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# Ten Clues for rethinking curriculum



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**IBE-UNESCO Director** Yao Ydo

**Coordination and Production Team** 

Lili Ji, Perrine Arsendeau, Kosala Karunakaran

Author Renato Opertti

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#### Ten clues for rethinking curriculum

#### **Abstract**

This discussion document highlights the urgency of rethinking curriculum in light of reinforcing the commitments of the Education 2030 Agenda on learning, disruptive systemic worldwide societal changes, and crucially, the profound transformation of education and education systems post Covid-19. Curriculum is always at the core of giving effect to social aspirations and ideals on the why, what, how, when, and where of teaching, learning, and assessing. We propose a series of 10 interconnected clues to deepen on the systemic and holistic understanding of curriculum as contributing to lay foundations for a better, sustainable and fair future. These clues are: understanding the new generations; combatting factors related to vulnerability; reinforcing understanding between school and families; deepening glo-local education; enhancing the focus on the person; promoting synergies among values; valuing diversity; focusing on education that enhances freedom; moving toward hybrid modes of education; and inspiring affection for educators.

#### Keywords

Curriculum design, curriculum development, curriculum reform, vulnerability, family roles, local curriculum, diversity, hybrid education

#### Introduction

The purpose of this discussion document is to share a series of clues for rethinking curriculum in light of four fundamental considerations. First is the need to reinforce a holistic and systemic understanding of curriculum as dynamic, complex, and contested processes of collective discussions, agreements and developments, reflecting social aspirations and ideals and involving a diverse array of stakeholders from within and outside the educational system on the why, what, how, when, and where of teaching, learning, and assessing (Amadio, Opertti, and Tedesco 2015; Jonnaert, Depover, and Malu 2020; Tedesco, Opertti, and Amadio 2013; UNESCO-IBE 2015).

Second, is the idea, underscored by the Education 2030 Agenda, that curriculum gains prominence, legitimacy, and sustainability on the basis of educational principles, policies, objectives, contents, and strategies that contribute to the transformation of the lives of persons and communities (Amadio, Opertti, and Tedesco 2015; UNESCO et.al. 2015).

The third consideration is that disruptive change is occurring at a global scale that is profound, systemic, exponential, and unpredictable, among other fundamental attributes. These changes have lasting societal effects and entail revisiting our identities and status as humans, citizens, workers, businesspeople, and community members (Maddah 2016; Schwab 2017; Stiegler 2016).

Fourth, Covid-19 has significantly contributed to discussions of two main issues. There has been an exploration and testing of proposals and pathways with regard to the integration and synergies between in-person and distance education; removing barriers and discontinuities among educational levels, settings, and provisions; and, crucially, revisiting educational aims, contents and strategies. The pandemic has also highlighted those student competencies and skills required to meet a diversity of personal and collective challenges with regard to ensuring freedom of expression, autonomous and creative thinking, sustainable lifestyles and development, and planetary coexistence and collaboration (Consejo Asesor de la OEI 2020; Fundación Santillana 2020; International Commission on the Futures of Education 2020; Microsoft and New Pedagogies for Deep Learning 2020; Reimers and Scheleicher 2020; United Nations 2020).

#### **Clue 1: Understanding the younger generations**

One of the biggest challenges facing educational systems worldwide is understanding students from a generational lifespan perspective that values and supports them as infants, children, adolescents, young people, and, foremost, as protagonists taking responsibility for their own learning. The lack of intergenerational empathy is evident in educational, curricular, pedagogical, and teaching proposals that fail to make the connections between contexts, circumstances, values, emotions, and cognitions in order to address the diversity of expectations and needs of all learners.

We share here four elements to support further understanding of the younger generations as an essential starting point for rethinking the curriculum from a renewed vision of education.

The first is to focus on, analyze more deeply, and make visible the multiplicity of factors associated with vulnerability. This implies going beyond a concept of vulnerability linked disjointedly to people, groups, contexts, or circumstances. It requires that we also acknowledge the multiplicity of interlacing vulnerabilities that challenge hegemonic "educational" or "societal" explanations. We highlight here three aspects for consideration.

We must weigh how household deficits with regard to access to connectivity and technology negatively impact teaching and learning conditions and processes. A growing long-term trend, unavoidable in the short term, of moving toward hybrid modes in which in-person and distance learning are integrated and connected generally accentuates these impacts and, crucially, serves to enhance and democratize learning opportunities.

On the other hand, vulnerability is related to weaknesses in the conceptual and operational frameworks of public policies that rely strongly on compensatory mechanisms to address multiple economic and social vulnerabilities impacting education. Those frameworks fail to attain equally meaningful and sustainable learning processes and outcomes for various individuals and groups. It is possible that those frameworks are based on fragmented conceptualizations, under the assumption that the aggregation and cumulative effects of sectoral interventions improve educational opportunities per se without a robust vision that connects and strengthens them.

