditionally, education systems have been slow to change. Furthermore, there is no great evidence that teachers are well informed about the implications of a lifelong learning policy for their work. It may well be that the discourse of lifelong learning is regarded as well-meaning generalities without real practical consequences for the day-to-day work of the teacher. As remarked in "Teachers for Tomorrow's Schools":

> How far schools are able to transform to become oriented towards lifelong learning will hinge to a large extent on the contribution of teachers.   ...This centrality of teachers is not always properly recognised, especially at the political level when the case is made for reform. (OECD, *Education Policy Analysis*, 1998, p.26)

9.   However, the policy of lifelong learning if fully activated in future years could be a most congenial one for teachers. As well as posing challenges to teachers and calling for new approaches from

them it endorses the significance of the teacher's role in society and holds out the prospect of re-energising the career of teaching, opening up new career pathways and supporting teachers as lifelong learners themselves. While the international concordance on the policy of lifelong learning is of recent origin, many of the underlying trends and developments for which it is a formal policy response were already occurring. The adoption and articulation of the policy provides a welcome coherence to such social developments which may have been seen as fragmentary and somewhat bewildering before. Teachers, in their classrooms, have been encountering many of the pressures and demands from a fast changing society and endeavouring to cope but with a sense that governments and communities were not fully aware or appreciative of the new roles they were playing. The lifelong learning concept helps to focus attention on these issues and gives a constructive policy framework for more informed supportive action.

10.   For a considerable time, teachers have sought the establishment of a lifelong learning approach to the teaching career, involving the "3 Is" – initial, induction and inservice education. The policy of lifelong learning now comes in behind such an approach and opens varied and interesting opportunities for teachers. If teachers are engaged in the education and training of their fellow citizens from the cradle to the grave then the lifelong framework provides great challenges, but also opportunities, with a much greater social valuation of their work than was always the case in the past. This valuation needs to be translated into positive action of an integrated kind, as suggested by the OECD in a recent analysis of lifelong learning:

> Teachers remain very much the heart of the matter, but policies will need to address learning conditions, resources and techniques as well as the expertise, preparation, professional development and incentives of those responsible for organising learning of young people. (OECD, Education Policy Analysis, 1998, p.6)

11.   Lifelong learning has emerged as a policy response to the needs of changing society. The depth and range of societal change have been on-going. Very significant changes in the nature of schooling have been occurring and teachers have been contributing to educational change. Before examining specific aspects of the teaching career in an era of lifelong learning, it is desirable to highlight key features of this societal change and consequent changes in the school system.

2.   A Fast Changing Society

12.   What are the societal changes which have called forth a lifelong learning policy response? Among change elements are the globalisation of the economy with its many effects on the movement of capital, labour and knowledge. This has created great international competitiveness which puts a premium on human resource development. More truly then ever before it is realised that a nation's wealth is its people. An educated, intelligent, creative, self-confident and adaptive population is a key resource in any country's well-being. The extraordinary and accelerating impact of the information and communications technology revolution presents new ways of providing knowledge, assessing knowledge and disseminating knowledge, which is altering many features of contemporary living. The continuing development of science and technology is expanding the knowledge base at a great pace. The accumulated impact of such change is greatly altering the character of work and occupational patterns over a life-cycle. The need to re-train and re-learn, to keep abreast of developments, has made in-career development a *sine qua non* for most occupations.   Emphasis on new skills and competencies are being promoted, encouraging adaptability, flexibility, self-reliance, teamwork and innovation as qualities for the contemporary workplace.

13.   Increasingly also, contemporary society is concerned that the momentum of economic growth and development is not at the cost of environmental sustainability. There is a social responsibility to ensure that the use of the environment is of such a character as not to do irretrievable damage to the health, safety and quality of life of succeeding generations.

14.   The family, as a social institution, has been undergoing profound change with many new forms of alignment being forged. This impacts on many aspects of social and community activity and has many implications for how we care for the younger generations. Linked to this, the developed world has been experiencing great demographic change with reductions in the proportion of young people while, at the other end of the life-style, greater longevity is in evidence, involving new patterns of relationships between the young and old generations. Many societies have become much more multicultural, involving new demands for pluralism and tolerance with a greater diversity of cultures, languages and religions within them. Despite the general improvements in standards of living in developed countries over recent decades, there is increasing concern about the extent and durability of social exclusion. The gap between the rich and poor has been widening. In the knowledge society with its dependence on information and communications technology, the danger of increases in the gap between those who 'know and can do' and those who 'don't know and cannot do' is obvious. Without serious and sustained attention to reducing that gap, society is storing up disaffection and alienation, with serious potential consequences for social justice and democratic cohesiveness. Chronic unemployment has very deleterious consequences for many families, particularly for those most disadvantaged in conurbations with poor resources. Sometimes the situation in such areas is exacerbated with racial tensions *vis à vis* immigrant groups. Overall, it can be concluded that we are living in an era of great achievement and potential, but one which also faces significant problems and challenges. Society looks to its education system as a major means of ensuring that the potential is realised and the challenges are met.

3.   The Changing School in an Era of Lifelong Learning

15.   An education system needs to serve the needs of society and when that society is undergoing profound and accelerating change, then particular pressures emerge to improve the alignment between the education system and these changing societal needs. The teaching profession is a key mediating agency for society as it endeavours to cope with social change and upheaval. But the teaching profession must be trained and equipped so that it will have the capacity to cope with the many changes and challenges which lie ahead. If it is to retain the confidence of society, the teaching profession must adapt a great deal so that it can act in a constructive manner within a fast-changing society. Society has been making greater demands on its education system and perforce the schools have been changing greatly and are in the process of changing further. In appraising the teaching career in an era of lifelong learning it is necessary to understand the changing profile and role of the school.

16.   While the organisational framework of schools varies in developed countries due to diverse political, religious, cultural, educational and economic considerations, nevertheless, there is a high degree of commonality in the developments which have taken place and the issues which face school systems in contemporary circumstances. In all countries there has been a massive expansion of pupil participation in secondary type schooling over the last twenty-five years and the pupils are participating for a much more extended time-period. These schools now deal with a very heterogenous pupil clientele with varying levels of intelligence, application and aspiration. Pupils require changed responses from the schools in terms of experience and relationships. The traditional emphasis of the school's role in promoting the intellectual and cognitive development of the child has been extended to emphasise more the pastoral, socialising, guidance and counselling role. In the context of some of the social changes alluded to above, the school is being required to take more care of the affective and emotional development of the young people who spend a significant portion of their childhood and youth within the school. Neave is surely correct when he

draws attention to the "major enlargement in the area of responsibility which teachers are expected to assume" (Neave, 1991, p.32). Society tends to seek more and more from the school and there is a tendency, when any social ill emerges, to look to what the school is doing about it, and to add on further course inputs (cf. Hargreaves, 1994).

17.   All school systems have been engaged in major programmes of curricular, pedagogic and assessment reform. The curricular reforms involve the updating of content, but also require the provision of new courses. Schools are being encouraged to plan their work bearing in mind the multiple intelligences exhibited by pupils. In the context of contemporary society, the approach adopted, of necessity, needs to be one of "rolling" reform to keep pace with the changing knowledge base. One of the pressing challenges for schools is the incorporation of information and communication technology (ICT) into the administrative and scholastic life of the school. The integration of ICT into the teaching-learning activity of teachers and pupils offers unprecedented opportunities of access to, as well as dissemination and creation of knowledge. But to reap their full potential ICT needs to be embedded in a genuinely educational frame of reference. Quality of learning is receiving greater emphasis in the hope of cultivating more self-reliance among pupils who may benefit from a "learning to learn" approach, and who become motivated to continue to apply the skills involved.

18.   Most governments are also showing increased concern at the level of pupil failure and under-achievement at school. This forms part of a wider move towards more inclusive societies. Various studies have indicated underachievement of between fifteen and twenty per cent of the school population. Frequently the problems of underachieving, demotivated and alienated pupils are embedded in socio-economic, domestic circumstances of great disadvantage. They can also be linked to destructive peer sub-cultures divergent from the values being promoted by the school. They are also affected by dysfunctional changes in the institution of the family, alluded to above.

19.   There are other aspects of the promotion of the equality agenda with which schools are being confronted. The promotion of greater gender equality within schools in terms of curricular content and choice, pedagogic styles, and interpersonal relationships is also an unavoidable challenge to contemporary schools. Furthermore, most developed countries have adopted a policy of greater integration of pupils experiencing disabilities within normal schooling, which presents challenges of various kinds, and requires improved resourcing. In almost all countries the issue of multi-cultural education is one which has to be coped with. Some schools, particularly in large urban centres, need to respond to pupils of varied colour, religion, language and local culture. The rights of all children have been underwritten by the U.N. Convention on Human Rights (1989), but responding in satisfactory ways presents problems for school administrations and teachers. In general, schools operate within a more litigious-conscious society than formerly and they need to be very alert that procedures follow due process and that all appropriate records are maintained and available for scrutiny. The care and protection of young people and their rights have become a more sensitive and complex responsibility for school personnel.

20.   Educational policies of many countries are encouraging greater autonomy for schools, whereby a "bottom-up" approach is being encouraged in devising school plans and school reports. Greater staff collaboration and collegiality are being sought and "Whole School Development" is being encouraged. For many teachers these trends involve new professional responses with which they are not familiar. In line with general public policy, new emphasis is being given to accountability and transparency in school affairs, particularly in the utilisation of public funds. Most countries have adopted new policies on school evaluation and assessment and to the maintenance of performance standards. Many teachers and school administrators testify to the increased amount of bureaucratisation and record-keeping which is now required, even if some of this is alleviated by the use of ICT.

