

CHAPTER ONE CAPABILITY AND QUALITY IN HIGHER EDUCATION

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The quality of purpose

The starting point for any discussion of the quality of higher education is the quality and relevance of its purposes. Assessing the quality of higher education according to the extent to which it achieves its purposes - ie assessing its fitness *for* purpose without assessing fitness *of* purpose - equates quality with efficiency and is therefore of limited value. It is possible to be very efficient in producing a low quality product just as it is possible to be inefficient in producing a high quality product. Though not unrelated, the efficiency of production and the quality of outcome are essentially different and require separate examination.

Nevertheless, efficiency of production is an important consideration. It is in no-one's interests to have noble purposes which can not be achieved within reasonable resource allocations. However, tight staff student ratios and other resource constraints are making financial efficiency the dominant quality concern of institutional educational planning, taking precedence over concern for the purpose of the whole enterprise. In the longer term, a failure to address the issue of quality of purpose could be more damaging to students, the institutions and the country as a whole than the risk of an occasional short term financial deficit.

From the outset, Higher Education for Capability has been concerned about the purpose of higher education. The original Education for Capability Manifesto focused on the limited value of education as being seen solely as the pursuit of knowledge and intellectual skills for its own sake. Individuals, industry and society as a whole benefit, the Manifesto asserted, when all of us have the capacity to be effective in our personal, social and working lives. This involves a much broader range of purposes than the traditional concern for knowledge and intellectual skills. Higher education should be judged by the extent to which it

- a) gives students the confidence and ability to take responsibility for their own continuing personal and professional development;
- b) prepares students to be personally effective within the circumstances of their lives and work;
- c) promotes the pursuit of excellence in the development, acquisition and application of knowledge and skills.

Higher education will need to be able to achieve these inter-related purposes within the context of expanding numbers, diminishing resources and external accountability, and with increasingly diverse cohorts of students.

Capability - a working definition

Capability does not easily lend itself to detailed definition. It is easier to recognize it than to measure it with any precision. It is an integration of confidence in one's knowledge, skills, self-esteem and values. We have found widespread support for our resistance to the temptation to define capability in reductionist terms, seeking ever more separately measurable competences. Capability depends much more on our confidence that we can effectively use and develop our skills in complex and changing circumstances than on our mere possession of those skills.

The following definition of capability, however, has been useful in exploring the essence of capability with academics:

Capable people have confidence in their ability to
* *take effective and appropriate action,*
* *explain what they are about,*
* *live and work effectively with others and*
* *continue to learn from their experiences*
as individuals and in association with others, in a diverse and changing society.

Capability is a necessary part of specialist expertise, not separate from it. Capable people not only know about their specialisms; they also have the confidence to apply their knowledge and skills within varied and changing situations and to continue to develop their specialist knowledge and skills long after they have left formal education.

Values, self-esteem and a commitment to learning

Capability is not just about skills and knowledge. Taking effective and appropriate action within unfamiliar and changing circumstances involves judgments, values, the self-confidence to take risks and a commitment to learn from the experience. Involving students in the decisions which directly affect what they learn and how they learn it develops a sense of ownership and a high level of motivation.

Many academics find the emphasis on confidence, esteem and personal values as well as on knowledge and skills relevant to their perception of an educated person and the role of higher education. Each of the four 'abilities' is itself an integration of many component skills and qualities, and each 'ability' relates to the others. For instance, one's ability to take **appropriate** action is related to our specialist expertise which in turn is enhanced by one's learning from one's experiences of earlier actions taken. 'Explaining what one is about' involves much more than the possession of oral and written communication skills; it requires self-awareness and confidence in one's specialist knowledge and skills and how they relate to the circumstances in hand.

Educating for capability through higher education

Capability, we argue, is developed as much by the way students learn as by what they learn. If students **have experience of being responsible and accountable for their own learning, within a rigorous and interactive environment**, they will develop confidence in their ability to take effective and appropriate action, to explain what they are about, to live and work effectively with other people, and to continue to learn from their own experiences. The medium, as they say, is the message. The Higher Education for Capability approach is a total approach. Confidence in one's personal qualities and specialist expertise is developed through successfully taking responsibility and accounting for the reflective application of specialist knowledge and skills.

The separate development of capability - often referred to as 'bolt-on capability' - has some superficial appeal. There are many well-constructed 'bolt-on' approaches in use (communication skills between 4 and 5 on Friday afternoons) but they always raise difficulties. They imply that normal educational activities are not about the development of personal qualities; they give students the impression that such activities are marginal, not central; and they set up timetable conflicts in which subject teaching will be more likely to prevail. When divorced from the students' academic studies, transferable skills raise issues of level such as 'What is a good upper second class honours degree in listening skills?', thereby rendering them unsuitable for inclusion in the formal assessments leading to the award of degrees. The fundamental objection to the bolt-on approach, however, is that it denies the holistic nature of capability, the essential integration of personal qualities, skills and specialist knowledge which enables students to be effective. Communication, team-working and objective-setting, Higher Education for Capability argues, all have meaning when set within the student's educational interests and can enrich the student's specialist studies. The specialist context provides both the opportunity and the rationale for the development of personal skills and qualities.