Furthermore, vulnerability affects the well-being and mental health of students, given that factors related to psychology, psychiatry, and neuroscience, among other disciplines, are inextricably interconnected. The accumulation of approaches and interventions targeting what it is defined as students' needs, even within a multi- or interdisciplinary framework, does not necessarily contribute to understanding and supporting each person as a unique human being and to customizing curricula, pedagogy, and teaching to each learner.

As Hargreaves (2020) notes, children's well-being is not an alternative to success in school but rather a precondition for learning, especially for the most vulnerable groups. Students' well-being is a prerequisite for engaging, meaningful, and sustainable learning. To a great degree, the concept of well-being reinforces a holistic view of education, recognizing the ongoing evolving interaction between the emotional nature of cognition and the cognitive nature of emotions (Pons, de Rosnay, and Cuisinier 2010).

The second element is that the global pandemic is shedding light on the resilience of the youngest generations—aspects that may be hidden, unreported, or unknown and undervalued in education at large. We are beginning to observe and understand that during a period of isolation or reduced inperson interactions, students get to know and use a wide range of strategies to pursue and concretize their learning. It may be that much ground is being gained in strengthening challenge-based learning, which brings into play such competencies as students' creativity, ingenuity, and adaptability as they confront shifting and adverse circumstances.

We may ask if learners may have developed during and after the confinement period certain competencies that allow them to:

- acquire more intellectual autonomy, more capacity for independent learning, improved executive (brain) functioning reflected in more flexible thinking and self-control, and greater online learning skills (Reimers and Schleicher 2020; Morin V. 2020);
- (ii) develop active and long-lasting social, emotional, and cognitive antibodies against possible future pandemics or crises;
- (iii) experience new ways of understanding, communicating, and building trust with their families, peers, and teachers;

- (iv) understand how their own motivation, involvement, values, attitudes, and emotions give meaning to their education and learning; and
- (v) learn how to face a wide range of problematic/challenging situations by developing personal competencies (such as confidence and self-awareness) as well as interpersonal ones (such as empathy and working collaboratively with others).

Third, the younger generations will increasingly demand lifestyle changes on the part of adults to allow them to contribute to, be part of, and enjoy a sustainable and better future, individually and collectively. A renewed agenda regarding rights, commitments, and responsibilities, strongly permeated by the younger generations, could emerge after the pandemic. Several points are worth noting with respect to this.

Issues and approaches linked to sustainable, healthy, and socially committed lifestyles are increasingly mainstreamed in curricular and pedagogical proposals. Nevertheless, it is not enough to carry out activities or implement projects that demonstrate, for example, the benefits of a balanced diet or physical activity. It is also necessary to connect and develop a unified conceptual and actionable framework that cuts across different educational levels and provisions with the intention of guiding and supporting students in owning lifestyles that are vital to global and local sustainability as well as personal and collective well-being. Additionally, it entails mainstreaming solid and evidence-based educational proposals on renewed ways of living in harmony with, understanding, and protecting nature and of feeling that we are part of one ecosystem.

At the same time, there must be a clear and substantive reaffirmation of freedom and independent thought that strengthens and protects the youngest generations as they develop preventive attitudes and antibodies against three mutually reinforcing risks: (i) the misuse of artificial intelligence devices and mechanisms to curtail the freedom of expression of individuals, groups, and communities; (ii) the consideration of people as data with "differential market values"; and (iii) the normalization of methods of controlling citizens at all times and without restrictions.

Fourth, after prolonged periods of isolation, it becomes necessary to look for ways to reconnect young people with education at large. This cannot be done by assuming that no significant learning of whatever nature and implications has occurred during the confinement period or by disregarding the diversity of strategies that teachers, learners, families and communities have developed to ensure learning. Reconnecting entails documenting, understanding, respecting and building upon the whole range of situations affecting the social, emotional, mental, and physical well-being of teachers and learners. In fact, the pandemic has highlighted the relevance of visualizing the multidimensionality of well-being as a foundation of any teaching, learning and assessment process.

Also, the disconnection reveals a huge pre-Covid challenge that countries worldwide face in different contexts and with diverse education system arrangements, namely, the historical fragmentation of education and education systems with regard to approaches, levels, cycles, provisions, learning environments, and educational content. This fragmentation can constitute a powerful institutional, curricular, pedagogical, and teaching barrier to learners' progression, and to the continuity of the learning processes.

Moreover, fragmentation can impede the smooth development of competencies and knowledge students should be acquiring in order to be able to function competently in a world of exponential and systemic changes. Likewise, the organization of educational levels and provisions around disciplinary silos stands in sharp contrast to the life experiences of students, who are faced with the challenge of

giving some unifying meaning to a multiplicity of stimuli and experiences. The disconnection and decontextualization of learning from students' aspirations and motivations push learners out from education. Nevertheless, they are labeled and, in some ways, stigmatized as dropouts.

