WORKING Group 01

CHAPTER



A **curricular framework** for flourishing in education

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This chapter proposes frameworks for education in and for flourishing by moving from general concepts and ideas about flourishing articulated in the previous chapters to the level of educational implementation and practice. The frameworks proposed are not meant to be prescriptive, but rather to offer a grounded and broad perspective that can take an informed approach in orienting education toward flourishing and reflect sensitivity to the variety of social-cultural-political contexts within which education takes place worldwide. The chapter outlines premises stemming from previous chapters, situating education as a complex phenomenon. Guiding principles are developed to form the basis of two frameworks. The first is a framework for education in and for flourishing that identifies, defines and positions in context the components of: a) curriculum, teaching and assessment; b) learning; and c) flourishing aims and manifestations. The second is a curricular framework for education in and for flourishing based on six domains featuring six learning trajectories that expand the pillars of education introduced in the Delors Report.

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СНАРТЕК

INTRODUCTION

Based on the conception of flourishing outlined in WG1-ch2 and the advancements in the scientific study of flourishing reviewed in WG1-ch3, the current chapter proposes frameworks for education in and for flourishing. This involves moving from the general concepts and ideas articulated in the previous chapters toward the level of educational implementation and practice. The frameworks proposed are not meant to be prescriptive; but rather to offer a grounded and broad perspective that can help develop informed ways to orient education toward flourishing. Inevitably, developing such frameworks requires some measure of abstraction, categorization and reduction and bears a risk of simplification. In order to circumvent at least some of these difficulties and arrive at a substantiated framework, after we outline premises that stem from previous chapters, we situate education as a complex phenomenon. This enables us

to promote a more informed approach tempered by reasonable expectations.

Furthermore, viewing education as complex seeks to reflect sensitivity to the variety of social-culturalpolitical contexts within which education takes place worldwide. The discussion of education and complexity leads to some guiding principles that support the development of two frameworks that are presented and outlined throughout the rest of the chapter. The first is a framework for education in and for flourishing that identifies and defines the components of: (1) curriculum, teaching and assessment; (2) learning; and (3) flourishing aims and manifestations, all positioned in context. The second, a curricular framework for education in and for flourishing, is based on six domains that feature six learning trajectories that expand the pillars of education defined in the Delors Report (International Commission on Education for the Twenty-first Century, 1996).





4.1

Considerations that underpin the development of education in flourishing

We outline the following points as premises that stem from WG1-ch2 and WG1-ch3 and that form a basis for the frameworks developed in this chapter. These points will be followed by a discussion of education in flourishing as requiring an understanding of education as a dynamic system.

A CURRICULAR FRAMEWORK FOR FLOURISHING IN EDUCATION



Education and flourishing are intertwined. We posit flourishing as both aim and means of education. Hence both the future orientation of education and the context in which learning is advanced are to be viewed through the lens of flourishing. 1. Human flourishing is the optimal continuing development of human beings' potential and living well as human beings. This means being engaged in relationships and activities that are meaningful, that is, aligned with both human beings' own values and humanistic values, in a way that is satisfying to them. Flourishing is conditional on the contribution of individuals and requires an enabling environment.

2. Flourishing is malleable. The extent to which newborns will grow into flourishing adults depends on the experiences to which they are exposed and those which they initiate. Beyond what nature endows us with and the specific conditions into which we are born, how we are nurtured can substantially impact flourishing.

3. Education and flourishing are intertwined. We posit flourishing as both the aim and means of education. Hence, both the future orientation of education and the context in which learning is advanced are to be viewed through the lens of flourishing. 4. Flourishing depends on multiple factors; broadly, it includes both individual potential, and external conditions and influences (i.e. context – local, global, economic, ecological).

5. Education can be framed as a broad system of relationships (e.g. teacher-student, self-other, selfself, self-society, self-ecology).

6. Given that flourishing is multifaceted, there is a need to inform education in and for flourishing through multidisciplinary and interdisciplinary perspectives, building on existing educational theory and practice and scientific findings that are viewed in the context of global and local challenges.

Building on these ideas that have emerged from previous chapters, we point to an additional perspective that seems necessary for proposing concrete directions for education in flourishing; that of education as a complex system.

4.1.1

EDUCATION, FLOURISHING AND COMPLEXITY

The transition from flourishing as a guiding ideal to an educational aim that can be operationalized and guide a curriculum should take into account the growing scholarly recognition that education is a 'complex system'. The term system is employed here in its broadest sense and refers to an organization of interrelationships between parts into unified and flexible wholes (Morin, 1992). The term complex system means that in a system there is a group of multiple components working both independently and interdependently that prevent the system from being fully controlled and predicted, and hence bound to evolve in unexpected ways (Radford, 2008).

The 'educational system' consists of a set of human and non-human elements and the relationships between them. Human elements include not only students and teachers but also administrators, parents, policymakers, stakeholders and various others. Non-human elements comprise learning spaces – classes, schools, virtual, outdoor, textbooks and so on.

We approach education as a complex system for the following reasons.

1. Education, like other complex systems, has no clear boundaries given the variety of learning spaces in which education occurs (e.g. schools, outdoors, nature, virtual), and the fact that different elements in the system (e.g. parents, communities) can be seen as standing both within and outside the system. The lack of clear boundaries makes the system susceptible to external influences, reduces the ability to control and predict it and renders the context in which education takes place crucial (Davis and Sumara, 2014).

