

# **Utopias and Realities of Learning in an emerging network society**

## **Hand-out/Working Paper**

International Colloquy  
Knowledge Age? Utopias and Realities  
Mexico City, November 17-18, 2003

**Hans F. van Aalst<sup>1</sup>**

---

<sup>1</sup> Associate Professor at Fontys University of Professional education, The Netherlands. Until recently: Managing Director R&D KPC Group and Consultant for the OECD on the Future of Schooling. The views expressed are those of the author only. Comments are welcomed through e-mail: [hfaalst@ision.nl](mailto:hfaalst@ision.nl). Further information at: [www.hansfvanaalst.info](http://www.hansfvanaalst.info)

## Contents

1. Introduction .....	3
2. Etre et Avoir – different realities and utopias .....	3
3. The school as a national institution .....	4
Invariants .....	4
Values and beliefs .....	4
Beliefs of learning.....	5
The robustness of the institutional set-up .....	5
4. Limits on growth; decreasing return on investment.....	6
5. Changes in society.....	7
The rise of the network society .....	7
The changing knowledge paradigm.....	7
Social texture and identity.....	8
Work and employability .....	8
The risk society .....	9
The power of identity, pressure groups.....	9
Bonds.....	9
Autonomy and authenticity.....	9
Globalisation .....	10
Indications of devaluation of national systems.....	11
6. In search for alternative forms of learning.....	12
Young people as trendsetters.....	12
Complaints .....	12
Trendsetters learning .....	12
Varied learning biographies .....	13
Political responses to the devaluation of the robust model of schooling .....	13
Scenarios .....	13
Lifelong Learning.....	14
7. Learning in Utopia .....	14
Learning in network society .....	14
From schooling to learning – criteria for emergent practices.....	14
Learning patterns .....	15
Educational institutions and learning venues .....	16
Learning content and methods.....	17
Teachers in the knowledge society.....	17
8. Change and educational policies for the future.....	18

## 1. Introduction

Learning is nowadays immediately associated with learning in school. As a matter of fact, to provide institutionalised learning for everybody was one of the biggest, if not the biggest project of modernity and concerned all countries and societies. In this contribution, I develop the argument that the robust model of schooling as it has been developing from the beginning of the 19<sup>th</sup> century has reached its limits. Its internal coherence led to decreasing added value as participation rates grew. And its structure and external outcomes increasingly mismatch the values and demands of the emerging network society.

The emergent network society is not only an instrumental change. I notice a transformation of values in three value domains: knowledge, identity and social texture, and globalisation. Politicians have developed scenarios for educational systems to deal with the new times, but tend to choose “save” scenarios, that basically improve the robust system, but do not match the new values that underlay the network society

Realities ..

The realities of learning for young people are nowadays quite ambiguous: they know that they must get a diploma in formal education – but the joy of learning lies outside formal education, lies in own-initiated projects and not standardized curricula. Increasingly, young people create their own learning and I consider them to be *trendsetters* from whom we as educators can and should learn. I describe some of the features of trendsetters-learning.

And my Utopia.

As an image of my personal Utopia, I suggest some elements of new learning, based on my analysis of the change in the three value domains. And I suggest a set of criteria for selection of valuable practices that may help to develop this new learning in a network society.

## 2. Etre et Avoir – different realities and utopias

The French movie *Etre et Avoir* is one of the successes of 2003 in cinemas in Western Europe. It is a careful and heart-warming registration of the work of the son of a Spanish emigrant as a teacher for 13 children in the age range 4- 11 in a rural village in the Auvergne (France). Why does this movie touch the heart of so many? Is it nostalgia? Or is there a certain recognition of what many feel to be “good education”<sup>2</sup>. Something that has a value in its own. Indeed, *Etre et Avoir* reflects many of the pedagogical ideals of the last century. However, I would guess that it is Utopia for most citizens today, given the reality of the school as they know it these days. Most certainly for the secondary schools, and in many instances as well for primary education.

My youngest daughter (24) recognised the warm pedagogic climate in the class of the movie, but she felt the approach of the teacher a little old-fashioned, not open to the world. If a movie of a real classroom evokes feelings of nostalgia or an Utopia in adults and at the same time is felt as closing and old-fashioned by the younger generation, does this mean that there are different realities for different generations? Does Utopia of the older generations fit the realities of the coming generations?

The movie ends with a perspective on the transfer to college. What will happen there? Will the warm pedagogical climate of adaptive education around childhood continue? Or will it change and address a new phase of childhood, often described as adolescence? Will the school force these children to unlearn their curiosity, their personal closeness, the discovery of interpersonal

---

<sup>2</sup> This was brought to my attention by my colleague at Fontys University, Jozef Kok.

values etc., as is often suggested. Are the realities of primary education different from the realities of secondary education?

### **3. The school as a national institution**

The development of national school systems reflects the processes of the emergence of nation-states from the end of the 18<sup>th</sup> century in western European countries. Differences in school systems between countries reflect differences in nation building, with its specific solutions for dealing with religious, economic, social and cultural controversies (De Vijlder 1996). Studies of the OECD (<http://www.oecd.org/EN/home/0,,EN-home-4-nodirectorate-no-no--4,00.html>) and the Information Network on Education in Europe (Eurydice [http://www.eurydice.org/accueil\\_menu/en/frameset\\_menu.html](http://www.eurydice.org/accueil_menu/en/frameset_menu.html)) provide a rich resource to illustrate the differences as they evolved until now.

However, despite the differences, the systems have remarkable robust and universal characteristics. The OECD study on Schooling for Tomorrow notes:

The universality of the “place called school” across OECD countries is a more notable fact than might at first sight appear. Only a century ago, universal secondary education was not established in some places and compulsory elementary attendance still in its infancy. Now, they are among the most established features of our societies. From this observation potentially opposing conclusions can be drawn as regards the future of schools. On the one hand, their historical regency is a reminder that they are less permanent than they seem, and may be subject to further important change in the future. On the other, that so many common arrangements for their young indicates the power of the schooling model. (OECD, 2001).

The universality may be explained by several factors. One of these is obviously the success of the system in terms of increasing participation and the supply of competent workforce, as the OECD study notes. On a deeper level the universality may be explained in terms of the the robustness of the institutional features of schooling and the deeply rooted underlying values.