Education systems face the challenge of working out meaningful integration of knowledge pieces, well packaged in compacted educational levels, that can provide a solid understanding of issues to address a diversity of student challenges. This means, among other things, the ability to educate students on a range of competencies visualized as essential for building a better future (Reimers and Schleicher 2020) and a foundation of renewed commitment to a cosmopolitan humanism respectful of diverse traditions, groups, and affiliations. The capacity of educational institutions to envisage education as a driver for reimagining the future will be a critical test of their willingness to redesign learning systems for resilience.

#### Clue 2: Combating factors related to vulnerability

As previously noted, vulnerability is the expression of a multidimensional set of human-capacity shortcomings that compromise the well-being and development of individuals, citizens, and communities. As Josep María Esquirol notes (Diario El País 2020), human beings are vulnerable, which means that we are sensitive and capable of being saddened and hurt.

Thus, it is clear that education cannot address vulnerability from a sectoral perspective endogenous to educational institutions. Neither can it do so on the basis of accumulating a multiplicity of interventions and supports from outside the educational system. Instead of perspectives and approaches devoid of close interfaces between educational institutions and society as a whole, what may be needed is an inter-institutional and inter-sectoral approach to understanding people's development and well-being. It must be sound, convincing, and easy to communicate, and it must recognize that people's situations and capacities cannot be separated and isolated according to area of intervention, beneficiary population, entitlements, or benefits.

Approaches to counteracting vulnerability require that we understand, value, and support people as individuals before we decide on any kind of sectoral intervention and certainly before narrowing people to the prescriptions deemed necessary by institutions. It is important, then, to reaffirm that each person has enormous potential, unknown a priori, for learning and development. This potential is characterized by a series of goals, processes, and phases in which a multiplicity of genetic and environmental factors, as well as set of interventions (by governments and/or by other institutions or actors) interact with each other.

Any child's development begins in the womb, and a lack of timely and high-quality public policy interventions produces and entrenches a set of vulnerabilities that are difficult to remedy at an older age. Studies show that children's brains have almost twice the number of synapses as adults' (Dehane 2018). Useful synapses survive and multiply, while others are eliminated. This process is associated to a large degree with the intensity and quality of stimulation the child receives from the environment, which naturally includes family, close adults, social actors, and educators.

For education to further the central goal of laying the foundation and supporting the developmental potential of each person, a conceptual and operational framework will be needed, one that is shared among those institutions responsible for issues of childhood, family, health and poverty, among others. Creating this framework begins with those institutions discussing and coming to agreement among themselves on a robust and holistic conceptualization of child development from early

childhood care and education (ECCE) onward. The acceptance of coordinating mechanisms and avoidance of overlapping efforts and initiatives are effective insofar as they rest on unified conceptual frameworks that effectively guide and support all types of interventions.

In addition, approaching vulnerability from a holistic public-policy perspective challenges educational systems to forge a multidimensional vision of student support and development as well as to guarantee the progression and flow of teaching and learning across institutions, levels, and provisions.

Doing so is not solely a matter of reinforcing public-private coordinating mechanisms. It is of primary importance to agree upon instructional itineraries, processes, and contents that conceptualize children and their progressive development from a standpoint that promotes their well-being, facilitates their learning opportunities, and compensates for their vulnerabilities. The cultural, economic, social, and territorial dimensions are not simply added to the educational dimensions proper; rather, they are interconnected within each initiative and action proposed by the school.

It is thus clear that addressing factors associated with vulnerability solely through education or social assistance is not a sustainable strategy for reducing the enormous inequalities that were already prevalent before the pandemic and have become even more severe and visible today.

## Clue 3: Reinforcing understanding between school and families

The global pandemic has led to discussions around the realignment of roles and responsibilities among educational institutions, teachers, students, and communities. Although the need to rethink roles was undoubtedly overdue even before the pandemic, the lack or discontinuity of in-person school activities has highlighted the relevance of deepening mutual understanding and trust as well as the collaboration among key school stakeholders.

First, schools stand out for the significant role they play in structuring our social lives. Face to face interaction permeates not only school but also families, workers, communities, and society at large. As Dussel, Ferrante, and Pulfer (2020) note, to a large degree the pandemic made clearer the role of schools in the socialization of children and adolescents, in terms of their relations with both adults and peers. Despite any criticism schools may deserve regarding approaches, organization, management or outcomes, their presence is vital and irreplaceable for societal harmony and sustainability.

Second, it appears that awareness is increasing globally among mothers, fathers, and communities about both the role of teachers and the delicate and complex act of teaching. The role of teachers in guiding and tutoring students as well as to facilitating learning processes, is presumably better understood by parents today than before the pandemic. This has led to revalue its role by parents in taking care of matters that are fundamental to their duties and their daily work, such as "explanation, organizing student work, and even grading" (Dussel, Ferrante, and Pulfer, 2020).

