

Learning: The Treasure within — Prospects for Education in the 21st Century

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If you plan for a year, plant a seed. If for ten years, plant a tree. If for a hundred years, teach the people. When you sow a seed once, you will reap a single harvest. When you teach the people, you will reap a hundred harvests.

(Kuan Chung²)

Point of Departure: Ancient Questions, New Issues

Reflecting on education and its role in society is at least as old as recorded history. Indeed, the human story abounds with records where philosophy and education are united in a single endeavour. In the Ancient Greek humanities they were inseparable elements of one single *Paideia*. When looking at what thinkers have had to say and write about education over time, hopes and disappointments have many remarkable similarities. Its broad aims have long been with us: to foster both diversity and unity; to impart specific skills through training and to free creativity; to develop both individual ambition and the ability to live in harmony with others; to ensure continuity and legacy, while establishing the foundations for societal innovation; and to ensure the basis for lasting citizenship and participatory governance.

More recently, as universal education has been recognised as a right, we have striven to balance equity with excellence and access with achievement. This dual role of education, both to conserve and to liberate, with its potential for contradiction, conflict and even immobilisation, is more present today than ever before. One might even say that this pervasive duality in education is compounded today by a rapidly changing society. It is as if the ‘old order’ of thinking is being replaced by new paradigms of understanding reality and of foreseeing our common predicament. Technological discovery has seized our daily life. The increasing speed of change makes it difficult for us to stop and reflect. The future proves less and less to be the simple projection of the past. This is the ‘age of discontinuity’ to quote a remarkable contemporary analyst, P. Drucker (1969). Education — the supreme social function — is ‘caught between two fires’, i.e. two kinds of society, in the transition of millennia. Evermore placed in the thin borderline between stability and change, between preservation and innovation, education is undergoing

(Note from the editors: This article was written in 2001, based on a presentation made by Roberto Carneiro at a conference in Mexico — IX Simposium de Educación, ITESO, Guadalajara, 26 al 29 de septiembre de 2001 — that discussed the Delors report and its implications. We decided to publish it in this issue entitled ‘What is Learning For?’ that launches the four issues of volume 50 because (i) it gives us a valuable first-hand account of the challenges faced by the International Commission on Education for the Twenty-first Century chaired by Jacques Delors and how they were addressed by a Commission of 15 members from across the world, and (ii) written before social media took hold and before the recession hit in the early years of the 21st century, it allows us to put the discussion in the four issues of the journal into a longer perspective and reflect on changes in visions, perceptions and priorities, even in the ‘short’ period since the article was written.)

unprecedented tensions. Indeed, it is a mirror of all the contradictions that strike our modern societies.

Seen from the industrialised world, in our *old society* — stable, simple and repetitive — memory controlled project, principles were immutably passed on, and exemplary patterns could be preserved as archetypes. It reflected the primacy of structure over genesis. Whereas, seen from our knowledge and creative-driven *new society* — unstable, inventive and innovative — project overcomes memory, future controls the past, patterns are constantly being put to question. It is the primacy of genesis over structure (Carneiro, 2001). Well beyond the overriding duality of the world we live in, it is also very important to realise that all hopes concerning the progress of our forthcoming society rest upon the learning attainment of nations and peoples. In the age of mounting knowledge and information, education regains a new thrust regarding our collective future. For each generation, education remains the most powerful tool to invent the future and renew measures of collective hope.

What is really new then? Why should we consider that there are new challenges facing our educational systems? Why a sense of urgency in scanning what would be Education in the 21st Century? Can we speak of a new emerging canon of Learning?

Fresh Challenges to Reach an Inclusive World

The Delors report (Delors *et al.*, 1996) reflects long deliberation. In a simple form it condenses dramatic discussions conducted during three consecutive years of joint work. It is intended to upset. The end point reminds us all that the challenging problem is to re-visit education. Education still contains the potential to set the main difference between the competition-led *homo economicus* and the inclusive-led *homo socialis*: either enhancing or blurring the dividing line between winners and losers, between leaders and followers. Education once again provides the master key to open doors out of blind alleys. When interpreting the complex mandate handed over by the UNESCO General Conference, our Commission decided to begin with an outward look.