#### ***Invariants***

Walo Hutmacher (1997) has suggested the following “invariants” of schooling:

- The structure of educational authority;
- Schools as formal organisations, including practices of selection and assessment, prescription of objectives and temporal and spatial arrangements;
- The constancy of schools’ latent functions, such as keeping children from the street

#### ***Values and beliefs***

Inspired and challenged by Walo’s analysis, I have suggested that the robust model of schooling embodies typical dominant values of the 19<sup>th</sup> century, including the following (van Aalst, 2002):

- the mechanical and hierarchical way of organizing labour of the early industrial mode of development. One can indeed look at schools as clear examples of mass-production, including the inevitable waste along the assembly line<sup>3</sup>. Growth (increase of participation) at less costs – a typical feature of mass-production systems – is indeed the main feature of national school systems in the 20<sup>th</sup> century.
- the emergent nation states and their role in ensuring human capital for the bureaucracy and later for management positions in industry as well as developing socialisation in

---

<sup>3</sup> See for an elaboration of this point: Senge, 1994.

terms of citizenship. The strong bond between education and national governments stems from this.

- The functional need for screening, associated with a commonly shared value of personal merit as the key for success and responsibility in society.
- The dominant perception of what valid knowledge is, based in the Enlightenment, institutionalised in the national research Universities ” as they have emerged from the 19<sup>th</sup> century and the associated concept of “academic freedom”.
- A hierarchical and static model of the texture of the society with concepts as class, status etc. and the associated perception of personal identity.

### Beliefs of learning

Such values are reflected in all sorts of beliefs of teachers and parents, and shaped the realities of education. For example, one account of the beliefs of learning in schools is the following<sup>4</sup>

- Learning is something you do with your head,
- It is an individual process,
- Learning is basically acquiring knowledge from books; Knowledge is basically expressed in language
- Knowledge objective truth – developed in academic freedom – away from practise,

And although several reform-pedagogues have tried hard to establish different practices, their endeavours have always stayed at the fringes of national systems.

### ***The robustness of the institutional set-up***

The institutional set-up based on these values and beliefs is indeed robust. Let me give two examples, one being Howard Gardner’s struggle for “multiple Intelligences” and one in relation to the equal chances movement.

Howard Gardner (1999, Chapters 2 &6) gives a personal account on how he gradually developed the understanding that the beliefs of 19<sup>th</sup> century about a general Intelligence (IQ or g-factor) might be mistaken and that the institutionalisation of this concept and the measuring instruments around it in schools might be an historical error. It is interesting to note that selection(screening) along one dimension is only institutionalised in education and does not occur in any other institutionalised selection process in society. Gardner describes his struggle to develop new beliefs in terms of “multiple Intelligence”. However, the concept of “multiple intelligence” is obviously incompatible with the screening-function of the robust model of schooling, for this is based on a one-dimensional model of knowledge and skills, known as “educational level”. “Educational level” however, may be an artefact of the model of schooling.

The second example is about the belief in meritocracy. The meritocratic model of schooling implies a standardized supply in terms of access, teachers, books etc; differences in outcomes are a given and reflect the merit of the individual. It is well known that this model of schooling brings a systematic underachievement of certain groups in society. This observation has lead to a pressure on schools and teachers to work outcome based in stead of supply based. This has not been the success as was expected. The reasons are complex<sup>5</sup>. I would guess that it underestimates that a meritocratic system produces low achievers by definition. In particular, the use of tests that have been developed for meritocratic systems will always differentiate

---

<sup>4</sup> A fuller, but perhaps more debatable list is given in Senge, 1994

<sup>5</sup> I have tried to analyse some of these reasons in vanaalst (1996)

between high and low achievers. And indeed: common sense in the public does expect education to make these differences.

If educational systems are indeed robust, they will also be resistant to change. Such systems only allow change in terms of variants of the same and incremental improvement. Transformational change will only occur on the basis of change of underlying values and obvious negative returns on investment.

So let us evaluate the robust model of schooling along those 2 lines: returns in investment and changing values.

#### 4. Limits on growth; decreasing return on investment

Limits on growth follow in the first place from the characteristics of the system itself. The stable growth of participation in education can and has been labelled as a success, but there is evidence that growth beyond a certain level may be counterproductive. There is a sort of diminishing return on increase of participation in education above a certain level. The limits may already have been passed. Three types of arguments contribute to this point of view.

1. One argument goes that the meritocratic function of the system has reached its limits. At the start of such a system, there is a reservoir of hidden talent in the population, that gets its chance to develop, even if the level they reach is not the highest possible. After some time, the hidden talent has been developed and the system tends to *produce* losers. The answer of educational policy to this problem has emerged from the 90<sup>th</sup> and includes basically the shift *from supply-based* education to *outcome-based* education, with a strong emphasis on extra means for weakly achieving participants. However, as I have argued it is highly unlikely that this will solve the problem (van Aalst, 1996). Beck (1986) has characterised the continuity of social inequality on a higher educational level as the “elevator effects” of the expansion of education.
2. Another argument goes that learning in a school context is effective in terms of rather specific types of learning outcomes, but less so for others. Staying too long in school settings may be detrimental to the emergence of other types learning-outcomes which are at least as important for economic, social and cultural development. Examples in case may be entrepreneurship, social and civil awareness and artistic production. But the features of the robust model of schooling are difficult to combine with the personal and contextual characteristics of innovative knowledge. Lundvall and Borrás (1997) argue that heavily codified qualifications may even be counterproductive for work. From the point of view of the individual, longer participation in education is still an advantage (in terms of initial income and chances for work); from the economic, social and cultural point of view it is probably not very productive.<sup>6</sup>
3. The third argument – closely related to the latter – is that school systems have an internal mechanism of self-generating growth. The system generates demand by an internal competition between participants to belong to the upper section of the distribution curve. Students have to achieve more and better than their peers do in order to reach the top of the ladder. (De Vries, 1993; Gardner 2002). In this process they gain more and more school-knowledge. Beck (1986) has characterised the continuity of social inequality on a higher educational level as the “elevator effects” of the expansion of education. This internal “rat-race” is rooted in all sorts of marking practices, but also in terms of social emotional messages within the “hidden curriculum”. The effect is that students accumulate more and more school-knowledge on internal grounds. This knowledge tends to be uncoupled from the real needs of society in terms of competencies. It may be doubted as well whether it contributes to personal development.