Third, fathers and mothers are being called upon to find, experiment with, and learn from ways of guiding and supporting their children, a task that has become more necessary and demanding now that in-person instruction is not so prevalent. Greater family engagement in the teaching and learning processes, beyond merely helping schools with non-educational tasks, was certainly needed before the pandemic. For families, finding the motivation to broaden their roles, as well as the guidance necessary to do so, will be a key issue going forward—and this is not just a short-term effect of the

pandemic. Education can no longer be reduced to teaching, learning, and assessing in an in-person setting. It also encompasses a growing range of opportunities for schools and families to strengthen each other and collaborate in the pursuit of shared goals.

Fourth, the ways that educators and students understand each other, relate to each other, and support each other in hybrid settings create opportunities to bring generations together, broaden perspectives, and facilitate more personalized, open, and holistic perceptions of people as individuals. Emotions and experiences can play a much more pronounced part in the relationships between educators and students as they become open to seeing themselves in roles that may have previously been less visible, more fragmented, or even hidden. This may be a golden opportunity for students and educators to understand each other better as human beings.

Fifth, the increasing awareness of the urgency to facilitate access to devices, connectivity, platforms, and educational resources both within and outside the home can support teaching, learning, and assessment processes within hybrid education modes. As has been noted, it is becoming increasingly necessary to enhance synergies among policies and programs geared toward families, homes, and education within one unified social policy framework.

In sum, reimagining the educational system entails not only broadening and deepening the roles of students and educators but also empowering families as learning coaches who can in turn support their children's learning (Reimers and Schleicher 2020).

#### Clue 4: Deepening glo-local education

The global discussion on sustainability emphasizes, in particular, strengthening collaboration and interdependence across global, national, and local levels as an essential condition for building a sustainable planet. In particular, the 2030 Agenda for Sustainable Development, structured around 17 objectives—with their respective goals and indicators to be met by 2030 (UNESCO et.al. 2015)—prioritizes the role of education as a pivot for reaching the other sustainable development goals (SDGs). It also visualizes the Education 2030 Agenda as a window of opportunities for promoting a transformative, humanistic, progressive, holistic, and sustainable vision of education and of education systems (Opertti 2016). This vision gains even more relevance insofar as the public policy responses focus on the role of education in forging a better, sustainable and fair future for younger generations.

The argument that is beginning to emerge and gain prominence rests on the idea that education cannot be neglected or tacked on simply to reproduce lifestyles that lead inexorably to planetary destruction, human decadence, deepening of inequalities, and a future in which artificial intelligence steers our lives. An education without sound ethical, humanistic, cultural, and social foundations will not serve the purpose of embodying and nurturing new perspectives with respect to harmony, well-being, and development.

More than ever, education must entail connection, nearness, and convergence across cultures, traditions, group affiliations, countries, and regions that come together to promote universal values and frameworks respectful of and accommodating to diversities and differences. In effect, a glo-local education represents a pledge to support a worldwide societal contract that demands new forms of cooperation and understanding between countries as well as, crucially, a forward-looking and reliable educational multilateralism that reimagines education. This entails rethinking curriculum and

pedagogy to lay the foundation for students to actively assume the role of producers, protagonists, discussants, and disseminators of a new order of global harmony.

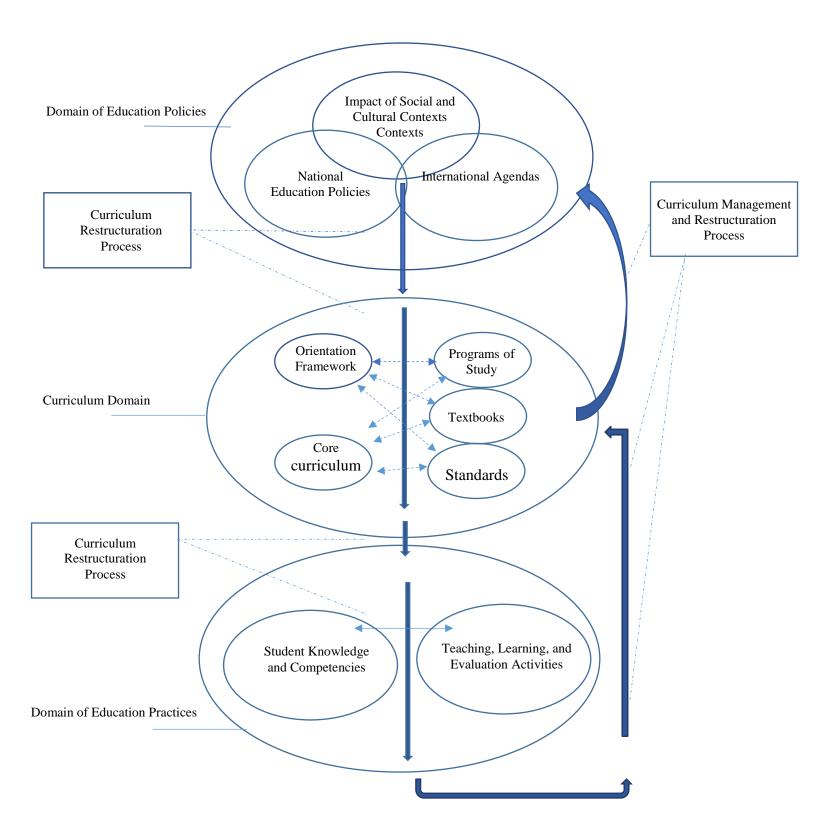
Such discussions of more inclusive, fair and sustainable societal imaginaries are becoming increasingly prominent in education. Essentially, this entails the engagement of education in undertaking a holistic reform of life, as Edgar Morin wisely points out (Morin 2020; Blanquer and Morin 2020).