The relevance of capability

In order to appreciate the value of student capability as an appropriate outcome for higher education it is useful to explore its relevance to the world outside the seminar and lecture room. Three aspects are particularly relevant: feedback on the quality of graduates; uncertainty and change in society and the work place; and the growing importance of individual responsibility and inter-dependence.

Feedback on graduate quality

One frequently voiced criticism of higher education made by employers is that graduates are often lacking in a range of personal qualities and skills relevant to the world of work, including specific skills such as writing ability (a criticism often made of scientists and engineers) and numeracy (a criticism often made of humanities graduates) and general skills such as personal presentation and oral communication. More substantial criticisms extend to inadequacies in overall personal capabilities often expressed in common sense terms such as 'having something about them', 'able to get on with things', 'initiative and reliability', 'works well with others' and 'able to cope with anything'.

Some of the more specific skills can be dealt with through intensive short-course training, minor changes in teaching methods and targeted feedback (e.g. engineering students having their written reports corrected for

clarity, grammar and spelling). The overall personal capabilities are of a higher order and require something much more substantial related to the very nature of the students' overall educational experiences. The possession of transferable skills, like the possession of specialist knowledge, is no guarantee that a person will be able to use them effectively. Overall personal capability is an integration of diverse qualities, skills and knowledge.

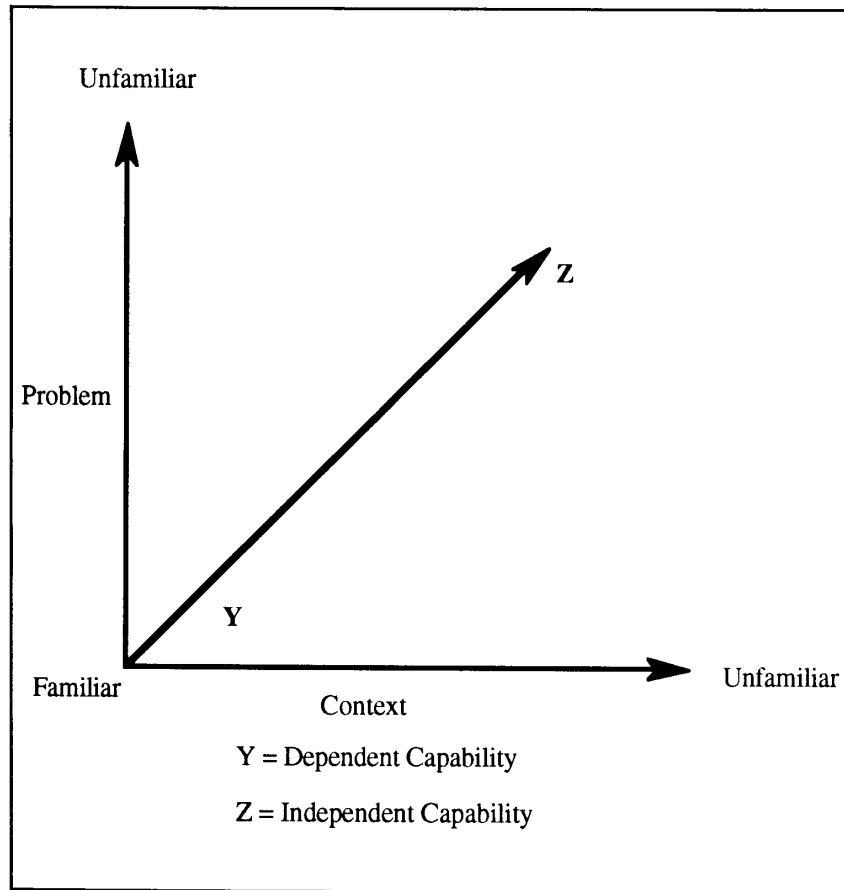
Uncertainty and change in society and the work place

It is almost a cliché that 'we live in a world of change'. Individual circumstances, of course, vary but there is general agreement about some of the factors which are driving change. They include

- a) the rapid expansion in the volume of knowledge and information available;
- b) advances in the techniques for storing and disseminating current information;
- c) the accelerating rate at which changes are occurring in life generally and in the work-place, through new technology, new applications, new structures and social movement;
- d) the greater complexity and diversity of the contexts within which we have to operate;
- e) the growing interdependence of people and between specialist expertise.

These common factors apply even in fields for which higher education has traditionally prepared its students - as professional academics, subject specialists and researchers.