21.   Some school systems have also introduced new forms of school management and new modes of administrative posts within schools, which require new responses from staff. Relationships with parents are now a more important part of school staffs' responsibilities. The acknowledgement of parents as central partners in the education system has become more generally established and calls for more time from teachers, and from some, new skills. Schools are also being urged to establish closer liaison with their local communities, and, in particular, with cognate agencies working for the betterment of the community, e.g. social workers, health and welfare officers, forces of law and order, employers. Many schools are seeking to adopt a more focussed approach to the changing world of work, experimenting with work placement experience and school-industry links.

22.   The advent of a policy of lifelong learning adds a new dimension to the role of the school and also provides a broader framework within which to interpret its role. Lifelong learning gives a sharper emphasis to many of the on-going pressures to which the school seeks to respond, and which have been outlined above. If the concept of lifelong learning is to achieve its full potential it is vital that a coherent view of education and training is put in place, whereby each sector of the education system is seen to contribute to the whole. Each stage should contribute to the succeeding stage and equip the learner so that he/she can progress in a developmental way through the system, and through the learning environment. Good communication is necessary between the sectors, motivated by a concern for service to the client. Appropriate bridges and transfers need to be established between sectors and partnerships forged between the educational institutions and their supportive communities, including employers. Certification and accreditation of learning ought to be flexible and lead to progression. A particular concern should permeate the system whereby special efforts to help those least able to help themselves becomes an inspiring ethic. Learning to learn has to be a central concern of policy and that includes motivation, capacity and opportunity. The cultivation of self-reliant learners who have the confidence and competence to become lifelong learners becomes the guiding aim of the process.

23.   It is vital that initial education gives a broad base of knowledge, skills, attitudes and experiences that will support further learning throughout life. The termination of formal schooling must be established as only a stage in lifelong learning. Accordingly, each stage of the traditional schooling patterns – pre-school, primary, secondary and tertiary education – come under scrutiny from this perspective and must explicitly incorporate this orientation in both their content and processes. Then, the whole area of adult, community and continuing education and training needs to get greater priority and to benefit from reinvigorated, targeted action on best practice principles.

24.   Social policy has again re-emphasised the concept of "Education as Investment" in social renewal and development. Investment in human capital and human resource development is now the orthodoxy for progressive societies. For many reasons, it is realised that nurturing and promoting the talents and potential of all the people is a vital dimension for the achievement of individual self-realisation and for the promotion of social, cultural and economic progress leading to greater social cohesiveness in democratic societies. In this context, the school is expected to become more permeable to other agencies with educational responsibilities and interests in their communities.

25.   The cumulative impact of such demands on, and aspirations for the school as a social institution in contemporary society amounts to a very changed concept of the school from that which existed even a generation ago. The inherited mould is creaking and is under considerable stress. This highlights the need for some fundamental thinking about the future of the school in the twenty-first century. There is a danger that too much may be sought from the school in too short a time-frame, without sufficient attention to the extent of the changes involved, and without establishing priorities among the many demands and pressures. Something of a new social contract may be necessary which will more satisfactorily merge aspirations with reality. Many teachers consider that they are experiencing change overload and that there is inadequate understanding among the public of the multi-faceted role they now perform, often in very difficult

circumstances. They also consider that there has been insufficient attention paid to implementation aspects of many of the policy initiatives. Much recent research highlights the complexities involved in achieving the implementation of wide-ranging education reform (cf. Fullan, 1993, 1999). The Centre for Educational Research and Innovation (CERI) of the OECD has conducted a study entitled "Schooling for Tomorrow: Trends and Scenarios" (2000). It states that "as an integral element of the overall strategy (of lifelong learning), schooling is brought into quite new forms of organisation and decision-making" (p.38). The report goes on to note, "The quality of learning and the success of reform and innovation depend crucially on the teachers... Whether schools are able genuinely to become oriented towards lifelong learning will hinge greatly on them" (p.48). Policy on lifelong learning needs to locate the teacher strategically within the reform developments. Consultation, dialogue and supportive action with teacher representatives are essential. Credible, supportive action is necessary if the desired shifts in understanding, consciousness and motivation regarding lifelong learning are to take place. There is a need to plan with some vision, backed by practical action, to ensure that society in the future has the calibre of teachers required to meet the challenges of the teacher's changed role.

4. What Kind of Teacher for Lifelong Learning?

26. Various international agencies have indicated an awareness of the profound character of the societal change which is afoot and have highlighted the centrality of a teaching force of high quality. For instance, the European Commission's Study Group on Education and Training stated:

> Teachers play a primordial role because they are the people in our societies providing a service of such a marked multidimensional character. Contemporary trends are that their role is becoming even more multi-faceted, because it increasingly incorporates social, behavioural, civic, economic and technological dimensions. (European Commission Study Group, 1997, p.131)

27. The UNESCO Commission on Education in the Twenty-first Century noted as follows:

> The importance of the role of the teacher as an agent of change, promoting understanding and tolerance, has never been more obvious than today. It is likely to become even more critical in the twenty-first century. The importance of the quality of teaching, and therefore of teachers, cannot be over -emphasised. (UNESCO, 1996, pp.141, 146)

28. Without engaging in an extensive typology, some key characteristics required of teachers for today's and tomorrow's school should be borne in mind. The teacher needs to have a deep understanding of her/himself, and of the nature of her/his work. She/he needs to have developed a wide range of professional skills in teaching, planning, assessment and personal relationships. She/he needs to have flexibility, be open to self renewal and be a lifelong learner. Of course, the teacher needs to be competent in subject areas and be prepared to co-operate as a team member. The teacher needs a repertoire of teaching skills, including those which can engage the sensibilities of alienated pupils or those with learning difficulties. They also need skills in the application of ICT to education. She/he should have an informed awareness of the social, cultural and political factors which impinge on her/his work. The teacher ought to have a good understanding of young people's intellectual and affective development and to be sympathetic to their culture and problems. Teachers need to have skills in relating efficiently with parents and with other educational partners. There is a need for increasing specialisation within the teaching profession to bring extra expertise to areas of school life requiring it, e.g. remedial, guidance and counselling, management and leadership. Within a lifelong frame of reference, new planning processes are required

internal to the life of the school. Teachers also need to be open to establishing linkages with early childhood education and various forms of post-school learning.

29.   It is only intelligent, highly skilled, imaginative, caring and well educated teachers who will be able to respond satisfactorily to the demands placed on the education system in developed societies. If society's concern is to improve quality in education and to foster creative, enterprising, innovative, self-reliant young people, with the capacity and motivation to go on as lifelong learners, then this will not happen unless the corps of teachers are themselves challenging, innovative and lifelong learners. The future well-being of the teaching profession in the context of a lifelong learning policy framework is of pivotal importance. It is necessary to view the career of teaching nowadays in a systemic way which locates it within the role required of it by a fast changing society and school environment (Coolahan, 1991). There is a need to understand the interconnecting elements of that career including recruitment, initial teacher education, induction and in-career development, salary, conditions of work, scope for promotion and specialisation, research dimension.

30.   The adoption of a lifelong learning policy adds a fresh impetus to many progressive trends which have been affecting the career of teaching. The concept of lifelong learning has not been the initial spur for the changes which have been taking place; indeed, it could be argued that it is only in a gradual way that the concept is penetrating the consciousness of those in the traditional education system. Yet it adds a new dynamic which can help to position the teaching profession to serve better the needs of a learning society. The policy of lifelong learning has the potential to be the framework of reference which can be a catalyst in re-positioning the teaching career in society and reversing the trend noted by the CERI report on "Schooling for Tomorrow" when it states, "There is a general teacher status problem, which has probably suffered long-term decline in most OECD countries" (p.49). It is generally accepted that teachers lie at the heart of the education process and that their morale, motivation and competence are of crucial importance in a reforming era. The commonsense presumption that teachers do make a difference and that quality teacher education makes a difference to teachers, is also backed by research. For instance, drawing from a wide range of studies in the United States, Darling Hammond concluded that they confirmed "a strong, significant relationship of teacher quality variables to student achievement even after controlling for student poverty and for student language background" (Darling-Hammond, 2000, p.25 and 1998, p.7; Murnane, 1996, p.1). While teachers' role in the future will be different, it will still be indispensable. The knowledge base on which the teaching career is based has deepened and calls for teachers to engage with it on an on-going basis as lifelong learners (Burke 1992; Good, Biddle and Godson, 1997).

31.   The following overview (Section 5) of relevant trends and policy perspectives on teacher education and the teaching career, within the perspective of lifelong learning, has, of necessity, to be of a generalised character. Its aim is to highlight what is happening generally in relation to elements of the teaching career and how it is being positioned for the challenges involved. It deals primarily with mainstream teachers in primary and post-primary education. It recognises the need for greater flexibility and adaptability in the teaching career in the new era.