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2. The elements that compose educational systems are myriad, interdependent and can change, learn and adapt (Boulton, Allen and Bowman 2015). As a result, the links between them are often diverse, distinctive and cannot always be anticipated. This applies, of course, to the pupils and teachers in the system and the relationships between them, but it also applies to other

...findings from neuroscience, biology and psychology show that humans share common features (e.g. basic inclination toward sense gratification, stress response at times of perceived threat, as well as seeking safe, caring and nurturing relationships) and certain common conditions are known to be more conducive for education in and for flourishing.

elements in the system, such as classes, schools, districts and even national educational systems. Notably, the elements that are the makings of education systems comprise complex systems in and of themselves. Many perspectives in neuroscience, biology, psychology and phenomenology construe brain, mind and body as dynamic systems (Siegel, 2015). Equally, affective and social neuroscience demonstrate that individual behaviours and mental experiences are substantially shaped by complex interactions with others (Immordino-Yang, 2015). Moreover, education itself takes place within a complex environment. The social, political and economic systems can all be, and indeed increasingly are, seen as complex systems (Byrne, 2001; Room, 2011). Complexity in education, therefore, is present on many levels and pervades the educational system (Mason, 2008). The implications of this are that not only are no two students the same, but the interaction between two, three or more students, seated within a classroom also introduces further unpredictability into

education. This further extends toward understanding that no two classes or schools are exactly the same, and similarly, national systems differ significantly.

3. While education and some of the systems it includes have disordered elements, they are not chaotic (Morrison, 2008). Many of the elements of educational systems are regular, stable and broadly foreseeable (e.g. cycle of the year and vacations, school setting). Hence, in as much as students' development is shaped by the contingencies of individual differences and social-politicalcultural context, findings from neuroscience, biology and psychology show that humans share common features (e.g. basic inclination toward sense gratification, stress response at times of perceived threat, as well as seeking safe, caring and nurturing relationships) and certain common conditions are known to be more conducive for education in and for flourishing (Noble et al., 2015; Sapolsky, 2017; Immordino-Yang, Darling-Hammond and Krone, 2019). Such is also the case when looking



at educational organizations and their functioning and development (Senge, 2006). They too contain ordered and disordered elements. Hence, due to the orderly elements found in them, they can be influenced and moved to advance along desirable paths, despite it not being possible for them, as complex systems, to be fully controlled (Colander and Kupers, 2016).

Recognizing complexity from the interpersonal to the intrapersonal, and on to the educational system, and understanding its makings as emerging both bottom-up and top-down, leads to some significant guidelines that should be considered.

Context is crucial because education is an open system that is both influenced by and influences the environment in which it is conducted. The attempt to promote flourishing should be multiscalar, from micro to macro, from that of the student to that of policy (Boulton, Allen and Bowman 2015). Since the different parts of the educational system are interdependent, it might not suffice to confine the promotion of flourishing merely to one level of the system, such as that of the student, and it is best to orient the entire system towards it (Mason, 2008).

2. Context is crucial because:

a) Education is an open system that is both influenced by and influences the environment in which it is conducted. Embracing complexity implies that the educational system should be made more flexible and responsive to local conditions and possible changes. This often, but not always, means giving more power to those involved in the practice of education, because they are most aware of and informed on the context in which it takes place.

b) What suits and works in one place might be inadequate for another. The idea of emulating models, as well as knowledge dissemination of best practices, is hardly trivial (**Biesta**, 2007). To provide only a few examples, the interpersonal differences in the interest of the students, the variance in teachers' authority, the culture of the surrounding

Context is crucial because what suits and works in one place might be inadequate for another.

communities and the political situation in the country can all play crucial roles in how flourishing is conceived and how education can promote it (see WG1-ch2 for definition of flourishing). It is hence essential that education in and for flourishing be sensitive to the context in which it takes place (Geyer and Rihani, 2012).

3. An attempt to address complexity requires multidisciplinary and interdisciplinary approaches. No field exhausts the understanding of human beings and social systems, hence different fields and their combination provide entry points for overcoming hindrances to, and promoting, flourishing. A framework for flourishing needs to draw on understandings from various fields, including among others, philosophy, sociology, developmental psychology, biology and neuroscience.

4. Adopting complexity requires that we do not think in terms of tightly conceptualized goals. Nevertheless, acknowledging complexity does not exclude the existence of shared goals or dismisses the ability that they can be fruitfully pursued. While promoting flourishing must be sensitive to the context in which it takes place, general directions for achieving it can be devised.

Bearing in mind the above guidelines and the limitations they pose on our ability to provide definitive direction for promoting flourishing through education, we have developed two frameworks. We view them as offering a number of links in a progression from theory toward practice. The first framework establishes the basic components of education in flourishing based on combining commonplaces of educational discourse with understandings depicted above and stemming from previous chapters. The second moves further toward practice by extending the first framework into curriculum development. WG1-ch5 brings these ideas further into practice within educational spaces (e.g. schools).



CHAPTER



4.2

<u>A framework</u> for education in flourishing

The basic framework proposed (Figure 1) depicts the process of education in and for flourishing as it unfolds based on fundamental concepts of education, emphasizing its situatedness within a context. We elaborate on the framework proceeding



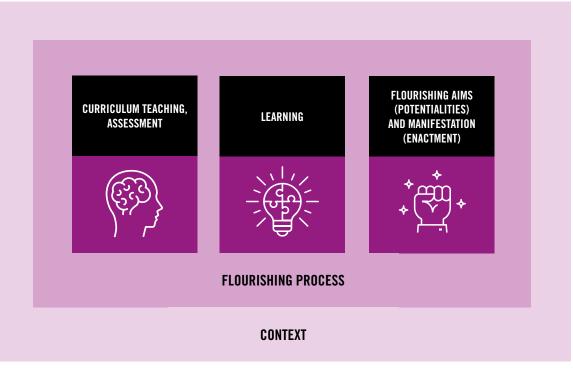


Figure 1. A framework for education in flourishing

from left to right as we highlight commonalities in educational discourse and rely on scholarship in various fields.