If we do in fact aspire to collective worldviews that involve reinforcing the quality of thought, life, and society, education plays a central and inescapable role. On one hand, it is of utmost relevance to support the development of students' personal and interpersonal skills. Education gives them access to criteria and tools for understanding and acting competently in the face of exponentially disruptive changes.

On the other hand, as addressed by UNESCO's International Bureau of Education (Tedesco, Opertti, and Amadio 2013; UNESCO-IBE 2015; Opertti 2016), curriculum and pedagogy are locally culture developments within global understandings. This also entails that the curriculum proposal must be clear, in-depth, and succinct in conveying what should be taught, learned and assessed. It should, however, have the required flexibility for empowering the school to co-develop the curriculum and, crucially, define how to transform educational aims and contents into effective teaching and learning practices.

In effect, the curriculum breaks down societal worldviews into a series of concepts, processes, and actions to facilitate, for each student, a personalized effective opportunity to learn. The curriculum also provides guidance and alignment for and adds value and consistency to study plans and programs and establishes a hierarchical and binding relationship with them (Jonnaert et.al. 2021).

This breaking down of the curriculum can be visualized as a restructuring, as illustrated by Jonnaert and team (see figure). In fact, education policies are mediated and redefined at the different stages and processes of curriculum development, transitioning from the normative prescriptive dimension up to the curriculum experienced by learners and their achievements.



*Figure 1:* Holistic curriculum and the process of curriculum restructuration, adapted from Depover and Jonnaert (2014: 188).

The strengthening of a glo-local perspective can focus on knowledge and competencies geared toward new forms of coexistence, sustainability, social protection, disease prevention, health care, production, work, commerce, development, mobility, recreation, and well-being. These themes will likely be part of a universal movement in favor of a profound and comprehensive transformation of education, one that centers mutual understanding and integration with policies related to health, social protection, work, family, and community.

As the International Commission on the Futures of Education (2020) asserts, progress must be made with regard to "deepening human empathy, progressing in science, and appreciating our common humanity." This means bolstering a strategic alliance between health and education, an essential foundation for strengthening a holistic vision of personal and social well-being, counteracting the reduction of people into "goals and objectives" of sectoral interventions, as well as alleviating potential tensions related to resource allocation to both sectors by the state, society, and others. It is not a matter of prioritizing one or the other but rather of ensuring that education and health initiatives go hand in hand with reinforcing the well-being, protection, and holistic care of people, citizens, and communities.

New educational challenges may lead to a profound rethinking of the paths, tools and resources used to educate the younger generations. The interconnected dimensions of social life, civic participation, work, and coexistence require not just that we promote cross-disciplinary dialog, which is fundamental, but that we acknowledge that initiatives related to issues such as inclusion and sustainability require cross-linkages, debates, and synergies between the humanities and sciences within universal ethical frameworks.

Educational systems in general and educational institutions in particular are mandated and equipped to teach discipline-specific content. It is widely known that more refined approaches to curriculum design and development cover cross-cutting themes in a variety of formats (workshops, projects, etc.) across educational levels (e.g., basic/primary and secondary education). This is insufficient, however, for enabling students to deeply comprehend issues such as climate change, healthy lifestyles, inequality, and diversity, as well as the wide variety of viewpoints people and groups have on those issues.

In-depth treatment of issues that are essential for coexistence, well-being, and individual and collective development requires much more than simply combining multiple approaches and disciplines. Comprehensive understanding of an issue comes not only from a consideration of different disciplinary approaches but from the specificity and evolution of that issue and from transcending disciplines, while embracing their bodies of knowledge as a foundation for understanding.

Disciplines are essentially intellectual tools that contribute to knowledge on a diversity of issues, but they are incapable of explaining everything. There is always the potential for our understanding of an issue to remain incomplete and uncertain—precisely because the complexity of thought and human action cannot be contained within disciplines. The temptation to narrow the study of an issue to disciplinary and even interdisciplinary approaches can leave us unable to understand it in its entirety.

