

EDUCATION RESEARCH AND FORESIGHT WORKING PAPERS



RE-INTERPRETING LEARNING

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Challenges of societal change Education versus Learning

HISTORICAL OVERVIEW

Learning has always been an essential part of human lives. When education is understood broadly as learning designed by adults for the young, it may be said to have a history almost as old as human beings themselves. Schooling, however, or the contemporary form of formal education, only started around 200 years ago at the height of the industrial era in the West. Industrialization saw the emergence of formal school systems and mass education where literacy and numeracy were taught essentially for urban jobs.

Contemporary school systems in other parts of the world have been largely modeled after schools in the West. While in many instances, these were initially introduced through missionaries and colonization, the development of mass schooling was also an expression of active efforts towards the modernization of nations. In Asia, for example, contemporary school started rather late, largely at the turn of the 19th-20th centuries, replacing traditional religious institutions of education in South Asia or the civil service examination system in East Asia. The expansion of schooling as the contemporary manifestation of formal education coincides with the spread of industrialization in these Asian nations.

It is therefore understandable, although often forgotten, that formal education in the contemporary world is conceived in what is essentially an economic discourse. At an individual level, education is about *employability*. Education was designed to prepare young people for urban employment based on a very fine division of labor and for jobs that remained relatively stable over time. At the systems level, education was seen to be essential in training manpower for industry.

Following World War II, this economic discourse on education was further strengthened with the emergence of the human capital theory. Governments' perceptions of education systems shifted from one inspired by a social welfare approach to one in which education was seen as an investment yielding economic returns. The value of education was measured in terms of ratesof-return to investment in education. Since then, the quality of education systems has come to be considered a major factor in « international competitiveness ».

As a social institution, education has, over time, gathered its own momentum with its own protocols. In most societies, education remains selective in one way or another. Although there are legal provisions for compulsory/universal schooling in most countries, screening and selection remains a basic feature of education systems. In other words, most education systems are conceived as pyramids of student abilities, which are modeled after the pyramidal manpower structure typical of a manufacturing organization.

CHALLENGES OF SOCIETAL CHANGE

However, society has changed. Multidimensional societal change is now posing new challenges to education as an institution. Some of our basic assumptions are no longer valid.

Firstly, modes of production have changed. Mass production based on a clear division of labor is gradually giving way to quality products/services which are tailor-made for clients. «Less of more», less quantity and more variety, has led to smaller work units and simpler organizational structure of shorter durations. New products, new means of production, new technologies, new markets, new ideas, new networks, are continuously emerging. Even within the economic sector, manufacturers, service providers, investors, and the workplace in general, have to constantly adjust themselves, and hence, have to continuously learn and adapt. «Learning to do» has become much more essential than it used to be.

In addition, individual lives have changed. Job insecurity, changing occupations and organizations, varying expectations, precarious rewards have all made work lives less predictable. Organizational loyalty and occupational identity are fading away. Individuals, even within work lives, face endless changes and new challenges. The knowledge they possess quickly becomes obsolete. New technologies and skills emerge on a daily basis. Individuals across the world face demands for new ideas and innovative solutions. They encounter new social relations and new social norms every day. They are also confronted by new moral and ethical dilemmas. Moreover, individuals are often forced to take sides in political confrontations and ideological debates. With much less organizational binding, increasingly individuals have to manage themselves. «Learning to be» carries a very new meaning.

Moreover, environments for human lives have also become less predictable and perhaps less favorable. Catastrophic natural disasters, major man-made accidents, unforeseeable economic crises, mounting potential for armed conflict, organized and individualized terrorist activities, recurring diseases and emerging new epidemics, spontaneous social unrest, irresponsible party politicking, and the widespread practice of corruption, have all increased in frequency and intensity. There is no sign that any of these might fade away in the foreseeable future. Under these circumstances, ethical principles and moral conscience are more important than ever in community lives. Peace, justice and fairness come forth as major issues in the international arena. Driven by the global market, world-wide environmental concerns and pervasive digital networking, mutual understanding and tolerance of differences have become the essential ingredients of citizenship in a global world. "Learning to live together» is arguably even more important in todays' world than in the 1990s when it was first introduced as one of the pillars of education in the 'Delors' Report'1.