- *Curriculum:* The term 'curriculum' is interpreted here drawing on twentieth and twentyfirst century conceptions that encompass the planned (formal), taught, assessed, hidden, inner and null curriculum (i.e. what is omitted from it) (e.g. Pinar and Grumet, 1976; Eisner, 1994; Giroux and Penna, 1979; Schwab, 1982; Pinar, 2014; Ergas, 2017). This broad perspective proposes that the curriculum itself is a dynamic system (WG2ch8 for a discussion on traditions and tendencies in curriculum and pedagogy development). It sees the curriculum as emerging from both top-down processes (e.g. policy-



... like teaching, we view assessment as part of curriculum and teaching; however, assessment is reiterated due to its substantial presence in contemporary educational practice, and its effects on the shaping of curriculum and teaching. making, curriculum design), which are followed by school and teacher deliberations (e.g. lesson planning, learning space) and bottom-up processes that emerge from the various relationships that arise during implementation (e.g. teacher-student, student-student, student-learnings space). The latter represent the dynamism of the learning experience, which is shaped by idiosyncrasies of students and classrooms and changing day-to-day events. Curriculum can hence be seen as the object concerned with the materialization of policies and subject matters, but it is also the experience and the process (a verb if you will) that comes to life in teaching and learning. It is both the collective experience of a class and the first-person experience of a lifelong journey. It includes both the top-down elements of policymaking and teacher deliberation, as well as the bottom-up processes that are introduced into the learning experience as students interact with teachers and other students and engage formally and informally with the curriculum.

- *Teaching:* the term curriculum as outlined includes teaching; however, teaching is reiterated due to its being a fundamental relationship that permeates most conventionally understood learning spaces (e.g. schools) (Hattie, 2009). It will later be construed as a pervasive relationship that is interwoven through all six curricular domains. Following various accounts, we treat teaching as an activity in which an intention to propel changes in knowledge, understanding, behaviour, attitudes or opinions in a human being is exercised in a nurturing way through diverse forms of human expression (e.g. speech, bodily demonstration, art, silence) (Hirst, 1971; Palmer, 1998; Noddings, 2003b).

- Assessment: like teaching, we view assessment as part of curriculum and teaching; however, it is reiterated due to its substantial presence in contemporary educational practice, and its effects on the shaping of curriculum and teaching (Pressley and McCormick, 1995). However, we situate it as integrated within curriculum and teaching, reclaiming its role as part of education in flourishing, instead of treating it as an external-instrumental element that is seen as merely 'supervising' education. We hence treat assessment as an act that occurs constantly throughout one's life, that offers evaluation and feedback on one's progression in relation to any problem or task. Viewed in light of these ideas, assessment is built into the brain's proactive nature (Bar, 2009) and the mind's functioning from the basic level of heuristics (Kahneman, 2011); it is a constant activity occurring during formal or informal teaching as a teacher evaluates student understanding and reflects on their work (Huba and Freed, 2000; Entwistle, 2003), as students reflect and regulate their own learning (Zimmerman, 1990; Panadero, Jonsson and Botella, 2017), and as a formal practice that occurs at the school and policy-making level (WG2-ch9; WG3-ch5).

- *Learning:* Moving to the middle box (Figure 1), we take a broad perspective on 'learning' as well,

to encompass learning as process, as experience, and as outcomes. Hence, learning is a process of active meaning-making situated in context (Bruner, 1960; Savery and Duffy, 1995), based on which relatively permanent changes occur within any one or more of the following: human dispositions, capabilities, knowledge, behaviours, values, attitudes and/or preferences (Gagne, 1970; Mayer, 1977; Gross, 2015). In our context, we seek changes that are conducive directly and indirectly to flourishing. Learning is also an experience of an individual and/ or groups and communities of individuals, shaped by various spaces (e.g. outdoors, indoors) (Andersen, Boud and Cohen, 2000; Henry et al., 2003; Kraftl, 2013). Our broad approach to learning emphasizes the importance of the teaching-learning relationship as formative in affecting the experience of learning. Following the above consideration of curriculum-teaching-assessment, understanding learning-asprocess also seeks to circumvent the problem of 'learnification' of education (Biesta, 2009) in which

... we take a broad perspective on 'learning', to encompass learning as process, as experience, and as outcomes.

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the end becomes more important than the means and is construed in ways that limit the horizon of education as a fully 'measurable' and predictable human endeavour. The approach proposed here is a pragmatic one, in which scientific evidence and established theories

are viewed as scaffolds that help direct education in flourishing, but do not formalize it entirely. Acknowledging the premise of education as a dynamic system implies that while we seek to do our best in directing education in flourishing, we must remain aware of the outcomes of our practice. We should continue to improve learning based on insights that potentially gain more credibility with time yet remain somewhat conjectural.

Flourishing aims (potentials) and manifestations (enactments):

The expected end result of the curriculum and teaching is the development of capacities, propensities and capabilities that contribute to the flourishing of the individual and that of others. Education should provide individuals with a range of mental, physical and practical capacities and capabilities that increase their ability to choose and follow their own path towards a flourishing life. Education should also develop the propensity to act on these spontaneously, by will or as an acquired habit. To

achieve flourishing, potential must be translated into action. Education, however, should also go beyond the flourishing of each particular individual. It should bring individuals to contribute to flourishing in broader interpersonal circles (e.g. through acts of caring). Each individual has the power to affect not only their own flourishing but that of others and education should guide individuals to promote the flourishing of others around them. In addition, education should encourage individuals to contribute to the creation, maintenance and enhancement of the conditions that facilitate flourishing (e.g. environmental, political, economic, cultural).