While attempting to come to grips with the changing patterns of a world subjected to relentless contradictions, several types of challenges were put before the Commission. First, those placed in the cutting-edge between permanence and change, tensions between tradition and modernity, long-term and short-term considerations, competition and equity. Next, the tensions between the global and the local, between the universal and the individual. Also, the mounting tensions between the expansion of knowledge and human beings' capacity to assimilate it and make the best use of it in the light of human development priorities. Finally, the perennial tension between the spiritual and the material. Moreover, our ultra-technological civilization runs the risk of deepening the gulf between haves and have-nots. Full citizenship and inclusion are contingent on a number of new social and technological skills that are becoming scarce or unevenly distributed in the modern social fabric. Inclusiveness today touches upon the capability to access and make full use of powerful tools such as the Internet and the vast array of digital apps.

A search into the realm of this evolving universe allows us to discern five paradigmatic mutations (Figure 1) when considering the transition paths to a new order of a knowledge-driven society (Carneiro, 2000). Among other key features





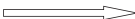
<i>CLASSICAL APPROACH</i>		<i>NEW APPROACH</i>
What to teach		Where to learn
How to teach		When to learn
Initial Education for a lifetime		Flexible Learning throughout life
Fragmented Knowledge		Holistic Knowledge
Status-ridden Knowledge		Inclusive Knowledge
'Have-nots'		'Haves'

FIGURE 1. The way to inclusive knowledge

this structural change aims at crossing the Rubicon of exclusion, a dividing line that was never breached during the industrial age, notwithstanding the most vigorous denouncements of the educational perpetuation of an underclass of non-achievers and low-skilled.

The Commission found itself in the difficult situation of having to walk a fine line: that which separates utopia from stifling realism. One can sense a general dissatisfaction with things as they are. This sentiment has been difficult to grasp, let alone provide a solid foundation for remedy. In their search for reasons to act, the Commissioners were bound to seek a further understanding of changing patterns; also, they had to enlarge their common perception of alternative futures and of insights on undercurrent trends.

Leadership and Participation

Faced with such a formidable mandate, how could a modest Commission of 15 members, coming from different walks in life, deliver a Report for a planetary audience? What would be the appropriate format of a final product? How could it provide UNESCO with a lever to re-assess its priorities for the 21st century? Which messages could fit both the need to create world-scale momentum and to make sense for such a wide constituency of regions and peoples? How could they avoid the repetition of sheer conventional wisdom resulting from an exercise of consensus building and broad involvement?

I recall our first meetings: lively discussions, with the most disparate approaches to life, values and philosophies, a deepening of irreconcilable perspectives, a tacit concern before ‘mission impossible’. This medley of disharmony went on for several meetings. Whenever, under the inspired leadership of Jacques Delors, we were summoned to find one common understanding, one basic concept or one shared priority for future education, inevitable differences would shoot down what could theoretically provide a good basis for consensus: human rights declarations are western-oriented and individualistically biased; dignity of the human person is anthropocentric; democratic values are open to diverse emphasis and vary with subjective interpretation; even development goals could differ considerably according to regions and levels/notions of well-being.

At a given moment, the Commissioners shared a certain feeling of discomfort. It was as though we all feared that the heated discussions did nothing but carry us away from any hope of returning to land. The open methodology was risky. No one was really certain about the outcome. We ended up combining two approaches: region by region, we would try to grasp the local flavour by surveying issues and conducting hearings of large groups of representative personalities; alongside that, we would strive to arrive at common foundational concepts woven around a limited number of broad sectoral approaches: education and science, education and culture, education and development, education and citizenship, education and democracy, education and environment, . . .

A total of eight regional hearings were carried out and some 130 experts actively surveyed.³ Rapidly, some outstanding interfaces began to acquire shape, which set the background for the educational enterprise of the future:

- The interplay between globalisation and the search for local roots.
- The quest for social cohesion, inclusion and increased democracy.
- The transition from a cycle of inequitable economic growth to purposes of sustainable human development.

These perspectives collapsed into three comprehensive chapters included in Part One of our Report under the general heading of Outlooks. They also set the context for a major paradigm shift: from the old order of the 'industrial society' to a new order of a 'knowledge-based society' or, even better, a 'learning society'.

