

IBE Working Papers on Curriculum Issues N° 15

**THE CURRICULUM IN DEBATES AND IN EDUCATIONAL REFORMS TO 2030:
FOR A CURRICULUM AGENDA OF THE TWENTY-FIRST CENTURY**



© UNESCO-IBE

Geneva, Switzerland, August 2015

The series *IBE Working Papers on Curriculum Issues* is intended to share interim results of ongoing research and to increase access to a range of unpublished documents, reports, reflections in progress and exploratory studies produced at UNESCO-IBE, by IBE partners or members of the IBE network on curriculum design and development. These Working Papers are disseminated to a wide audience of both academic and non-academic people and institutions for purposes of information and discussion. They have been approved for circulation by UNESCO-IBE but typically have not been formally edited or peer reviewed. Therefore, feedback on these documents is warmly encouraged.

Previous issues: ([Available online](#) on the IBE website)

5. *Desarrollos curriculares para la educación básica en el Cono Sur: Prioridades de política y desafíos de la práctica.* (By M. Palamidessi). October 2006.

6. *The Diversification of Secondary Education: School Curricula in Comparative Perspective.* (By A. Benavot). November 2006.

7. *L'approche par compétences en Afrique francophone : quelques tendances.* (By X. Roegiers). May 2008.

8. *Conocimiento complejo y competencias educativas.* (By I. Aguerrondo). May 2009.

9. *Currículo e inclusión en la región andina de América Latina.* (By L. Guerrero Ortiz y V. Villarán). October 2009.

10. *Porqué importa hoy el debate curricular.* (By J.C. Tedesco, R. Operti and M. Amadio). June 2013.

11. *The role of curriculum in fostering national cohesion and integration: Opportunities and challenges.* (By D. Njeng'ere). March 2014.

12. *Competency-based curriculum and curriculum autonomy in the Republic of Korea.* (By K. Lee). April 2014.

13. *Scotland: Education, curriculum and learning. The strengths, challenges and solutions in lifelong learning.* (By A. Armstrong). May 2014.

14. *Educación ciudadana en América Latina: Prioridades de los currículos escolares* (By C. Cox *et al.*). June 2014.

The opinions and findings expressed in the Working Papers are those of the authors and do not necessarily represent the views of UNESCO-IBE or their sponsoring institutions. The designations employed and the presentation of the material do not imply the expression of any opinion whatsoever on the part of UNESCO-IBE concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The documents published in this series and made available in PDF format can be quoted and cited without permission as long as UNESCO-IBE is mentioned as the original source and copyright holder, along with the title and year of publication. They may be freely translated into other languages, provided that an electronic copy of the translated document is sent to UNESCO-IBE (contact: m.amadio@ibe.unesco.org).

These electronic documents are available free of charge and permission is given to reproduce them for personal use only, as long as they are unaltered and complete. Copies may not be duplicated for commercial purposes. Posting of the PDFs to other websites is not authorized. However, direct hyperlinks to the documents made available on the IBE website (<http://www.ibe.unesco.org/>) can be established without written permission.

COVER

Photograph by P. Nagy. Caption: Shatila camp (Beirut, Lebanon, 2008).

©

IBE/2015/WP/15

**The curriculum in debates and in educational reforms to 2030:
For a curriculum agenda of the twenty-first century**

by

Massimo Amadio, Renato Opertti y Juan Carlos Tedesco

Geneva, Switzerland, August 2015

UNESCO International Bureau of Education

About the authors:

Massimo Amadio (Italy) is Senior Programme Specialist at the UNESCO International Bureau of Education (Geneva, Switzerland). Email: m.amadio@ibe.unesco.org

Renato Opertti (Uruguay) is Programme Specialist at the UNESCO International Bureau of Education (Geneva, Switzerland). Email: r.opertti@ibe.unesco.org

Juan Carlos Tedesco (Argentina) is at present Professor of Educational Policy at the National University of San Martín (Buenos Aires) and previously served as Minister of Education of the Argentine Republic. Email: juancarlos.tedesco@gmail.com

1. Movements around the vision of curriculum

At least two main visions of curriculum can be identified. On the one hand, there is a broad perspective viewing curriculum as the product of a process of selection and organization of relevant “contents” on account of the characteristics, needs and aspirations of society, and which embrace the aims and purposes of education, study plans and programmes, the organization of teaching and learning activities, together with guidance regarding the assessment of what has been learnt. On the other hand, we have a more restricted focus that looks upon the curriculum as the range of study programmes built on disciplinary bases (Gauthier 2011, 2014; Jonnaert 2007; Jonnaert, Ettayebi and Opertti 2008).

Curriculum has traditionally been regarded as a rather technical matter best left to disciplinary specialists, educationalists, textbook writers and designers of assessment tests and examinations. More recently, however, the debate on curriculum has gradually moved beyond the technical realm to become also a subject of policy discussion on what education is needed and for what type of society, involving decision-makers, educators, organized interest groups and a variety of local and international institutions and stakeholders. In the process of defining regional and national development agendas linked to world dialogue on the post-2015 sustainable development goals (UNOWG 2014), the vision of curriculum as an instrument for forging learning opportunities throughout life places it (or should do so) at the centre of discussions on cohesion, inclusion, equity and development. For curriculum constitutes one of the very bases of an integrated conception of education as cultural, social and economic policy, and particularly of the forms of insertion in society and the knowledge and information economy (Gauthier 2011; Goodson 2005; Jonnaert and Therriault 2013; Marope 2014; Marsh 2004; PRELAC 2006; Reid 2006; Roegiers 2010; Tedesco, Opertti and Amadio 2013; UNESCO-IBE 2015; UNESCO-IBE 2013b).

In general, the main features of identity of the curriculum have been the study programmes and the disciplines. While the disciplinary approach is still predominant, it is observable that the curriculum has begun to occupy a major place in the discussions, agreements and dissensions around what society it is sought to construct and achieve for the future generations (Moore 2006, 2014; Young 1998). The centre of attention thus appears to swing around: it is the multitude of society's expectations and demands which, expressed in the curriculum, lend meaning and establish a tie with the study programmes and disciplines. This change of perspective, not free of contradictions, gives rise to new processes, dynamics and stakeholders. For the curriculum involves a multiplicity of political, social and educational agendas – global and local – that become superimposed and often collide, and to a great extent reflect different projects and interests.

The spaces of curriculum legitimation increasingly involve the political, social and economic stakeholders, the media and the social networks through, for example, public consultations, parliamentary debates and commissions or boards made up of trade-union representatives, employers' organizations, professional associations and sectors of civil society. Dialogue on change and curriculum content has expanded and it no longer seems possible to maintain that they are themes

exclusively incumbent on the educational authorities, the disciplinary specialists and teachers' unions, with the marginal participation of learners, citizens and society as a whole (Amadio, Opertti and Tedesco 2014). Advocating an extensive and open dialogue as a critical component of the process of curriculum design and development does not involve blind belief in the possibility of achieving education and curriculum policies based on a unanimous consensus. Tensions and conflicts are inherent in the debate on curriculum and, that being so, they should be taken on board as features of reality. It indeed seems that the most effective processes of dialogue are those that take account of both the consensus and the dissent alike, and identify the areas of agreement in order to promote sustainable changes looking beyond the near future (Opertti 2011, 2014).

For their part, the contents of the educational pacts (Tedesco 1997) give rise to growing controversy. A traditional line of thinking, still far from discarded, concerns the need to confine the agreements to a series of investments and associated goals, with conditions and inputs that back the teaching and learning process, a major component of which is the percentage of the gross domestic product going to education as an expression of the political will to prioritize education. From this viewpoint, the function of curriculum remains essentially limited because priority goes to the funding of textbooks, teaching materials and equipment (which, at least in the most advanced contexts, nowadays necessarily includes digital technologies and resources), together with mass teacher-training facilities generally following a cascade model. An emerging alternative prospect takes a more integral view of the education system, seeking synergies between inputs, processes and outcomes. In this context, curriculum renewal can be seen as an essential tool for backing educational and national development agendas which, from a humanistic perspective, pursue the expansion and effective democratization of the education cycles (for example, at basic and youth education levels) and their political legitimization (for example, at parliamentary level).

One of the challenges for the curriculum seems then to lie in being able to come up with convincing responses given the explosion of interests, expectations and needs looming over it, often chaotically, admitting the dual nature – political and technical – of decisions about the why, what, where and how of education. The need to strike a productive balance between the political and the technical characterizes the contemporary curriculum environment, and it may provide an antidote given the risks of its excessive politicizing or its limitation to a dialogue among specialists on self-referenced contents that are a far cry from what citizens demand and expect. Recognition of the political character of discussions and decisions regarding education and curriculum (Frigerio and Diker 2005) should nevertheless not be interpreted as backing for the discretionary interference of politics in teaching matters. It rather means understanding curriculum as a politico-technical synthesis of different visions taking account of the diversities of national societies plunged into a process of deep change and promoting a genuinely inclusive universalism of different beliefs, affiliations and interests.

The processes of curriculum design and development are thus facing a twofold challenge. On the one hand, the aim is to promote values regarded as universal (tolerance, peace, democracy, inclusion, equity, social justice, development) in a variety of political and social contexts while at the same time

respecting local values; and, on the other, there is the need not to be sidelined by the changes gathering speed worldwide and nationally that have an effect on the economy, the labour market, business, finance, social relations, and communications. At a time of instability and constant changes, it is not hard to see that societies are seeking to redefine, with more doubts than certainties, the rightful role of education in the overall training of tomorrow's citizens.

From various spheres, both national and international, the curriculum is required to come up with answers affirming values and references common to all citizens which often conflict with social behaviour patterns and economic dynamics. All in all, the curriculum operates within the setting of society's own irrationalities and cannot simply be seen as a consistent rational construction (Jonnaert and Therriault 2013). Hence, inasmuch as it responds to the many pressures bearing on it from society and the economy, the curriculum inevitably reflects contradictions and compromises.