---

<sup>6</sup> This proposition has been elaborated in ARO (1994) (In Dutch)

Thus: the sort of socialisation that goes along with schooling could have negative effects if it takes too long. The need may not be more of the same, towards ever-higher levels of initial schooling. Increasingly, the need may be of different ways of learning in a life long learning setting .

## **5. Changes in society**

The second source that may challenge the robust model of schooling are changes in the underlying values. And indeed: the dominant values of the industrial society are weakening. Gradually other values take the lead.

### ***The rise of the network society***

This has been named as the transformation from the industrial mode of development to the *informational* mode of development or as the move towards the network-society. (Castells, 1996). The term *informational* does not refer to the introduction of computers and ICT, but refers to changing patterns of social organisation, changing values of knowledge and identity and different conceptions about states, state governance, universities and schooling. As compared to the features of the industrial mode of development, the informational mode is characterised by variety, design and innovation, participation, complexity, flow of knowledge, mass individualisation, global institutions, regionalisation and communities of practice. Most governments in OECD countries adhere to the phrases of the informational model.

A study of societal trends that I conducted for the OECD from studies in Canada, Germany, Japan and The Netherlands (Van Aalst, 1998, 2001) revealed three areas of changing values in society, which drive the emerging network-society and in fact challenge current school systems:

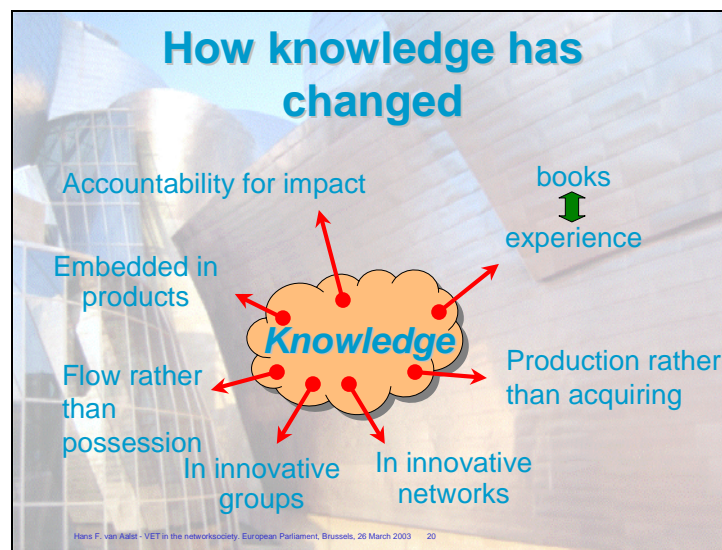
- the knowledge paradigm;
- identities and social texture;
- globalisation.

### ***The changing knowledge paradigm***

The changing knowledge paradigm refers to a different way of understanding of what knowledge is about, as well as different positions in judging which kind of knowledge is valuable. In short one can say that the production of knowledge in the disciplinary organised way in Universities has been enriched with an “transformational” mode, integrated in innovation of products and services and with different stakeholders. This has been called “mode 2 knowledge production” (Gibbons et al., 1996). In fact, Mode-2 production of knowledge explains these days the major increase of knowledge. Furthermore, knowledgeproduction is now much more seen as a process between tacit and codified forms of knowledge, it is more “in the flow” than in the books. Finally, knowledge is not only seen as an individual asset, but more and more as an asset of groups and networks. An account of these changes may read as follows (Van Aalst 1998):

- The subjective, contextual character of knowledge is gaining importance, while data and information are more and more accumulated in automated expert systems and databases. Much learning is localised and much of technological knowledge has to be adapted to specific local conditions to be effective.
- Tacit knowledge is more and more seen as a most valuable sort of knowledge. Processes of *interaction between codified and tacit knowledge* are explicitly managed.
- Expertise is becoming less an attribute of individual persons and more a property of *systems* (expert systems) and *networks*. Having smart people is not enough; you need *smart teams* and smart organisations.

- The origination, transmission, assimilation and use of knowledge occur across boundaries of several firms – and increasingly in *cross-border value-added chains*: strategic alliances and networks.
- Knowledge management increasingly uses a *variety of resources and means of dissemination*: learning from research, history (cases), from day-to-day work, knowledge centre, helpdesk, benchmarking, competition, experts, informal meetings, playing. Dissemination includes general publications, internet sites, technology licensing, foreign study and apprenticeships and trade in capital goods, products and services with a high knowledge content.
- Knowledge management focuses as much on *cultural elements* e.g. building a community, developing skills to have productive conversations and a sense of purpose, as on technology systems.



## ***Social texture and identity***

Changes in felt identity and social texture include changed lifestyles, demography, welfare, values, norms and social cohesion, the role of woman, the emergence of social pressure groups, caring for environmental and social issues, changing patterns of personal responsibility, social care, social-emotional development, motivation, etc. I will shortly discuss here: work and employability, risk, pressure groups, bonds and authenticity.

## **Work and employability**

Work is becoming more and more individualised. Part-time work, flexible working hours and temporal work alternating with periods of schooling are becoming normal. Work is less concentrated in one place, fixed times, one organisation and one group of colleagues and is more based on ad-hoc networks. All sorts of self-evidences and guarantees from the industrial society are suddenly less sure. Workers are now less connected to the institution they serve. They are more autonomous, feel connected to their profession and have contacts with professional peers all over the world. They change jobs easily. Where in the industrial mode of development workers were dominantly seen as parts of the mechanical production-process, strongly embedded in rules of behaviour, in the networked model, there is much more autonomy and self regulation. Basic human capital – such as literacy, numeracy and workplace skills account for less than half of the wage differences in OECD countries. (OECD, 2002). Part of the remainder may be explained by a 'wider' form of human capital, that includes: 1. The ability to

learn, to identify one's learning needs and to manage one's learning activity, 2. Career planning, job search skills, and the ability to blend working and personal objectives and 3. Personal characteristics (like trustworthiness and motivation). DESECO (2002) suggested the following Key Competencies for the network society: Acting autonomously, Using tools interactively and Functioning in socially heterogeneous groups.

### The risk society

A different organisation of work, privatisation of state-tasks and globalisation challenge the identity and social security as far as this is related to work and social position. People feel insecure. It demands different strategies to deal with risks and to handle social conflicts (Beck, 1986).