Human Advancement and the Four Pillars of Learning

Twenty-four years earlier, the Faure Report had succeeded in proposing a very attractive notion to the international community: Learning to Be (Faure *et al.*, 1972). This concept remains absolutely pivotal to the present challenges of education. However, the recognition that a profound change is taking place, stretching from all levels of society to every single human interest, demands a somewhat broader approach — perhaps focusing on enablers of conceptual operationalisation — to the main principles governing policies and strategies in education. This broader view necessarily lies beyond the merely functional approach, that which interprets: (i) education as an instrument of economic growth, (ii) the decision to learn in the light of a strict calculation of returns on investment, or (iii) training as a mere pre-requisite to increased job productivity. Even the most recent measures of competitiveness provide evidence on how education could act not simply as input to the economic production function, but also as a powerful contributor to the formation of social trust, a spirit of community and shared values, that is to say to the foundations of prosperity at large.

When establishing a frame of reference for the future, the Commission inevitably arrived at a basket of principles. No one single principle was able to encompass the wealth of concepts at stake. Indeed, the Commissioners were fully aware of the need to link the hand to the mind, the individual to society, cognitive and non-cognitive learning, old and new knowledge, and formal and non-formal/informal learning processes.

Learning to Be emerges, once again, as a timeless priority. Being and becoming a whole person — fully entitled to rights and duties, bearer of a human dignity beyond conditionalities — remain prime goals of every single educational endeavour. This pillar brings to life the road to self-fulfilment and to meaning as a

personal and social construct which only an inner journey, stemming from autonomous learning and a balanced relation to others can provide.

Learning to Know appears fully embedded in the realm of scientific progress and of technological breakthrough. Moreover, this principle addresses the urgent need to respond to new sources of information, to diversity in multimedia content, to new modes of learning in a networked society, to the rise of social learning, and to the growing importance of knowledge workers. In other words, *learning to learn* makes the most of a multi-sectoral approach which imparts the pleasure of learning throughout all stages of life.

Learning to Do lays the groundwork for bridging knowledge and skills, learning and competences, inert and active knowledge, codified and tacit knowledge, and the psychology and the sociology of learning. Following passionate discussions, the Commission decided to draw the attention of educators and policy-makers to the need for further experimentation with alternative models involving a combination of both periods of formal classroom learning and of professional experience. 'Learning by doing' and 'doing by learning' turn out to be a key to the most sought after problem-solving skills required to face uncertainty and the changing nature of work.

Finally, **Learning to Live Together** epitomises a formidable challenge of our times. This pillar addresses the building of cohesion thresholds, in the absence of which communities are non-viable and development does not take place. It contemplates core citizenship values, stems from identity construction through multiple belonging processes, and involves a rational commitment to the betterment of society. Ultimately, it provides the pre-condition for a *culture of peace and understanding*.

These four pillars are conceived as a network of rights and responsibilities implied in every educational thrust directed at the preparation for a life of liberty and of interdependencies. By the same token, the emphasis on *learning* is heralded as one of the most significant paradigm changes, that which characterises a *biological society*, in opposition to the paradigm of *teaching*, which dominated the *mechanistic ideal* of a rote, repetitive, industrial society. Hence, in a learning-centred approach, one can elicit six distinct dimensions in the process of human advancement (Carneiro, 2001):

1. To learn the human condition in its infinite dignity and richness, but also in its mysterious contingency and vulnerability.
2. To learn a modern citizenship, celebrating diversity and appreciating democracy, empowering members of a community, entitled to rights and obligations.
3. To learn our culture of origin in the fullness of its ingredients: memory, language, civilisation, history, philosophy and dialogue with the world.
4. To learn how to process information and organise knowledge, that is to say, how to deal with the information society and the abundance of oracles in a context of lifelong learning.
5. To learn to develop a vocational identity in the different aspects related to the productive system, ranging from the continuous acquisition of skills to sustainable employability.⁴
6. To learn to nurture wisdom, through a well-balanced combination of codified and tacit — active — knowledge, bearing in mind the need of a conscious

evolution and of procuring meaning-making constructs, that are enclosed in the gift of life and in the cosmic dimension of existence.

Each of the four pillars is inextricably linked to each of these six aforementioned dimensions that characterise the evolution of humankind. They form a web of 24 intersections comprising a wealth of challenges to the makings of contemporary education and learning.