In short, four emerging traits of a possible reconceptualizing of the curriculum can be highlighted. First, we have the perception that the curriculum articulates the educational and development aims and purposes put forward by society and the pupils' personal learning and development needs (UNESCO-IBE 2015). Secondly, there is the vision of the curriculum as the product of a process of social dialogue and collective construction implying a diversity of stakeholders and based on a comprehensive approach to the education system. The third trait concerns the intention that the curriculum should help to support and legitimize educational policies as a cross-cutting dimension and essential ingredient of a systemic vision. The fourth point is the expectation that, as a form of guidance for renewed teaching practices, the curriculum may be able to promote the effective democratization of learning opportunities and stimulate the gradual transformation of the teacher's role (Halinen and Holappa 2013; Fullan and Langworthy 2014; Roegiers 2010; UNESCO-IBE 2015; UNESCO-OIE 2013a).

1.1. The many dimensions of the curriculum

Albeit differently in and within the various regions, the curriculum is increasingly recognized as representing more than the range of study plans and programmes by educational cycles. But such recognition has generally not been matched by a clear perception of what to consider under the term "curriculum". An initial aspect to posit is that the curriculum has to do with the sum of processes that begin with the social dialogue on "contents" and are finally embodied in learning and performance achievements. The various dimensions of the curriculum (intended, implemented, hidden, achieved and experienced) must be taken into account when it comes to examining the curriculum design and development processes from a comprehensive viewpoint.

Discussion has usually centred, on the one hand, on identifying the gaps between what is prescribed and what in practice is learnt and taught, with emphasis on the difficulties of institutional and academic management of the changes ("the reforms fail on account of errors in applying them"; with regard to Africa, see for example Tehio 2009); and, on the other, on the discrepancies between the values and messages advocated by the intended curriculum and those underlying the

action of the education centres (Gvirtz 1997; Torres 2011). On the latter, one of the greatest contradictions lies in the fact that the curriculum prescription assumes that everyone can learn and that the education system is morally obliged to ensure that this happens, while the implicit assumption in many practices is that this goal is not within the reach of all owing to the immediate surroundings and/or their own capacities. In fact, the education system is often organized around segregated training circuits in accordance with learning expectations based on the pupils' cultural, ethnic and social origin (García Huidobro 2009).

These contradictions should help to centre discussion on the meaning and scope of "educability", namely that "every child is born potentially educable, but the social context operates in many cases as an obstacle to the development of this potential" (Tedesco and López 2002a:9). Questions likewise arise about how the education systems turn obstacles into opportunities, replacing the paradigm of deviation (emphasis on the fact that the main learning difficulties are due to deficiencies in the capacities of learners) with that of inclusion. The main difficulty lies in the insufficient responses generated by the curriculum with regard to organizing the learning contexts and experiences (Ainscow and Messiou 2014; Skidmore 2004).

More recently, the exponential growth of assessment systems and activities, both nationally and internationally, focuses discussion on the curriculum achieved – albeit chiefly in the areas of language, mathematics and science – and on the factors within and outside the education system that influence learning (Benavot 2012; Jaies 2003; UNESCO-IBE 2013b). It should be noted that more attention generally goes to outcomes than to the processes, the curriculum being devoted to what is measurable and assessment being avoided as a tool for promoting and motivating learning processes or using the outcomes to improve the quality of the processes. To some extent, learning is thus reduced to what is understood as "hard" and basic or fundamental (Atkin 1999; Gauthier 2014).

In general, the curriculum experienced by pupils has not been a priority theme in curriculum debates and policies (McCormick and Murphy 2000). The tradition of understanding it basically from the expectations and prescriptions of educational provision has overshadowed the learner, looked on rather as a passive recipient of knowledge that is transmitted and has to be assimilated. Scant attention has likewise gone to the understanding of individual pupils as special beings who learn and express themselves in distinctive manners. The matter of how to discover and motivate the learning potential of each pupil has been left aside in the educational proposals, which have opted for a curriculum focused more on content (knowledge) than on the processes (how that knowledge can be learnt and used). Finally, it would also be fitting to take account of what is not taught and learnt at school, namely what is not part of the intended curriculum, since it may show how irrelevant the curriculum is to the needs and interests of learners and the development prospects of national societies.

1.2. Who is responsible for and what is the role of the curriculum?

The curriculum has historically been an instrument of cultural, political and social integration and of the building of national identities underpinned by a Nation-State

directing and providing what education has to offer. That role of the State has for quite some time been increasingly questioned owing to a set of factors, notably: (i) the State's own difficulties in universalizing the right to education ensuring effective learning opportunities equitably; (ii) a civil society and a private sector actively developing curricular proposals intended for a variety of social sectors; (iii) the transnationalization of educational agendas, frameworks and models that determine the all but compulsory presence of certain themes in any reform process; and (iv) the emergence of international institutions and stakeholders exerting a marked influence on national agendas and, to a great extent, dominating the process of defining a global educational policy agenda (Meyer *et al.* 2014).

Specifically in connection with curriculum themes, it is important for us to highlight the following aspects. First we have the observation that the curriculum has had relatively little influence on initiatives to improve the quality of learning arising from the 2015 Education for All (EFA) goals established under the Dakar Framework for Action (UNESCO 2000). Secondly, the bodies funding educational reforms, associated to a great extent with the EFA goals, have conceived the curriculum as an input for the achievement of quality, concentrating basically on the provision of infrastructure, equipment, textbooks and teaching materials. Thirdly, on noting the persistence of low standards of learning and large gender, ethnic, territorial and social gaps, the focus of attention in the last decade has shifted to educational quality, with recognition of the limits of programmes chiefly concerned with the expansion of coverage and the provision of inputs (UNESCO 2014a; UNESCO-IBE 2013b).

Fourthly, the renewed emphasis on quality education in connection with the Education Agenda 2030 is expressed in not necessarily concordant positions: on the one hand, we have proposals confined to assessing the learning outcomes in what are termed the “hard” cores – language, mathematics and science – under the assumption that only what can be measured matters; and, on the other, there are positions extending the range of learning dimensions and areas to be considered and giving priority to curriculum and pedagogic renewal as an essential component of teaching and learning processes able to produce better results. The need to lend an integrated meaning to a variety of approaches regarding quality education is a task to be addressed in the new educational policy agenda (Tawil, Akkari and Macedo 2012).

In the fifth place, giving more attention to the role of the curriculum seems necessary not only since successful educational reforms depend on sound curricular proposals (Moreno 2008), but also because some of the key features of the international educational agenda – such as laying the necessary bases for lifelong education, forging a global citizenship and promoting sustainable living and development models – require profoundly renewed schools, curricula and pedagogic approaches (Skilbeck 2012; Chapman and Aspin 2012). Finally, it should not be forgotten that the processes of curriculum innovation and reform are carried out in a context marked by the growing influence of new stakeholders such as international assessors/auditors (Yates and Young 2010) and enterprises marketing worldwide contents, chiefly online, and ever more sophisticated assessment instruments.

To take account of all the aspects mentioned, and assuming that the curriculum is increasingly regarded as a both political and technical matter, what is needed is a State capable of providing guidance and ensuring that the ideals and genuine aspirations of the national society are fully reflected in the educational and curricular proposals. The point would not be to introduce more state control but effectively to lead and manage processes of dialogue open to the participation of a wide variety of stakeholders. Shifting towards a scenario where the State redefines its role in the matter of curriculum admittedly has its risks. For the temptation exists of promoting an all-embracing statism that reduces public policies to those of the State and does not foster the generating of innovation on the part of local stakeholders – the so-called “territorialization” of educational spaces – and civil society as a whole (López 2005; Da Silveira 2014).

2. Some trends in present-day curriculum development

Traditionally the main lines of curriculum policies and proposals have been, and to a great extent still are, the disciplines, parcels of fragmented knowledge that often prevent the building of an overall vision (Morin 2009, 2011). Furthermore, the disciplinary approach has given pride of place to subjects defined as core or “hard” – for instance, mathematics and science – and pedagogical approaches that have emphasized the transmission and accumulation of information and facts instead of promoting an understanding of what can be done with such knowledge.

Growing dissatisfaction is to be noted nowadays with the traditional curriculum formats, the contents of which appear divorced from the motivations, interests and daily lives of the learners – often regarded as passive recipients rather than the main actors of their learning. The traditional approaches fail to take due account of the growing diversity (cultural, social, individual) of the pupils caused by the expansion and democratization of basic and secondary education, in addition to overlooking the wide range of conditions for learning and the singular nature of each pupil as a special being (Acedo and Operti 2012; Ainscow and Messiou 2014).

It can likewise be observed that, in the national curriculum reform processes, it has become usual to refer to themes and approaches that seemingly shape an international educational agenda, with the associated risk of importing them without their giving rise to any critical contextualizing and appropriation. The relative standardization of national educational agendas is not a new phenomenon (Braslavsky 2002, 2005), but in recent years it has also become more frequent owing to the all but exponential increase in the number of national and international assessments, which is a matter of growing concern for teachers, educationalists and researchers (Benavot 2012; Meyer 2014).

We now highlight some of the themes that seem to have a significant influence on the process of defining national curriculum reform and renewal agendas.

2.1. Transnationalization of topics and competencies

Reference to generic, non-domain specific competencies such as communication, collaboration, critical thinking and problem-solving, creativity and learning to learn, together with cross-curricular topics like global citizenship, sustainable development, and inclusion, has become quite common in contemporary curricular proposals in countries of the South and the North alike. Acting competently to enjoy a satisfying and productive life and to be able to meet the challenges of an uncertain world is a recurrent goal in a good many national educational agendas, although the concept of acting competently (Masciotra and Medzo 2009) should not be understood solely as preparing competitive individuals for the local and global markets, but rather as the tangible possibility of exercising citizenship in several walks of life.

Furthermore, the countries also refer to the complexities of actually achieving and assessing competencies (Amadio 2013; Amadio, Operti and Tedesco 2014). The role and place of generic competencies in the traditional curriculum structure by discipline and how the various subjects should help develop them continue to be debated. In addition, the existence regarding competencies of numerous proposals and reference frameworks that use a repertory of different approaches, classifications and terminologies may give rise to ambiguity and confusion (Voogt and Robin 2010). There are also undeniable tensions between a basic education preparing pupils for continued studies, or preferably for developing skills for adult life, and between competencies defined at highly abstract levels and their socio-historical construction in each national society (Perrenoud 2011).

Although the competency-based approach and the cross-curricular topics have been turning into an axis of organization of the curriculum design processes in many contexts, its effective application in the classroom requires sustained and far-reaching changes in how the teaching and learning processes are organized, together with renewed assessment criteria and instruments (Gordon *et al.* 2009; Labate *et al.* 2010), which highlights the big gaps still existing between theory and practice.