5.   Recruitment/Entry to Teacher Education

32.   In the context of a teaching profession facing a major enlargement of responsibility, it is to be expected that recruitment to the profession should be a matter of growing concern in developed societies. While the attraction of applicants with high intelligence, good imagination and caring attitudes is clearly desirable, the actual pattern of recruitment varies a great deal between different countries. In countries where, traditionally, teachers have been accorded good social status, the quality of recruits is high. Thus, in countries such as Scotland, Ireland, Sweden, Finland, Iceland, there is high competition for entry into teacher education courses. However, there is evidence that many countries are experiencing serious

recruitment problems, particularly for subject areas such as Mathematics, the Sciences, Business Studies and ICT. Countries such as England, France, Germany, the United States, New Zealand, Australia are already encountering difficulties in the recruitment and retention of teaching staff and this trend could become exacerbated into the future (*Times Educational Supplement,* 11/8/00, 9/3/01, 16/3/01, CERI, "Schooling for Tomorrow," 2000, p.49). In many countries, the career of teaching has experienced a decline in attractiveness and does not appeal to high achievers. Inadequate salaries and long incremental salary scales serve as deterrents, but so, too, does the image of the job and the demands it entails. As well as paying attention to salary issues, it is important that conditions of work and other aspects of career development be attended to. The costs of not doing so are likely to be very high. It is a promising sign that EU Heads of Government in Stockholm in March 2001 agreed on a set of concrete objectives for the future of education which included the following, "The question of recruitment and making the status of teachers attractive has to be addressed" (Council of European Union, 5494/01).

33.   It would seem that a less than favourable public image of the teaching career may be highly influential in another general phenomenon which is the feminisation of the teaching profession. This is an international trend and is very pronounced in primary teaching, which has become preponderantly female. This is so even in countries where teacher salaries are relatively high (European Commission 2000, p.135). The imbalance is a cause of concern and several states have sponsored research on why teaching is not attracting more males. As yet, no successful strategies have been devised to restore a better male-female balance. The imbalance at recruitment is not followed through in the promotion pattern and males hold a larger proportion of senior positions in the schools. This is also receiving attention in various countries. However, it is also the case that with the developments in gender equality and the opening up of many career opportunities for women, there are indications that well educated women are engaging in much more varied career pathways, and the future may witness a decline in such women opting for teaching as a career. It is recognised that the recruitment of teachers from minority groups and ethnic cultures is desirable but it is not easy to achieve. Significant efforts are needed to alter this situation, if lifelong learning is to be a reality for such minorities.

34.   Entrance to teacher education courses is mainly based on the results of terminal secondary school leaving examinations, particularly for concurrent and primary teacher education courses. Entry to the teacher education element of the consecutive courses is based on the performance of the applicant in university degree examinations. However, most countries now allow, and indeed encourage, more varied routes of entry. Provision is made for "mature" student entry and for applicants bringing wider work experience to bear. This is seen as providing an enrichment to the teacher student body and improving the range of work experience of the teaching body, and is in line with lifelong learning emphases. Some countries supplement the academic performance criterion with personal interview or aptitude tests, but these are seen to have logistical and validity problems. In most countries, the state, either directly or indirectly, monitors the supply and demand situation, *albeit* with some flexibility, as demographic forecasting is an inexact science.

35.   While recruitment poses serious problems, the matter of retaining able teachers in the service is also a cause of concern. Expanding career opportunities in other walks of life have been attracting bright and innovative teachers out of teaching. While some "brain drain" is not surprising, it would be important that it did not become a haemorrhage. It is interesting to note that where career breaks for teachers have been introduced, the rate of return to teaching has been low. The demographic downturn experienced by many European countries in recent decades has led to a "greying" profession with insufficient " new blood" entrants. For instance, in European Union countries, the proportion of teachers aged more than forty years is more than half the teaching force (European Commission, 2000, pp.132, 133). The "generation gap" assumes greater significance in the context of lifelong learning and the social changes alluded to above. The response of some governments has been to introduce early retirement schemes and increase secondments of classroom teachers to inservice work etc., and so open up some new recruitment

opportunities. In the context of the pressures on teachers in contemporary society, it may well be that for some teachers a classroom teaching career for four decades or more is no longer a feasible option. On the other hand, many countries have found it difficult to establish satisfactory procedures to remove the chronically incompetent teacher from the classroom.

6.   Institutional Arrangements

36.   Over recent decades, the massive expansion of pupil enrolment, the increase in retention rates, developments in educational studies, aspirations of teachers, among other factors, have altered the traditional institutional arrangements. In most countries there has been a strong tendency to assign to the universities or polytechnics a more fundamental role in the education and training of all teachers (Judge, 1991; Michaelsson, 1995). This has been generally interpreted as an upgrading for the teaching profession involving a deepening of the academic knowledge base and an opening up of a greater research orientation for trainee teachers.

37.   Within some universities education departments have been winning greater status than they had formally enjoyed, and, in the context of lifelong learning, it is being argued that universities "must give teacher education priority in their strategic planning, funding and reporting, to cement the connection between teaching as the critical knowledge profession and the quality of entrants into all university courses" (Gregor Ramsey, 2000, p.22). Education department staff are expected to hold postgraduate qualifications in educational studies and to engage in research. As well as pre-service courses, there has been a large expansion in the provision of postgraduate in-career diplomas on specialist areas such as curriculum, management, guidance and counselling, as well as in masters' degrees and doctoral programmes. This is regarded as providing a benign academic cycle whereby initial teacher education, inservice career studies and educational research enrich each other. It also promotes greater career diversification. Pre-service teacher education continues to be a central concern. However, this has been supplemented by a wide range of post-graduate and inservice courses leading to university qualifications. Departments also tend to engage in more school-based inservice work, mostly of a short-term character, but sometimes of a longitudinal nature. Educational research by staff and post-graduate students is strongly established. Staff sometimes contribute to national policy formulation and act in consultancy capacities to many educational organisations, as well as participate in official commissions or reviews on educational issues. The following chart indicates the changing work profile of many education departments.

Changing profile of Education Departments
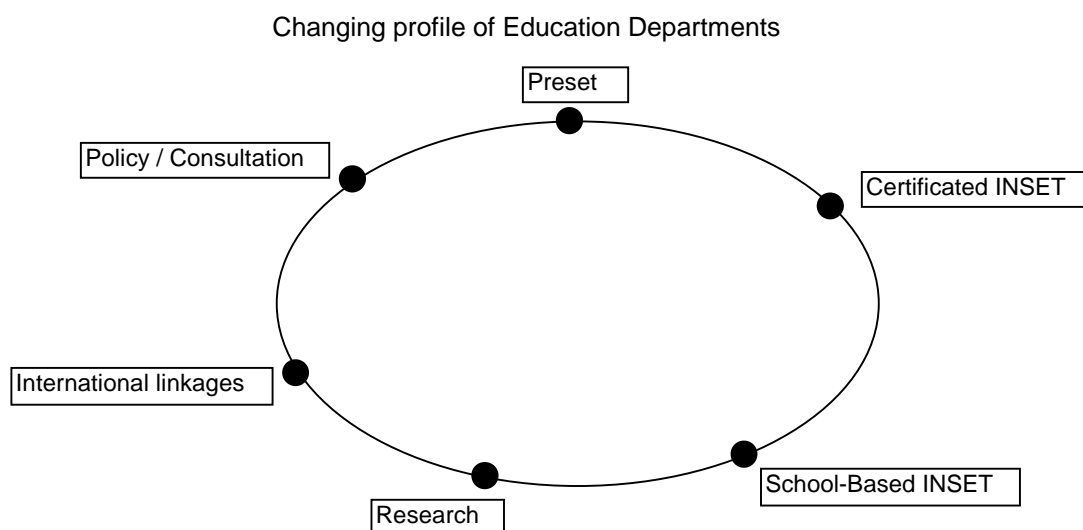
38.   This type of model holds a lot of promise for an era of lifelong learning. It establishes education as a significant subject within the university tradition, it opens up more interactive linkages with the schools and inservice teachers, fosters collaboration with policy-makers and social partners and it also promotes research activities. It has the potential for flexibility and adaptability in interacting with non school educational and training agencies. It would also be important for a lifelong learning approach to get rid of compartmentalisation patterns, inherited from an earlier era, and open up constructive co-operation with other training agencies involved at all stages of the life cycle.

39.   The promotion of a greater influence of the university on teacher education was accompanied by some apprehension that this would lead to an over-theoretical approach at the expense of pedagogical and applied teaching studies, which were more associated with the mono-purpose training college tradition. However, while some concern still exists, the apprehension has been largely alleviated, with pedagogical studies and classroom-focussed research getting more serious attention. This may have been facilitated by the nature of the negotiations and arrangements arrived at by the non-university and the university institutions. The pattern of alignment varies, sometimes involving amalgamation, but often allowing for more of an association arrangement for course validation and awards, rather than for full absorption into the university's institutional framework. This has sometimes allowed for the best aspects of both the university and training college traditions to fructify each other with an improvement in both the quality and status of teacher education (Coolahan, 1991a).

40.   A notable divergence from the strengthened influence of the university in teacher education is the case of England. Here, the government moved to control the structure, content and evaluation of teacher education in a more direct manner. While teacher education in England is linked to the universities, government appointed bodies have intervened to reduce the educational studies' input to professional studies in favour of methodological studies, and a much more school-based approach to training. There has been some criticism of this as a shift towards a technicist rather than a professional approach to teacher education (Aldrich and Crook, 1998). In the contemporary and evolving school context it seems more important than before that teachers have sufficient theoretic underpinning of their professional work though this is not incompatible with a schools-based approach to facilitate their creative engagement in the teaching and learning process. The greater involvement of school-based mentors in initial and induction teacher-education has helped to develop a shared professional language and discourse, which is beneficial to all concerned.

