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EDUCATION 2000: UNITED KINGDOM

A Discussion Paper arising out of discussions at the Comparative and International Education Society Conference in Annapolis (March 1992) concerning the need for a "Whole System Change" within formal education.

1. The pace of technological and economic change worldwide requires ever high levels of both functional skills, and those other social and intellectual skills that give both cohesion and purpose to society, and satisfaction to the individual.

2. The accelerating move towards manufacturing economies, starting from the early 19th Century, largely destroyed those earlier community structures in which learning was a social activity conducted within the family, and through apprenticeship. The industrial model of schooling in practice sought to develop learning in isolation from its practical application: while such a system was reasonably efficient in equipping large numbers of people with a range of basic, functional skills it gave little, if any, confidence to the individual in his own ability to learn.

3. Fear of change, and an inability on the part of millions of people to learn new skills, has been an enormous inhibitor to economic progress as nations have sought to move into post-manufacturing economies.

4. Criticism that formal institutional schooling is failing to equip young people with appropriate skills, and with an ability to apply their learning in subsequent life is no new phenomenon, though its intensity has increased dramatically in recent years (a) in those societies where conventional mores have broken down (b) where society has become less hierarchical, authoritarian and "confident", and (c) most recently with the new technologies of information and communication side-lining the school as the pre-eminent place through which to access knowledge and information.

5. Worldwide only a few of the major industrial countries have completed this full cycle...... and each with particular local variance. Some developing countries are only now replacing the social environment of learning with institutional instruction.

6. Criticism of the system, particularly in the UK and the USA, has increased dramatically since the late 1970s, and a multiplicity of attempts have been made at reform. These reforms have, very largely, assumed that they should be implemented through the school, as currently structured, and have sought to improve its efficiency through a variety of schemes stressing "basic skills". Despite the commitment of significant funds and enormous energies the results of such reforms have been largely disappointing, and have served to increase the concern that a society - which as separate individuals has no belief in its ability to be learners - will be unable to adapt to the imperatives of economic and technological change.

7. Whilst schools have pursued reform, industry and commerce too has been forced into reconsidering its own structures with many companies and large corporations discovering that, for their survival, they have to exploit and develop the learning capabilities of their staff. Seeking the most efficient way of doing this employers have found the programmes dependent on conventional teaching styles are nothing like as effective as those which, resembling apprenticeship models of old, necessitate the whole-hearted commitment and involvement of the learner to something which he understands, and "owns".

"Learning (properly structured) on the job", it is found, beats instruction any day.
8. While as yet lagging far behind other forms of medical research, findings from neurology support those from psychology that show the critical importance of learning being structured in ways which are compatible with the way the brain learns naturally (as it evolved over aeons of time); that it learns when it is trying to "make sense"; when it is building on what it already knows; when it recognises the significance of what it is doing; and when it is learning collaboratively in a social/team setting. Essentially, it seems, the brain learns best - and grows to learn more - when it is exercised in highly challenging but low-threat environments. Each brain, it is becoming apparent, is as individualistic as those physical characteristics which give persons their individuality. The brain drives itself and is remarkably stubborn to external pressure.

9. Born partly out of frustration with the failure of current reforms, and fed partly out of experience with industrial programmes and the emerging research on the brain, a number of individuals and organisations in several countries (developed, developing and possibly under-developed) are sensing that educational reform must start with a reconsideration of how learning takes place, rather than institutional and structural reorganisation. In other words they see that the school, and particularly the way in which society has delegated to it almost total responsibility for young people, has itself become a major part of the problem, rather than the solution. The full implications of this are daunting. Not only do they require reconceptualising how learning takes place (it's not the opposite of teaching), it requires a reconsideration of the place of young people in society, and a reconceptualisation of "community" which, however it may be fully in line with other trends in industrial structures and social thinking, will be hard...... but is probably inevitable.

10. So well established have schools become in industrial society, so firmly have individuals within such societies adjusted their life styles on the assumption that they do not have to be directly involved in any substantial support for young people, that the kinds of reform probably needed must drive at the very heart of a community's values, and individuals' priorities. While a sense of frustration, and panic, at the the "failure" of the present system may provide the energy to do this, the absence of any clear model, or models, which are demonstrably better than the present only exaggerates the sense of impotence.

11. While it is now possible with the beginnings of new understandings as to how high level learning could be structured in ways compatible with the natural learning structures, these insights (such as they are) are nevertheless largely hypothetical and understandable only to a few. However good these people may be as communicators, their audiences - even those with strong motivation to change - have to be helped to "jump out" of their present mind sets, and reconceptualise on the basis that they can accept theory (at least for a while) as being more persuasive than their own historic experience.