2.2. Educating and learning go hand in hand

Mainly in the last two decades, the focus of the debate and of the educational proposals has gradually shifted from teaching to learning (UNESCO-IBE 2013b), placing the learners at the centre of the concerns as actors taking the lead in and regulating their learning (Dumont, Istance and Benavides 2010; OECD 2013). This renewed emphasis on learning also marks the discussions on educational goals up to 2030 from varying ideological and programme positions. The emphasis is placed on “the direction of learning in schools”, on “learning resources and environments”, on “teachers as professionals of learning”, on “tests and examinations as assessments for learning”, and on “technologies as a means of liberating learners” (Cheng 2014:3).

At the same time, the perception has spread that we are faced with a “learning crisis” (King and Palmer 2012; UNESCO 2014a) weighing more heavily on the most marginal and poorest sectors of the population, and which essentially takes the form of worrying deficits in the acquisition of literacy and numeracy skills.

They are undoubtedly basic skills but this vision centred on what is regarded as the “hard” core of learning overlooks to a great extent the values, attitudes and emotions underpinning it, with the probable consequences of giving more attention to measuring and assessing than to effectively improving the learning process (Archer 2014), to teaching for examinations and tests, and to defining the aims of education on the basis of what is measured (Labaree 2014).

Owing to the growing prioritization of learning assessment by means of national and international standardized tests, the many dimensions of learning are relatively neglected and the emphasis is placed on quantifying deficiencies in the acquisition of knowledge seen as basic – mainly reading, writing and mathematics. This trend unfailingly raises concerns. For example, there are doubts about the possibility of ranking the various types of learning with regard to their relevance and utility when it comes to promoting the integral development of citizens. Doubt is voiced about whether measurable learning courses are in themselves indicative of the varied skills that learners need to develop to take their place successfully in society and in the world of work. Also drawing criticism is the assumption that learning is the result of cognitive processes that disregard values and emotions, avoiding recognition of the emotional nature of cognitive processes and the cognitive nature of emotions (Pons, de Rosnay and Cuisinier 2010; Immordino-Yang 2011; Immordino-Yang and Damasio 2007).

Given this reductionist vision of learning, the diversity of themes, processes and experiences can be assumed to assist the achievement of an all-round development and to require a wide range of pedagogical strategies (Aguerrondo, Vaillant *et al.* 2014). The importance of promoting relevant learning processes is a key issue for a renewed agenda on educational quality. For example, *Education First*, a world initiative in favour of quality, relevant and transformative education promoted by the United Nations Secretary-General, Mr Ban Ki-moon (2012), defines as priority areas the bids to “improve the quality of learning” and “foster global citizenship”. The rationale of the initiative recognizes the mismatch between the skills necessary in today’s world and those acquired in the present education system as a factor hampering the achievement of improved learning quality, in addition to the obsolescence of curricular proposals and teaching materials for forging a respectful and responsible global citizenship. Furthermore, UNESCO states that in addition to the acquisition of basic knowledge and cognitive skills, the content of learning must promote problem solving and creative thinking; understanding and respect for human rights; inclusion and equity; cultural diversity; it must also foster a desire and capacity for lifelong learning and learning to live together, all of which are essential to the betterment of the world and the realization of peace, responsible citizenship and sustainable development. (UNESCO 2012)

Fostering broader understanding of learning presupposes revisiting relations between teaching and learning, mediated to a great extent by the curriculum and the pedagogy. It needs remembering that there are no instances of educational excellence without quality teachers and teaching (Hargreaves and Shirley 2009). For the strong emphasis on learning in educational proposals is causing a certain disregard of the role of the educator and the necessary support for generating quality learning processes (McLean 2014). Even though it is observed that there is no quality education without good teachers and in the context of the consensus on

educational goals for the period to 2030, the need to be able to call on qualified, professionally trained, motivated and supported teachers is established (UNESCO 2014b), reasoning centred first and foremost on learning and particularly its assessment should not blind us to the need for combined strengthening of the teaching role, of the curriculum and of pedagogy.

A comprehensive concept of educating is an essential, albeit insufficient, basis for promoting learning. Educating presupposes harmonizing learning to learn from the cognitive point of view and learning to live together from the social point of view as a fundamental aspect of educational strategies intended to achieve the all-round development of the individual (Sinclair 2004; Tedesco 2005). Way back in the report *Learning: The Treasure Within* it was postulated that both types of learning should be regarded as a whole responding to a unitary vision and educational strategy (Delors *et al.* 1996).

There are at least five guiding principles that could be taken into account with respect to the challenges of educating to learn to live together and learning to learn: (i) recognition of the diversity of world views and the strengthening of a plural vision of knowledge; (ii) genuine concern for a sustainable human and social development affording room for alternative paths to development; (iii) a vision of lifelong learning without separations between the formal and informal or between forms of administration; (iv) moving beyond a strictly utilitarian or instrumental approach emphasizing the humanistic dimension to ensure a renewed purpose for education; and (v) the re-contextualizing of education as a common good in the digital age that should be materialized in effective learning opportunities (digital and educational inclusion) (Tawil 2012).

One of the central issues of the contemporary curriculum debate consists in finding points of connection between educating in a set of universal values and references in the framework of a cosmopolitan vision of the world, taking account at the same time of the realities anchored in local values and references. In other words, the aim is to make an open global view compatible with a relevant local touchdown. Among other things, this implies recognizing the interdependence of national societies in forging a sustainable way of life respectful of the various identities and strengthening local cultures, valuing their responses to the challenges they face (Hallinen and Holappa 2013; Tawil 2013).

The strains between universal and local are very much reflected in the curriculum. For example, this has to do with the need to combine a cosmopolitan vision that has room for national identities, respects differences and promotes harmonious living (civil education) with the strengthening of matters of politics and democracy, together with the rights, duties and responsibilities of the citizens (civic education). As an illustration, in Latin America the comparative analysis of the civic/citizenship education study programmes of six countries shows that the themes celebrating diversity and sociocultural pluralism are given pride of place over those relating to politics as a whole and the citizen vote (Cox *et al.* 2014).

In an era of turbulence and uncertainty, educating requires the reaffirmation of universal values and references that enable us to act as citizens competent at both the global and the national and local levels. This presupposes on the one hand

avoiding approaches seeking to separate and segregate in order to safeguard identities (Lenoir, Xypas and Jamet 2006) and, on the other, not adopting doctrinaire approaches that reject and expel those who are different from society (and from the curriculum). This also implies that teaching and learning to respect and form ties with those who are different, developing strong feelings of adherence to social justice, and assuming values of solidarity and peaceful conflict resolution, together with changing consumption habits to promote the sustainable use and management of resources and the environment, require a strong commitment that is not only cognitive but also ethical and emotional.

With this perspective, educating for a better and more solidarity-based world means helping to establish a just society in which everyone is recognized and treated as an individual but where all are protected and cared for should they become vulnerable (FIET 2014). “Generating adherence to justice in the knowledge society means being able to manage large amounts of important information and their ethical implications, and having a strong core of universal values that reinforce meanings and practices regarding justice” (Tedesco, Operti and Amadio 2013:4).

2.3. Curriculum frameworks, an option for a holistic and localized approach

The fragmentation of themes, approaches, learning environments and courses available between and within educational levels and cycles – mainly between primary and secondary – often prevents education systems from including a holistic vision of educating and learning, and certainly does nothing for a smooth transition of students from one level to another or from one mode to another. The alternative of a restructuring of cycles and levels on the basis of common curriculum and educational approaches is increasingly expressed through curriculum frameworks.

The curriculum frameworks constitute a form of preparing and reflecting political and social agreements regarding educational aims that result in a range of requirements and regulations guiding the implementation and evaluation of the curriculum at local and school levels (Stabback 2014; UNESCO-IBE 2013a). They tend to be organized around learning areas (including traditional disciplines), cross-curricular topics, and competencies within a unitary vision of the education system encompassing the initial, basic and secondary levels with strong institutional and programme linkage. For they represent a manner of expressing and lending consistency to the planned curriculum, adopting the form of documents intended to establish the parameters within which the curriculum should be developed, contemplating the pedagogical approaches and learning materials, the management of educational establishments and the forms of assessment.

Curriculum framework does not mean a uniform curriculum but a consistent and sequenced range of guidelines and criteria at national level that authorize and support the design of appropriate and adapted educational provision, besides facilitating the development of the school curriculum connected with local realities in the context of a standpoint open to the world and to the national society as a whole. To some extent, a curriculum framework permits “glo-local” constructions and developments. The study plans and the disciplines become meaningful in the light of the programme guidelines contained in the curriculum framework – for instance

through cross-curricular topics. In short, the curriculum frameworks can be seen as a sort of constitution for education systems lending substance to their aims and purposes in a series of steps and processes effectively connecting the prescribed and the actually achieved curriculum.

The complementarity between universal contents and those common to educational levels, courses available and centres, and differentiated and individualized through curriculum development at school level, is a feature of several contemporary curriculum reforms. The margins of responsibility and operation of the educational centres tend to be associated with defining and developing local curricular proposals rather than contextualizing contents defined at central level. It would no longer be a question of trying either to carry out a top down reform or of “landing” contents defined centrally, but rather of ensuring that the school can assume the responsibility of defining the central aspects of what and how to educate within the setting of clear and binding general guidelines. This approach based on the school curriculum in a general context providing guidance, following up and assessing is uppermost among the OECD countries (Kärkkäinen 2012).

The idea of localization shows up the need for the curriculum to be both centralized and decentralized. The debate mainly concerns “how prescriptive the centrally designed curriculum should be and how much leeway should be left to teachers to adapt the curriculum for classroom use” (Amadio, Opertti and Tedesco 2014:3).

The curriculum contents can be described as learning and life situations that involve the mobilization of cognitive and emotional resources. These situations presuppose a new form of articulating the relationship between the curriculum and society, where the relevance of the curriculum proposal lies in its capacity to connect with social demands, economic requirements and youth cultures (Dussel 2013). The situations approach does not underplay the importance of the traditional disciplines or of knowledge forms but rather strengthens them in their capacity to influence how the learner addresses several orders of challenges in life. Acting competently is being able to know what knowledge needs to be called upon in specific situations mediated by values and attitudes (Masciotra and Medzo 2009).