Let us consider the global Covid-19 pandemic as a hot-button issue in need of in-depth and subtle integration of knowledge and competencies for its comprehensive understanding. For example, the Scientific Council for National Education of France's Ministry of National Education and Youth (2020) recommends seeing the epidemic as an opportunity to develop competencies in a variety of fields, including native languages, foreign languages, mathematics, science, history, and geography in a

unified and integrated way but also to bolster an emerging discipline, such as critical reading of media.

In addition, as the council itself notes, analysis of the pandemic allows us to work in three complementary dimensions: current challenges, the educated consumption of information, and the adoption of socially responsible attitudes and actions. Following this line of study, the market for wild animals in Wuhan could be viewed as a potential case study that might involve an analysis of traditional and modern lifestyles, global and local value chains, premium gastronomy (wild animal meat), indigenous health knowledge and practices, and the movement of people and animals across continents, etc.

Furthermore, one of the main challenges in the creation and development of a glo-local curriculum is to position the student in an active role as a producer, debater, and proponent of a new vision of global coexistence, based on the assumption that maintaining the status quo deprives students of a sustainable and prosperous future in which they should be protagonists. In essence, the curriculum must be grounded in a view that is much more focused on laying foundations for the future than on reproducing or even modifying the present or the past.

Education is facing a dilemma that will have a large impact on its development as well as that of society as a whole. One possible path forward is to use a standard definition of normality that simply incorporates more clearly than in the past the disruptions of technologies and the challenges of the digital world without undertaking a fundamental reconsideration of the why, the what, and the how of education. This would not necessarily involve a cross-cutting reexamination of both in-person and virtual education, each in light of the other. A possible alternative is to see the development of the new normal as a golden opportunity to transform education, to reimagine it, to ask the how and why questions in order to effectively make them a reality. In this regard, Doyle and Sahlberg (2020) identify three keys to developing a transformational normality: (i) visionary leadership within educational institutions, (ii) professional wisdom among educators, and (iii) impassioned commitment on the part of students as change makers.

## Clue 5: Enhancing the focus on the person

The global pandemic, with its numerous and devastating effects, reorients the discussion toward people and their life circumstances as well as their hopes, frustrations, and plans. In particular, in education—prior to the pandemic and even more so during it—the need for a holistic vision of human development that incorporates various interrelated facets has been evident. In the first place, we consider human well-being and development from a perspective that reaffirms the value of social, humanist, universal, and globally minded justice in education. The resurgence of ethics and humanism as universal educational issues is becoming increasingly relevant in basic and secondary education curriculum proposals and developments (Opertti 2019). Clearly it highlights the relevance of curriculum as reflecting societal imaginaries.

Moreover, a holistic approach involves connecting more clearly and substantively students' circumstances and status to their identities, expectations, needs, and restrictions as infants, children, adolescents, and young adults. A separation in this regard should not even exist, but education that is strictly structured and managed according to fragmented levels and cycles often consolidates a narrow view of students' expectations and needs. It is more difficult, for example, to shift the education of adolescents and young people toward an approach that embraces perspectives, content, strategies, and practices connecting secondary and technical-professional levels than it is

to continue on fragmented levels that can become socio-economically and culturally segregated tracks.

Integrating findings from educational science, cognitive psychology, and the neuroscience of learning, show that each person is a unique human being. An integrated education must acknowledge that each person is one indivisible whole in order to effectively guide them as well as to share conceptual and practical frameworks to enable them to evaluate, process, and make decisions regarding their individual and social lives. It is not a matter of prescribing and mandating an ideal vision of the person, no matter what doctrinal elements it may be based on, but rather of increasing awareness that the person is a whole comprising biological, psychological, anthropological, and sociological dimensions (Morin 2020).

A forward-looking and progressive curriculum will take into account the need to highlight and prioritize the person as an individual throughout all aspects of education, whether in the educational aims and contents, the repertoire of pedagogical strategies, or the criteria and tools of assessment. Often, consideration of the individual "is lost" or "gets blurred" in the accumulation of disconnected disciplinary content as well as in the disentangling of cognitive factors from ethical, emotional, contextual, and circumstantial factors.

## **Clue 6: Promoting synergies among values**

The 2030 educational agenda that UNESCO spearheaded emphasizes that teaching values throughout the course of life lays the foundation for harmony, well-being, justice, and sustainable development. Values constitute the inescapable and beneficial foundation of all teaching and learning, no matter its form, content, or implications. To a great degree, we must overcome the conditioning and prejudices that cause us to regard the teaching of values as prescribing and imposing beliefs, group affiliations, worldviews, and societal models. It is also fallacious to frame discussions about values in terms of dichotomies, not allowing for the possibility of linkages or synergies between them.