Learning Throughout Life

The enunciation of the underpinning principles sustaining a cluster of four cardinal pillars was felt as a necessary step, but not a sufficient one. It was deemed necessary to carry our reflections one step further. Hence, the Commission discussed at length ways to implement these concepts. In this context, 'learning throughout life' emerged as the strategic proposition destined to combine tradition and modernity.

How then would learning throughout life be different from: (i) decades of adult education policies, (ii) endless discussions focused on recurrent education, or (iii) the recent surge of interest around lifelong learning? Is this merely a rhetorical face-lifting of old theories or does it truly encompass elements of novelty? The stages and bridges of education are increasingly recognised as crucial. How the system conceives of the passage from one stage to another, the links from one stream to the next, tells us a great deal about the espoused philosophy in each system. Are the stages conceived as smooth transitions to facilitate mobility? Are the bridges wide, many and inviting? They should be, because the purpose of education needs to address both excellence and inclusiveness.

Learning throughout life, then, is both a way of organising education and a philosophy of education; taking education certainly not as a preparation for life, but a human predicament embedded with life itself, to follow the overarching concept of J. Dewey (1916).

Learning throughout life must then be conceived as offering:

- Diversity of itineraries in time, in content and in learning styles.
- Continuing learning opportunities.
- Community participation, decentralisation, diversification of financing and delivery, democratic consultation on the aims and practices of education.
- Antidotes to un-learning and to de-skilling trends observed in vast segments of our societies.
- New social dimensions to knowledge production and competence acquisition.
- Action and remedies designed both to prevent and to minimise the inequitable distribution of *talent* in our current societies.

Under this vast umbrella, learning throughout life is a fresh look at ways to address increasing human advancement needs, which inevitably fall into one of three main categories:

1. Personal and cultural development.
2. Social and community development.
3. Professional development and sustainable employability.

For national provisions of formal education, different times/different places represent a dramatic departure from the traditional format of one time/one place. It reaches far beyond a quantitative target of an Education for All.⁵ On the contrary, it summons a qualitative effort to meet individual itineraries and a wide variety of demands. Likewise, this new perspective constitutes the basis for the Commission's advance towards a *learning society*, made up of multiple demands and flexible choices for learning and for doing.

A fully comprehensive model will consider the intersections of three key variables: paradigm shifts; delivery modes; driving forces.⁶ In turn, each of these key variables is allowed to evolve longitudinally throughout time dimensions: past; present; future. Beneath this umbrella view, we are swiftly moving from a *Clockwork Orange* education to a *Knowledge Age* of learning, against the backdrop of a *Learning Society* positioned as the strategic community-led educational goal.⁷ Learning throughout life represents a quantum leap into the 21st century. To make it work, the Commission discussed concrete means and strategies. The demise of previous policies could not discourage us from pursuing new avenues in a typically long-term approach. While diverse in nature, these avenues would invariably appeal to broader and stronger partnerships involving all interested parties and stakeholders.

Delors advanced a more radical proposal (1996, p. 32):

As learning throughout life gradually becomes a reality, all young persons could be allocated a study-time entitlement at the start of their education, entitling them to a certain number of years of education. Their entitlement would be credited to an account at an institution that would manage a 'capital' of time available for each individual, together with the appropriate funds. Everyone could use their capital, on the basis of their previous educational experience, as they saw fit. Some of the capital could be set aside to enable people to receive continuing education during their adult lives. Each person could increase his or her capital through deposits at the 'bank' under a kind of educational savings scheme.

After thorough discussion, the Commissioners supported this idea as a *study-time entitlement* to be granted *at the end of compulsory schooling* to enable adolescents and adults to choose a path without signing away their future.⁸ In other words, the Commissioners envisaged a tool to stimulate demand that was distinct from the pure voucher theory and was not directly applicable to the basic education segment which must remain open to each and everyone.

The decision to include an autonomous chapter on teachers was taken at a rather late stage of our work. This does not mean that it was considered a minor issue. On the contrary, it represented a clear-cut recognition that teachers are central to education and that any sustainable approach to educational change stands little chance of success without their full support and active participation. Thus, learning throughout life will only be a reality if it is applied to teachers in a first instance. Public authorities, teachers associations and unions, individual schools and communities are jointly responsible for fostering such a fundamental step towards an Educative Society.