Furthermore, the debate on contents also has to do with what contents are regarded as part of a common core. To a great extent, the need is to define the meaning and scope of the State’s action to promote and agree on universal values and references guiding definition of profiles of graduation and of the courses of learning pursued. And of course there are still many challenges regarding the identification and selection of the “basic” contents required by the citizens of tomorrow (UNESCO-IBE 2015).

2.4. Diversity, personalization and inclusive education

Inclusive education is increasingly seen in the context of rethinking the responsibilities and role of the education system in upholding quality education for all (Ainscow 2014; Florian 2014; Opertti 2011; Opertti, Brady and Duncombe 2009; Opertti, Walker and Zhang 2014; Slee 2014). A traditional approach regards education systems as offerers of services, chiefly in the formal sphere, and

characterized by a multitude of institutions, stakeholders and programmes not necessarily working harmoniously in accordance with a long-term shared vision. Alternatively, education systems may be conceived as facilitators of learning opportunities on the basis of a flexible range of educational and curriculum provision, and combining in a complementary manner the formal with the informal and the public with the private (World Bank 2011).

Education systems do not succeed in just legitimizing and maintaining good results through the volume of investment and expenditure they carry out to improve the learning environments and conditions of teaching work. Those that appear most effective are permanently and markedly concerned with giving everyone a real opportunity to learn, and with not leaving anyone behind, identifying and backing the learning potential of each learner, and promoting relevant training hubs equally balanced between individual and collective development. The evidence of the most successful systems lies in the fact that the educational and curricular proposals motivate, induce and permit the development of life skills and the exercise of citizenship. In these systems nobody is “uneducable”, so that there is no justification for pupils not learning because of precarious cultural, social and economic contexts (Armstrong 2014; Lee 2014; Tucker 2011).

Building an effective inclusive system requires substantial changes in mindsets, cultures, policies and practices. The challenge consists in moving from traditional systems where only a few pupils learn to new systems – viewed as facilitators of learning opportunities – where all pupils need to learn at high levels (Schleicher 2011). The focus on learning, a central feature of inclusive education systems, requires linking three elements: (i) high quality of knowledge shared by teachers with students in the different learning areas and related disciplines (i.e. the pursuit of excellence); (ii) a wide range of opportunities to learn and apply knowledge competently (openness to society); and (iii) the emphasis on values and attitudes that show appreciation of freedom, solidarity, peace and justice, among other core values.

The need is not just to advocate inclusion generally, allocating more resources for infrastructure and equipment judged necessary, or making *adjustments* to the curriculum, to the training of educators and the professional development strategies for teachers. It is rather the case that inclusive education involves, above all, the willingness and skills to understand and support the variety of characteristics, expectations and needs of the pupils in order effectively to democratize learning opportunities, processes and outcomes. Among other fundamental aspects, it means that educators must be convinced and actively promote inclusive practices in collaborative learning contexts.

Inclusive education can then be seen as a cross-cutting principle in the organization and functioning of education systems that facilitates and diversifies the teaching and learning processes. For it is a way of strengthening the significance and universalist framework of social policies, moving gradually from an approach that seeks to equalize through a homogenizing proposal to another one seeking inclusion through differential and personalized attention reducing the disparities that hamper the democratization of learning. Diversity is an asset of inclusion while disparity is a hindrance. (Ainscow 2014; Ainscow and Miles 2008).

The other aspect of assuming the diversity and uniqueness of the special being of each learner is the personalization of education. This entails activating the learning potential of the special being of each pupil while respecting his or her pace of progress and making effective use of the advances of cognitive psychology and the neurosciences (Abadzi 2006; Fischer and Bidell 2006; Marina 2011). These advances are an indication to us that personalized learning involves various types of learning and a variety of strategies for stocking and making sense of the information (Hughes 2014; UNESCO-IBE and International School of Geneva 2014).

Personalizing education does not involve the whole collection of individualized plans for attending to the pupil as detached and abstracted from a collective environment of learning with other peers. It means backing the learning potential of each pupil working in a variety of environments and contexts. To personalize is to respect, understand and construct on the uniqueness of each person in the setting of collaborative environments understood as a learning community where all need each other and are mutually supportive (Florian and Black-Hawkins 2010; Hart and Drummond 2014).

Furthermore, inclusive education involves differential attention to individuals and groups, recognizing and understanding their expectations and needs, while connecting them with society as a whole in a universalistic framework of public policy. This type of attention cannot involve separation or segregation or stigmatization of learning opportunities and environments. Under this concept, adopting a focused approach may constitute a public policy instrument for achieving differential attention, requiring a comprehensive framework that clearly establishes common goals and outcomes for the variety of populations and groups.

The intended or prescribed curriculum is an educational policy instrument seeking to promote learnings relevant to society and suiting the individual, but on its own it is no more than a document determining expected contents and outcomes. The curriculum needs an institution taking charge of it to develop it, not as a prescription to be applied but as opportunities and processes of teaching and learning suited to pupils' needs. But the institution alone also runs the risk of prescribing activities if it does not convince and commit its staff. Also needed is an educator skilled in using the curriculum, laying down goals, rank-ordering training and content themes, selecting educational strategies and assessment criteria and instruments responding to the special being of each of the learners. The educator alone cannot personalize education if the curriculum and the institutions are unsupportive. In short, the synergies between curriculum, educational centre and teachers are fundamental when it comes to putting inclusive education into effective practice (Amadio and Operti 2011; Burns and Shadoian-Gersing 2010; Forlin 2012; Lopater 2014; Operti and Brady 2011).

2.5. The curriculum and the teacher in the digital age

Instantaneous communication, the possibility of immediate access to a staggering amount of information and knowledge online, and the growing availability of digital technologies require (or should require) revisiting the vision of a curriculum requiring school attendance and focused on the transmission of information and the

assimilation of disciplinary contents. The point is not to assume that the virtual replaces the real or to generate parallel training circuits that may generate greater segregation. Nor should there be any mechanical transfer of presential training approaches to the digital world, or replacement of textbooks and physical classes with the “flipped classroom” or the “massive open online courses” (MOOCs), delivering the traditional information and contents but in another format (Fullan and Langworthy 2014).

The all-embracing presence of the digital world is a fact of life ever more widespread in the countries of the South – in Africa, for example, there are estimated to be over 650 million mobile telephone users (Schmidt and Cohen 2013). This digital world represents a window of opportunity for, among other things, exploring new forms of inclusion and diversification of learning trajectories, associated for instance with such mobile devices as smartphones, tablets and personal digital assistants. It also offers the teacher the possibility of resorting to online resources to extend the range of educational contents and strategies that cater for the diversity of the learners and personalize the curricular proposal.

This digital world should force us to rethink some essential aspects of the education system, namely the relations between educational policy, curriculum and pedagogy, and between teachers and learners. In general, it can be said that progress is being made in facilitating digital inclusion, for instance by providing primary and/or secondary pupils with a laptop, and access to online resources and contents, but there has been much less progress in educational inclusion based on the necessary changes regarding the curriculum, teachers and underlying pedagogy. The curricular and assessment standards that basically gauge the reproduction of contents constitute one of the major barriers to the generalized adoption of new educational methods that lend meaning to digital inclusion (Fullan and Langworthy 2014; Valiente 2010).

The curriculum should provide clear and consistent guidance on the “why” and “what” of education, made explicit in a range of desired learning patterns and how their various components should back the learning processes. For their part, the pedagogy should provide the learning and teaching models which, facilitated by the use of online resources and digital technologies, can enable the learner to use and produce knowledge in real-life situations. Technologies understood as processes to be developed and not as tools to be applied should be part of a renewed vision of the curriculum and of pedagogy (Aguerrondo, Vaillant *et al.* 2014).

However, although the potential for digital technologies to transform ways of organizing the curriculum, teaching, learning and the school environment has been celebrated for over 30 years now, it can be noted that the profound changes hoped for have not materialized and that, to a great extent, these digital devices and resources are very often used as new means of transmitting contents and reproducing approaches of traditional education (Cuban 1986, 2001; Dertouzos and Moses 1979; Kress 2006; OECD 2012; Robson 2013; Selwyn 2011; Somekh 2006; UNESCO-IBE 2015).

The growing use and influence of digital technologies certainly feed discussion of the required profile and role of teachers for sustaining quality

processes and outcomes. The pendulum tends to move, sometimes without further transitions, between the opposed visions of teachers transmitting and those serving as facilitators. Over and above the inappropriateness of exhaustively defining the teaching role with just one feature, we understand that transmitting and facilitating are essential aspects but certainly do not exhaust either the ultimate significance or the essential assignment of the teacher.

Above all, the teacher is an educator with an ethical mandate who, assuming a binding commitment to the goals that society assigns education and the students' all-round development, leads the learning processes. His or her role as "expert orchestrator" of learning environments to foster and support the development of skills (OECD 2013) is to understand each learner in their indivisible entirety in cognitive and emotional components, and to keep as a reference point their well-being, both physical and emotional, and guide and support them in their learning process. Likewise, the emphasis on the need for learners to act competently requires the teacher to refine his or her comprehension and understand knowledge as a tool, irreplaceable but not sufficient in itself, for addressing challenges and situations of daily life. In short, a good teacher seems to combine three qualities: (i) a high level of general intelligence; (ii) a firm command of the subjects taught (and of digital technologies); and (iii) a proven ability to get learners involved and help them understand what is being taught (Tucker 2011).

The teacher is responsible for broadening the learning opportunities of pupils, removing barriers to participation and effective learning, regarding the intellectual, affective and social domains of pupil development as an integral whole. Let us take the pedagogical principles that: (i) teachers and students work together as partners, the learners being seen as active subjects and builders of meaning; (ii) classroom decisions are taken in the common interest and the group is a powerful learning resource; and (iii) all the boys and girls can and wish to learn and can be infinitely ingenious if adequately supported (Hart and Drummond 2014). All these principles enable the learning potential of each individual to be fulfilled, with reaffirmation of the interactive and collaborative nature of learning.

Likewise, the need becomes even clearer for the teacher to act as a sort of compass amid the information flows (Savater 2012), to lend meaning to and explain phenomena and situations. As Umberto Eco (2014) observes, "the Internet says *nearly everything* [to students] except how to search, filter, select, accept or refuse that information". In the context of the meta-cognitive processes nowadays needed in an information-intensive society, we must develop not only our abstraction capacity but also the ability to judge the abstraction processes performed with technological devices.