### The power of identity, pressure groups

However, people do not wait for policies, they create their own social texture. Manuel Castells suggests in volume II of his trilogy "The Power of Identity" that groups do arise that define their own identity. Partly such groups organise themselves around traditional values as religion, the Nation and the Family. Partly they choose new items, such as anti-globalisation, sustainable development etc. Castells argues that such groups gain power over national governments. Their relatively closed character develops over time to a more open and worldwide structure. Greenpeace is an example in case. According to Castells, such groups are the new symbols of meaning and identity and gradually replace symbols as "the work", nationality etc. This perspective is difficult to understand from the industrial point of view. As Castells (1997) notes: "... our historical vision has become so used to orderly battalions, colourful banners, and scripted proclamations of social change, we are at a loss when confronted with the subtle persuasiveness of incremental changes of symbols processed through multiform networks, away from the halls of power."(p. 362).

### Bonds

In the network society bonds between people shift from predominantly *strong* bonds to *weak* bonds. Strong bonds have a high density and homogeneity, they are rather stable and allow little change. Weak bonds are extensive, heterogeneous and complex (.....). They are open and a source for change. Participating in weak bonds demands a certain flexibility of the people involved, because constantly changing roles occur.

### Autonomy and authenticity

In western countries, people have a right to choose their own pattern of life, their own convictions, their own way of organising their lives. In many cases our grandparents had less choice. Taylor (1991) has written about the "Malaises of modernity": 1. Individualism and the disenchantment of the world, 2. instrumental reasoning and 3. loss of freedom because of the power of political institutions on the one hand and the decrease of participation in public policy on the other hand.

Charles Taylor warns us not to accept these malaises, nor to oppose them. He argues that these developments need a better understanding of their place in history. He sees individualism as the fulfilment of a moral idea of self-fulfillment, more than the more surface-level manifestations of narcissism, fragmentation and egoism. "Moral" means an image of a better state of life, in terms of what we would wish. Such a standard is often out of scope, because people tend to stay with a sort of liberalism, moral subjectivism and a instrumental way of scientific work. Motivations of people are often described in terms of direct use or advantages instead of as a moral standard. Freedom of choice becomes so a purpose in its own.

He then takes us along the road of three principles (p 23):

“The picture I am offering is rather that of an ideal that has degraded but that is very worthwhile in itself, and indeed, I would like to say, unrepudiable by moderns. So what we need is neither root-and-branch condemnation nor uncritical praise; and not a carefully balanced trade-off. What we need is a work of retrieval, through which this ideal can help us restore our practice.

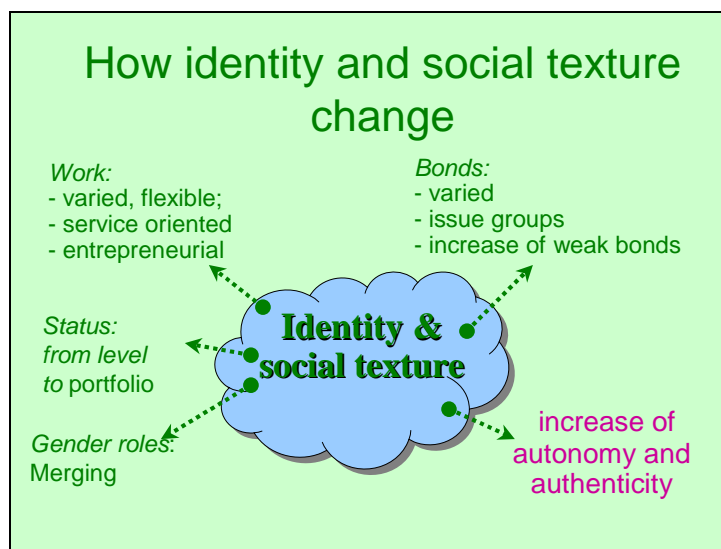
To go along with this, you have to believe three things, all controversial: (1) that authenticity is a valid ideal; (2) that you can argue in reason about ideals and about the conformity of practices to these ideals; and (3) that these arguments can make a difference. The first belief flies in the face of the major thrust of criticism of the culture of authenticity, the second involves rejecting subjectivism, and the third is incompatible with those accounts of modernity that see us as imprisoned in modern culture by the "system," whether this is defined as capitalism, industrial society, or bureaucracy.”

Identity from this perspective is not longer given by the structures of the society, but increasingly by authenticity. It is not possible to develop authenticity on your own, you can only develop it in dialogue with others. Taylor then develops an idea what authenticity involves (p66):

Briefly, we can say that authenticity (A) involves (i) creation and construction as well as discovery, (ii) originality, and frequently (iii) opposition to the rules of society and even potentially to what we recognize as morality. But it is also true, as we saw, . that it (B) requires (i) openness to horizons of significance (for otherwise the creation loses the background that can save it from insignificance) and (ii) a self-definition in dialogue.

### *An ethics of authenticity*

Many feel that schools are the only resource left to fight societal fragmentation and individual narcissism. In fact a survey between educators shows that the trend toward individualism is the only trend in society that educators do not wish to follow! I have learned from Taylor (and later from others as well), that this position is counterproductive, and that schools and education would need to develop a morale of authenticity instead.



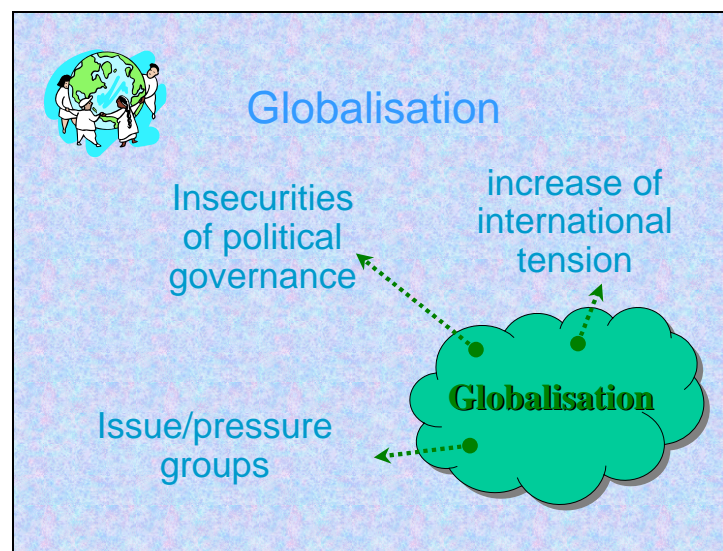
## **Globalisation**

Globalisation has been defined as a mix of several factors (Lubbers, 199?): worldwide systems of communication and exchange of information; worldwide economy and worldwide convergence towards a combination of democracy and regulated markets; traditional ideological boundaries between first, second and third world are disappearing.