The hallmark of a learning school, then, is its *ethos* to continually seek new knowledge and to provide the leadership enabling a new teacher professionalism (Resnick & Nelson-Le Gall, 1997). In this renewed landscape, teachers are fundamentally learners, eager to engage in the institutional negotiation of

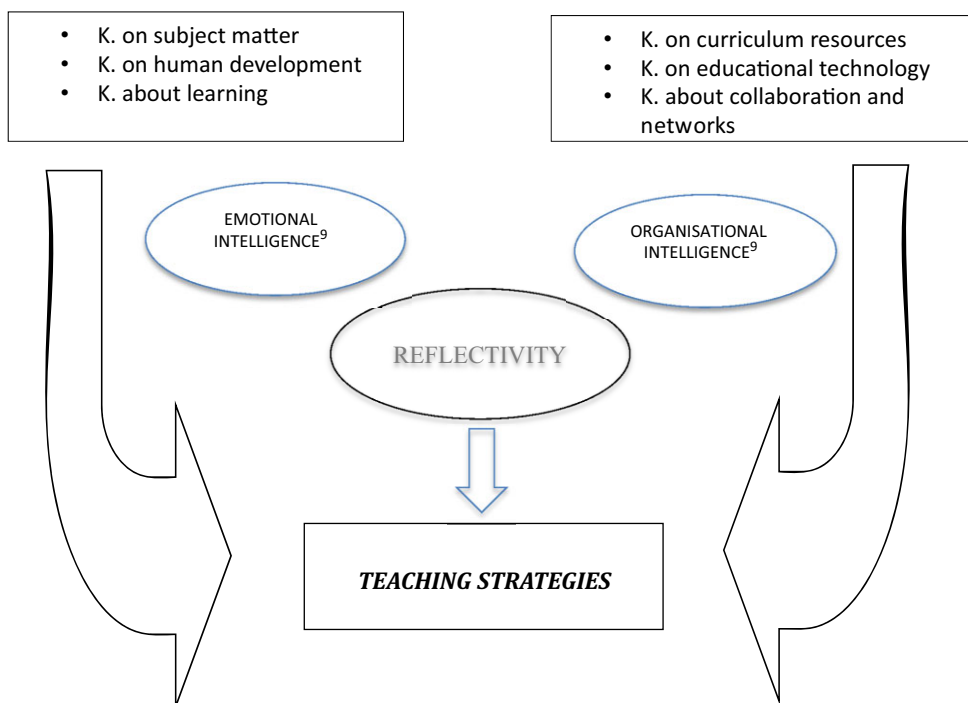


FIGURE 2. The knowledge/learning society challenges for teachers

improvement goals and in the strengthening of solid vocational identities. From this fresh perspective, teachers are no longer required to display a standard set of abilities. Externally prescribed performance benchmarks can be met in a variety of ways. As lifelong learners, teachers are expected to target moving learning goals and to commit themselves to constantly expanding a package of core skills. The following diagram summarises some of the knowledge challenges for teachers in a learning society, which may translate into enhanced teaching (Figure 2).

Teacher and taught, educator and learner, parent and child, these are powerful combinations for this innovative model of society where everyone is a teacher and a learner at all times and in all places. Initial and in-service teacher development — and institutions — can now gain a new breadth in making provision for the mainstream educators of tomorrow.

Learning and Education: Issues at the Heart of Society

Uncertainty is a core feature of contemporary society and is likely to remain so. Education can help us to understand what humanity has learned about itself, can help us to place our own existence in context, can help us to prepare for change and provide us with the tools to fashion our own future. However, any sound reflection on contemporary education narratives leads us into a land of difficult issues, in many ways a new *Terra Incognita* made up by human stories of exclusion, inequity and suffering. Among the most pressing issues one could underscore the persistence of gender imbalances in educational access that affect large proportions of the world population, the heavy toll of 130 million children still deprived of basic education, almost 900 million adult illiterates, 100 million early school leavers,

several million children victims of warfare, and permanent school failure ratios that indicate an inability to reach the core competences needed to fare in the modern world.