Furthermore, the digital world could be seen as a space of relative horizontality in relations between learners and teachers, where resources are shared, there is mutual support and individuals learn from one another. As is often suggested, the need is to learn *with* rather than *from* the teachers, in a shared effort to search for meaning in the face of all the knowledge available together with its application (Koh 2015; Prensky 2014). One of the challenges is that of providing access to personalized knowledge suiting the needs of each learner that opens up a great many possibilities for the application and production of knowledge. The

curriculum proposals must take advantage of the virtual space for extending the opportunities to learn, given that the young see themselves “like a fish in water” in that space (Balardini 2014).

The teacher thus has to adjust the approaches, contents and classroom teaching times to relieve them of the transmission and passive reception of information and associated tasks, and so be able to concentrate on orienting individual learners on the basis of their questions, uncertainties and comments, facilitating unhurried work in the areas in which they need support (Hughes 2014).

A renewed teaching role with a view of the curriculum that harmoniously combines the classroom and digital worlds through hybrid learning models smooths the way to affording students more and better opportunities of learning in different formats and from their peers. Besides which it strengthens confidence and gives them more leeway in the matter of playing an active part in the development of their own learning processes by connecting their motivations with the tasks of learning. In this way, teaching is personalized and learning becomes a singular pursuit, overcoming the rigidities of school models that provide everyone on the same footing with the same sequence of contents at fixed times (Khan 2012; Chapman and Aspin 2012).

The need to renew the teaching role should also involve recreating the bases of mutual confidence with the education system and society as a whole (PRELAC 2005). The teaching role cannot and should not be thought of separately from the emotions, beliefs and narratives of the teachers, nor from the complex contexts and circumstances in which they work (Tedesco and López 2012b). As we have observed in other documents, the risk is run of asking too much of teachers, who also have to put up with often precarious and unsatisfactory working conditions and may easily lose sight of the most important and enthralling aspect of their work: how to educate tomorrow’s citizens (Amadio, Operti and Tedesco 2014).

2.6. Curriculum and assessment

The learning assessment arrangements affect the curriculum in many ways. Assessment is often thought of as lying outside the curriculum and designed to record achievements in learning and the acquisition of skills, without being sufficiently regarded as an important component of the learning process that should help in involving and supporting each pupil (Savolainen and Halinen 2009; Labate *et al.* 2010). The fact of lying outside the curriculum is also established because assessment often fulfils a function of selection and “regulation” of opportunities to move ahead in the education system.

The dream of a “Harvard education”, starting at the initial level, is ever stronger and prompts sometimes anguished mothers and fathers to try to give their children what they deem to be the best educational opportunities. The child and the adolescent are turned into objects and quantifiable objectives of performance needing to take many tests and examinations, often starting in lower secondary education (and even at the end of the primary education cycle), to be able to go on to tertiary studies and continue “the learning journey” up to master’s degrees and doctorates (Operti 2011).

It is interesting to observe how innovations in curriculum and education matters may often clash with the assessment logic strongly characterizing education systems. For example, since 2001 in China progress has been under way in transferring to the school responsibility for implementing a part of the basic education curriculum (Muju 2007). Underlying this initiative is the intention of placing the learner at the centre of the educational process and moving on from frontal educational approaches, concerned with the transmission of information, to practices promoting the development of competencies. Implementing this proposal for a school curriculum and for educational renewal is hampered by a practice of assessment closely associated with the entrance examinations for upper secondary education and the universities, which strongly influences how the teachers organize the learning process in response to the demands of communities and families (Wang 2012). The intention of favouring the development of competencies may be frustrated by the prevalence of practices that prioritize the assimilation of disciplinary contents covered in examinations.

Another example is Japan, whose 2002 curriculum reform sought, among other things, to reduce the pressure on teachers, grant them more autonomy and stimulate the interest of students in learning. To contribute to those aims, a subject called 'Integrated Studies' was introduced that gave teachers some freedom regarding what to teach and at the same time afforded students the possibility of choosing what they were most interested in learning. Japanese teachers tend to see themselves as subject specialists and feel the pressure of parents mainly concerned with seeing that their children are well prepared to pass the examinations by subject set for the end of upper secondary education. According to reports on how the new subject worked, the teachers gave priority to their own subjects and used the allocated time to complete what they had not had time to teach in their classes. They in fact took advantage of that leeway to meet the concerns of parents about the quality of the education and in particular about the examinations (Bjork 2009).

Designing and reforming the curriculum mainly on the basis of what is measured and hence matters can result in that curriculum proposals are evaluated according to the sufficiency standards established in international tests, which may differ significantly from the national curricula, as in the case of the Programme for International Student Assessment (PISA) (Münch 2014). It would seem then that the curriculum must be recreated on the basis of the overriding consideration of assessment results that disregard their national and local components and in fact assume the idea of a *global* curriculum – without any clarification as to who is in charge of its definition and legitimation, through what processes, and how the various social actors can participate in them.

International and national assessments of a summative character have begun to wield predominant influence and are based to a great extent on the utilization of “a single metric to assess basic knowledge and skill levels acquired by students mostly in three curricular areas: language, mathematics and sciences” (UNESCO-IBE 2013b: 4). This trend whereby educational and curriculum reform agendas have as their main reference the indicators of international tests is a growing one. For example, in the 2013-2025 proposed educational reform, as an indicator of equitable access to quality education, the Ministry of Education of

Malaysia seeks to come in the upper third in international assessments such as PISA and the Trends in International Mathematics and Science Study (TIMSS) over a 15-year period (Ministry of Education of Malaysia 2013).

Repositioning assessment as a curriculum component should result in greater importance being given to it as learning and educational strategy (more than as an instrument of accountability) and to the criteria and instruments of formative assessment. Formative assessment should not be discussed as opposed to summative assessment, but establishing complementary functions to achieve a common purpose – supporting the learning process (see for instance Stein, Dawson and Fischer 2010). Furthermore, assessment in the curriculum must remain consistent with the approaches underlying the teaching and learning processes, responding to a unitary and shared educational vision. For example, it is often observed that many contemporary curriculum reforms have adopted a competency-based approach as an organizing and guiding principle, while maintaining assessment arrangements involving summative tests and examinations by subject which do not assess progress in the development of competencies.

It should also be borne in mind that teachers with professional qualifications of a disciplinary type often prefer to use a summative assessment approach since it enables them to check, apparently in a clearer and more linear manner, the level of assimilation of the information, facts and concepts passed on to learners. On the other hand, a formative approach enables the teacher to understand better how the students are learning, to ascertain in greater detail the varied learning styles, to identify problems the students may face in the learning process, and to use feedback to ensure that all have the opportunity to learn.

3. Some guidelines for the curriculum agenda of the twenty-first century

What we have so far expressed gives an idea of the considerable complexity taken on by tasks to do with curriculum design at the different levels of the education system. Curriculum making processes involve many social stakeholders, respond to a wide range of society's requirements and should be tied in with the dynamics of the development of knowledge and its disciplinary organization. Such complexity grows at times like the present, when societies are engaged in a period of profound changes that modify the conditions and needs of learning of persons, both for their performance in the labour market and for their citizenship and personal performance.

Examination of the processes whereby a particular curriculum design is defined implies considering how it is constructed and shared, along with its contents. Both aspects are closely related and regard what should be the basic guidelines defining the *meaning* of educational activities or, to put it in another way, defining the response to the question of the "for what" of education. Answering this question assumes, at this historic juncture, a singular importance since one of the features of the culture of what has come to be called "the new capitalism" is just this deficit of meaning. According to Sennett (2006), we live in a culture of *here and now* and of *nothing long term*, a hypothesis shared by other analysts of contemporary culture from different viewpoints (Laïdi 2000; UNESCO 2004). Education is the place

expressing most tangibly the social consequences of breaking with the past and the uncertainty about the future. The task of education, in short, consists in sharing the cultural heritage and preparing for a particular future. If the cultural heritage lacks validity and the future is uncertain, this erodes the fundamental pillars of the work of educational institutions and the roles of those participating in the educational process, both school and out-of-school. Furthermore, the deficit of meaning affects the dynamics of educational policy decisions and even the cognitive and emotional processes linked to the capacity to process changes in the pace of life subjectively.

Implicitly or explicitly, all curriculum decisions are defined in the framework of particular orientations of meaning. Only in such a framework is it possible, for instance, to establish what subjects, what times and what contents will have their respective study plans and programmes, what teaching and learning strategies teachers will need to adopt, what assessment criteria will be used, and what institutional designs the schools will have. The traditional meaning guidelines – educating to build the Nation-State or educating to train human resources for economic development, for example – seem to have exhausted their capacity to mobilize the interest of the various social actors and are unable to meet the new demands.

In this connection, it is usual to find analyses on the social changes at present under way based on the idea that the deficit of meaning is accompanied by the hypothesis that everything is absolutely new. The work organization models have changed radically, as have the political institutions and the processes of cultural construction. However, while nobody can doubt the novelty and depth of these changes, it needs emphasizing that in this process old problems reappear that we thought had been solved. From the socio-economic point of view, the analysis of Thomas Piketty (2014) highlights the significant increase in social inequality and the return of patrimonial capitalism. According to this perspective, there has been a return to economic accumulation on the basis of financial income managed by family dynasties. Associated with this increased inequality come other old problems with new faces: xenophobia and racism for instance, together with extreme violence to settle social, cultural or religious conflicts. Regular statistics do not usually gather information on these phenomena, but some surveys and other reliable sources point to a big rise in xenophobic, racist and violent behaviour, mainly on the part of young people. These analyses echo the paradoxical hypothesis that we are today closer to the situation existing in the late nineteenth century than that of the mid-twentieth century.

The exhaustion of the traditional paradigms, coupled with the need to react against these regressive trends of the new capitalism, have stimulated the definition of postulates based on the concept of social justice. In this text, and in the framework of all the United Nations agencies, the new guidelines on the meaning of education are based on the ideal of building more just societies and reaffirming the value of education as a common good. The concept of social justice matches the idea of human development and is well suited to articulating the new tensions caused by the globalization process between the universal and the local, the self and the other, the individual and the collective, diversity and inequality. Advancing in the process that brings us closer to this ideal is an urgent task. The increase in inequalities and the phenomena of violence towards particular population sectors

shows that very intense educational efforts will be needed to generate the levels of commitment to justice that social development requires.