Globalisation has a number of important consequences, which can be listed as follows.

- There is an increase of international tension, and thus an increase of international efforts to control these tensions.
- Insecurities of political governance. Democracies have been developed within the concept of the Nation-state. New global arrangements have to be developed, but are not yet readily available.
- By a strong emphasis on technological and economic issues, there is a certain risk that social and environmental issues are kept on the background. This leads to social pressure. People organize themselves in project networks in order to achieve a goal. Greenpeace is an example in case. Lubbers calls this the “New Governance”. This may be seen as valuable aspects of the development of a responsible civil society.

In the domain of Globalisation supporters gather around Johan Norberg (2001): while Anti-globalists take Noreena Hertz (2002) as their advocate. International business comes under pressure. It is not longer enough to obey the laws of different nation states. Public policy – whose task it is to make and maintain laws – is so passed by.



### Indications of devaluation of national systems

National Education systems weaken as well. Manuela du Bois-Reymond (2003) listed three interrelated developments that devalue national educational systems:

- international benchmarking - increase of supranational educational demands and controls – internationally fixed quality standards, internationally operating universities etc.
- the appearance of alternative forms of learning. Formal education will have to compete with other forms of learning. Historically that is a new state in the development of education.
- devaluation of public education in favour of private education. Elites take their children out of unproductive and unpleasant state-run schools and put them into private schools or co-financed suburban (white) schools where learning conditions are better and often pleasanter. On the other hand, inner-city state-run schools deteriorate and are left to the poor and the minority kids.

This is not a-priori negative, It could well be that national educational governance is gradually enriched with more local and at the same time more global arrangements.

## 6. In search for alternative forms of learning

Alternative forms of learning that would better fit to the values of the network society and overcome the inefficiencies of the 19<sup>th</sup> century model of schooling are probably not to be found in innovation programs, bound as they are to the robust model of schooling and the inherent political interests. Rather one would search at the fringes of the system, in youth cultures and in practices of developing learning organisations and knowledge management in innovative businesses. Learning in such unorthodox environments may be called “emergent practices”.

### *Young people as trendsetters.*

#### Complaints

Manuela du Bois-Reymond (1999) notes a generally felt complaint of young people about formal education: they complain about the divide between theory and praxis and about an utter lack of respect of the teachers toward them as students.

“As concerns the theory-praxis question, it is obviously the feeling of irrelevance of what the school curriculum offers and defines as knowledge. The young people feel that what they learn inside school does not help them much to cope with the problems they encounter outside school. It is impressive that this criticism was put forward by young people of all the European countries involved in the research and, as I said, by trendsetter-oriented as well as disengaged young people. (..)

The other point of critique – lack of respect, also put forward across all our research countries – thematizes breaches in the intergenerational relationship between the young and the elder. Traditional learning arrangements are built on the premise that it is the older generation who has the knowledge in storage, not the young, and it is the young who has to pay respect to the teacher, not the other way round. But in as much as experiences of contingency and risks become properties of postmodern societies, the knowledge lead of the older generation becomes questionable – do they really know the way? Therefore to the young it is much more convincing if the teacher defines her or his role more in terms of a “co-not-knower” who is just as much subjected to risks and contingencies and doubts about the right way – is there one at all? – as the students are. In other words, if teachers disrespect students, they try to close their eyes before the restrictions of formal education to guarantee a successful transition of the students to work and life. “

#### Trendsetters learning

Both findings point to a demand from young people for a better mix between formal and non-formal education in all educational systems and on all levels. introduced the concept of “trendsetter learners” as “those young people who develop new approaches toward learning and working by making inventive combinations of formal, non-formal, informal and peer learning, who experiment with new combinations of learning and working and spending their leisure time and who, in doing so, carve out new life courses for themselves.” She notes that we know very little about the strategies of learning of trendsetters and suggests the following features:

- Young people who do not restrict learning to formal learning but who are able to make productive mixtures of different forms of learning, have better chances in knowledge societies. Historically this is a new situation because in former times success in learning was identical with the acquirement of formal education (the American self-made man the model and the exception).
- Trendsetters learn with intrinsic motivation by obtaining for themselves flow learning experiences as described by Csikszentmihaly, who developed a “flow model” in which the subject experiences learning as a pleasant state of mind, resulting in an action sequence which in turn stimulates further learning. He says: “If we can learn more about activities which are enjoyable in themselves, we will find clues to a form of motivation that could become an extremely important human resource.” Plausibly (but seldom done in motivation research) he starts with pleasure, not with goals (set by others) to be achieved.

- It is plausible to assume that trendsetters, like other successful learners, have, through their families, the chance to accumulate much cultural and social capital; in the 6-field scheme of Bourdieu they are to be located in the upper cultural field. But I would like to pose the hypothesis that trendsetters have made themselves partly or wholly independent of their familial background. It is thus possible that they originate in upper just as well as lower classes. They produce their own cultural and learning capital which allows them to disregard conventional learning and professional paths and produce new learning and working careers. Historically speaking, they would be the first generation who emancipate themselves from the dominant older generation of knowledge transmitters.
- (...) we found trendsetter learning attitudes in all social and cultural milieux, although it is a safe bet to assume that family backing and a good educational background are valuable assets, never mind how much somebody diverts from conventional learning and working career paths. But we found “counter cases” of trendsetter biographies who started up successful learning and working careers without any help from their parents, using peer-capital (peer networks) much more than institutionalized information and knowledge.”

### Varied learning biographies

Of course, trendsetters do not represent the only dominant form of learning in the youth population. Manuela du Bois-Reymond (1999) suggests three other exemplary types as well: the intrinsically motivated intellectuals, the extrinsically motivated mass-learner, and the extrinsically motivated learner in continuous re-qualification. The interesting observation is that

“The “old-style permanent learners” (intellectuals) and the “modern-style permanent learners” (trendsetters) operate on different fronts in society and professions. Often, they have nothing whatsoever in common or to do with one another. (...)”

