

Welcome and Introduction to Conference: Education for Capability

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In welcoming you to the University, may I say that the roots of the Institution actually go back to 1820 and the establishment in Salford of a Mechanics Institute. Such institutes were established in many town and cities at that time. In Manchester, the Mechanics Institute evolved into UMIST. Here in Salford the evolution took place through the Royal Technical College and the Royal College of Advanced Technology to the University of Salford and we now maintain the royal connection through the Duke of Edinburgh who is the Chancellor of the University.

The original purpose of the Mechanics Institute was to provide education and training for working people. This link with industry has continued throughout the history of the Institution and indeed the present policy of the University is to maintain industrial links and to develop them more strongly.

The Charter of the University states that the Institution's objects 'shall be to advance learning and knowledge by teaching and research especially into the basic and applied sciences'. We have recently defined our aims and objectives more specifically in the three areas of: teaching, research and technology transfer.

In the area of teaching, our aims and objectives are very much in line with those that you as CDT teachers are considering today. We seek to produce graduates with certain characteristics, to fit them for employment in industry, commerce or the public service, to make them responsible but not uncritical citizens of society and to allow them to develop their individual thoughts and aspirations. In order to achieve these characteristics we seek to have students who develop the capacity to acquire, organize and systematise knowledge: to appreciate, to value and to make judgments: to identify, formulate and then to solve problems and to make, design, organise, produce or construct useful objects and services: and to co-operate with others valuing communal endeavour and achievement as well as competition. Our teaching aims are clearly in line with those of CDT teachers. Secondly, we emphasise research — 'original', 'derivative' and 'interpretive' — in science, technology and education.

Our third aim concerns technology and skill transfer and professional enhancement. We believe that universities must not only have the traditional role of undergraduate teaching and research, but we must also have, with equal excellence, the important area of transferring knowledge, skills, new devices and products into society. The important area of professional enhancement is demonstrated by this CDT Conference today.

In welcoming you, I want to highlight three ways in which we are putting these aims into practice. Firstly, the Information Technology Institute has recently been established to meet a great need for graduates in industry which higher education is not meeting at present. A curriculum is being jointly developed by the University and industrial personnel. The course is designed for students with any A-level subjects: Science A-levels for instance are not a pre-requisite for entry onto the course. Secondly, CAMPUS links about 80 firms to the University in order to help develop new initiatives involving industry and the University. Thirdly, the Centre for Advanced Robotic Studies has been established here with strong industrial support. Again, a joint submission with the other North Western universities has resulted in the new Centre for Exploitation of Science and Technology being located on the Science Park.

These developments indicate that here in the North West there is a new confidence. We are, I believe, making great progress and universities are taking an increasingly important role in the development of the region as well as the nation. I mention these initiatives in welcoming you here today for this CDT Conference, which is jointly organised by 'CDT Support Through Change' and 'Greater Manchester DESTTECH', because I think that they illustrate and identify the sort of developments that your work is leading to in the higher education system.

In this country we have been extremely good at producing Nobel prize winners in science, but, if we are so clever, why are we so poor? I think the emphasis which this University and CDT teachers have made in trying to link increasing knowledge with the use

of knowledge and the development of creative activities, is absolutely vital to our nation. We want to maintain the qualities that enable our country to win Nobel prizes, but we need to give equal status to the use of knowledge, to creativity and to developing new and imaginative ventures. The problem in our country is that we have not educated sufficient numbers of people to the required standard and indeed we have not always developed students in the right ways. Our industrial competitors educate greater numbers of the 16-18 year age group range to higher levels. If we compare the number of people with recognised qualifications in this country with those in Germany we fall way behind in both numbers and quality.

The exciting work that you are involved with in schools is not just feeding into our work in higher education but also equipping people for many areas of work within the community. I use the term 'exciting work' because I think that it is nationally important, innovative and has a very stimulating flavour.

You are working in collaboration with others in developing your work and here at Salford there is a great collaborative effect taking place in CDT. The CDT Support Through Change project, managed from the University of Salford is connected with the Crewe & Alsager College of Higher Education, De La Salle College and Edge Hill College of Higher Education, and a number of local education authorities including Bolton, Bury, Cheshire, Manchester (the host), Oldham, Salford, Stockport, Tameside and Trafford, together with HMI and the Manpower Services Commission. May I mention the collaboration of IBM with today's event. The Conference organisers are pleased to acknowledge their financial support.

My final task in this introduction is the delightful one of welcoming Lady Parkes. She will chair the morning and the afternoon sessions. She is very much involved in national committees and overseeing the development of CDT examinations. I hope you will all enjoy the Conference and find it valuable and now I welcome and introduce Lady Parkes.