Finally, the rapidly changing contexts of development have created new societal problems thus challenging established institutions. Among these challenges, governments are finding it increasingly difficult to claim that they are capable of solving all the major societal problems. Governments are attempting to adjust their roles and positions while civil societies begin to rethink the meaning of democracy. Free markets are also facing challenges of their own. The market-government interplay is taking on a new turn. Organizations, be they financial institutions, commercial firms, industrial factories, or non-governmental organizations, all have to adjust to the new political environments, and the new market-policy interplay. Even for families and religious institutions, stability has become a luxury. Not only individuals, but all organizations, institutions and governments have to learn or «to learn to learn». «Learning to know» has much wider application in today's world.

EDUCATION VERSUS LEARNING

These societal changes are posing fundamental challenges for education as a social institution. Education, however, has been slow to adapt to these changes. The institution and its protocols are so strong that it is not easy for the formal education system to respond to current changes in society. Yet, there are several imperatives that underline the need for educational change.

First of all, the current economic discourse is increasingly invalid. Manpower requirements and individual career paths are increasingly unpredictable and diverse. It is no longer valid to assume that education aims to prepare people for specific jobs or foreseeable manpower requirements. There is an urgent need to change the discourse in education to one of *learning*. Current discourse should, for instance, be adapted to refer to:

> *learning leadership* in schools, rather than school management;

➤ learning resources and learning environments, rather than educational finance or school equipment;

¹ Delors, J. et al. (1996). Learning: The Treasure Within. Paris, Unesco.

➤ teachers as professionals of learning, rather than as a teaching force;

 tests and examinations as assessments for learning, rather than assessment of learning;

technologies as a means of liberating learners, rather than as a way of replacing teachers

Moreover, workplace expectations have extended well beyond knowledge and skills. Unlike the industrial era where production relied on depersonalized «impartial» design and systems, the human element has become increasingly important in today's workplace. Attitudes, values, ethics, and other personal attributes have emerged as new foci of concern. In many jurisdictions, such learning is yet to be on the agenda of government education policies.

In addition, technologies have changed the ownership, control, transmission as well as creation of knowledge. Schools and teachers are no longer the only source of knowledge. They have to assume new roles. How students should become active learners, how teachers become learning facilitators, how technologies help liberate learners, and how schools become an environment conducive to genuine learning, have all become the prime goals of education development. Unfortunately, many education reforms continue to place their emphasis on teacher policies, school administration and public assessments, with little direct reference to student learning.

Student learning, which should be the core concern of education, is often taken for granted, but neglected in reality. Current societal changes point to the necessity of restoring the central position of learning in education. They all confirm the forward-looking vision of «Learning to Be» outlined in the 'Faure report' more than 40 years ago.2 They also reflect the wisdom of the four «Pillars of Learning» in the 1996 'Delors report'.

The current drive to reform education in so many parts of the world runs the risk of reinforcing the institutional elements of education systems, rather than attempting to fundamentally rethink education. One typical but widespread trend is to emphasize test scores as a proxy for student learning outcomes, and to strengthen control of teachers as a principal means of improving student learning. Such approaches may be justifiable, but only if associated with genuine concern for student learning.

There is a fundamental danger of overemphasizing administrative «accountability» in lieu of professional accountability over schools and teachers, and to apply stringent management measures in place of professional improvement. In the end, there would be too much reinforcement of education protocols, which are but peripheral, if not detrimental, to students' genuine learning. There is also a danger of placing teachers in the position of being administered, hence reducing teachers to passive employees, and students to passive receivers of information.

Beyond pressures within education systems, there are new pressures (often political in nature) which are not helpful in facilitating student learning. Short-sighted political concerns, partisan politicking, political movements, and social unrest, all hinder efforts toward putting education onto the right track of learning.

Meanwhile, however, there has been substantial progress in various aspects of the science of learning. Scientists at the frontiers of research on learning have reaped fruitful harvests that have broken new ground in understanding human learning. Such research findings should lead to new approaches to student learning, re-confirm traditional wisdoms in education, as well as unveil misconceptions about student learning.

There are findings in the science of learning that have received much attention and brought about valuable insight. For example,

 Learning is meaning making by human beings of the world external to them.

 \rightarrow Learning is the active construction of knowledge by the learner.

> Learning is effective at understanding, and understanding is valid in application of the knowledge thus constructed.

➤ Learning is a matter of experience and takes place during doing and using;

➤ Learning is most effective in groups; collaborative learning is the most effective method of learning.

> Different people learn differently.

It is prime time now to review changes in society, the state of affairs in education development, and to initiate a global movement to restore the central position of learning in educational efforts.

² Faure, E. et al. (1972). Learning to Be: The world of education today and tomorrow. Paris, Unesco.