The old and new marginalised segments of society have nothing in common either - except the fact of their marginalisation. But it is quite evident that their social position is ever more dependent on their learning biography. If they did not get the chance to learn how to learn in early childhood, they have decidedly less chances in life than (...) those a generation before them with little scholarly capital.”

This only stresses to find new and effective learning arrangements for all, and there is no doubt that such arrangements will be varied.

## ***Political responses to the devaluation of the robust model of schooling***

### Scenarios

One response on the political level on the change of values on the one hand and the diminishing returns on the other of the robust model of schooling has been the “Schooling for Tomorrow” project of the OECD. One of the activities was to develop possible futures in terms of scenarios. The OECD study comes up with 6 possible futures, grouped under 3 headings: “The status quo extrapolated” and “Re-schooling” and “De-schooling”. (OECD, 2001)

The OECD scenarios offer a means for structuring the debate – the strategic conversation - on the future of education. Walo Hutmacher (2001) analysed two of such debates between European decision-makers and educators. The two “re-schooling” scenarios are considered by many to be both desirable and likely, while the “de-schooling” futures are usually considered both undesirable and unlikely. Only the “Status quo continues” scenario is judged by most of those canvassed to be undesirable but reasonably likely to occur. In his discussion of these results, Hutmacher adds:

“ (-)the views reported here seem to express the attitudes of a particular group that could be called the informed and policy-interested section of the education community. (-) Members of this community seem to agree with the need for change – they reject the “status quo” – but are sensitive to the problems that change would bring (and hence judge likely that the status quo will actually continue). They appear convinced that “re-schooling” represents the means to ensure the continuation of public sector schools meeting highly demanding quality standards. These findings are not entirely

unexpected: the changes these respondents dream of would not reject traditional values, where schools are responsible for social integration, and their own interests are invested in the support of public education. Aspects of these scenarios are also in line with the management strategies pursued by many countries for a decade or so, with an emphasis on educational decentralisation, as illustrated by the four national forward-looking studies reviewed by Van Aalst in Chapter 8.”

This is a nice illustration how established institutional arrangements try to accommodate to new values and avoid transformation to new institutionalisation (De Vijlder, 1996).

### Lifelong Learning

Another approach has been to develop an alternative overall model of learning in the society: the Lifelong Learning model. For example the Memorandum of the European Commission sets the following targets for making Lifelong Learning a reality:

- Valuing learning - including nonformal and informal learning
- Information, guidance and counselling
- Investing time and money in learning
- Bringing together learners and learning opportunities
- Basic skills
- Innovative pedagogy

The EU has incorporated these objectives in an overall strategy for improving education and employability, although in the political process some of the consequences of a Lifelong Learning strategy for institutional change have been lost.

## **7. Learning in Utopia**

Having said all this, what would learning be in my Utopia. I suggest the following features:

### ***Learning in network society***

- Learning is something you do while acting, making something or delivering a service; the service may include a personal service or a service to the local or global community.
- Learning includes working together with peers as well as with interesting adults – other than teachers - , locally as well as in world contexts; Weak bonds are as important as strong bonds;
- Learning involves pride, ownership and meaning;
- Learning involves the use of a variety of resources, such as products, processes, manuals, inspiring adults, peers and also books,
- Learning is pro-active and future oriented; guided in the light of career and life perspectives;
- Learning has more to do with the *production* of knowledge than with acquiring knowledge;
- Learning is assessed in real life, on the basis of a broad set of personal and general competencies (Human Capital), and codified in portfolios.

### ***From schooling to learning – criteria for emergent practices***<sup>7</sup>

The de-schooling scenarios of the OECD carry a rather negative meaning: the description is made up of negative statements. This may reflect the attitude of the educationalists which were involved in the development of the scenarios. However, the de-schooling scenario's may also

---

<sup>7</sup> This part is based on an earlier presentation at Leuven University (Van Aalst, 2002)

be interpreted as a positive shift from schooling to learning and as a transformation in terms of governance, financing and effectiveness.

In this chapter, I will suggest a set of criteria to select promising new experiences that reflect the transformation to the informational network society, and the newly emerging values in terms of knowledge, identity and social texture, and globalisation as outlined before. Such experiences may help educationalists and educational policymakers to develop the alternatives for the robust industrial model of schooling, as we move further towards the informational network society.

In this set of criteria, learning arrangements are based on *micro-choice, networked learning and a mix of formal, non formal and informal learning*. The infrastructure is not longer a set of institutions. School choice is not an issue. Demand is not for schools, but for targeted, content bound and tailored learning arrangements, with a high and negotiated added value and specific contextual value for objectives that individuals or groups have set for themselves. Suppliers are specific, and either internationally based or very local. People arrange their learning, together with changing groups of others, more that that they choose out of a supply of standardised quality. The perspective is more that of a learning society than that of a system of schooling.

I have listed the criteria under four headings:

- Learning patterns;
- Educational institutions and learning venues;
- Content and methods;
- Staff and staff development.

### Learning patterns

#### *Micro-choice and self-directed learning*

Perelman (1992) has proposed the word micro-choice. It refers to the learner's minute-to-minute choice among a wide array of specific media, programs, services, products, and sources of knowledge to nurture her or his brain. Learners make such choices alone or in co-operation with other members of a team. They will choose things that matter, that makes a difference and that adds to their portfolio. Self-directed learning will be more important than following pre-determined courses.

#### *Learning networks/communities*

Learners will not longer follow a programme in one school, but they will participate in a number of learning networks or communities at the same time, including those of professional associations and private institutions. They will increasingly arrange their own learning packages and mix formal, non-formal and informal provisions. Fluctuation and redundancy might take over from step-by-step learning tracks.

#### *Long timelines in tertiary education*

In stead of taking full-time initial programmes of limited time, students in tertiary education will learn over longer periods in part-time. Secondary education will be shorter and for a large percentage vocationally based.

#### *Financing of individuals and not institutions*

Together with micro-choice go of course "micro-vouchers". Perelman uses this term to indicate that vouchers are not meant to be used to change between schools, but indeed in order to allow the learner to arrange its own package from different suppliers. Learning vouchers will not only be supplied by governments, but also by private institutions and enterprises. It will mean that public funding of schools will gradually shrink.