7.   Course Structure and Duration of Initial Teacher Education (I.T.E.)

41.   Two predominant models of course structure have evolved in teacher education, the concurrent and the consecutive model. The concurrent model involves a three or four year course, in the main, with academic subject knowledge, e.g. mathematics, history, being combined with educational and professional studies throughout the course duration. This model has been particularly favoured in primary teacher education but can also be found for secondary teachers, particularly relating to special subjects such as Home Economics, Physical Education and craft subjects. The predominant model for secondary teachers has been the consecutive structure whereby students complete their undergraduate degree in their subjects, e.g. science, languages, and then concentrate for a year or two on their educational and professional studies. Variations also exist, focussed particularly on "mature" students or those with work experience. In some countries, e.g. Denmark, the Netherlands, Sweden, there has been a trend to combine teacher education for the primary and junior cycle of secondary education, usually in a concurrent process. The average duration of training for upper secondary teachers ranges from a minimum of four years in Ireland and Austria to as many as six, or more, in Germany, Spain and Italy. Training for senior cycle secondary in these countries is on the consecutive model. In most East European countries the concurrent model prevailed. Over the years, opinion has varied as to the advantages of the concurrent and consecutive

approaches over the other; but at present, it seems that each model is regarded as fulfilling valuable functions in response to emerging needs of systems and individuals.

42.   As could be expected, in the light of the increasing responsibility of the teacher's role and the university linkages, the duration of courses, particularly for primary teachers, has been extended from two to three and four years, over recent decades. It varies in different countries as, for instance, the training for primary teachers varies from three years in Austria, Belgium and Spain to five and a half years in Germany (European Commission, 2000). However, where concurrent courses are of just three years duration, or where there is only one year available for education studies in the consecutive model there is pressure for more time to be available so as to satisfactorily achieve course objectives (Burke and Coolahan, 1995). Students are faced with so many and varied demands, that there is little time to reflect on their course content and their experience in a satisfactory manner. This feeling of pressure is linked to the inadequate institutionalisation of a 3 I's (Initial, Induction and Inservice) policy on teacher education, which a lifelong learning policy could alleviate.

8.   Curriculum of Initial Teacher Education

43.   The issue of curriculum in pre-service teacher education has become a matter of major concern, debate and research in most countries. Bearing in mind the extent and pace of societal change and the challenges facing schools, in a lifelong learning era, it is no surprise that programmes of teacher formation would be subject to much scrutiny and development. Modern teacher education pays attention to the knowledge, attitudes and skills required by the beginning teacher but also seeks to equip the beginning teacher with the ability and motivation to continue learning throughout his/her career. There is a large degree of commonality in the general content of programmes in most developed countries. The content can be grouped into four key elements, as follows:

  −   academic subjects, e.g. science, history;

  −   studies in educational sciences, e.g. psychology of education, sociology of education;

  −   methodologies, subject didactics;

  −   teaching practice.

There are, of course, variations in content, sequence and balance of these components, but they form the structural framework of programmes. Different systems approach the curriculum in different ways, but the constructivist and pragmatic approach has been gaining ground (Tatto, 1999, p.6).

44.   Whether in the concurrent or consecutive models, the tendency is for the treatment of academic subjects, e.g. history, to proceed in a relatively discrete manner from the other "educational" components. The rationale behind studies in the educational sciences is to provide the teacher with a framework of reference and understanding to underpin approaches and practice. It is considered that the "foundation" disciplines of education such as philosophy, psychology, sociology, history, curriculum theory when dealt with in an applied, targeted way, help the teacher towards a critical awareness of the schooling system, the social context, stages of pupil development, underpinning values, curricular issues etc. which is necessary for professional work (Shulman, 1986 and 1987; Good Biddle and Goodson, 1997). Traditionally, there has been some criticism about a gap existing between theory and practice. While this is still a problem in some areas, many courses have adapted to incorporate an applied dimension in the themes dealt with, and sometimes, a problem-solving, thematic approach is taken, with some teamwork by subject specialists.

45.   General teaching methods and specific subject methodologies form a core component of courses. In the past, this dimension of university-based courses was regarded as weak and inadequate, but now almost all courses pay increased attention to methodology aspects. This is often further complemented by the use of video camera work, sometimes employed in micro-teaching techniques and in follow-up analyses of videoed classroom practice. As part of an emphasis on promoting self-reflection among student teachers, some are trained in self-analysis techniques with the help of audio-visual technology and computer applications. Skill in self analysis is particularly important in a lifelong learning context and the ability to adapt practice to changing circumstances is a valuable capacity. Staff involved in subject methodologies in some countries have relevant and recent experiences of the classroom and of curriculum development in relation to the subject. This is a requirement of full-time staff in England. In Ireland, in post-primary teacher education, there is a tradition of highly skilled classroom subject teachers making their expertise in subject methodologies available to students, on a part-time basis. Efforts are also made to provide variety in the methodology sessions using demonstration videos, workshop and active learning methods. Student teachers for primary schools tend to take a broad range of subject methodologies in keeping with their more generalist role, while those for secondary schools, particularly upper secondary, concentrate usually on one or two subjects. In many countries, school curriculum reform has been a "rolling" and on-going issue. In response to this, curriculum studies and curriculum innovation skills have assumed a greater role than formerly in teacher education. It is crucially important for the promotion of lifelong learning that such sophisticated, varied and active learning methodologies are further developed, combined with core constructive partnerships with the teaching practice schools.

46.   Many of the social and school changes are influencing the content of the curriculum in teacher education. Some of these developments are particularly worthy of mention, even if they cannot be developed within the confines of this paper. The multicultural character of modern society, particularly in urban contexts, calls for more attention to the educational and methodological issues involved. Many European countries are promoting greater integration of pupils with disabilities into mainstream schooling and this also calls for more attention to aspects of special education in general teacher education courses. Furthermore, research has been highlighting gender inequalities in the structures and processes of schooling, and student teachers are being alerted to and given guidance on equality of gender treatment in school. The rights and role of parents in school systems have been given much greater prominence by most European countries in recent times. Formerly, the links between teachers and parents could be rather distant and tentative. This is no longer the case, and components of teacher education courses deal with teacher-parent relationships, encouraging student teachers to view the parents as genuine partners and to adopt positive, co-operative links with parents. Groups such as the European Parents' Association (EPA) have been proactive in recent years in promoting combined training initiatives between teachers and parents. However, it is recognised that initial training courses cannot of themselves cope fully with such demands. They need to be firmly supported by on-going inservice support.

47.   Increasingly, teacher educators seek to exemplify a wide variety of methodologies, e.g. lectures, tutorials, seminars, workshops, "hands-on" technology sessions, video recording, small group work, individual guidance and feedback, but the large class groups, which often exist, can inhibit the satisfactory implementation of such techniques. It is generally considered that students would benefit greatly from more engagement with experiential learning and small group techniques.

9.   The Integration of ICT in Teaching and Learning

48.   Because of the significance of ICT in the era of lifelong learning, it is necessary to give it some specific attention as an element of the teacher education curriculum. As information and communications technologies have become such a major feature in knowledge production, access and dissemination, most countries have greatly increased their interest in integrating them within education systems in recent years.

This integration is regarded as having the potential for a major transformation of the educative process. It is now accepted that all student teachers need to be equipped so as to make the most effective use of ICT in their teaching activities. While there is more progress to be made, the pace of change in this regard has been impressive. Major initiatives have also been undertaken in the provision of training in the applications of ICT for inservice teachers. Large proportions of the teaching force in developed countries have been undergoing courses in the applications of ICT to education, seeking to maximise the educational usage of the technologies. The courses have proved to be very popular, with high take-up rates and excess demand. In the United States, over a three year period, 77% of teachers participated in professional development activities in the use of computers (NCES, 2000). Schools have been equipped with the needed technology and pupils have been developing skills in its utilisation and been encouraged to draw upon it for learning sources and the presentation of projects etc. Utilisation of the Internet, Email, CD Roms, and so on, have opened up many new learning and communication possibilities. This promotes the learning to learn process and nurtures pupils to be self-reliant learners, in keeping with the aims of lifelong learning.

49.   The extremely rapid growth in the technology and developments in its application mean that teachers face continuous challenges in coping. A number of comparative studies have been undertaken by the International Association for the Evaluation of Educational Achievement (IEA) on the extent to which teachers are prepared and enabled to incorporate ICT in their work. The IEA reported that in many countries ICT courses for teachers were heavily concentrated on the technical aspects, and not enough emphasis was placed on the pedagogical implications. It also urged the rapid expansion of inservice training courses for teachers and highlighted the value of the role of computer co-ordinator within the school (IEA, 1993). The OECD *Education at a Glance* Report for 2000 stated:

> In all countries principals reported that teachers' lack of knowledge/ skills in using computers for instructional purposes was a bigger problem than a perceived lack of interest... Professional support for teachers in making the best use of information technology is a critical component of ICT use. (OECD, 2000, p.251)

50.   The OECD PISA project has been examining the use of ICT in education and the levels of pupil skill throughout OECD countries, and will report in 2001. A major study which is also underway is the second Information Technology in Education Study (SITES). The main findings of the first module of this study, giving a "snapshot picture" of the current situation reported as follows:

  − Many schools in economically developed countries are getting access to the Internet. The use of this medium by students is still low.

  − The density of computers for instruction is continuing to rise. Many countries have an average of one computer for every ten students.

  − The adequate training of teachers is still a major problem in most countries.

  − There are indications that ICT facilitate changes in pedagogical practices. (IEA, SITES, Nov. 1999).

51.   As the SITES project reported, there is a general realisation that most countries face the continuing challenge of adequate training of teachers in ICT. There are a number of specific challenges facing teachers in dealing with ICT integration. These include:

  − Lack of technical skill and confidence;

- Dealing with students who often appear to have more skill than the teachers;

- There is a risk of technology domination, where the operation of the technology itself takes precedence over the content of the lesson. Achieving a balance requires thoughtful integration of ICT;

- The challenge of maintaining a culture of equal access to ICT, in an environment where those with home computers (and boys) are likely to show more interest.