The experience of history shows that defining a curriculum based on certain guidelines of meaning presupposes that society adheres to those guidelines but, at the same time, requires of the educational activities the shaping of that commitment in the new generations. In the specific case of commitment to the ideals of social justice, it has to be recalled that its validity clashes with other guidelines of meaning and with a no less significant phenomenon: an adherence that is purely rhetorical or cut off from how people actually behave.

On the basis of these considerations, it can be argued that the main education and curriculum challenge facing us in this stage of historical development consists in designing and validating learning experiences that permit, at both the cognitive and the ethical and emotional level, to combine the defence of the self and respect for the other, personal fulfilment and solidarity with the least favoured, and scientific rationality and responsibility for the results of the use of knowledge. The design of these learning experiences obviously depends on the level of the education system under consideration and on their cultural and institutional context. But a common and fundamental aspect of that design is to assume that this learning is very demanding, both cognitively and ethically, and that both dimensions have to be conceived as a single block. There should be no contradiction or dissociation between the cognitive dimension and the ethical dimension in learning. Learning experiences enlist all dimensions of the personality and we must ensure that not just one has legitimacy and the others remain hidden.

The degree of legitimacy of learning experiences comes from the assessment systems, both national and international, which nowadays have become highly relevant in managing education policies. In this context, assessment systems will need to be designed that can gauge learning outcomes more fully, moving beyond the approaches that concentrate on measuring cognitive attainments in three curriculum areas (reading and writing, mathematics and sciences). This task is enormously complex technically and politically, especially where the aim is to cover all educational institutions and in very diverse cultural contexts. On this issue, it could prove useful to work with the concept of multiple intelligences (Gardner 1998), which provides a theoretical justification for the design of assessment systems gauging outcomes in the various dimensions of the personality with more holistic views of educational performance.

In addition to the integral and demanding character of learning experiences, it is necessary to emphasize the importance of basic education. In this respect, there is broad consensus on the need to conceive education as a lifelong process. The speed and depth of the renewal of knowledge is one of the central features of present-day society but, to develop the capacity to adapt to this pace of scientific and cultural change, a basic education of very good quality is key. The priority given to basic education represents one of the main lines of curriculum transformation in the twenty-first century, which presupposes a radical change in the scale of prestige usually applied by education systems, where the less basic it is the higher its prestige. The experiences of some countries achieving high levels of educational quality and equity show this line of action to be one of the “good practices” that

ought to be generalized. In the definition of the contents of this universal and compulsory basic education, we can retrieve the concept of new forms of literacy: to the traditional but renewed literacy (reading and writing) must be added digital literacy and scientific literacy. Basic education also includes the cultural dimension, where the strengthening of the self must be associated with respect for the other.

The priority given to basic education does not mean underestimating the importance of educating the ruling elites in the process of building more just societies. From this point of view, it is necessary to include in the discussion agenda the theme of curriculum design for the various university courses. The need to include learning experiences that guarantee the training of high levels of social responsibility in higher education goes both for the courses termed “hard” and for the “soft”. Decisions on how far to direct and how to utilize research on health, genetic manipulation, caring for the environment and food production, for example, are just as important as research on job creation, science teaching, housing construction or migration processes. Likewise, responsible use of the knowledge of biologists is socially just as important as in the case of economists, as has been clear after the recent economic crises.

The dynamism of social, cultural and technological changes and the diverse contexts of educational activities result in a strong demand for innovation in curriculum designs, which will have to handle the tension between stability and change. From this point of view, it seems appropriate to postulate the concept of *transitional curriculum designs* incorporating updating arrangements as a normal procedure. For this, one of the challenges of the twenty-first century consists in introducing greater doses of innovation and experimentation in teaching and learning strategies, coordinated with precautionary criteria, as in scientific research in general.

The curriculum challenges of the future also include the actual process of participating in the definition of learning contents and experiences. In this respect, the available analyses indicate that, despite an increase in the range of stakeholders involved in the process, participation continues to be concentrated on those with organizational capacity (such as entrepreneurs, trade unions, Churches and academic groups). Curriculum design associated with the building of more just societies further requires the participation of the organized sectors, and the presence of a voice that expresses the particular learning needs of the general interests, the common patterns and social cohesion. In this respect the role of the State and the public sector is a key one, to prevent curriculum definition from remaining enclosed in the logic of corporate interests.

Finally we find it necessary to maintain that these challenges also hold for the academic world, responsible as it is for producing the knowledge associated with the design of the most effective instruments to ensure that the ethical option for social justice is not relegated to a mere rhetorical approach devoid of substance.

Bibliography

- Abadzi, H. 2006. *Efficient learning for the poor: Insights from the frontier of cognitive neuroscience*. Washington DC: The World Bank.
- Acedo, C. and R. Opertti. 2012. "Educación inclusiva: de focalizar grupos y escuelas a lograr una educación de calidad como el corazón de una Educación para Todos." Pp. 23-45 in *La Educación para Todos en América Latina. Estudios sobre las desigualdades y la agenda política en educación*, edited by X. Rambla. Buenos Aires: Miño and Dávila.
- Aguerrondo, I., D. Vaillant *et al.* 2014. *Aprendizaje efectivo para todos. ¿Cómo lograrlo? Resumen de informe de investigación*. Montevideo: Universidad ORT–Uruguay.
- Ainscow, M. 2014. "From special education to effective schools for all: Widening the agenda." Pp. 171-185 in *The SAGE Handbook of Special Education* (2nd edition, Vol. 1), edited by L. Florian. London: Sage Publications.
- Ainscow, M. and K. Messiou. 2014. "La diversidad del alumnado: una oportunidad para aprender y mejorar." *Cuadernos de Pedagogía* 446, 42-45.
- Ainscow, M. and S. Miles. 2008. "Making education for all inclusive: Where next?" *Prospects* 145(1), 13–34.
- Amadio, M. 2013. *A rapid assessment of curricula for general education focusing on cross-curricular themes and generic competences or skills*. Background paper prepared for the Education for All Global Monitoring Report 2013/4. Paris: UNESCO.
- Amadio, M. and R. Opertti. 2011. "Educación inclusiva. Cambios de paradigmas y agendas renovadas en América Latina." Pp. 195-226 in *Derechos de la infancia y educación inclusiva en América Latina*, edited by P. Dávila and L. M. Naya. Buenos Aires: Granica.
- Amadio, M., R. Opertti and J.C. Tedesco. 2014. *Curriculum in the 21st century: challenges, tensions and open questions*. Working Papers UNESCO ERF (Education Research and Foresight) No. 9. Paris: UNESCO.
- Archer, D. 2014. *Reflections on the Learning Metrics Task Force*. NORRAG News (Network for Policy Research, Review and Advice on Education and Training). Geneva: NORRAG.
- Armstrong, A. 2014. *Scotland: Education, curriculum and learning. The strengths, challenges and solutions in lifelong learning*. IBE Working Papers on Curriculum Issues No. 13. Geneva: UNESCO-IBE.
- Atkin, J. 1999. *Reconceptualising the curriculum for the knowledge era. Part 1: The challenge*. Seminar Series No 86, Incorporated Association of Registered Teachers of Victoria, Jolimont, Australia.
- Balardini, S. 2014. *Diálogos del SITEAL. Conversación con Sergio Balardini. Viejas y nuevas formas de ser joven. El impacto de las transformaciones socioculturales en la construcción de las identidades juveniles*. Buenos Aires: SITEAL.
- Ban, Ki-moon. 2012. *Education First. An Initiative of the United Nations Secretary-General*. New York: United Nations.
- Benavot, A. 2012. "Policies towards quality education and student learning: Constructing a critical perspective." *Innovation: The European Journal of Science Social Research* 25(1), 67-77.

- Bjork, C. 2009. "Local implementation of Japan's Integrated Studies reform: a preliminary analysis of efforts to decentralize the curriculum." *Comparative Education* 45(1), 23-44.
- Braslavsky, C. 2001. *La prise en compte de l'interculturel dans les curricula*. Geneva: UNESCO-IBE.
- . 2002. *The new century's change: New challenges and curriculum responses*. New Delhi: COBSE International Conference.
- . 2005. "La historia de la educación y el desafío contemporáneo de una educación de calidad para todos." Pp. 269-285 in *Pedagogía y educación ante el siglo XXI*, edited by J. Ruiz Berrio. Madrid: Complutense University of Madrid.
- Burns, T. and V. Shadoian-Gersing. 2010. "The importance of effective teacher education for diversity." Pp. 19-40 in *Educating teachers for diversity: Meeting the challenge*, edited by the authors. Paris: OECD.
- Chang, K. 2014. *Re-interpreting learning*. UNESCO research and foresight (ERF) working papers, 10. Paris: UNESCO.
- Chapman, J.D. and D.N. Aspin. 2012. "Schools and lifelong learning: The importance of schools as core centres for learning in the community." Pp. 521-538 in *Second International Handbook of Lifelong Learning*, edited by D.N. Aspin et al. London and New York: Springer.
- Cox, C. et al. 2014. *Citizenship education in Latin America: Priorities of school curricula*. IBE Working Papers on Curriculum Issues No. 14. Geneva: UNESCO-IBE.
- Cuban, L. 1986. *Teachers and machines: the classroom use of technology since 1920*. New York: Teachers College Press.
- . 2001. *Oversold and underused: Computers in the classroom*. Cambridge: Harvard University Press.
- Da Silveira, P. 2014. "Hacia una política educativa al servicio de los ciudadanos." Pp. 103-149 in *La educación uruguaya del futuro que necesitamos hoy*, edited by E. Martínez Larrechea and A. Chiancone Castro. Montevideo: Grupo Magro Editores/UDE.
- Delors, J., et al. 1996. *Learning: The Treasure Within*. Report of the International Commission on Education for the Twenty-first Century. Paris: UNESCO.
- Dertouzos, M.L. and J. Moses (Eds.). 1979. *The computer age: A twenty-year view*. Cambridge, Mass.: MIT.
- Dumont, H., D. Istance and F. Benavides (Eds.). 2010. *The nature of learning. Using research to inspire practice*. Paris: OECD.
- Dussel, I. 2013. "Nuevas prácticas culturales juveniles: del currículo cultural a la mediación pedagógica." Pp. 171-181 in *Hacia la innovación en educación secundaria. Reconstruir sentidos desde los saberes y experiencias*, edited by H. Ferreyra and S. Vidales. Córdoba (Argentina): Comunicarte.
- Eco, U. 2014. "¿De qué sirve el profesor?" *Revista del CIPES para la Gestión Educativa* 10(26), 24–25.
- Fischer, K.W. and T.R. Bidell. 2006. "Dynamic development of action and thought." Pp. 313–399 in *Handbook of Child Psychology* (Vol. 1, 6th edition), edited by W. Damon and R.M. Lerner. Hoboken (New Jersey): Wiley.
- Florian, L. 2014. "Reimagining special education: Why new approaches are needed." Pp. 9-22 in *The SAGE Handbook of Special Education* (2nd edition, Vol. 1), edited by the author. London: Sage Publications.