Based on this first framework of education in and for flourishing, we focus on a framework for curriculum followed by its relation to learning. The movement to curriculum reflects a movement from a conceptual-theoretical framework to one that is closer to practice.

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4 CHAPTER

4.2.1

A CURRICULAR FRAMEWORK FOR EDUCATION IN FLOURISHING

We propose six curricular domains for flourishing in education, based on understandings gleaned from previous chapters, the conception of dynamic systems discussed above and existing literature. More specifically, the conception presented here has also been inspired by Bronfenbrenner's (1979) model. Bronfenbrenner's ecosystems model nests the child in a series of circles that affect one's experience, development and, in the current context, one's learning and flourishing.

Bronfenbrenner's model was chosen because it connects us with the developmental perspective presented in WG1ch3 and is consistent with the understanding of dynamic systems in acknowledging the various ways in which children are affected as they engage in various ecosystems. However, we frame our reliance on Bronfenbrenner as informing rather than dictating the framework developed. The model we present reflects a shift from a psychological model that does not acknowledge the ecological dimension to one that is aimed at developing a curriculum toward flourishing within the context of a contemporary ecological crisis, as we now elaborate (Figure 2).

1. The shift to a curricular perspective has led us to opt for a representation that separates the nested circles image to one of curricular domains. We acknowledge Bronfenbrenner's model in which all domains affect each other. We also, as mentioned, view the educational system as a complex system comprising many inter-relations. The domains, however, are represented separately in order to better convey a more systematic and concrete way to develop curricula. Hence, we recommend bearing in mind the psychological

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nested-circles model suggested by Bronfenbrenner when considering the separate curricular domains, and after elaborating these separate curricular domains, we will provide examples of some interconnections between them.

2. We define a 'curricular domain' as a relatively distinct area/field that includes knowledge and practices to be learned. 3. Informed by Bronfenbrenner, as well as by understandings gleaned from **WG1-ch2** and **WG1-ch3**, and based on deliberations among the International Science and Evidence based Education (ISEE) Assessment members, we arrived at six curricular domains that in contemporary times seem to be fundamental to the flourishing of individuals and groups across countries: environmental, cultural,



..... an acceleration of environmental destruction due to economic globalization... along with empirical evidence of the effects of poor environments on the possibility of flourishing point clearly to the need for education in and for flourishing to help people protect and improve the environment and benefit from it.

social, technological, interpersonal and personal. Each of these domains makes its own unique and irreplaceable contribution to flourishing.

4. We postulate that engaging in each curricular domain means engaging in a relationship between the individual and that curricular domain. This engagement can be direct, as in learner–curricular domain, for example, a student learning to use a certain software and interacting with technology; or indirect, that is, with a teacher who designs the students' encounter with the content in that domain.

5. When a teacher is involved, as would be the case in most formal educational systems, at least three relationships shape the learning experience: teacher-student, teacher-curricular domain, student-curricular domain, and all are affected by contextual factors.

6. In light of the definition of flourishing and the developmental perspective presented in WG1-ch3,

we envision a potential movement in each curricular domain toward increased flourishing as reflecting a progression from basic knowledge and understanding to meaningful engagement and ultimately to agency.

7. All curricular domains can be engaged in deliberately with an intention to learn or in a nondeliberate way in which learning can occur as an unintentional byproduct.

In Figure 2 we elaborate each of the six domains from left to right following a structure that includes these components: a demarcation of what each domain entails; a justification for the presence of the domain in the framework; an explanation of what a relationship means in each domain; a short consideration of some critical perspectives regarding the domain. Due to the differing rationale of each domain, not all discussions follow exactly the same sequences.



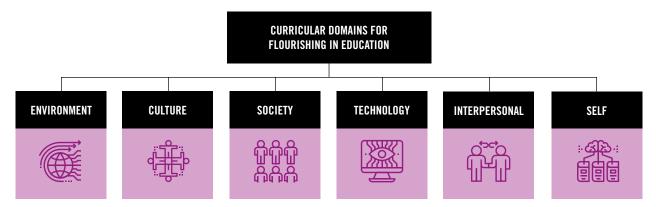


Figure 2. The six curricular domains for flourishing in education

ENVIRONMENT

We live within a human and nonhuman environment. Although the two are closely connected and mutually influence each other, in this section, we focus on the latter, which includes among others animals, plants, our close abiotic surrounding and the earth itself. While learning to live with and in nature has long been considered by many educationalists as a significant part of living a flourishing life (e.g. Rousseau, 1762/2001), education is now required to go beyond it. In the last few decades, it has become

evident that human actions have a destructive influence not only on the environment itself (pollution, reduction of biotic diversity, global warming etc.) but also on the ability to live a flourishing life within it (Abram, 2018). The COVID-19 pandemic is one more striking reminder that it is so (Pan and Zhang, 2020). Moreover, we are currently witnessing an acceleration of environmental destruction due to economic globalization (Abram, 2018). These observations, along with empirical evidence of the effects of poor environments on the possibility of flourishing (Checkley et al., 2004;

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Bartram et al., 2005; Owusu, 2010; Finell and Natti, 2019), point clearly to the need for education in and for flourishing to help people protect and improve the environment and benefit from it.