The understanding of complementarity between the values of freedom, justice, solidarity, inclusion, equity, cohesion, excellence, and well-being is a fundamental part of any message of societal harmony and development, and it is crucial that educators share it with their students. These complementary frames of reference can guide the actions of people, citizens, and communities and strengthen students' intellectual autonomy and informed action in society. There are many sound ways of creating synergies among values grounded on different but equally legitimate perspectives. It is not about "sacrificing" one or more of them because of the supposed predominance of others. There should be no trade-offs between values disregarding society ideals and common grounds.

Finally, it is important to note the need for educational proposals to contain clear and sound messages, at all levels, about the relevance of values, as well as to demonstrate synergies among them. The symbiotic relationship between the content and the methods of teaching and learning about values is yet another reaffirmation of the inextricable interconnectedness of curriculum, pedagogy, and teaching.

#### Clue 7: Valuing diversity

Education plays a bridging role between common frames of reference shared by society as a whole and the diverse array of identities, beliefs, and affiliations that lie at its core. Unlike other types of disparities, which are the object of interventions designed to eliminate or mitigate them, diversity is not understood as a problem or obstacle that may be wrongly labeled as learners' "deficiencies or faults" or that assumes "the impossibility" of being managed.

Diversity is essentially a window of opportunity for expanding learning opportunities, processes, and outcomes, and for supporting students' holistic development. It also entails understanding and acknowledging the many dimensions of each person's uniqueness and identities, as well as their social, cultural, gender, ethnic, and territorial contexts. Indeed, diversity broadly understood requires societal, political, and public policy determination and support.

In fact, diversity challenges homogenous mindsets, narratives, strategies, and practices that fail to appreciate the uniqueness of individuals, whether students or educators. Two factors in particular must be kept in mind. First, all students must be acknowledged as individuals in order to engage them in their own education. At the same time, we should be aware that the analysis of brain images show that all learners go through very similar learning circuits and rules (Dehaene 2018; Dehaene, Le Cun, and Girardon 2018; Ferreres and Abusamra 2019). Learning processes are in fact quite similar for all learners regardless of their unique features as persons.

Second, diversity requires an in-depth understanding of the different beliefs, attitudes, and practices educators bear with respect to learners' capacities and potentiality to learn as well as their role and responsibility in ensuring learners' progression. It entails ethical considerations as well as curricular and pedagogical ones. Diversity implies a constant back-and-forth between the frames of reference, representations, experiences, and practices of students and educators.

A narrow view of normality based on binary thinking ("normal" and "special") runs counter to the current paradigm of inclusive education advocated by UNESCO (UNESCO 2017; OEI/UNESCO-OIE 2018; UNESCO 2020), which is precisely to acknowledge, as noted, that each student is a unique human being who requires personalized attention tailored to his or her expectations and needs. In fact, all students are special. We should question the idea that diversity is a "deviation" from what we expect students to be and to develop into and that the greater the "deviation," the lower the likelihood that teaching and learning will occur.

In particular, curriculum can be based on a broad understanding that values and strengthens diversity in order to ensure more and better learning. Often individual diversity remains hidden because it is "smothered" by curriculum, pedagogical, and teaching proposals based on the artificial construct of an average student, which is actually a fiction.

#### Clue 8: Focusing on education that enhances freedom

Historically, a pervasive and fundamental concern in education is how to guarantee students' intellectual autonomy in a climate of respect and openness to debate, allowing the contrasting and synthesis of ideas. From a philosophical standpoint, the positioning of freedom in education, or what can be called liberal education, seeks to develop among students critical, constructive, proactive, and open-minded ways of thinking with no frontiers and barriers. Liberal education is not a matter of allegiance to a specific political, economic, or social orientation but rather of empowering learners to

think for themselves and explore the significance of life along diverse domains, bearing in mind the ethical dilemmas they face day-to-day.

A forward-looking and progressive curriculum engages students to independently think through and make decisions that allow them to exercise their freedom fully, as well as to question unique ways of thinking and biased narratives. All those competencies that strongly inform curriculum transformation and development processes, such as critical thinking, creativity, resilience and empathy, are strongly sustained by teachers' openness to promoting learners' freedom and to learners expressing freely.

#### Clue 9: Moving toward hybrid modes of education

Unlike in-person and virtual teaching models and strategies, hybrid modes of teaching, learning, and assessment are based on the integration and complementarity of in-person and distance learning, led by teachers with the goal of guiding, enhancing, assessing, and demonstrating each student's learning. We summarize here nine fundamental characteristics of these hybrid modes.

First, the hybrid mode is basically a guiding framework for designing and reflecting various ways of integrating in-person and distance learning, taking into account the specific contexts, circumstances, and capabilities of each educational institution. There is no single model but rather a series of discrete, succinct, and robust criteria for tailoring education to each specific setting.

Second, going back to an in-person model of education has become impracticable—not just due to the pandemic's short-and medium-term impacts but also because it was clear even before the pandemic that learning opportunities, educational contents and resources, and ways of teaching and learning cannot be confined to in-person school activities. The pandemic has raised awareness that education has ceased to be solely in-person.