## Educational institutions and learning venues

### *Diversification of learning venues*

There is no doubt that the nearly universal accessibility of knowledge resulting from the networking of media will lead to a diversity of learning venues. The home, the working place, the professional organisation and the office, all may become colleges.

### *Educational institutions, increasing service levels*

Schools will improve and develop a service function, for individuals as well as for businesses and local and global communities: a “front office” function. This includes for example:

- guiding and coaching – matching PDP with resources (including training), people and learning communities.
- Assessment of earlier experience
- Assessment of learning, validation of Portfolio's
- ICT services at home, in the workplace and in the local community
- Contractor to business and public institutions to ensure Human Capital

### *Educational institutions, outsourcing and specialisation of production*

Some schools may completely concentrate on the service-function and buy learning packages of others, private and public (insourcing). Others will still produce courses themselves, but sell their own educational packages to others (outsourcing). This goes further than and is different from mere co-operation. Each institution will gradually concentrate on its own specific core competency and sharply define its identity and no longer try to cover all grounds of a learning programme. Learners will learn in learning networks, rather than in one school. Schools have a network-organisation.

### *Internationalisation and localisation*

Strategic alliances will have a local and an international character. Learners will choose certain parts of their learning arrangements from institutions all over the world and consequently those institutions will serve students all over the world, according to their particular core competencies. Internationalisation will thus stretch further than exchange of students and staff and co-operation programmes between educational institutions.

### *Institutions will open to other life worlds and community projects*

Schools will get more and more involved in projects in the outside world, aiming at some sort of negotiated improvement. Firms and public institutions will increasingly look for partners in fulfilling their particular learning needs and focus on concrete improvements, not on delivery of courses. For example: the network society assumes free access for all to learning and ICT facilities. There is a risk that part of the population will not have access to learning facilities. Governments will certainly want to make sure that this will not happen and put pressure on educational institutions to make sure that this risk is as small as possible. This will mean that governments and community councils will contract educational institutions that concentrate on projects that guarantee access to the learning space of under-privileged groups.

### *Quality management*

Quality management of educational institutions will increasingly focus on three issues:

- *Strategic human resources management.* This may include hiring a certain variety of competencies, stimulating learning of staff by ICT, extra financial payment for those who contribute to the innovation of specific areas etc.
- *Orientation towards consumers and “users”.* This may include use of client-information to improve offerings and the addition of information services (e.g. access to databases, access to e-mail) to learning offerings.

- *Knowledge-management.* This may include development of new offerings on the basis of existing know-how, an organised way of sharing tacit knowledge, measuring intangible assets etc.

## Learning content and methods

### *Innovation-competencies in real-life contexts*

Learning of specific subject related competencies, will be extremely important. But learners should learn those competencies in a real life *mode-2* client-led context. This may be accomplished in some sort of strategic alliance of schools with innovative firms or networks. A better balance between knowing, doing, being and living together (Delors, 1996) will be increasingly important.

### *Less emphasis on assessment of individual outcomes*

Where knowledge production in teams and networks is getting more important, team-results might increasingly count for assessment; individual assessment might be more related to context and prospects. Examinations will be less standardised. Portfolio's of achievements in team-settings and the results of those teams and reports from assessment centres will be more important than fixed diploma's. Qualifications will more often be acquired at the workplace and in other life-settings than in formal courses.<sup>8</sup>

### *ICT at home and in the street*

Schools are trying hard to keep up with the use of ICT. However: the use of ICT within the more traditional culture of schooling might not contribute much to empower students for the knowledge society. Such integration of ICT in learning is not more than using the telephone in stead of fires on the top of hills to communicate information. Learning-policies will focus on the use of ICT on street-corners, in homes, built into products etc.

Of course, schools should make use of modern technologies where that is functional to its purposes. However, the challenge for the use of ICT for education will be to make learning more productive, efficient and useful than it is in traditional settings. This is a normal criterion for the introduction of technologies in processes and this criterion should also apply to educational contexts. There is some evidence about gains in productivity in training and adult learning, it remains to be seen for primary and secondary education.<sup>9</sup> The development of such devices for learning will demand concentrated investment. It seems to me that that will be impossible from within schools. Breakthrough seems only possible in partnerships with capital and knowledge from private ICT companies.

## Teachers in the knowledge society

There is no doubt that the role of teachers will change considerably. Such changes may include:

### *Transformative leadership*

Teachers will need the competences of transformative leaders: sharing meaning, professional craftsmanship and personal attention

### *Diversification of teachers, specialisation in educational competencies*

Teachers will specialise. Some will concentrate on coaching and moderation of learning processes of students, others on learning with multimedia and tele-learning. People from outside (external experts) will increasingly be involved in selected educational arrangements.

---

<sup>8</sup> This point has been elaborated in Van Aalst (1996).

<sup>9</sup> OECD (1997): Information Technology Outlook. OECD, Paris.

Practical experience in fields outside education will be required for many in the teaching profession.

#### *Partnerships of educational entrepreneurs*

Competent staff will not longer work in one school alone. They will apply their competencies in different workplaces including universities, multi-media production centres, local TV stations, community learning centres, home-teaching, in-company-training etc. This may be arranged in parallel (several part-time jobs at the same time) or one after each other. These professional educational entrepreneurs will organise themselves in partnerships that may allocate their expertise to different settings, including schools.

#### *Professional Knowledge Space*

The knowledge society puts heavy demands on education. Teachers, school leaders and school councils feel this pressure all the time and often it makes them unhealthy. Partly with right and reason! Their nurture falls short. A modern knowledge system for education does actually not exist. At the end of the sixties the big innovations in education started. There was a strong belief that educational research could provide the knowledge base for those innovations. We are beginning to understand that this is not true. A very large part of the knowledge base for education is embedded in the day-to-day experience of teachers and in their informal interactions. There is an important role for Knowledge production through Communities of Practice between teachers, were electronic means help in improving the quality of interactions and embedding it in organisations.

#### *Challenging tasks for faculties of education*

All this may lead to new and challenging new agendas for faculties of education.

To suggest a few:

- Creating a Learning Space for teachers. Such a Learning Space will be built upon practical experience of teachers and school leaders as well as of codified knowledge of learning in non-formal and informal settings.
- Creating opportunities for learning in other places than schools (ICT in the homes and streets).
- Quality (standards) of learning arrangements in co-operation with professional organisations. In a later stage this may be expanded to methods of teacher assessment.
- Participation in International projects for improving education in the developing world e.g. World Bank projects.
- Involvement in community learning projects and community schools.