There are also pedagogic challenges:

- ICT can facilitate the adoption of a more collaborative/exploratory type of teaching, but managing this kind of classroom requires new skills and methods;

- There appears to be a risk that some of the impact of exploratory work which is done using ICT may be lost if the teacher does not skillfully connect this with the learning of the principles and concepts involved.

- There is increasing quantitative evidence of a linkage between "constructivist" approaches and the use of ICT in the classroom. The IEA SITES project showed a relationship between high levels of ICT in a schools and "emergent practices." In the US, Becker (2000 p.28) concluded that the teachers using ICT in an open way in the classroom were more likely to have constructivist views of teaching.

52.   Most countries have been investing heavily in short courses for inservice teacher skill development and in providing infrastructural supports aimed at making technology more accessible to teachers.

53.   It is also the case that in many countries there have been attempts to organise the resources available on the web for teachers, so that teachers can use a single site as a portal, and access the most relevant material in a structured way, e.g.:

- Ireland – Scoilnet

- UK – The Virtual Teacher Centre, as part of National Grid for Learning;

- In the US Free – more than 30 federal agencies have collaborated to make web resources available to schools.

54.   Similarly in many countries there has been extensive use of pilot projects as "pathfinders" to develop and model replicable methods:

- In Ireland the SIP projects;

- In UK the BECTA/NCET Pilots;

- US spotlight schools.

55.   There are curricular implications of ICT – if we expect that in the knowledge society of the future people will be lifelong learners and will be confident and skilled in managing their own learning, then:

a) The curriculum needs to include meta-cognitive skills;

b) The value of a very traditional knowledge based curriculum is questioned.

56.   In response, many countries have tried to adapt the curriculum. In Sweden recent curriculum changes have given schools the freedom to shape the curriculum and assessment themselves, thus facilitating changes to problem-based approaches. More commonly, countries have tried to encourage integration of ICT through curriculum guidelines. In the UK schools are asked to teach ICT skills through curricular subjects, but are given the option to teach it separately if they cannot achieve the targets in an integrated way.

57.   Governments have also been moving to establish targets for competence achievement in ICT for teachers and pupils. A notable instance of this is the UK's National Grid for Learning. Examples of targets under this remit are that all current newly qualified teachers need to be ICT–literate to mandatory standards to receive the award of Qualified Teacher Status. By 2002 all serving teachers will be expected to be confident and competent to incorporate ICT in their implementation of the curriculum. Also by 2002 most school leavers will be expected to have a good understanding of ICT as set out in the curriculum, and their competence in ICT will be formally assessed (D.F.E.E., 1997, p.24). Countries have also been taking initiatives to evaluate the effectiveness of the use of ICT in schools to test if the investment in the promotion of ICT is providing a return in terms of student achievement and to employ such evaluation to promote positive change (McNabb, M., Hawkes, M., Rouk, U., Jan.2000). In the UK BECTA have conducted a major quantitative study looking at the relationship between use of ICT in schools and learning. The primary schools report, published in January 2001 reported that schools with high levels of ICT usage also had higher levels of attainment (BECTA, 2001). As expenditure on ICT provision for education increases, it is likely that accountability based on evaluation studies will also increase (OECD, 1999, p.61).

58.   Despite improvements, it is still the case internationally that only a small proportion, less than one-third, of expenditure on ICT goes to software and teacher training (OECD, 1999, p.47). There are also problems regarding the extent and quality of software for educational purposes and it is generally considered that a more productive partnership needs to be fostered between educators and the software manufacturers so as to improve software quality and usage. It would seem beneficial if software specialists could be seconded to work with teachers and curriculum developers to facilitate breakthroughs in the provision of software. Whatever the future holds, it is incontrovertible that ICT as part of teaching and learning is here to stay, with many new developments ahead in the era of lifelong learning. Equipping teachers to master the utilisation of the technology remains a formidable task for all countries, but the progress made over the last decade is an encouraging omen for success.

10.   School-Based Experience

59.   The practice of teaching in schools under supervised conditions is a long established component of teacher training programmes. It was a particularly prominent feature of primary teacher training, less so at secondary level.   Indeed, it is still the case that practical teaching experience is not required for recognition for secondary teaching in a few countries. An older emphasis on apprenticeship and manuals of teaching method has given way to a more professional emphasis whereby student teachers are assisted in forming understandings, attitudes and skills in critical and reflective ways (Zabalza Beraza, 1996). Increasing importance is being laid on the school as a "site" for helping students to understand the dynamics of classroom teaching and the principles underlying it.

60.   Student teacher placement in schools usually takes the form of continuous participation for days or time periods throughout the school year, or block placement whereby trainees are located in the schools on a full-time basis for periods over the duration of the course.   Block placement tends to be more characteristic of the concurrent course model, which allows more variety in school placement experience than the consecutive model. There is also a move away from just focussing on teaching practice during school placement towards broader features of school experience, including supervision, examinations, staff meetings, parent meetings, planning sessions, extra-curricular activities. For teaching practice placements to operate effectively and efficiently it is necessary that they be well planned, closely monitored, carried out in a context of critical enquiry into current practices, guided by skilled professionals and leading to worthwhile reflection and analysis. The duration of school-based experience varies in different countries, but, in almost all of them, it is getting greater policy emphasis. The United Kingdom has taken the most radical approach by greatly increasing the time spent on school experience, giving much greater authority to school personnel, and reducing the time spent in the university. In Germany, the practical experience dimension occurs in the schools following the completion of academic studies in the universities, with only limited contact between school and university personnel. While reforms in Spain on teacher education have been welcomed, there is criticism that the attention to the practical aspects is inadequate at both primary and secondary levels (Montané and Bordas, 1992).

61.   The increased emphasis on school-based experience has highlighted the need for more overt partnerships between the schools and the training institutions. These take many forms, but in no country is the emphasis on the school as partner as strong as it is in the United Kingdom where re-allocation of funding as well as responsibility from the university to the schools has been politically decreed (Townsend, 1994).   However, some agree that this risks reverting to a form of apprenticeship which could be a conservative and narrowing force (Solomon, 1987). As a counter to this danger, much attention is being focussed on the role of co-operating teachers and school mentors and how these roles can be best promoted and operated (Zanting et al., 1998; Edwards, 1998; Koster et al., 1998). Developments in the training of mentors also have useful spin-off effects for induction and inservice teacher education (Moon, 1996). To ensure successful outcomes of the partnership approach there is a good deal of preparatory and organisational work involved by both the teacher education institutions and schools, with attention paid to aims, procedures, monitoring; and the student teachers' voice needs to feed into such arrangements. As yet, the role of mentor has not generally been formally established as a career post. Mentors usually operate from professional goodwill motives and many testify that they too benefit from the work of student teachers who often exhibit new ideas and approaches. The interplay of the generations can be mutually beneficial. However, there is significant scope for improving the linkages between schools and education departments in the interests of improved teacher education in the majority of countries. The more extensive engagement of experienced teachers on certificated inservice courses allows for greater involvement of such personnel in mentoring work and also facilitates greater partnership between school staffs and the training institutions. The training institutions also need to foster closer relationships with other social partners who have roles to play in lifelong learning.

62.   The responsibility for evaluating student teachers' performance remains, in most countries, the responsibility of the teacher educators. It is thought that the absence of a responsibility for evaluation on the school mentor allows more freedom and openness to the relationship between student and mentor. However, in most systems the advice or general views of mentors are elicited and are borne in mind by the evaluators. The complex professional skills involved in successful supervision or mentoring of student teachers have not always been formally recognised. The status of this work should improve as new systems of partnership and the emphasis on quality practice take hold. The frequency of visits to schools by institutional supervisors varies in different countries, and depends on course format. Criticisms tend to be voiced that the visits are not frequent enough for satisfactory formative feedback to students.

63.   One of the key concerns in modern teacher education is to establish a greater inter-penetrative influence between theoretical inputs and practical teaching experience. It is realised that in pre-service education, where the student's main concern is to surmount immediate challenges, the content from the foundation disciplines may not always achieve their full import. Thus, seminars, tutorials, interaction analysis, dialogue on practice are utilised to add a more problem-focus to issues and to tease out the linkages which can exist between theory and practice. Student teachers are often given the teaching supervision schedules of the supervisors and encouraged to engage in mutual discussion of elements of the practice, sometimes with reference to research findings. Increasingly, the aim is to help the student teachers to be self-analytical and reflective on their own practice. The availability of audio-video recordings of performances is a valuable tool for this process, and repeated analysis can take place back in the training institution. In the context of lifelong learning skills in self-analysis and appraisal become all the more important.

64.   The influence of Schon and the "Reflective Practitioner" movement has been widespread and is a motivating factor in the new emphasis on practice and self-analysis. Schon characterised the "reflective practicum" as "learning by doing, coaching rather than teaching and a dialogue of reflection-in-action between the coach and the student" (Schon, 1987, p.303).

65.   The close co-operation between teacher education institutions and schools is also desirable for the promotion of an emphasis allied to that of the reflective practitioner — the emphasis on the teacher as action researcher. The student teacher does not have the experience to engage in large-scale research, but action research exercises can be highly illuminative of practice and prompt remedial action where this appears desirable (Drudy and Uí Chatháin, 1999).