Concurrently, education is challenged to respond to sweeping changes taking place in society at large and at the workplace in particular. Most observers agree that both in and out of work, it is not knowledge itself, but the way in which it is used that is important. The ways in which we put our knowledge to work and develop problem-solving skills depend on our own characteristics: our capacity for empathy, for co-operation, as much as our initiative and our autonomy; our capacity both to evaluate risk and to take risk; our ability to place actions in context, long and short-term. Uncertainty is also our lot in terms of human progress. We embrace the propensity to sustain technological progress and the benefits derived from the extraordinary human ability to invent; nevertheless, we are also experiencing a time of doubt about our joint ability to progress in terms of solidarity and of living together in harmony.

Education is not the panacea, the single answer. However, without education we shall not have an answer, perhaps not even reach a glimpse of an answer. Think of any single contemporary plague: moral decay, unemployment, social exclusion, extreme poverty, environmental depletion, rising fanaticism, tribal fundamentalism, ethnic prejudice, urban violence, and so forth. Each and every one challenges our human conscience and calls for an inner journey that is capable of changing minds and hearts. Each and every one appeals to education and its capacity both to elevate humankind and to reach out to higher levels of collective wisdom in giving and sharing.¹⁰

Not one single world leader or reputed thinker would dare underestimate the relevance of education for the future. Well to the contrary, education today is heralded as key to public policy: fundamental to social cohesion, to economic development, to sustainable competitiveness, to human advancement, to the construction of world peace. Business leaders turn increasingly to the role of immaterial factors and to the centrality of *soft skills*; national and corporate accounting underscore knowledge valuation and struggle with metrics to appraise its impact. Education is regarded as the main crossroad between the past and the future — a recognition that sails with favourable wind in the absence of known opposition.

It is time to remind ourselves that, while learning can and should be regarded as a personal endeavour, education is typically a public good. In a market metaphor, while learning places itself on the demand side of the individual's acquisition of proprietary/private assets, education as a common purpose occupies prevalently the supply side of a public good. Therefore, educational action falls under the responsibility of the community at large and of public policies *stricto sensu*. Whether speaking about accountability and evaluation, or about how to meet growing demands through diversified financing, or the impacts of new technologies and of the information society, all the way to decentralisation and school autonomy, education remains typically a public sphere of concern. Thus, it is open to debate, to controversy, to remedy, to partnership, to research and to public decision-making.

By the same token, education co-operation must move up to the top of the ladder in international dialogue. Whether making debt swaps work for education, encouraging the international exchange of scientists and researchers, or earmarking a quarter of development aid as a minimum for the international funding of educational projects — as boldly proposed by the Delors Commission —, the time

is ripe for a new generation of multilateral and bilateral partnerships that are more in line with the pressing needs of the international community.

In a global learning environment, *Education as a Right* finds a natural partnership in *Learning as a Duty*. In other words, the New Millennium is a kind of void canvas that the theorists of the *natural state* so eloquently described. From Plato to Rousseau, Hobbes to Rawls, social philosophy sought supreme harmony through the formation of stable and lasting *social contracts*. Contracts that are freely negotiated and that establish codes of conduct based on a balanced interplay between rights and duties in society.

It is worth mentioning at this juncture another remarkable human trait: that, unlike common animal sociality, human social existence stems from the genetic propensity to nurture *long-term contracts that evolve through culture into moral precepts and laws*. We engage naturally into *lasting covenants*; moreover, we accept the necessity of securing them for *survival of the species*: family bonding, allegiance to identity, long-term friendship, national ties, community attachment, cultural belonging. Learning is also an enterprise of the communal mind; one of its fundamental principle is *ethics*, a body of community-led principles catering for our foundation institutions of sociality. Thus, a learning society posits a sovereign opportunity: to strike a new balance between social rights and individual duties. Furthermore, it embraces a time to reconcile individual with collective — or cultural — rights (Carneiro, 2001).

The emergence of heightened contemporary demands touching all fields of our predicament to live together leads us to conclude that conscious citizenship lies at the root of participatory democracy.

Furthermore, the learning society demands a threshold level of *social capital and trust* capable of upholding higher-order common purposes. This sphere of public interest surpasses the simple rights of individuals to affirm their difference. This is why democratic rule lies at the heart of citizenship education.

