

포럼

교육혁명이 오고 있다



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■ 교육에 혁명이 오고 있다. 지난 30여년 동안 공교육의 질이 떨어지면서 서구에서는 사립학교가 대거 건립됐고, 아시아에서는 학생들이 학교와 학원을 왔다갔다 하며 종일 공부만 한다. 학교에서 교사가 가르치는 교재나 자료들은 더 이상 사실이나 진리가 아닌 것이 많다. 과학분야에서는 날마다 새로운 진리가 나온다.

이제 학교에선 정보의 홍수 속에서 어떻게 비판적 사고·통찰력·이해력·합리적 판단 능력을 기를 것인지를 가르쳐야 한다. 선생(先生)이란 말에는 모든 것을 다 아는 사람이라는 뜻도 담겨 있다. 하지만 이제 선생은 매일 인터넷 검색을 하는 학생보다 더 모를 수밖에 없다.

‘암기’ 대신 ‘분석·창의력’이 중요

미래사회에는 엘리트교육이 사라진다. 미래사회는 엘리트층을 원하지 않기 때문이다. 다가오는 미래는 쇼 사회(show-society)로 간다. 모든 사람이 페스티벌을 즐기고 남에게 보여주는 것에만 신경을 쓴다.

현대사회는 이미 문맹이 늘어나고 있다. 영

상세대들이 TV와 컴퓨터 비디오게임만 하다 보니 글을 쓰고 읽는 것을 잊어 버린다. 고령사회로 들어가면서 아이들의 사회 경험과 현실 감각 성숙도가 오히려 떨어진다. 아버지 세대에서는 20대가 배우고 경험하던 것을 25세에서나 배운다. 아이들이 손쉽게 일자리를 떠나고 인내할 줄 모르며 행복을 잘 느끼지도 못한다.

미래사회는 오히려 정상적인 사람보다 조금 이상한, 즉 사회 상식에서 벗어난 사람이 환영 받는다. 정형의 틀에 박힌 아이들, 판에 박힌 사고를 하는 아이들은 환영받지 못한다. 교사와 학원강사가 가르치는 것을 달달 외우기만 하는, 성실하지만 창의력이 없는 아이들은 실패한다. 미래사회의 총아가 될 남과 다른 아이, 비정형의 아이들은 현 체제 속에서 자신의 비범성을 알릴 방법이 없다.

이들이 자신의 비범성을 이끌어내 인정 받도록 하는 것이 미래의 교육이다. 지식은 더 이상 암기할 필요가 없다. 날마다 업데이트되는 지식과 정보는 인터넷에 널려 있기 때문이다. 대신 이러한 지식들을 분석하고 창의적으로 상품화하는 능력이 매우 중요하다. 사안에 대해 감성적으로 접근하면서 미래사회의 변화 흐름을 포착하고 이해할 수 있는 아이들이 최대의 승자가 된다.

교육의 미래는 자명하다. 평생교육, 사이버 대학, 이동성 강화에 따른 다문화 교육, 긴밀한 산학연계, 집단지능, 적시학습, 부모의 직장 스

케줄에 맞춘 유연성으로 교육 스트레스 줄여주기, 영상·인터넷 게임 세대를 위한 교육 시스템의 변화, 엘리트주의가 아닌 대중주의로서의 창의성 기르기 등이 미래교육의 핵심 코드가 될 것이다.

정보지식 사회에서의 교육은 큰 변화를 겪게 된다. 이미 인터넷 검색을 해 가며 시험을 치는 시대다. 그러나 각국의 교육자들이 이익집단화해서 온갖 구실을 갖다붙이면서 변화를 거부한다. 오히려 획기적인 변화는 아직 교육계의 이익집단이 제대로 자리잡지 못한 개발도상국에서 먼저 시작될 수 있다.

미래의 변화 아는 것이 힘이다

미래의 교육은 사람들이 사회의 변화 방향을 적기에 알고 그에 맞춰 준비하는 데 초점이 맞춰져야 한다. 미래사회 변화에 대한 선행학습이 필요한 이유가 여기에 있다. 미리 알면 앞서갈 수 있기 때문이다. 한국에는 유엔미래포럼처럼 미래사회를 연구하는 기구나 기관이 많지 않다고 들었다. 미래사회 변화에 대한 인식을 갖고 미래학의 주요 과제를 연구하는 것이 미래사회의 경쟁력을 키우는 지름길이다.

현재의 사고가 아닌 미래 사고를 하는 사람들의 이야기를 듣는 것이 바로 경쟁력이다. 지금 있는 것만 배우면 박물관사회(museum-society), 즉 냉동 사회다. 미래의 변화를 아는 것이 바로 힘이다.

When a revolution is needed in the educational systems

By Fabienne GOUX BAUDIMENT 27/03/07

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During the last three decades, education has become a major issue in most of the countries in the world.

Several criticisms are made to the national educational systems.

The first of them is the decline of the quality (in terms of contents) of the public system. Hence the development of an alternative system of private schools, where the children can go instead of going to the public schools like in Europe and in some Western and Arabic countries, while in Asian the children attend both, driving them crazy as they have only time for schooling and doing their homework.

The second is growing inadequacy between the competences taught to students and the skills required by the employers. The goals of the school —and often of the higher education itself— seem to be to fill the students' head, too often with already obsolete material, rather than to teach them how to learn by themselves and acquired the needed competencies such as a critical mind, a comprehensive understand, a systemic approach and relational capabilities. The basic requirements have also been enlarged: they are no longer only to read, write and count, but also to “multi-speak” (fluent practice of foreign languages and cultures), to click (use of a computer) and to surf (use of internet), which most of school do not provide.