11.   Staffing Issues

66.   With the move towards university status, staff in teacher education institutions generally have to fulfil the entry requirements normally sought from other university appointees. Thus, in the great majority of cases, staff need to be university graduates of high academic achievement, usually holding post graduate masters or doctoral degrees. Those recruited for Educational Studies, *per se,* usually need to have a good track record in teaching and have some distinctive achievements to their credit in some feature of educational practice. Publications and involvement in educational research activities are also sought. Thus, the staff profile is now seeking academic and research achievement as well as distinguished, practical teaching experience. Most teacher education institutions employ part-time staff for particular purposes, e.g. subject pedagogy. In these instances, the emphasis is on demonstrated experience and expertise in classroom teaching, curriculum innovation or in teaching supervision. There is also an emerging trend of seconding practicing teachers to serve in colleges of education, to contribute to inservice education initiatives and to assist in curriculum innovation. This cross-fertilisation is beneficial to all and increases mutual understanding and respect.

67.   As in other areas of higher education, staff development is an established feature for teacher educators. With the pace of change in educational studies and educational policy, it is regarded as critical that teacher educators keep themselves well abreast of their subject areas. The provision of sabbatical leave to engage in exchange or development experience is a normal pattern. Financial support and leave facilitation are also available for staff to attend conferences/seminars in their professional areas of interest. Visiting lecturers and in-house conferences provide opportunities to keep in touch with new research or developments. The normal expectation also applies of staff maintaining scholarship through reading new publications and relevant research reports. The periodic secondment of staff to external research projects or public service consultancy is another valuable means of staff development. Because of the influential role they play, it is particularly important for teacher educators to be lifelong learners.

12.   Evaluation of Pre-service Teacher Education

68.   Traditionally, the education department of the state exercised close monitoring of the teacher training institutions, particularly for primary teacher education. In most countries this has changed and the modes of quality assurance have moved into the pattern existing for university-type institutions. Greater academic freedom has become a norm. However, this also coincides with the international concern on quality assurance in higher education generally.

69.   The United Kingdom provides a striking instance of how the state insists on retaining a very direct influence on the evaluation of teacher education courses. The government there has promoted a series of competences that determine the nature of practical assessment and it has given a greater role to school-based staff in student evaluation (Moon, 1996). The competency model is now well established in the United Kingdom, but it has not won wide favour in other European Countries. As early as 1984, the U.K. government set up the Council for the Accreditation of Teacher Education (CATE) which was empowered, as an external monitoring agency, to exercise tight evaluation procedures on teacher education courses. This tradition has continued and the Teacher Training Agency (TTA) succeeded CATE in 1994. It now forms part of an extensive accountability and evaluation process for higher education generally in the U.K.

70.   The predominant pattern of evaluation relies on less direct, external processes. The main explicit measure of course quality is student assessment. In some countries the system of external examiners operates, whereby the adjudications of internal staff are monitored by experts from other institutions. Many universities are now required to prepare annual reports which, among other things, detail research and other aspects of the performance of departments, including Education Departments. In most European countries quality assurance mechanisms for teacher education have been tightened up although it has been commented that "accountability in the southern (European) countries is relatively 'soft.' In some countries there is no tradition of evaluation" (Montané, 1995).

71.   In more indirect ways, school inspectorates and school employers exercise judgement on the student teacher graduates. Periodically, governments convene national reviews of teacher education programmes which allow inputs and analysis from the various stakeholders. Some countries have agencies such as Scotland's Teaching Council, and Ireland's Secondary Teachers' Registration Council, which designate certain course requirements in teacher education programmes. New Teaching Councils have been established in England and in Wales which aim to give the teaching profession a greater influence and recognition powers on teacher education courses. A more elaborate Teaching Council is expected to be established in Ireland in the near future (cf. Ireland, A Teaching Council, 1998, 2000). A teachers' professional council is also being proposed for New South Wales. A council already exists in Ontario, Canada.

72.   In line with international trends in quality assurance of higher education institutions, teacher education departments are included in quality review procedures, conducted on a periodic basis. These involve whole departmental review involving internal self-appraisal followed by visits of external peer review teams. As Stern states:

> The strengths of self-evaluation are considerable but are enhanced where there is
> management support for it from within, and technical and specialist support from
> outside. (Stern, OECD, 1996, p.59)

It is likely that such departmental evaluations will become more common, perhaps with an added input from other involved stakeholders. In the context of a lifelong learning policy, new elements may be added to the quality assurance process, such as the preparedness of teachers to liaise with, or contribute to the

work of other educational agencies. The teaching career in the new century is likely to be much less compartmentalised than in the twentieth century and more open to interaction and exchanges with other sectors of the education and training system, as well as with industrial occupations.

13.   Induction

73.   Induction is the second element of the tripartite "3 Is" structure for the teaching career in a lifelong learning era. The quality of a teacher's experience during the early years of teaching is critical to developing and applying the knowledge and skills acquired during initial training and to forming positive attitudes to teaching as a career. The entry of newly qualified teachers into working life is widely acknowledged as problematic. The beginning teacher is often "thrown in at the deep end", with a full-teaching load and associated responsibilities. She/he often has few support structures to draw upon and can feel isolated, stressed and anxious. This is neither good for the individual nor for the school, and mistakes made may be hard to rectify. Research indicates that poor induction can have many deleterious consequences. On the other hand, beginning teachers who are provided with continuous support by a skilled mentor are much less likely to leave the profession, are more likely to get beyond personal and class management concerns quickly and to focus on student learning sooner (National Commission Report, 1996; Darling-Hammond, 1998). While the independence of the young teacher needs to be respected, she/he should be entitled to a phased introduction to full responsibility, given time for planning and correction work and have some resource personnel to draw on for counsel or support. The purpose of induction is the further development in newly qualified teachers of those skills, forms of knowledge, attitudes and values that are necessary to carry out their roles effectively. Induction forms a bridging process between their initial teacher education and getting fully established as a confident and competent practitioner. It is distinct from probation, which carries with it an evaluative function, although the period of induction and probation may well coincide. With the introduction of a period of formal induction, teachers in England now have an induction year involving both probation and training and support.

74.   There is a general acceptance of the value of good induction processes for the beginning teacher, but there is a lack of coherent policy on its implementation, despite "the high probability that solid induction programmes represent one of the most cost-efficient preventative strategies around" (Fullan, 1993, p.106). There are not many examples of really good practice in the induction area. Interesting research and experiments have been undertaken, but there has been a failure in follow-up consolidation. Some of the most interesting induction work would seem to be in Scotland, the Netherlands and Northern Ireland. A comprehensive induction system involves much logistical planning and can be expensive. The tendency is, when funding is limited, to devote resources more to inservice teacher education rather than to induction. The selection, training and reward of school mentors to assist the beginning teachers present problems. Working out satisfactory partnerships between the training institutions and the schools on induction programmes has not generally been given the requisite attention. Much is demanded of school leaders in the contemporary school context and not all school leaders see a clear role for themselves in the induction process. School inspectorates in some countries have been involved in the probation of beginning teachers, but this evaluative role may cut across the guidance dimension of induction. The closer partnership with school personnel which is being fostered in initial teacher education should be a useful foundation on which to build more supportive induction processes for beginning teachers. The interaction between experienced and beginning teachers can be very productive, especially if there is a group of inductees involved. It is important to protect the beginning teacher from a sense of disillusion which can occur in unpropitious teaching contexts. It is particularly important to support beginning teachers who have to begin as part-time and substitute teachers. Teaching cannot afford to lose well-motivated young teachers either from a personnel or an investment viewpoint.

## 14.	Inservice Teacher Education

75.	For a considerable period of time countries have accepted the need for providing inservice education and training for teachers. This has become much more strongly affirmed in the context of a lifelong learning education policy. It is axiomatic that, in modern circumstances, an initial professional training is altogether inadequate for a career which can extend for forty years. This is particularly so for teachers, who need to be abreast of new developments in knowledge and pedagogy so as to be efficient mediators for the successive cohorts of young people they encounter. As teachers seek to equip and motivate their pupils to be lifelong learners they need to exemplify lifelong learning characteristics in their own behaviour and attitudes. Bearing this in mind, governments have been investing more heavily in inservice teacher education. The continual renewal of the teaching profession is seen as important in realising its potential and achieving desired educational reforms.

76.	There is a wide variety of types of inservice education and also a multiplicity of providers. In most countries these include teacher education institutions which, in the past, were largely focussed on pre-service teacher education. The duration of courses varies from long duration courses leading to certification to short-term, sandwich and summer courses. The areas covered in contemporary inservice education reflect the changing needs of the education system. Thus, there is emphasis on areas such as school management and leadership; curricular up-dating; introduction of new curricular material, e.g. civic education, social and health education; remedial education; school guidance and counselling; pedagogical innovations; relations with parents /community. An area which has benefited from much greater government interest and support in recent years is the promotion of information and communication technologies within the education system, as has been discussed in Section 9.

77.	In most countries participation in inservice teacher education (INSET) is on a voluntary basis, but in a few countries it is part of contractual obligations. Most countries operate inservice provision partly on school time and partly on personal time. In some countries, as, for instance, Great Britain, some non-teaching contract time is devoted to collegial planning and inservice activities. Promotion prospects for teachers also tend to be affected by evidence of participation in INSET.