Hence, making allowance for a Learning Society is closely tied in with deepening democratic beliefs and committing future generations to perfecting democracy. Schools and universities are — and have always been — bastions of sociality. They are social institutions to the marrow and the seedbeds of societal governance. Education establishments and educators are at the forefront of a *new society*. They are the engines of a *brave new world*. They carry the prime responsibility of making possible the betterment of society: building the basis for a new social contract, one that elicits education, knowledge and learning as the key ingredients of a *new deal*.

Education Lies Within the Realm of Society

The fundamental recognition contained under this heading is a direct consequence of education's *radical social nature*. To put into a neater formulation, this core statement emerges from a growing awareness that education:

- remains the most potent lever to liberate humans from servitude and peoples from underdevelopment,
- is the primordial source of human advancement, which in turn acts as an engine of prosperity understood as the meeting point between solidarity and competitiveness, social and economic performance, cultural densification and diversity, and

- enables learning and reflected experience, which are the main fountains of accrued wisdom and of intangible capital.

The Commission devoted a considerable amount of time to the attempt to arrive at a deep understanding of learning as a process of inner transformation and improvement. As a consequence of this soul-searching procedure, the 15 Commissioners came to subscribe unanimously to a revitalised proposition on the aims of learning (Delors 1996, p. 86):

A broad, encompassing view of learning should aim to enable each individual to discover, unearth and enrich his or her creative potential, to reveal the treasure within each of us. This means going beyond an instrumental view of education, as a process one submits to in order to achieve specific aims (in terms of skills, capacities or economic potential), to one that emphasises the development of the complete person, in short, *learning to be*.

Education is Ultimately the Proven Engine of Fairness

No society, without a solid educational thrust, can aspire to justice and equity. Therefore, education remains our common measure of hope, the precious treasure to be discovered. Likewise, inspired by La Fontaine's acclaimed Fables, the Delors report (1996, p. 35) recasts the splendour of this ultimate treasure in a simple poem:

*But the old man was wise
To show them before he died
That learning is the treasure.*

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NOTES

1. Member of the International Commission on Education for the Twenty-first Century, UNESCO 1993–1996. Chair of the EJE Editorial Board 2005–2015.
2. KUAN CHUNG (d. 645 B.C.) Kuan-tzu (Book of Master Kuan) (1970) *Kuan tzu chi p'ing* (Ling Juheng, Ed), 1, p. 12. Title romanised.
3. A good sample of the material collected from the surveys can be found in: *Education for the Twenty-first Century: issues and prospects* (1998) (Paris, UNESCO Publishing. Education on the Move).
4. Nurturing strong vocational identities is the theme of a vast research network in Europe touching on the following topics, in: CARNEIRO, R. (2000) *Education 2000: On Knowledge and Learning for the new Millennium* (Sydney, Australian College of Education):
 - A knowledge base (the cognitive genome).
 - A portfolio of competencies.
 - A preference for learning strategies.
 - A discernible path towards the strengthening of identity (construction of *self*).
 - A foundation of emotional stability and of self-esteem.
 - A set of strategies to enhance personal assets.
 - A commitment to both the vision and priorities of the organisation, regarded as primal learning *loci*.

- A conscious evolution, including the social dimensions of identity formation.
- 5. We recollect here the well-publicised motto that was approved in the wake of the *Education for All* call launched in 1990 at the Jomtien international conference by governments and multilateral agencies.
- 6. A model of the future of learning was first presented by us to a social partners' meeting which took place at CEDEFOP to discuss the implications of New Skills in our societies (Carneiro 2002).
- 7. Note from the editors: This triologic model of representing the long wave-length evolution of education and learning over decades is further developed and presented in Carneiro (2009).
- 8. This concept was adopted in the UK when the Blair government proposed and implemented a scheme of *Learning Accounts*.
- 9. Note from the editors: The fundamental roles played in schools by Emotional and Organisational Intelligences are the core concern of a EC sponsored project under the 'Lifelong Learning Programme': IGUANA (<http://www.iguana-project.eu>). The author coordinates this major European research consortium (2013–2015).
- 10. Manuel Antunes, a remarkable Portuguese Jesuit, professor at the University of Lisbon, once said: 'Without education, man is only a possibility; deprived of that benefit he is little more than the most destitute being in the zoological scale' (Carneiro, 2001, p. 12).

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