Much of higher education practice has not caught up with the implications of preparing students for coping within such changing and demanding circumstances. Teacher dominated courses prepare inactive and passive learners for predictable situations; student responsibility and accountability helps students prepare for active participation in change. Diagram 1 illustrates two contrasting contexts within which most graduates will have to operate.



Most of us operate, for much of our time, in Position Y (Diagram 1). In position Y, we are dealing with familiar problems for which we have learned familiar solutions. The context in which we are operating is also familiar. Position Y can apply to the work-place, the home, community activities or artistic pursuits. Good performance in

Position Y may require technical skills and knowledge of the highest order, or at the simplest level. In so far as our post-16 education is a preparation for capability, it is mostly a preparation for Position Y. We give students information about the context; the more complex the context, the more information we give them. We give them information about the kinds of problems they will meet, and details of the solutions which have been found to be effective. We might even give them practice in the implementation of the solutions and evaluation of their effectiveness. We seek to develop student capability in Position Y by passing on other people's experience, knowledge and solutions. Though no doubt effective in the context of Position Y, the resultant capability is essentially a dependent capability.

But Position Y is not the whole of our experience. As indicated above, change is the order of the day. Many more of us will be spending more of our time having to operate in Position Z. In Position Z, we have less familiarity with the context and we have not previously experienced the problems with which we are faced. The slavish application of solutions perfected for familiar problems may have disastrous effects in Position Z. To a large extent we are on our own, either individually or collectively. Very often, what distinguishes effective pilots, effective surgeons, effective social workers, effective teachers, effective builders and effective accountants is our confidence that they will eventually perform as well in Position Z as in Position Y.

To be convinced of the growing importance of being capable in Position Z, we need only reflect on our own lives - and the extent to which our formal specialist education prepared us for our current position and concerns. The rate of change in higher education itself, and the new roles and problems with which academics are having to grapple, reinforce this message almost daily.

Position Z is essentially a learning situation. By definition, we must inform ourselves about the unfamiliar context, not remind ourselves of what we were taught or trained to do. By definition, we must formulate the problems we have to deal with, not remind ourselves of problems previously learned. We must devise solutions and ways of applying them without the certainty of knowing the outcome, as a way of learning more about both the context and the problem. We need confidence in our ability to learn about the new context and to test possible ways forward from which we can learn. We need confidence in ourselves, and in our judgments, if we are to take actions in uncertainty and to see initial failure as a basis of learning how to do better.

In Position Z, intuition, judgment and courage become important; certainty based on proof and prior experience become less so. Specialist knowledge and skills are still relevant, but they are insufficient by themselves. It is necessary to appreciate their potential inadequacy, and to have the skills and confidence to enhance them. The solutions devised for the problems which are formulated will be essentially propositional in nature, developments from existing understanding. Evaluation of the consequences of actions taken in Position Z will enhance our understanding, and perhaps even improve our performance in Position Y.

Preparing people to be effective in Position Z is important at all levels of education. It is, however, of particular importance for higher education because it is from our graduates that many of our future leaders, in work as well as in the community, are likely to be drawn. As the intake to higher education expands and becomes more diversified, the more this will be true. The nation needs its future engineers, business executives, architects, social workers, administrators and citizens to be as capable in Position Z as they are in Position Y.

Individual responsibility and interdependence

By itself, coping with an accelerating rate of change in society and the work place is not a sufficient basis on which to define the capability needed of graduates. It is also the nature of some of the changes in social and organisational structures which is putting a premium on individuals, in association with others, having more responsibility for managing their own affairs. New technology means that more people can work remotely from central control. New attitudes to organisations encourage flatter structures in which more people have direct responsibility for their own areas of activity, and for liaising and collaborating with contiguous activities thus diminishing the more traditional hierarchical and authoritarian structures of control and communication. There are very few working situations in which team working and effective communication with fellow workers, suppliers and clients are not crucial to their success. Most specialists have to share their expertise with holders of related or even different expertise as a normal part of their working routine. Total Quality Management (TQM) requires all employees, as individuals or in teams, to examine their working practices and to promote changes leading to improved quality and / or efficiency. Squeezes on the public provision of services enhance the importance of community groups, voluntary organisations and local activity; local management in schools, polytechnics, colleges and hospitals are part of this general trend towards spreading the burden of responsibility for their own development to a greater proportion of the community. On a more dramatic scale, the peoples of Eastern Europe are having to learn that they too can take decisions affecting their own lives. We are moving very

quickly towards what the RSA calls 'A Learning Society'. The more effectively more of us can take responsibility for our own personal and professional development, the more we as individuals, groups and a nation will flourish.

Educating for capability and the quality of learning

Capability approaches to learning improve the quality of student learning by emphasising the application of knowledge and skills, the negotiation of programmes, collaboration with others and structured reflection on progress.