- Florian, L. and K. Black-Hawkins. 2010. "Exploring inclusive pedagogy." *British Educational Research Journal* 37(5), 813-828.
- Forlin, C. 2012. "Future directions for teacher education for inclusion." Pp. 246-253 in *Teacher education for Inclusion. Changing paradigms and innovative approaches*, edited by the author. Oxford: Elsevier.
- Foro Internacional de educación y Tecnología (FIET). 2014. *Inclusión y cohesión social*. Tarragona (Barcelona): FIET.
- Frigerio, G. and G. Diker (Eds.). 2005. *Educación: ese acto político*. Buenos Aires: Del Estante.
- Fullan, M. and M. Langworthy. 2014. *Una rica veta. ¿Cómo las nuevas pedagogías logran el aprendizaje en profundidad?* Montevideo: Mastergraf.
- García Huidobro, J.E. 2009. "Inclusive education as incorporation to citizenship." Pp. 27-35 in *Defining an inclusive education agenda: Reflections around the 48th session of the International Conference on Education*, edited by C. Acedo, M. Amadio and R. Opertti. Geneva: UNESCO-IBE.
- Gardner, H. 1998. *Inteligencias múltiples: la teoría en la práctica*. Barcelona: Paidós Ibérica.
- Gauthier, R.F. 2006. *The content of secondary education around the world: present position and strategic choices*. Paris: UNESCO.
- . 2014. *Ce que l'école devrait enseigner. Pour une révolution de la politique scolaire en France*. Paris: Dunod.
- Gauthier (sous la coordination de). 2011. "Le curriculum dans les politiques éducatives." (Dossier). *Revue internationale d'éducation de Sèvres* 56, 31-165.
- Goodson, I. 2005. *Learning, curriculum and life politics. The selected works of I. Goodson*. Abingdon (Great Britain): Routledge.
- Gordon, J. et al. 2009. *Key competences in Europe. Opening doors for lifelong learners across the school curriculum and teacher education*. Center for Social and Economic Research (CASE) Network Report No. 87. Warsaw: CASE.
- Gvirtz, S. 1997. *Del currículum prescripto al currículum enseñado. Una mirada a los cuadernos de clase*. Buenos Aires: Aique.
- Halinen, I. and A.S. Holappa. 2013. "Curricular balance based on dialogue, cooperation and trust – The case of Finland." Pp.39-62 in *Balancing curriculum regulation and freedom across Europe* (CIDREE Yearbook 2013), edited by W. Kuiper and J. Berkvens. Enschede (Netherlands): CIDREE/SLO.
- Hargreaves, A. and D. Shirley. 2009. *The fourth way: The inspiring future for educational change*. London: Sage Publications.
- Hart, S. and M.J. Drummond. 2014. "Learning without limits: Constructing a pedagogy free from determinist beliefs about ability." Pp. 439-458 in *The SAGE Handbook of Special Education* (2nd edition, Vol. 2), edited by L. Florian. London: Sage Publications.
- Hughes, C. 2014. *Training Tools for Curriculum Development. Personalized Learning*. Geneva: UNESCO-IBE.
- Hutt, E. 2014. "The Tests of General Education Development (GED) and the rise of contextless accountability." *Teachers College Record* 116(9).
- Iaies, G. 2003. *Evaluar las evaluaciones*. Buenos Aires: UNESCO-IIEP.
- Immordino-Yang, M.E. 2011. "Implications of affective and social neuroscience for educational theory." *Educational Philosophy and Theory* 43(1), 98-103.
- Immordino-Yang, M.E. and A. Damasio. 2007. "We feel therefore we learn: The relevance of affective and social neuroscience to education." *Mind, Brain and Education* 1(1), 3-10.

- Jonnaert, P. 2007. *Le concept de compétence revisité*. Montréal: Université du Québec à Montréal.
- Jonnaert, P. and G. Therriault. 2013. "Curricula and curricular analysis: Some pointers for a debate." *Prospects* 43(4), 397-417.
- Jonnaert, P., M. Ettayebi and R. Defise. 2009. *Curriculum et compétences: Un cadre opérationnel*. Brussels: De Boeck.
- Jonnaert, P., M. Ettayebi and R. Operti. 2008. "Dynamiques des réformes éducatives contemporaines." Pp. 17-25 in *Logique de compétences et développement curriculaire*, edited by the authors. Brussels: De Boeck.
- Kärkkäinen, K. 2012. *Bringing about curriculum innovations: Implicit approaches in the OECD area*. OECD Education Working Papers No. 82. Paris: OECD.
- Khan, S. 2012. *The one world schoolhouse: Education reimaged*. London: Twelve.
- King, K. and R. Palmer 2012. *Education and skills in the post-2015 global landscape: History, context, lobbies and visions*. NORRAG (Network for Policy Research Review and Advice on Education and Training) Occasional Paper No. 1. Geneva: NORRAG.
- Koh, C. 2015. "Understanding and facilitating learning for the net generation and twenty-first-century learners through motivation, leadership and curriculum design." Pp. 1-10 in *Motivation, leadership and curriculum design. Engaging the net generation and 21st century learners*, edited by the author. Singapore: Springer.
- Kress, G. 2006. "Learning and the curriculum. Agency, ethics and aesthetics in an era of instability." Pp. 158-178 in *Schooling, society and curriculum*, edited by A. Moore. Abingdon (Great Britain) and New York: Routledge.
- Labaree, D. 2014. "Let's measure what no one teaches: PISA, NCLB, and the shrinking aims of education." *Teachers College Record* 116(9).
- Labate, H. et al. 2010. *El rol de la evaluación como promotora del desarrollo de competencias de los estudiantes*. Comunidad de Práctica en Desarrollo Curricular, UNESCO-IBE Annual e-Forum (22 November–10 December 2010). Geneva: UNESCO-IBE.
- Laïdi, Z. 2000. *Le sacré du présent*. Paris: Flammarion.
- Lee, K. 2014. *Competency-based curriculum and curriculum autonomy in the Republic of Korea*. IBE Working Papers on Curriculum Issues No. 12. Geneva: UNESCO-IBE.
- Lenoir, Y., C. Xypas and C. Jamet. 2006. *École et citoyenneté. Un défi multiculturel*. Paris: Colin.
- Lopater, A. 2014. *La cultura docente ante el desafío del actual contexto. Una mirada sobre la educación media en la perspectiva de una educación más inclusiva de la diversidad*. Montevideo: Grupo Almagro Editores.
- López, N. 2005. *Equidad educativa y desigualdad social. Desafíos a la educación en el nuevo escenario latinoamericano*. Buenos Aires: UNESCO-IIEP.
- Marina, J. 2011. *El cerebro infantil: la gran oportunidad*. Barcelona: Planeta S.A.
- Marope, M. 2014. "Improving the equity of quality and learning in education: A systemic approach." Pp. 55-79 in *A Report from the IWGE. From schooling to learning*, edited by N. V. Varghese. Paris: UNESCO-IIEP.
- Marsh, C.J. 2004. *Key concepts for understanding curriculum*. (Fourth edition). New York: Routledge Falmer.
- Masciotra, D. and F. Medzo. 2009. *Développer un agir compétent. Vers un curriculum pour la vie*. Brussels: De Boeck.

- McCormick, R. and P. Murphy. 2000. "Curriculum. The case for a focus on learning." Pp. 204-234 in *Routledge International Companion to Education*, edited by B. Moon, S. Brown and M. Ben-Peretz. London and New York: Routledge.
- McLean, H. 2014. *Who owns learning?* NORRAG News. (Network for Policy Research, Review and Advice on Education and Training). Geneva: NORRAG.
- Meyer, H-D. 2014. "The OECD as pivot of the emerging global educational accountability regime: How accountable are the accountants?" *Teachers College Record* 116(9).
- Meyer, H-D. *et al.* 2014. "Accountability: antecedents, power, and processes." *Teachers College Record* 116(9).
- Ministry of Education of Malaysia. 2013. *Malaysia Education Blueprint 2013-2025 (Preschool to Post-Secondary Education)*. Putrajaya: Ministry of Education.
- Moore, A. 2014. *Understanding the school curriculum. Theory, politics and principles*. Abingdon (Great Britain) and New York: Routledge.
- Moore, A. (Ed.). 2006. *Schooling, society and curriculum*. Abingdon (Great Britain) and New York: Routledge.
- Moreno, J.M. 2008. "La dinámica del diseño y desarrollo del currículo: escenarios para la evolución del currículo." Pp. 311-333 in *El Conocimiento escolar en una perspectiva histórica y comparativa. Cambios de currículos en la educación primaria y secundaria*, edited by A. Benavot and C. Braslavsky. Buenos Aires: Granica.
- Morin, E. 2009. "Changer le rapport de l'homme à la nature n'est qu'un début, Il est temps de métamorphoser la civilisation pour poétiser la vie." *Le Monde*, Saturday 13 June 2009.
- . 2011. *La Voie. Pour l'avenir de l'humanité*. Paris: Fayard.
- Münch, R. 2014. "Education under the regime of PISA & Co.: Global standards and local traditions in conflict – The case of Germany." *Teachers College Record* 116(9).
- Muju, Z. 2007. "Recent Chinese experiences in curriculum reform." *Prospects* 37(2), 223-235.
- Organisation for Economic Co-operation and Development (OECD). 2012. *Connected minds: Technology and today's learners*. Educational Research and Innovation. Paris: OECD.
- . 2013. *Innovative learning environments*. Educational Research and Innovation. Paris: OECD.
- Opertti, R. 2008. "Les approches par compétences et la mise en œuvre de la réforme des curriculums en Amérique latine: processus en cours et défis à relever." Pp. 79-100 in *Logique de compétences et développement curriculaire*, edited by P. Jonnaert, M. Ettayebi and R. Opertti. Brussels: De Boeck.
- . 2011. "Cambiar las miradas y los movimientos en educación. Ventanas de oportunidades para el Uruguay." Pp. 63-113 in *Jóvenes en tránsito. Oportunidades y obstáculos en las trayectorias hacia la vida adulta*, edited by F. Filgueira and P. Mieres. Montevideo: Rumbos/UNFPA.
- . 2013. "Visión del currículo y debates curriculares: Una perspectiva interregional." Pp. 55-67 in *Hacia la innovación en educación secundaria. Reconstruir sentidos desde los saberes y experiencias*, edited by H. Ferreyra and S. Vidales. Córdoba (Argentina): Comunicarte.
- . 2014. "Repensar el sistema educativo para sostener una sociedad inclusiva." Pp. 71-101 in *La educación uruguaya del futuro que necesitamos hoy*, edited