78.	Best practice in inservice provision tends to incorporate features such as those identified in the OECD report, *Staying Ahead: Inservice Training and Teacher Professional Development* (1998, pp.53-59). Thus, it is regarded as desirable that INSET should incorporate both on and off-site school dimensions. Teachers have a greater role in setting the agenda. The active engagement of teachers in the process and the use of experiential techniques are favoured. In many countries, through training of trainers' courses, teachers have been assisted to work with their peers as facilitators and team leaders. This gives rise to a sense of empowerment and confidence building which cultivates a good *esprit de corps.* Collaborative, interactional techniques are very much in favour, rather than lectures to large groups.

79.	Another key trend is the promotion of inter-school networks or clusters, wherein staff from a number of schools work together on new curricula or methodologies. Instead of a "top-down" or a "bottom-up" approach, the OECD report terms this trend as "bottom across." As the OECD report notes, there is a crucial role for external assistance to the process, such as support from higher education institutes, education centres, regional or specialist support teams. It is also recognised internationally that teacher development is often best promoted within the context of school development, and more and more schools are being encouraged to engage in collaborative development planning. While the education system's needs are prominent, this is not to the exclusion of the personal and individual needs of the teacher. This is particularly important where the occupational hazard of geographic or professional isolationism is in evidence. The teacher's needs are also linked to INSET for career diversification and more specialism within a greatly changing school system.

80.   While INSET has developed significantly in recent years and has become enriched and varied, there is scope for improvement. In this context, the OECD international study commented:

> Improved planning, more involvement of teachers, better evaluation and dissemination will all strengthen the concept of professional development which must be seen to begin with pre-service and continue through a teacher's career. Professional development is not simply an "add-on" or a "quick fix" to be applied when a particular problem arises. (OECD, 1998, p.56)

Furthermore, past under-investment in INSET needs to be redressed. Drawing from a Eurydice Study of 1995, the *OECD Policy Analysis* for 1998 noted, "In none of the European countries supplying data was the INSET share of the education budget higher than two per cent, and in some cases it is a small fraction of one per cent (p.30).

81.   It is clear that improved and targeted inservice education for teachers forms a crucial and essential dimension in the promotion of a lifelong learning policy. It supports teachers to be themselves lifelong learners, improves motivation and morale, gives new empowerment, develops new skills and, accordingly, helps teachers to be animating promoters of learning and open to new developments. Lifelong learning should be regarded as the master principle for the future renewal of the teaching profession.

15.   The Research Dimension

82.   In some countries research has always been incorporated into the work of university education departments, but it did not always focus on teacher education issues. In recent years, this tradition has been changing and a greater emphasis on research in relation to teachers' education processes is in evidence. Most countries have national associations for the promotion of educational research, including research on teacher education. Apart from the work of international bodies, such as OECD, there is evidence of greater international collaboration in seeing how teacher education can benefit from educational research. A notable instance of this was the international conference organised by the Association of Teacher Education in Europe (ATEE) in 1992 on the theme "Educational Research and Teacher Education." The founding of the European Educational Research Association in 1994, one of whose aims is "Disseminating the findings of educational research and highlighting their contribution to policy and practice" was another indication of increased interest in drawing on educational research in European teacher education. Of course, associations such as American Educational Research Association (AERA) have been active for many years. The degree of the incorporation of educational research into teacher education programmes varies a good deal between different countries (*European Journal of Teacher Education,* Vol.15, Nos.1, 2, 1992 and Vol.16, No.1, 1993). It is an evolving rather than a resolved issue and depends a good deal on the conception of the teacher's role which prevails. The research dimension is also linked to the greater influence of the university on teacher education. A major recommendation in a recent review of the teaching profession in New South Wales stated:

> Universities, with substantial support and leadership from the Commonwealth Government, must share their educational research with teachers in ways which are timely and readily accessible. Professional practice must be highly informed by contemporary and relevant knowledge which teachers can apply to improve the quality of teaching and learning. The extent to which much of the research is made possible by the participation of schools and teachers, makes this a key issue. (Gregor Ramsey, 2000, p.31).

This emphasises the need for partnership and sharing between educational researchers and practitioners for the benefit of the system they work within. This view of stakeholder interest in educational research was also emphasised by the OECD in its review of trends and issues in educational research (OECD, 1995).

83.   While investment in research on teacher education is less than is necessary, more attention is now being focussed on the role of research for all levels of teacher education. Many traditions and methodologies of educational research contribute to the knowledge base in education. Emphasis in recent decades on effective schooling, curricular studies, evaluation, achievement of educational change has been regarded by many teachers as very beneficial to their work. Obstacles which have, in the past, limited the impact of educational research on student teachers and teachers included an alleged irrelevance, problems in the mode of discourse, difficulties in dissemination, a lack of preparedness to draw upon it, as well as a lack of experience in engaging with it. These difficulties are being addressed in a number of ways. Student teachers are being introduced to applications of educational research and, through assignments and projects, are themselves encountering the research findings and engaging in research at appropriate levels. Action research approaches are proving particularly useful for this. Teachers involved in certificated inservice courses have a greater exposure to educational research findings and, in most instances, have to conduct projects and research dissertations as part of the course requirements. Again, here, action research can be one of the ways in which teachers are helped to identify specific areas of their work and guided to research it in a structured way compatible with their experience and circumstances (Collins and McNiff, 1999). The more extensive involvement of teachers in such activities has established bridges between educational researchers and the teaching force. Researchers have also become more conscious of the desirability of communicating with practicing teachers, as well as with the academic research community.

84.   In the context of lifelong learning, it is important that worthwhile research findings and insights are drawn upon and enrich understandings and actions within teacher education at all stages, and help improve various dimensions of the education process. In pointing the way forward, Malcolm Skilbeck has set out the following six guidelines for teacher educators:

(i)   Develop in students critical-mindedness, interest in and capacity for reflective enquiry ... to see that research is no more and no less than the systematisation of this reflective, critical spirit and its translation into specific public forms of enquiry;

(ii)   Help students to understand the goals, general procedures and organisation of research;

(iii)   Students need to be trained to practice, in a systematic way, techniques and procedures used by experienced researchers. They need to design and conduct experiments and field enquiries, to prepare questionnaires and interview and data observation schedules, to process data, to have practice in literature surveys and to be shown how to write research reports using different types of discourse;

(iv)   Through the aforementioned procedures students need to acquire capacity for and interest in reading research literature;

(v)   There needs to be much closer collaboration between teachers in their classrooms and university researchers;

(vi)   Teacher education needs to produce teacher educators and educational researchers of the next generation, particularly through research training in in-service courses (Skilbeck, 1992).

85.   These guidelines put forward an agenda for the future with a strong professional emphasis. The fostering of critical awareness, understanding the goals of research, developing research skills through

practice, fostering the ability to interpret research and engaging in co-operative endeavours with researchers, can open up new and invigorating approaches for teachers. To varying degrees, in European countries, the interface of research and teacher education is being promoted in these ways, albeit there is room for much progress (Galton, M., 1994). However, it would seem that there is a consensus regarding the importance of the research dimension. The conclusion of the ATEE Conference (1992) on this theme was that "The Conference strongly endorsed the view that educational research, both in terms of its findings and its prosecution was integral to proper teacher formation" (European Journal of Teacher Education, Vol.15, 1992). The consideration of the value of educational research for teachers again emphasises the need to recruit high calibre people into the teaching force who will have the understanding and capability to engage with educational research so as to better inform their educational planning and practice.

16.   Teachers Conditions of Employment

86.   Because of the very varied character of the conditions of employment of teachers in developed countries and because of space limitations it is only possible to highlight a few points in relation to this sub-theme. Salary levels vary enormously across countries. As the OECD's, *Education At A Glance,* 2000, states:

> Teacher salaries are the single largest factor in the cost of providing education. The size of education budgets reflects either an explicit or implicit trade-off between a number of interrelated factors, including statutory teachers' salaries, student/teaching staff ratios, the quantity of instructional time planned for students, and the designated number of teaching hours. (p.208)

However, the report also states, "Teacher salary levels can affect both the desirability of entering the teaching profession and the ability of schools to retain the most skilled teachers" (p.208). In periods of good economic buoyancy and much differentiation of occupations, the problems of recruitment and retention of the high quality people required can become acute. When compared with the salary levels of other university graduates the OECD reports that in most of the countries for which data is available teachers' salaries are lower (pp.210, 211). For an occupation which is seen as pivotal for the learning society, the issue of appropriate salary award is likely to be one which will demand rectification in the period ahead. As Richard Murnane states, "A salary structure that attracts academically talented graduates to teaching and makes it worthwhile to acquire the skills needed to teach effectively is a necessary condition for improving the quality of teachers. The question is how to structure salaries to achieve these goals efficiently" (Murnane, 1996, p.247). The area of salaries, linked as it is with other aspects of working conditions, is very much a national issue, and comparative approaches are of limited value. As a range of recent OECD reports on education in East European countries testify, the predicament of low teacher salaries is at crisis point in those countries, due to the changed economic circumstances. The agenda for education reform is very extensive in these countries, but it is being seriously affected by the dispiriting conditions in which many teachers have to live and work.

87.   As the career of teaching becomes more differentiated there are opportunities for some teachers to develop areas of specialist skill such as remedial education, guidance counselling, curriculum development, management. While formerly a rather flat-structured career, teaching now generally provides more promotional posts to areas of responsibility within schools. However, patterns of procedure are often linked to an earlier era, and are out of keeping with good professional practice in other occupations. Seniority, rather than merit, is a determining factor in promotion in some countries. For instance, the OECD recent studies of education in Korea, Greece and Italy demonstrate how entrenched the seniority criterion is in those countries.