Historically, due to a deeprooted belief in the West that science and technology are capable of managing our planet, environmental problems have often been viewed as a matter of management and control (Huckle, 1993; Mogensen and Mayer, 2005). This has led to an oversimplified perception of the role of education in relation to the environment, according to which environmental problems have clear solutions that can be taught, including a set of predetermined knowledge, attitudes and behaviours. However, in the 1990s more radical views shifted the focus to the social-political aspects of environmental problems, viewing them as derived from the conflicting interests of groups of humans in the utilization of natural resources (Schnack, 1998). These developed understandings led to the extension of the goals

of environmental education to include, among other things, acquisition of a set of decisionmaking and problem-solving skills (Disinger, 1989), reactivating values towards society (Posch, 1999), promoting environmental awareness and dynamic qualities, such as initiative, independence, commitment (Posch, 1991), and education for citizenship, for critical participation and for taking personal responsibility in actions and decisions concerning the natural, social, cultural and economic environment (Mayer, 2004). These extended goals were reflected in the International Implementation Scheme for the United Nations Decade of Education for Sustainable Development (UNESCO, 2004, 2005).

In addition, with time, it became increasingly clear that effective actions of environmental protection and remedy require collective efforts (Kolstad et al., 2014). As Harari (2018) argues, it is becoming apparent that, while individuals can supposedly flourish in certain domains that concern their personal life, the

... it is becoming apparent that, while individuals can supposedly flourish in certain domains that concern their personal life, the ability to experience flourishing will be dramatically hindered by the effects of the ecological crisis.

'Effective climate change mitigation will not be achieved if each agent (individual, institution or country) acts independently in its own selfish interest, suggesting the need for collective action'. ability to experience flourishing will be dramatically hindered by the effects of the ecological crisis. The Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report addresses this issue as a case of 'the tragedy of the commons' by stating that 'Effective climate change mitigation will not be achieved if each agent (individual, institution or country) acts independently in its own selfish interest, suggesting the need for collective action' (Kolstad et al., 2014, **p. 211)**. As a result, alternatives to the traditional models of environmental education were developed, which were criticized as too individualistic and relativistic, thereby failing to cultivate collective social responsibility (Wals, 2010, 2011; Van Poecka, Goeminne and Vandenabeele, 2016; Blenkinsop and Morse, 2017; Franck, 2017; Jickling, 2017; Lengyel et al., 2019).

Today, stemming from the growing acknowledgement of the multifaceted dimensions of environmental problems and the need for collective action, there are mounting calls

to establish universal ethics (Curry, Whitehouse and Mullins, **2019**), as the foundational basis of environmental education (Blenkinsop and Morse, 2017; Orr, 2017; Sterling, 2017; Lengyel et al., **2019**). Such an ethical framework resonates clearly with indigenous approaches to ecology (e.g. Rose, 2005; Roderick and Merculieff, 2013) and recognizes that humans have an interdependency with other humans and with nature, and that these interdependencies and interconnectedness form the wholeness of human existence and flourishing (Capra, 1982; French, 1986; Abram, 2018). Orr (2017), for example, proposes the development of a curriculum based on deep humility, which acknowledges the systems' interrelatedness and our lack of ability to fully comprehend Earth. Abram (2014), for his part, highlights the importance of being embedded in place. He also calls for rejuvenating the sense of unity with Earth and highlights the importance of a multiplicity of cultures. Common to many of the approaches that are currently advanced is a shared understanding of the





role of environmental education in creating in-depth embodied awareness of our interconnectedness with the more-than-human world, appreciation of its complexity, and a collective sense of responsibility to do no harm. To conclude, learning to live harmoniously with the environment, to appreciate it and be able to enjoy it, is a significant aspect of living a flourishing life, one that education should facilitate. In addition, protecting

the environment, and potentially even remedying it, has become essential for our ability to live a flourishing life. Seeking to live a flourishing life, we cannot ignore the dangers of environmental destruction and its potentially devastating effects and impact on future generations. They are equally entitled to seek flourishing lives just as we feel we are. If we are to achieve flourishing, the curriculum must provide us with the capacities and capabilities needed to conserve it as well as the drive to put them into practice (WG3-ch5; WG3-ch7).

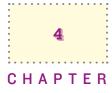
CULTURE

The conception of culture embraced in this framework draws on a common typology applied in educational theory, dividing 'culture' and 'society' (the curricular domain that follows hereafter) into distinct curricular domains. Hence, following **Biesta** (2009), **Egan (1997)** and **Lamm (1986)**, who articulate this typology in similar ways, culture as a curricular domain involves the cultivation

of humanity by engaging with the best of local and global cultural accomplishments. The content of this curricular domain includes past and present human endeavours and achievements from across the globe featured in oral and written works. It often refers primarily to the traditional understanding of humanities, arts, social and natural sciences. It encompasses, for example, among other things, being acquainted with famous literary texts across cultures, scientific theories, historical developments and artworks. This curricular domain has a universal orientation and acknowledges globalization and multiculturalism, pointing to a cosmopolitical orientation, and highlighting the need for social inclusion (Nussbaum, 1994; Hansen, 2010; Appiah, 2017).

Alongside the social curricular domain (hereafter), the cultural curricular domain is found at the heart of the formal curriculum in schools across many countries. Framed here as a relationship with culture, it entails the interaction with knowledge of

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past and present achievements, including humanities, arts and sciences. It also encompasses acquiring capabilities that allow a movement from being merely knowledgeable about culture to someone who can benefit from it and potentially contribute to it (e.g. appreciation of knowledge, critical thinking, cultural literacy). Many leading educationalists point to, and elaborate on, the importance of being exposed to past and present culture to expand one's potential for a flourishing life (Dewey, 1938; Eisner, 1994; Peters, 2010). In addition, the definition of flourishing endorsed in this report, which stresses the value of engagement in meaningful activities, reinforces the significance of culture because it is from culture that most activities draw their meaning and value. Moreover, the relationship advocated here reiterates and highlights the appreciation of noninstrumental knowing and critical thinking. In proposing culture as a curricular domain, however, there is by no means a suggestion that the conventional fragmented disciplinary curriculum, critiqued

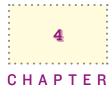
by many (Dewey, 1933), is to remain the organizing framework for schools. There is ample room for creatively redesigning curricula in ways that maintain high standards of knowing and better contribute to flourishing (Fogarty, 1991; Barbezat and Bush, 2013; Reiss and White, 2013).