12. What is needed more than anything, it is postulated, are real working models, community-wide, which have been helped (with all the skill of resource that the issue demands) to work through how all this can be put into practice so as systematically to deliver such quality results far in advance of what was previously anticipated. And then to use such models to create a sense of envy amongst large numbers of other communities who should be able - on the basis of the experience which supported the first group of communities - to adopt new arrangements all the quicker.
13. While the numbers of people who are aware of the need to develop these trends has increased, it is highly unlikely that there are sufficient of such people (with all the skills which will be needed) to implement all this within any one country. Furthermore experience, even of the most enlightened, needs encouragement to move away from parochial concerns to look at local issues with questions posed in very different environments. It is possible that, at a professional level, under-developed countries, say in Africa, might have insights arising from being closer to natural learning systems than say the US; carrying less accumulation of current thought. Such countries could influence the future shape of education in the advanced nations every bit as much as the appreciation of the possible role of technologies in education as developed in advanced countries, could shape education in the under-developed world.

"Every child needs a whole village to complete its education"

14. No one organisation, and certainly no one "discipline of experts", knows enough as yet to be able to give a properly researched framework in which such communities could develop. Specifically it follows that research and other bodies which have been established within the current system have been conditioned to see their roles specifically as supporting and refining the existing system, rather than changing it; e.g. Cognitive Theory has been seen almost exclusively as the concern of psychology with the very structures of medical (and therefore neurological) research working independently, and in different modes. Equally the legislation that supports education, and the financial arrangements that had been established to underpin this, are so shaped by habit to see that formal learning is appropriate for support, but that informal learning is "too loosely structured" to be an acceptable notion for normal funding.

15. Education is subject to emotional and political pressures. In the need then to bring about change quickly individual nations are inevitably tempted to legislate for those things which may bring short-term political advantages, rather than be sufficiently bold as to undertake programmes of such length that the political benefits may well be reaped by others.

16. All this suggests that the solution, which it is now within our "collective" power, is most unlikely to emerge nation by nation, and that some form of international initiative is urgently need that would form a most powerful "Knowledge Network", and chain this to an association of autonomous community-wide projects carefully selected from a variety of socio-economic environments with a number of different nations.

(a) A Knowledge Network - While new insights on how learning occurs are coming from a variety of applied programmes, and studies in psychology and neurology, there is little cohesion to the research and so far little powerful and understandable articulation of what is understood, and what is still problematic. There is an urgent need to draw these insights together (literally from insightful sources world-wide) and to suggest and commission new lines of research aimed specifically at the practical requirements of education.

(b) An Association of Autonomous Community-wide Projects - This paper has argued that the changes which are required are "whole system changes", ie they cannot be carried out just in the schools, or in the community, or with technology; they have to take place progressively and simultaneously within a closed system. The problem we seek to address is systemic, but will always be subject to local variation and interpretation to meet local circumstances. The paper has argued that the solutions will involve attitudinal changes on the part of every individual within their communities. It follows, therefore, that the "Knowledge Network" has to feed, and feed upon, a range of projects which are - in very real terms - "owned" by their local communities, and shaped by the collective wisdom within that country. Each project would need to feed-off, and feed-into, the Knowledge Network as a co-equal.
(c) **Freedom to be Truly Innovative** - Each Project has to be autonomous. It has to negotiate in advance within its own framework whatever arrangements are necessary for it to be truly innovative, but to set a time-frame within which it will work to create a new structure in that - subject to the normal political decisions of that land - will enable it to be evaluated and, if found acceptable, to be replicated and then re-integrated into the normal system. Once agreed nationally it is to be hoped that participation in such an international programme would protect the programmes from short term, national, political pressures.

(d) **Outstanding Expertise, Locally Developed** - The Knowledge Network needs to be the very best that the world can provide....... but it needs to be light and imaginative in its touch. It must not dominate, and intimidate, the Projects. Its members must work together easily. It must certainly be non-bureaucratic.

17. **Collaboration, not Competition**

The existence of such a programme could well intimidate many existing agencies, and lead to the worst of "the not invented here" syndrome. It would be best if:

(a) The programme could be established quietly (though with all the resources it could ever need), and be developed under the most neutral and impeccable international colours.

(b) There should be just enough, and no more, projects in a variety of environments - and countries - as would be necessary to feed back ideas to the network.

(c) From the start it should be made obvious that the whole programme is being developed through the drawing together of the work of existing practitioners (eclectic) and that, in helping local projects to draw off an international Knowledge Network, it is, quite literally, supporting each nation move more rapidly than any one could do by themselves.

18. **Timescale**

To satisfy 17(a) it would be essential first to map who and where the elements of the Knowledge Network are (and who in practice could work together), and to establish broad and appropriate parameters for the inclusion of specific projects from particular countries. This would argue for a decision in principle from a funding agency to support an extended "setting up" period during which the potential members of both the network and the autonomous projects could work together on the details of what would be needed in the development phase. The "setting up" period could well be anything between one and two years, with the development period certainly covering at least five years.

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