## **8. Change and educational policies for the future**

We have seen how values of the beginning of the 19<sup>th</sup> century are embedded in current school systems. Our educational systems belong to the big successes of the industrial period, together with the industrial development and the creation of national bureaucracies (in the positive sense of the word). The educational system is one of the strongest institutions of western European societies, as they have developed from the beginning of the 19<sup>th</sup> century.

As values change, institutions start trying to adopt new ways of working, in order to accommodate the changes. Only after quite some time, as the external pressure becomes too high, new institutions are created to assimilate the new sets of values, and often they are

created by new players in the market<sup>10</sup>. In most OECD countries, one can see activities of accommodation. There are only little initiatives to develop new institutions. However, I have argued that the “invariants” of the robust 19<sup>th</sup> century model of schooling, such as selection, standardisation, the academic and reflective culture and the narrow ties with the state bureaucracy may be less effective in the network society. Problems in the future may not yet felt very clearly. For example: the new knowledge is quite uneasy for schools and bureaucracies, where they rely heavily on codified written documents as curricula, standards and textbooks, where knowledge in the network society is far more complex and embedded in societal structures and services. However, as long as schools are rather closed systems, this mismatch is not really felt.

Given the strong bonds between state-bureaucracies and the robust model of schooling, it cannot be expected that national governments are leading in creating new institutions that are based in the new sets of values. Only after the pressure has increased too high, they will probably follow. As a consequence, large scale innovations of the main stream of schooling and educational policies are probably increasingly ineffective.

Tapscott (1995, p 30) describes three phases of change in institutions that want to keep up with the knowledge society: Quality Improvement, Restructuring and Transformation. Many educational reforms of this moment are still in the phase of quality-improvement. The two others have still to come!

What we need for transformation are practical examples of innovative learning, which operate out of the frames of industrial schooling, embrace modern values of knowledge productivity, identity, social texture and globalisation. Learning arrangements that operate with interesting partners from society and with active participation of youngsters. Such practical experience needs to go along with ongoing trend-analysis and scenario workshops, both on the macro and on the micro level. This has to be a matter of not only educationalists. Educational expertise will be increasingly important, but it will find its working area in society at large, not (only) in schools.

---

<sup>10</sup> I use the terms accommodation and assimilation on purpose, to draw the parallel with the use of these terms by Jean Piaget. Piaget showed that people try to accommodate their existing knowledge structures as long as possible to new observations. Only if the contrasts become too high, they have to change their cognitive structure.

## References

- AALST, HANS F. VAN (1996): Assessment in schools: a matter of change. In: Paul Black & Alain Michel (Eds): *Learning from pupil assessment: international comparisons*. CSE Monograph Series in Evaluation, 12, 1998, pp. 55-70. Center for the Study of Evaluation, UCLA, Los Angeles, California 90095.
- AALST, HANS F. VAN (2002): *Education in Europe in the 21st Century: Trends and challenges*. Paper for the First International Academic Workshop *Educational Systems in East Asia and Western Europe: a Comparative Approach*. K.U. Leuven, Shenyang Normal University (SNU), China.
- BOIS-REYMOND, MANUELA DU (1999): *Trend-Setters and Other Types of Lifelong Learners*. Second European Conference on Lifelong Learning, University of Bremen, 25-27 February 1999. [http://www.erill.uni-bremen.de/lios/sections/s4\\_bois.html](http://www.erill.uni-bremen.de/lios/sections/s4_bois.html)
- BOIS-REYMOND, MANUELA DU (2003): *Youth - Europe - Learning: A Hopeful Ménage à Trois*. Keynote to the Nordic Youth Research Symposium 2003, Danish Centre for Youth Research, Roskilde University, Denmark. <http://www.cefu.dk/kalender/konferencer/information/keynotes/reymondpaper/>
- COMMISSION OF THE EUROPEAN COMMUNITIES (2000): A Memorandum on Lifelong Learning. Commission staffworking paper SEC(2000) 1832. Brussels, 30.10.2000. <http://europa.eu.int/comm/education/life/priorities>
- DESECO (2002): Definition and selection of competencies: theoretical and conceptual foundations; Strategy paper on key competencies an overarching frame of reference for an assessment and research program; Revised draft- september 13, 2002; ines/smg/2002/2/2. OECD, Paris.
- GARDNER, HOWARD (1999): *Intelligence Reframed – Multiple Intelligences for the 21st Century*. Basic Books, New York.
- HERTZ, NOREENA (2002): *The Silent Takeover – Global Capitalism and the Death of Democracy* (2001).
- HUTMACHER, WALO (1997): *Invariants And Change In Schools And Education Systems*. In: OECD (1997): *Schooling for tomorrow. Schools today and tomorrow: innovation and change*. Draft report for publication of the OECD/Japan Education Seminar on Schooling for Tomorrow, held in Hiroshima University, Japan, 5-7 November 1997
- HUTMACHER, WALO (2001): *Visions of Decision-makers and Educators for the Future of Schools – Reactions to the OECD Scenarios*. In: *What schools for the future?* OECD, Paris. <http://oecdpublications.gfi-nb.com/cgi-bin/OECDBookShop.storefront/EN/product/962001111P1>
- LUBBERS, RUUD (1998-99): Globalization studies homepage. <http://fsw.kub.nl/globus/lubbers/>
- NORBERG, JOHAN (2001): *Leve de globalisering*. Houtekiet, Antwerpen.
- OECD (2002) Education policy Analysis 2002. Chapter 5: Rethinking human capital OECD, Paris
- SENGE, PETER, ART KLEINER, CHARLOTTE ROBERTS, RICHARD B. ROSS & BRYAN J. SMITH (1994): *The Fifth Discipline Fieldbook*. Nicolas Brealy Publishers, London.
- SPECK, OTTO (1997): *Chaos und Autonomie in der Erziehung – Erziehungsschwierigkeiten unter moralischem Aspekt*. Ernst Reinhardt Verlag, München.
- TAYLOR, CHARLES (1989): *Sources of the self. The making of the modern identity*. Harvard University Press, Cambridge, Massachusetts.

TAYLOR, CHARLES (1991): *The ethics of Authenticity*. Harvard University Press. Cambridge, Massachusetts.