88.	There are also increasing opportunities for teachers to specialise in areas such as special education, which many countries now wish to be more integrated with mainstream schooling. Then, in the context of a lifelong learning policy, developed countries are paying more attention to the area of early childhood education, at one end of the age spectrum, and to adult education for those of mature years. Teacher education for the traditional school system has not been targeted at these groups and there are distinctive pedagogic and other approaches required for skilled work with them. Nevertheless, training ought to allow for co-operation and understanding between educators dealing with all sectors. The possibility of staff interchanges should be promoted, albeit with extra training for involved personnel. Lifelong learning requires linkages and bridge-building so that citizens may benefit from smooth transitions in-and-out of the education and training systems, at all stages of their life-span.

## 17.	Teachers as Change Agents

89.	A great deal of educational research in recent times has focussed on issues such as school effectiveness, school improvement and the implementation of educational reform. While many valuable guidelines for policy have emerged, such studies have also emphasised the complexity of achieving significant educational change and the multifaceted requirements needed to bring it about. There is no quick fix or ready solution. Rather, a process of restructuring and reculturation is necessary and a long time-frame is needed to bring it about. An indispensable ingredient is a teaching force which has the knowledge, attitudes, skills, motivation and perseverance to take proactive approaches in promoting the reform process. As Fullan remarks:

> ...A high quality teaching force – always learning – is the *sine qua non* of coping with dynamic complexity, i.e., of helping to produce citizens who can manage their lives and relate to those around them in a continually changing world. There are no substitutes to having better teachers... We cannot have a learning society without a learning profession of teachers. (Fullan, 1993, pp.104, 131)

90.	The question arises as to how much understanding there is of this among policy makers and the wider society, and how much commitment is there to take the action necessary so that teachers can indeed be change agents? Society has been articulate regarding what it requires of teachers in the era of lifelong learning. It will also need to adopt enlightened policies which address weaknesses affecting the teaching profession. Society needs to support and develop worthy initiatives already afoot in various aspects affecting the career (Coolahan, 1995). The direct guidance given by the National Commission's Report (1995), *What Matters Most: Teaching for America's Future,* has relevance for all countries:

a)	What teachers know and can do is the most important influence on what pupils learn.

b)	Recruiting, preparing and retaining good teachers form the central strategy for improving schools.

c)	School reform cannot succeed unless it focusses on creating the conditions in which teachers can teach, and teach well.

91.	It is also important that teachers are regarded as partners with a sense of ownership of the change processes. Good practice has sought to engage teachers in developments linked to their professional concerns. This includes participation in the recruitment of student teachers and in the delivery of initial, induction and inservice teacher education. Some governments have also involved teacher representatives in genuine consultation leading to the shaping of policy. The involvement of teachers in national curriculum formation and development is an acknowledgement of the centrality of their professional expertise in this area. In many countries teachers form an integral component of the management boards

of schools. In places where inter-sectoral planning approaches are being adopted to tackle problems of multi-faceted, socio-economic disadvantage teachers do have valuable contributions to make. In a general sense, teachers are frequently proactive members of organisations in their local communities and such linkages tend to cultivate favourable regard for teachers among the public. In ways such as those outlined above teachers demonstrate that, apart from their professional performance in schools, they contribute to the wider educational context in which schools operate.

92. While unsatisfactory performance by teachers should not be condoned, it is important for governments and the public to acknowledge and affirm the crucial work of high quality which is performed by teachers. It is in the interests of all to protect and promote the features which contribute to the status, morale and well-being of this career of which so much is being required in contemporary society. As has been noted above, in a few countries, such as England, Wales, Ireland, Canada, steps have been taken, or are being taken, to establish largely self-governing councils of the teaching profession. This would not suit all circumstances, but it is symbolic of a trust and confidence by society in teachers as a body with a major role to play in the era of lifelong learning.

18. Guidelines for Action

93. While the policy of lifelong learning is regarded as a significant, historic landmark in the history of education, it has emerged as a response to on-going societal developments and needs. It provides a framework for co-ordinated and invigorating action, but the developments are not arising *abinitio* from the declaration of policy. What this paper has sought to demonstrate is that many valuable changes and examples of good practice in relation to teacher formation and the teaching career have been occurring. In looking to the future, a key contribution can be the support and promotion of on-going good practice, giving backing to some new initiatives and providing the policy context which promotes coherent and strategic planning for the future.

94. New models of schooling and educational provision may emerge throughout the next century. The best current strategy is not to build on hypothetical scenarios, though anticipating such has a role, but to target the approaches and skills which are of the essence of good educational practice and which can be adapted and transferred to changing environments. The concept of the school changing in dynamic interplay with its environment, rather then an abrupt transition to a new model, may be the most useful way of conceiving the situation. In this way, the school is seen as a "self-eco-organising" system, involving a set of players and entities linked through extensive interchange and capable, when interacting with its environment, of reacting, evolving, learning, inventing and self organising (Michel, 2000). If schools are to be learning organisations within a learning society, the teacher needs to be assisted to make the transition and be enabled to contribute to such a process.

95. If the objectives of a lifelong learning policy are to be realised then it is essential that greater priority be given to the teacher in strategic planning. Lifelong learning requires that the different aspects of the teaching career should be regarded in an inter-connected, integrated, systemic way so that a restructuring and reculturation can be fostered to meet the needs of a new era. Arising from the analysis of trends and developments in this paper the following guidelines for action are proposed.

− There needs to be greater clarification, projection and dissemination of the significance of the policy of lifelong learning.

− Greater efforts are needed to engage the teaching profession and the general public with the implications of education for lifelong learning and the opportunities which it provides.

− Many existing initiatives which have emerged in response to educational needs of a fast changing society could be beneficially co-ordinated within the framework of reference of lifelong learning and thus give a sense of concretion to what may sometimes appear as general aspirations in the literature.

− Policy formulators and implementors should use the lens of lifelong learning policy as a way of viewing educational initiatives and employ the discourse of lifelong learning in discussing such initiatives.

− Policy-makers need to be aware of the necessary tension which exists when, in a period of fundamental societal change, major educational reforms are sought. Research on the problems of implementing such major educational change highlights the complexity of the process. A tendency to be impatient with the apparent recalcitrance or inefficiency of teachers is not only a superficial response, but it can also be counter-productive.

− The extent of the reforms being currently promoted in schools in developed countries are very extensive and in keeping with lifelong learning perspectives. Their satisfactory achievement will be a major dimension of the lifelong learning crusade. Interpretative evaluation of initiatives is important. The worthwhile efforts of school leaders and teachers to achieve such reforms would benefit from the understanding and affirmation of politicians.

− As a matter of urgency, it is desirable that efforts be undertaken to enhance the public image of the teaching career. This is a many-sided process, but it is vital that, in an era of great change in career pathways, society expresses its belief in the central significance of the teacher's work. The attraction of people of high quality to the teaching career is a sine qua non with regard to the achievement of a lifelong learning policy. This point was strongly urged in the conclusions of the Rotterdam CERI Conference on "Schooling for Tomorrow" (Nov. 2000) when it was stated:

> It is a matter of the utmost concern that in many countries severe problems of recruitment and teacher supply are emerging. New incentives are needed across the whole range of conditions and rewards, both to attract high-quality recruits and maintain a vibrant, diverse teaching force [DEELSA/ED/CERI/RD(2000)15].

− More attention needs to be paid to the generation gap within the teaching profession in contemporary circumstances, and governments need to expand some imaginative schemes which address this issue.

− The concept of the "3 Is" – initial, induction and inservice teacher education – should be fully adopted as established policy. It is central to a lifelong learning approach, and, because of the nature of their work, teachers, more than any other group, should be lifelong learners.

− Support should be given to teacher education institutions/departments to adopt more multi-faceted roles, as is happening in some instances. Thus, their work in initial teacher education should be supplemented by induction and various forms of inservice education. The promotion of applied educational research is integral to their role, while establishing partnerships with policy-makers and relevant stakeholders would be very much in keeping with lifelong learning concerns. Teacher educators need to have close reciprocal relations with schools and with those working in adult and community education areas.

− As is set out earlier in this paper, much innovative work is occurring within the curriculum of teacher education. This needs to be sustained and developed. Particular emphasis needs to be placed on small group, experiential activity. The greater exchange of best practice studies needs to be encouraged.

− Because of the central significance of ICT for the learning society, sustained efforts are required to ensure that all teachers are in a position to use it effectively in their teaching. Innovative use of ICT in the classroom is crucial. Of course, ICT's potential for learning in environments other than schools both calls for a lifelong learning policy as well as provides a major tool for its achievement.

− Moves to greater partnership between teacher education institutions and schools should be further developed for teacher formation. The role of school mentors should be developed. The cultivation of partnerships between school personnel and non-school stakeholders is important in the promotion of lifelong learning.

− As lifelong learning requires adaptable, self-reliant teachers, the goal of the reflective practitioner should be promoted in the process of teacher pre-service and inservice education.

− Investment in good quality induction and inservice education is crucial for teachers in a lifelong learning context. Guidelines for best inservice practice, as incorporated in the OECD's *Staying Ahead: Inservice Training and Teacher Professional Development*, (1998) should be drawn upon.

− Educational research, particularly of an applied and action research orientation, should inform all stages of teacher education. Teachers should be trained and assisted in engaging in appropriate research studies in their schools and in drawing on the findings for school development strategies.

− National governments need to ensure that teacher salaries and conditions of work are maintained at a level which makes the occupation of teaching attractive and enables the teacher to operate effectively with all of their pupils.

− The teaching profession needs to be treated as a partner in policy formulation processes, with dialogue and consultation influencing the planning for implementation.

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