The centrality and value of the cultural domain in the curriculum, however, have been challenged, especially lately. Firstly, the association between the cultural domain and formal schooling indicates that this domain, if inadequately delivered, may lead to boredom and antagonism on behalf of students due to the imposing of specific subject matter on students. Special care then needs to be taken when selecting subject matter so as to maximize students' present and future interest, to form a healthy lifelong relationship with knowledge. Nevertheless, it must be kept in mind that the ability to appreciate and benefit from culture often requires a long process in which one learns about it and is exposed to it (Throsby, 2001). To promote flourishing,

While the importance of teaching and learning is crucial in all domains, it is important to reiterate here that, eventually, it will not be the choice of subject matter or discipline that cultivates capabilities of critical thinking but rather how they are taught and by whom. education should, therefore, not refrain from engaging with culture, even when the benefits of it are not immediately apparent to students or parents because its value often becomes evident only after significant engagement. Importantly, however, within the great selection of cultural assets, a curriculum should include ample choice that allows students to select subject matter to their liking (O'Neill and McMahon, 2005). Secondly, today's abundance and availability of knowledge has brought a growing sense that perhaps there is no need to hold as much in the mind as was necessary decades ago. As a result, the idea that learning about culture is an essential part of the curriculum is also undermined. Research shows, however, that this is an illusion and knowledge is still essential (Yates and Young, 2010; Young, 2013). Wineburg (2018), for example, demonstrate that the very situation of abundance and availability of information, in fact, requires increased capacities for critical thinking because along with this abundance comes the need for wise consumption, sifting

and adjudicating. Wineburg (2018) hence particularly emphasizes the learning of history as a discipline, by which such skills are cultivated. Furthermore, if we hope to cultivate good thinking skills, knowledge itself cannot be compromised, for the cultivation of thinking requires the building blocks of knowledge (Nickersonet al., 2014). It is in light of such claims that the cultural curricular domain cannot afford to be too narrow and/or too instrumentally focused. While the importance of teaching and learning is crucial in all domains, it is important to reiterate here that, eventually, it will not be the choice of subject matter or discipline that cultivates capabilities of critical thinking but rather how they are taught and by whom.

Thirdly, the last centuries have seen a growing emphasis on the instrumental aspects of education, especially those related to the economy (Nusshaum, 2010). For example, in some parts of the world, there is a process of academization of kindergartens in which arts are gradually



... by engaging in a relationship with culture, education makes an indispensable contribution to flourishing. It opens avenues for developing potential, finding meaning, strengthening a sense of belonging and even new forms of pleasure. overtaken by preparation for first grade (Bassok, Latham and Rorem, 2016). Another example is the way sciences have overtaken the humanities in university departments (Newfield, 2012). The rationale here is economic and budget pressures can often shape what students learn, especially in higher education (Bok, 2009). Setting aside what ought to be prioritized, trends such as these reduce the cultural domain and, as such, they directly reduce the potential for education in and for flourishing. Hence, as much as possible, a balanced curriculum should be sought, one that also acknowledges the importance of cultivating a culture of leisure time in which individuals can pursue worthwhile activities of their liking (Noddings, 2006). Following a point made above, however, the separation of the domains can itself be considered from a critical perspective, and designing balanced curricula that form intersections between them is a valid possibility (Zajonc, 2006).

To conclude, by engaging in a relationship with culture,

education makes an indispensable contribution to flourishing. It opens avenues for developing potential, finding meaning, strengthening a sense of belonging and even new forms of pleasure (Scitovesky, 1992; White, 2011; Gilead, 2017b). Moreover, the cultural domain has the potential to strengthen interconnectedness in a globalized world. As Hansen (2010, p. 1) suggests 'curriculum across all subjects can be understood as a cosmopolitan inheritance' (WG1-ch1). Cultural achievements, such as a poem by Rabindranath Tagore or Pablo Neruda, allow for both cultural specificity and the transcending of gender, race, regionality, religion and other potential identities, allowing for the sharing of a common ground. Similarly, scientific advancements, such as a search for a vaccine for COVID-19, can be seen as a shared universal interest for most individuals and societies regardless of nationality. The cultural domain lends itself to a universal perspective that strives toward global interconnectedness.



SOCIETY

The social curricular domain, as distinct from the cultural curricular domain, encompasses the relationship between individuals and institutions and between individuals and groups. It includes, among other things, the political, economic and legal spheres. Whereas the cultural curricular domain, as conceived here, has a universal orientation, the social domain is traditionally more oriented towards the community or the nation. The social curricular domain

A CURRICULAR FRAMEWORK FOR FLOURISHING IN EDUCATION



In recent decades, scholars have placed an increased emphasis on forming critical citizens able to reflect on politics, sensitive to questions of social and economic justice and aware of power relations among individuals, groups, genders and so on. is examined here from both a functionalist perspective (Durkheim, 1972; Parsons, 1985) and conflict based perspective that emphasizes power relations (Marx, 2000). The ability of an individual to take an active part in society is considered fundamental to flourishing and has traditionally been one of the main purposes of education. While individuals may differ in their need to be part of groups, to a great extent flourishing depends on a sense of belonging (WG3-ch3). It would be difficult to foster this sense of belonging without being immersed in one's society, which necessitates understanding of its norms and being capable of navigating one's life within these norms.