Application of knowledge and skills. Rigid distinctions between the possession of knowledge and the application of knowledge are unhelpful. Reflections on the outcomes of actions can extend our knowledge or deepen our understanding; greater knowledge and deeper understanding can inform our planning and improve the effectiveness of our actions. Properly managed, action based learning can be an effective way of testing what we know and improving what we do. Even the most abstract of academic specialisms, including art and philosophy, lend themselves to propositions, argument, challenge, application, learning from experience and the development of confidence in one's personal skills.

The negotiation of programmes. To prepare and secure agreement for programmes of study, students need to develop clarity of purpose, to communicate those purposes, to express their purposes as learning goals which can be achieved and demonstrated, and to show how what they propose to do is feasible in terms of time and resource availability. On most conventionally organized courses these highly educational activities are the preserve of the teacher.

Collaborative learning requires students to share roles and tasks which, in turn, requires awareness and acceptance of those tasks. There is access to a greater amount of data when students are able to pool their individual learning for the collective purpose. Pooling of learning requires students to communicate what they have learned to peers and eventually to others, and the collaborative learning environment gives opportunity for the practice and development of interpersonal skills.

Reflection on progress. Learner responsibility and accountability also give students greater involvement in the *monitoring* of their own progress. If comparison of grades with fellow students on identical courses is not available, simply because students are on distinctive programmes, then other means of checking progress have to be found. If students have clear purposes and goals, they have the opportunity to judge their progress according to the extent to which they feel they are understanding what they learn and according to the progress they are making towards the achievement of those goals. They will judge their learning according to the extent to which they feel able to converse or argue with established experts, either in person or in print. The ultimate test is when students' are taken seriously by the specialist reference group they are seeking to join. Finally, to demonstrate their completion of their negotiated programmes, students must be able to communicate what they have learned and the extent to which they have achieved their goals. Progress, in other words, has to be judged in terms of what the student is consciously learning.

Learner responsibility and accountability also promote *deep learning*, taking students into a search for meaning and for underlying principles. Students have to judge the relevance of what they learn to their longer term goals. As they do so, they are able to integrate the various components of their studies in their own minds, around the unity of their negotiated purpose. In the conventional course, meaning, underlying principles, relevance and component integration are the preserves of the teacher - if teacher teaches A then A must be relevant to the course. On capability programmes, students own their programmes of study and internalise their learning experiences.

Many educational researchers have associated student responsibility and accountability with strength of motivation and learning effectiveness. Sherman (1985), for instance, claims that 'when learners see themselves as instrumental to achieving outcomes they tend to gain higher levels of attainment', a view based on 'the concept that learning is a personal activity requiring personal learning decisions'. Knowles (1986) asserts that learners generally need to understand... how it will benefit them if they learn it' (p41) and that when they do understand, there is a release of so much energy for the learning' (p37).

Biggs (1985) concludes that being able 'to exert control over their own cognitive resources' is an important condition of 'deep learning' (Marton and Saljo, 1976) and recommends 'independent study' as a strategy for its development (p210). Pask (1976) refers to 'holistic learners' (p130) who 'assimilate information from many topics in order to learn the "aim" topic' (p130) thereby becoming 'comprehensive learners', capable of learning

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'at a deep level' (p132). Lamdin and Worby (1976) found that learning 'created of the student, by the student, for the student' at Empire state College fostered 'a kind of intellectual and emotional maturity' (p66), and Biggs (1979) argued that 'internalising strategies' lead to high level performance.

In summary, giving students opportunities to be responsible and accountable for their own learning prepares them for effective performance in their personal and working lives, enhances their commitment to their studies, promotes deeper understanding, builds confidence in their ability to learn and helps the development of high level personal qualities and skills. In short, capability education is quality education.

Challenges

Introducing Higher Education for Capability presents challenges for students, teachers, course designers, professional and accrediting bodies, institutional managers and employers of college graduates. It is a major task. Circumstances, however, are becoming more favourable, particularly

- a) the realisation that the rapid expansion of knowledge particularly in business, engineering and science can not be accommodated within the confines of conventional timetables,
- b) higher student / staff ratios, which are encouraging many institutions to rethink their teaching strategies,
- c) larger numbers of what used to be called 'non-standard students', causing institutions to introduce more flexible ways of responding to different student needs

Higher Education for Capability argues that helping students develop their independent capability is an aspiration of the highest quality. Its achievement demands a high level of commitment and invention on the part of the staff, flexibility on the part of the institution and support from external bodies. The educational challenge is to devise courses and invent learning experiences which help students acquire the necessary expertise - both knowledge and skills - for effective performance in familiar and predictable circumstances in ways which give students confidence in their ability to cope equally effectively with uncertainty and change.

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