The same inadequacy can be observed, in one hand, in the pedagogical methods: most of the current ways of teaching are still nothing else than asking for pure memorization; teachers do not care if the child understand or not what he has to remember; this phenomenon is very similar to the issue of birth delivery, when women were supposed to suffer to give birth. And in the other hand, between the management of the schools and the current lifestyles: parents and children's schedules are not coordinated, affiliation to one school is imposed without considering the distance from home or the transportation availability, the rhythm of the courses leaving no time to breath and think.

Mass education (with the related lack of teachers and resources) and democratisation (the ambition to get 80% of a generation graduated) are partly responsible of this phenomenon. But the structure of the oldest national education systems, often nicknamed “mammoth”, unable to be reformed and adapted is also guilty. As well as the fact that in some countries the title of teacher or professor —like the Chinese mandarin of the old time— prevent you to be continuously trained, to update your courses, to really dedicated yourself to your students: there, professors are just a dying elite.

Last but not least, elitism has to be considered here. Democratization of education is often the opposite of an high-level elitist system. Does it mean that Cambridge, Oxford, Stanford or any of the first ten universities in the world will stay forever a place only for elite? Does it mean that the model elite/high level of education and mass/low level of education is unbreakable?

Emerging trends

Illiteracy, as knowing not to read and write, is coming back again in most of the rich countries, mainly due to migrations, while illiteracy, as having forgotten how to write and read, is steadily increasing in the native population, mainly to the growing abandon of literature (to read a book) at the benefit of the civilisation of image (show-society) led by TV, computers and video-games.

As life expectancy is extended, the observed level of maturity in terms of understanding the reality and involve himself in it, is moving back: the reasoning of a young European

about 25 is at the same level than those of his father when he was 20. Luxury, easy access to almost everything, enlarged freedom would be the reasons of this situation.

Youth unemployment even when jobs are there is one of the consequences of this situation, the main other being the unhappiness at work and development of violence.

Emerging needs

Within this landscape, new needs are emerging from the employers' point of view, such as ability to quickly grasp a new situation, flexible adaptation, curiosity and willing to progress, polyvalence, openness to other cultures, open mind, efficiency, productivity, control (zero default/error).

From the students' points of view, these new needs are related to how to better understand the world in all its complexity and from an evolutionary perspective, how to fit the employers' requirements, the spread of distant learning and the international certification (diplomas available everywhere in the world and unification of the formal levels of teaching (bachelor, master and phd).

They also need to be given time to think, especially in higher education where they have to study an increasing number of disciplines, often taught in only 30-40 hours, and without no clear relation to what will be their job or their knowledge needs in the future. They above all need to learn to learn, and not to memorize.

Well-known answers

To face these issues, we already know the answers: freedom in the choice of the school that will impose competition within the educational system to better improve it; large consultation and dialogue between education system and firms, and benchmarking, resulting in new policies with adapted contents and methods; use of cognitive sciences to reshape pedagogy; same thing to improve the school management taking into account parents' constraints, adaptation to the current trends such as the "show-society" (or "images-based society"), and strong fight against illiteracy; rethinking of the deep meaning and limits between elitism and democratisation.

So why does anything change? Because we know the problems but we lack the courage and the will to implement the solutions. Indeed we have to carry out a whole rethinking and redefinition of what is education in the XXI century. This work has already been undertaken by some small groups of deans or vice-chancellors, such as the Magna Carta NGO (<http://www.magna-charta.org/home.html>), or by some universities such as the University Sains Malaysia. But the most drastic change will occur in the emerging countries rather than in the rich ones, sleeping on their former success. Already Asia appears like the next leader in higher education around 2030, if the region succeeds to harmonize ambition, means and identity and not to just copy the western systems.

Hopes for tomorrow

What makes the excellence of a society, is the way in which it welcomes deviants. Not those students which run themselves easily in the mould, which will be teachers, engineers or commercial. But those which do not answer the conventional criteria.

These are of two kinds. On the one hand "out-of-limits": between those disabled and those exceptionally gifted, the border is sometimes very thin. In the other hand, the different ones, the unclassifiable ones: the children whom one feels intelligent but which cannot show it in a system extremely coded and rigid. It is very easy to be intellectually different: for example to have a mindset oriented towards the synthesis rather than towards the analysis, to be good neither in literature nor in math but in understanding how the world functions, in a comprehensive way, or in being sensitive to the future more than to the past... However, for these young people, there is no place in the education system. This later remains a mould to produce conformity by eroding the

differences which, however, could become these sources of innovation that in the other world —that of the adults— that are sought so loudly.

The way the difference is looked at is symptomatic of the capacity of evolution of a society. To consider the mentally disabled person like one “retarded”, the exceptionally gifted one as “precocious”—what a strange symmetry of what would be the same evil!— and the different one as a “good for nothing” is revealing this impotence to face the future, to face the novelty, than the anthropologist Claude LEVI-STRAUSS described by opposing the “thermodynamic” to the “mechanical” societies.

Education has been the thermodynamic dynamic engine of the progress since the XIX^o century. Most of the current national education systems seem to reverse the process in producing a museum-society, frozen in a world which already is not any more. Time of change is clearly coming: time to understand that we know so little about intelligence while we are already supposed to enter the society of knowledge...