Preparing people to live in society and take an active part in it has always been seen as an essential part of education. Almost all forms of formal education are supposed to equip students with the knowledge (e.g. numeracy and literacy), skills (e.g. professional skills) and values (e.g. moral or political) necessary to successfully participate in social life (**Biesta**, 2009). Significantly, over the last two centuries, nation-states have gradually become the social entities that guide education. In its current form, the schooling system was mainly created to serve nation-states and ensure that citizens can fulfill their role in it and are faithful to it (Green, 1990). Hence, ideals of citizenship are often defined by the state according to its political philosophy, such as liberalism, communitarianism, republicanism and conservativism (Beiner, 1995).

In recent decades, however, scholars have placed an increased emphasis on forming critical citizens able to reflect on politics, sensitive to questions of social and economic justice and aware of power relations among individuals, groups, genders and so on. At the same time, it was, and is increasingly, held that citizenship education should strive to form active, responsible and participatory citizens rather than docile subjects (Westheimer and Kahne, 2004). Hoskins (2006), for example, argues that active citizenship should emphasize

Education is seen as necessary to create a global citizenship in which students know their place in humanity and human rights. participation that upholds human rights and democratic principles, such as non-violence and mutual respect. However, some go even further and argue that a more transformative and humancentred approach is critical for promoting flourishing. According to this view, what is required for flourishing is active citizenship that demands that [young] people are also informed, engaged and empowered (Akar, 2019). According to this approach, citizenship is also understood in terms of degrees of agency. For Banks (2017), for instance, a transformative form of citizenship demands that students use their agency to achieve sustainable change, even if it requires violating government laws. Struggles for gender or race equality should be regarded as worthy and desirable.

In addition, it is becoming increasingly clear that, in dealing with society, education in general, and citizenship education in particular, must extend beyond the students' relationship with the nation-state. On the one hand, globalization has increased international interdependence and brought with it the formation of communities and political institutions that go beyond the nation-state. As a result, it is claimed that education for citizenship must transcend national borders and prepare students to live in global communities (Falk, 1993). Education is seen as necessary to create a global citizenship in which students know their place in humanity and human rights (Osler and Starkey, 2005; WG3-ch4). On the other hand, the significance of groups and communities, as well as civil society and the public sphere, has been stressed by many thinkers (Habermas 1991; Taylor, 1994; MacIntyre, 2017). An education for flourishing, therefore, must not neglect these crucial aspects of social life (McLaughlin, 1992; Meyer and Boyd, 2001; Callan and White, 2002).

It must be remembered, however, that in many contexts around the world, education for active citizenship is undermined by classroom pedagogies. Freire (1970) argues that pedagogies that





require children to uncritically receive and reproduce information provided by a higher authority dehumanize them into receptacles waiting to be filled. Memorization, the avoidance of deliberative dialogues and the absence of emotion management are prevalent in countries affected by armed conflict, especially in the Global South (Weinstein, Freedman and Hugson, 2007; Quaynor, 2012; Akar, 2019). To achieve greater flourishing, then, not just new ideals but also new methods must be developed and implemented.

Another notable aspect of social life to be addressed by the curriculum is the economy. The idea that education can significantly contribute to the economy dates at least as far back as the eighteenth century, but it has come to occupy centre stage in educational policy in the last four decades. Following the development of human capital theory, at the level of individuals, education is seen as essential for finding employment and increasing personal wealth (Becker, 2009). On the social level, because of its potential contribution to increasing worker productivity and generating and disseminating knowledge, education is regarded as vital to economic growth and its subsequent benefits (e.g. improved living conditions, higher employment rate) (Stiglitz and Greenwald, 2014). The centrality of the economy in determining the standards of living of both individuals and societies make dealing with the economic aspects of life into an essential component of education for flourishing.

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Indeed, the preparation to succeed in a competitive global economy and employment market by equipping students with the necessary knowledge, skills, and traits has become a priority in educational systems around the world. Nevertheless, questions are increasingly raised about the way education currently relates to economic matters and specifically their prioritization. It is maintained that the present emphasis on economic competitiveness and productivity leads to inequalities, social tensions and the marginalization of other crucial educational aspects (Baptiste, 2001; Brighouse, **2006**). All these have a potentially harmful impact on flourishing. In addition, it is held that to effectively promote flourishing education must encompass economic dimensions that currently receive little attention, such as consumption and how to use available resources in a way that is more conducive to flourishing (Scitovsky, 1992; Gilead, 2017a; WG1-ch1; WG1-ch2).

To conclude, formal education



To promote flourishing, education should extend students' learning by teaching them to think critically, exercise agency and strive to improve the political and social aspects of society. tends to prepare students to integrate into the political and economic aspects of social life, but this might not be sufficient for flourishing. To promote flourishing, education should extend students by teaching them to think critically, exercise agency and strive to improve the political and social aspects of society. In addition, education should go beyond the state and the economy and deal with the global and communal aspects of life. This section only touches on this briefly and it is also somewhat difficult to distinguish between the social realm and the interpersonal since the lines between them are blurred. For this reason, some aspects that may be considered as part of the society curricular domain will be examined in this report under the interpersonal curricular domain.