Third, virtual spaces—mainly educational platforms and resources—that are seeing exponential worldwide growth in recent years are generally placed next to in-person education. Rather than maintaining in-person and distance education as completely distinct tracks, the various types of hybrid modes emphasize the idea of a larger ecosystem of learning that encompasses initiatives, programs, and resources from a range of institutions and actors both within and outside of the educational system.

Fourth, it is important to note that not all distance learning is screen-based or internet-based (Hargreaves 2020). In fact, distance learning can take place in many ways when educators involve students in individual or group activities that combine and integrate study, production, sharing, and discussion.

Fifth, hybrid modes involve revising the curriculum—the why and the what of education and learning—focusing on the intersection between key concepts and essential content and with a view to enhancing the learners' emotional, social, and cognitive competencies in an integrated, meaningful way.

Sixth, a mayor challenge lies in ensuring that students enjoy maximum opportunities in mixed learning ecosystems (Reimers and Scheleicher 2020), in which in-person and distance learning are mutually reinforcing. In the hybrid modes, in-person education is reexamined in light of virtual education, and vice versa. If, for example, the distance section involves a number of individual and group activities, the in-person one can focus on feedback from the teacher on student work more

than on just sharing (and often merely communicating) concepts, ideas, and information. This entails the diversification of pedagogical strategies to support personalized educational paths according to the needs and the progression of each student.

Seventh, hybrid modes involve intense and coordinated processes to strengthen the competencies of students and teachers. On one hand, students' competencies in educational technologies should be reinforced to enable them to be protagonists, self-regulated and responsible for their own learning. On the other hand, educators should be supported in student feedback methodologies as well as in strengthening collaborative professional work to produce, share, discuss, and validate practices.

Eighth, hybrid modes mean designing the school digital strategy in light of mixed in-person and distance-learning approaches (Menéndez 2020). The school should be empowered to deliberate and make decisions about educational content and teaching and learning methods while focusing time and instructional resources on those who are at risk (Hargreaves 2020).

Ninth and lastly, hybrid modes should strengthen the triad of (i) access to devices and connectivity in homes and educational institutions, (ii) public platforms based on a strong state commitment to ensuring their availability for all citizens, and (iii) a range of opportunities for teachers to produce, discuss, and validate in-person and distance-learning materials. This triad can spur reorganization of the curriculum, further diversification of pedagogies, strengthening the guiding role of intermediary educational bodies (for example, at the level of supervisors and inspectors), and pedagogical leadership on the part of schools. Even more important, though, is its potential to enable educators to customize teaching, learning and assessment.

In short, and in light of moving toward hybrid modes, it is urgent to reimagine educational systems (Microsoft and New Pedagogies for Deep Learning 2020) to ensure learning anywhere at any moment within a new order of global harmony and sustainable development for people, citizens, and communities.

## **Clue 10: Inspiring affection for educators**

The global pandemic is challenging educators at the very core of their role as mentors and guides for students and as facilitators of student learning. Essentially, their capacity to respond to a situation that is unexpected, complex, and unpredictable (in the present as well as the near future) has strengthened their resilience, enabling them to design and implement educational initiatives that inperson formats—largely associated with conventional methodologies focused mainly on transmitting information and knowledge—tend to limit. Educators are daring to explore the unknown and to search for solutions they can design, develop, demonstrate, and evaluate in dialog and constructive collaboration with their colleagues.

These educational initiatives are not isolated actions nor are they entirely individual. One could speak of a budding transformation in terms of mutual support and "outside-the-box" collaboration occurring among educators. Strengthening curriculum proposals within educational institutions could bolster nascent collaborative mechanisms among educators via communities of practice both within and outside of educational institutions, in which practices based on peer-to-peer learning are shared and exchanged. This could also involve the production, discussion, and validation of materials to support hybrid teaching, learning, and assessment, which could improve the quality of curriculum and pedagogical proposals.

In addition, the transformational impetus within teaching can be strengthened if school innovation is embedded in a robust, clear, and verifiable framework of educational objectives. These objectives would be shared throughout the educational system, but educational communities would have the flexibility to tailor methods to fit each school. Underpinning sustainable and effective innovation are both top-down and bottom-up synergies.

Moreover, the increasing exposure of educators to distance learning could have the effect of bringing them closer to the younger generations. Distance learning could, among its other beneficial aspects, sharpen our ability to understand and enhance student development through interlinkages between students' physical and virtual identities as well as to better understand how younger generations communicate and express themselves.

Finally, it is worth noting a concern that the current situation, in which, in general, greater appreciation is shown toward educators and their role, could evaporate if educational systems and, in particular, educational institutions opt to make only marginal changes and return to the pre-Covid-19 status quo once the most severe effects of the pandemic are largely under control. If that were to happen, levels of personal, citizenship, professional, and institutional frustration could increase drastically, putting at risk the emergent processes of rethinking normality through a transformational and progressive lens.

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