- by E. Martínez Larrechea and A. Chiancone Castro. Montevideo: Grupo Magro Editores/UDE.
- Opertti, R. and J. Brady. 2011. "Developing inclusive teachers from an inclusive curricular perspective." *Prospects* 41(3), 459–472.
- Opertti, R., J. Brady and L. Duncombe. 2009. "Moving forward: Inclusive education as the core of education for all." *Prospects* 39(3), 205–214.
- Opertti, R., W. Zachary and Y. Zhang. 2014. "Inclusive education: From targeting groups and schools to achieving quality education as the core of EFA." Pp.149-169 in *The SAGE Handbook of Special Education* (2nd edition, Vol. 1), edited by L. Florian. London: Sage Publications.
- Perrenoud, P. 2011. *Quand l'école prétend préparer à la vie... Développer des compétences ou enseigner d'autres savoirs?* Issy-les-Moulineaux (France): ESF éditeur.
- Piketti, T. 2014. *Le capital au XXI siècle*. Paris: Seuil.
- PRELAC (Regional Education Project for Latin America and the Caribbean). 2005. "Protagonismo docente en el cambio educativo." (Monográfico). *Revista PRELAC* 1, 3-179.
- . 2006. "El currículo a debate." (Monográfico). *Revista PRELAC* 3, 6-171.
- Prensky, M. 2014. "The world needs a new curriculum." *Educational Technology*, May-June.
- Pons, F., M. de Rosnay and F. Cuisinier. 2010. "Cognition and Emotion." Pp. 237-244 in *International Encyclopaedia of Education* (Vol. 5), edited by P. Peterson, E. Baker and B. McGaw. Oxford: Elsevier.
- Reid, W. 2006. *The pursuit of curriculum. Schooling and the public interest*. Greenwich (Connecticut): Information Age Publishing.
- Robson, R. 2013. "The changing nature of e-learning content." Pp. 177-196 in *Reshaping learning. Frontiers of learning technology in a global context*, edited by R. Huang, Kinshuk and J.M. Spector. Berlin and Heidelberg: Springer-Verlag.
- Roegiers, X. 2010. *La pédagogie de l'intégration. Des systèmes d'éducation et de formation au cœur de nos sociétés*. Brussels: De Boeck.
- Savater, F. 2012. "En el mundo que viene. La educación." Pp. 31-49 in *Ética de urgencia. Primera Parte*. Barcelona: Editorial Ariel.
- Savolainen, H. 2009. "Responding to diversity and striving for excellence. An analysis of international comparison of learning outcomes with a particular focus in Finland." Pp. 49-59 in *Defining an inclusive education agenda: Reflections around the 48th session of the International Conference on Education*, edited by C. Acedo, M. Amadio and R. Opertti. Geneva: UNESCO-IBE.
- Schleicher, A. 2011. *Educación: Una inversión estratégica con altos logros*. Paper presented at the Conference organized by the Center for Education Studies of the Global Foundation for Democracy and Development (GFDD), 18 April 2011. Santo Domingo, Dominican Republic.
- Schmidt, E. and J. Cohen. 2013. *The new digital age. Reshaping the future of people, nations and business*. London: John Murray.
- Selwyn, N. 2011. *Schools and schooling in the digital age. A critical analysis*. London and New York: Routledge.
- Sennett, R. 2006. *La cultura del nuevo capitalismo*. Barcelona: Anagrama.
- Sinclair, M. 2004. *Learning to live together. Building skills, values and attitudes for the twenty-first century*. Geneva: UNESCO-IBE.

- Skidmore, D. 2004. *Inclusion: the dynamic of school development*. London: Open University Press.
- Skilbeck, M. 2012. "No royal road: Mapping the curriculum for lifelong learning." Pp. 499-520 in *Second International Handbook of Lifelong Learning*, edited by D.N. Aspin *et al.* London and New York: Springer.
- Slee, R. 2014. "Inclusive schooling as an apprenticeship in democracy?" Pp. 217-229 in *The SAGE Handbook of Special Education* (2nd edition, Vol. 1), edited by L. Florian. London: Sage Publications.
- Somekh, B. 2006. "New ways of teaching and learning in the digital age." Pp. 119-129 in *Schooling, society and curriculum*, edited by A. Moore. Abingdon (Great Britain) and New York: Routledge.
- Stabback, P. 2014. *Training Tools for Curriculum Development. Development and application of curriculum frameworks*. Geneva: UNESCO-IBE.
- Stein, Z., T. Dawson and K.W. Fischer. 2010. "Redesigning testing: Operationalizing the new science of learning." Pp. 207-224 in *New Science of Learning. Cognition, Computers and Collaboration in Education*, edited by Myint Swe Khine and Issa M. Saleh. London and New York: Springer.
- Tawil, S. 2012. *Ensuring the relevance of any international education agenda beyond 2015*. NORRAG News (Network for Policy Research Review and Advice on Education and Training). Geneva: NORRAG.
- . 2013. *Education for 'global citizenship': A framework for discussion*. UNESCO ERF (Education Research and Foresight) Working Papers No. 7. Paris: UNESCO.
- Tawil, S., A. Akkari and B. Macedo. 2012. *Beyond the conceptual maze. The notion of quality in education*. UNESCO ERF (Education Research and Foresight) Working Papers No. 2. Paris: UNESCO.
- Tedesco, J.C. 1997. *The new educational pact. Education, competitiveness and citizenship in modern society*. Geneva: UNESCO-IBE.
- . 2005. "Aprender a vivir juntos en tiempos de exclusión y fundamentalismos." Pp. 111-117 in *Opiniones sobre política educativa*, edited by the author. Buenos Aires: Granica.
- Tedesco, J.C. and N. López. 2002a. *Las condiciones de educabilidad de los niños y adolescentes en América Latina*. Buenos Aires: UNESCO-IIPE.
- . 2002b. "Desafíos a la educación secundaria en América Latina." *Revista de la CEPAL* 76, 55-69.
- Tedesco, J.C., R. Opertti and M. Amadio. 2013. *The curriculum debate: why it is important today*. IBE Working Papers on Curriculum Issues No. 10. Geneva: UNESCO-IBE.
- Tehio, V. (Ed.). 2009. *Politiques publiques en éducation: l'exemple des réformes curriculaires*. Actes du séminaire final de l'étude sur les réformes curriculaires par l'approche par compétences en Afrique (11-12 June 2009). Paris: ICPE, IOF and AFD.
- Torres, J. 2011. *El currículum oculto*. Madrid: Ediciones Morata.
- Tucker, M. S. 2011. *Standing on the shoulders of giants. An American agenda for education reform*. Washington DC: National Center on Education and the Economy.
- Valiente, O. 2010. *1-1 in education: Current practice, international comparative research evidence and policy implications*. OECD Education Working Papers No. 44. Paris: OECD.

- Voogt, J. and N. P. Roblin. 2010. *21st century skills discussion paper*. Report prepared for Kennisnet. Enschede (Netherlands): University of Twente.
- United Nations Open Working Group (UNOWG) on Sustainable Development Goals. 2014. *Outcome document. UN Sustainable Development Knowledge Platform*. New York: UN Economic and Social Development.
- UNESCO. 2000. *Dakar Framework for Action. Education for All: Meeting Our Collective Commitments*. Adopted at the World Forum on Education, Dakar (Senegal), 26-28 April 2000.
- . 2004. *The future of values: 21st century talks*. (Under the supervision of J. Bindé). Paris: UNESCO/Albin Michel.
- . 2012. *Education and skills for inclusive and sustainable development beyond 2015. Thematic think piece*. UN System Task Team on the post-2015 UN Development Agenda. Paris: UNESCO.
- . 2014a. *EFA Global Monitoring Report. Teaching and learning: Achieving quality for all*. Paris: UNESCO.
- . 2014b. *Final Statement. The Muscat Agreement*. Global Education for All (GEM) Meeting, 12-14 May 2014, Muscat, Oman.
- UNESCO-IBE. 2015. *Repositioning and reconceptualizing the curriculum for the effective realization of Sustainable Development Goal Four, for holistic development and sustainable ways of living*. Discussion paper presented at the World Education Forum, Incheon, Republic of Korea, 19–22 May 2015.
- UNESCO-IBE and International School of Geneva. 2014. *Guiding principles for learning in the twenty-first century*. Geneva: UNESCO-IBE and ISG.
- UNESCO International Bureau of Education (UNESCO-IBE). 2013a. *Training tools for curriculum development: a resource pack*. Geneva: UNESCO-IBE.
- . 2013b. *Learning in the post-2015 education and development agenda*. Geneva: UNESCO-IBE.
- Wang, B. 2012. *School-based curriculum development in China. A Chinese-Dutch cooperative pilot project*. Enschede (Netherlands): SLO.
- World Bank. 2011. *Learning for all: investing in people's knowledge and skills to promote development. World Bank Group education strategy 2020. Executive Summary*. Washington DC: World Bank.
- Yates, L., and M. Young. 2010. "Editorial. Globalisation, knowledge and the curriculum." *European Journal of Education* 45(1), 4-10.
- Young, M. 1998. *The curriculum of the future. From the 'new sociology of education' to a critical theory of learning*. London: Falmer Press.