TECHNOLOGY

The word technology, derived from the Greek words 'techne' (artefact) and 'logos' (knowledge), refers to the artefacts that are

invented or adapted with the purpose of addressing human challenges. In this context, artefacts can assume a material (e.g. computer hardware) or non-material form (e.g. software); technology also includes associated processes that surround the use of artefacts. Over the course of history, and especially in the last two centuries, the role of technology in human life has become more central. Moreover, in recent decades accelerated technological changes and advances have made technology indispensable for almost every aspect of life, from work to leisure to personal relationships. The COVID-19 pandemic has only pushed this trend further (WG2**ch6** for further discussion on education and technology). It is, therefore, essential that education in and for flourishing takes full account of the significance of technology. That said, we frame the relationship with technology in light of both its positive potential contributions to flourishing, as well as its more contested and negative aspects and side-effects, acknowledging,

The emphasis on preparing students for the technological sphere has extended beyond techno- and media-centric conceptions to include more human-centric aspects. for example, claims of its negative impacts on attention span (Carr, 2010), on consumerism and noncritical education (Postman, 2011) and on interpersonal relationships (Turkle, 2017).

Technology, as a curricular domain for flourishing in education, can be conceptualized as a domain-specific and a transversal relationship. Domain-specific technology competencies can serve as a pathway for moving from digital literacy to digital fluency, which is foundational for becoming responsible and active citizens. As a domain-specific relationship, individuals can learn about technology as a subject and develop, both within and outside schools, skills to engage in lifelong learning. New curricular directions have emerged to support learning in a new age; most notable among these is the emphasis on computational thinking, the use of digital technologies to engage in innovation and entrepreneurship and understanding how advanced AI technologies, such as algorithms, can construct our lived experiences in the digital

world. On the other hand, from a transversal perspective, technology can be seen as a means to support the achievement of other educational goals, with a focus not only on problem solving and disciplinary learning, but also on developing higher-order thinking skills that can guide self-regulated learning and acquiring a deep understanding of the world in which we live.

Significantly, however, over the years, the emphasis on preparing students for the technological sphere has extended beyond techno- and media-centric conceptions to include more human-centric aspects. It is recognized that unchecked technological developments can have potentially detrimental impacts on many dimensions of life that are essential for flourishing, such as the environment, health and politics (WG3-ch5). As a result, education for technology, it is claimed, should be viewed as an 'ethical practice of facilitating learning and improving performance by creating, using and managing



... in order to best promote flourishing, the curricular integration of technology should also prepare students to engage in ethical and responsible citizenship. appropriate technological processes and resources' (Januszewski and Molenda, 2013, p. 1). It should also include 'the application of knowledge to support the development of productive, thoughtful and responsible persons' (Spector, 2015, p. xxvii). Such views place technology as central to flourishing, acknowledge the role of technology in human activity and indicate the active relationship between humans and technology.

As in the case for all other curricular domains, the overarching goal should be seen as helping learners progress from a level of familiarity with technology, through acquiring digital literacy skills to having the ability to become an active agent in shaping technology and thus participating in its creation. The notion of empowerment should be at the centre of a re-envisioned role for technology in education (Kyza, 2017). The International Society for Technology in Education (ISTE) describes seven types of standards that students need to achieve to become

empowered actors in today's complex societies. These standards are particularly relevant to flourishing and relate to students' abilities to:

- set personal learning goals and choose technologies that can support students in achieving them (empowered learner);

 be responsible and ethical citizens of the digital world (digital citizen);

 use diverse resources and actively engage in knowledge building (knowledge constructor);

- understand how technology works and be involved in how technology can be shaped to support collective and individual goals (innovative designer);

 employ advanced technologies to solve complex problems (computational thinker);

- select appropriate digital means to express and communicate with



others (creative communicator); and

- use digital tools to collaborate with others, and to understand global challenges from multiple viewpoints (global collaborator).

Care should also be taken to

ensure that relief, inclusion and democratization are not empty promises, but can be realized through technology (Macgilchrist, 2018; Buck, 2020).

Finally, in order to best promote flourishing, the curricular integration of technology should also prepare students to engage



It is hence essential that education does not only focus on the technical aspects of using technology, which is in themselves conducive to flourishing, but goes beyond this to secure the proper development and use of technology that serves to promote human flourishing. in ethical and responsible citizenship. In a conceptual analysis, Choi (2016) identifies four components of digital citizenship that relate to ethics, media and information literacy, participation/ engagement and critical resistance. Choi's claims are aligned with contemporary views of technology that dismiss perspectives of technology as value-free and unproblematic (Gonzalez, 2015) and propose a critical view of technology, call for media and information literacy education, and seek to engage students as creators not just consumers of technology. In this context, technology should be understood as a human activity to be debated, altered and shaped to meet specific needs.

To conclude, at present, technology has unprecedented significance in human life and hence in human flourishing. Education must, therefore, engage with it deliberately. Technology, however, is a double-edged sword that holds much promise but also poses grave danger to human flourishing. It is hence essential that education does not only focus on the technical aspects of using technology, which are in themselves conducive to flourishing, but goes beyond this to secure the proper development and use of technology that serves to promote human flourishing (WG2-ch6; WG3-ch7).

INTERPERSONAL

The 'interpersonal' is the curricular domain associated with an individual's engagement with other individuals and groups. The premise underpinning the need for this curricular domain is stated in MGIEP (2020, p. xxv): 'humans are complex social and emotional beings whose well-being depends on learning to communicate their needs to each other effectively and managing their emotions in healthy ways'. While people may differ in regards to their inclination to engage with others, it is hard to imagine a flourishing life without the capabilities required for understanding others, being able to communicate and collaborate with them, or knowing

Taking relationships to be a fundamental aspect of education, this is probably the most straightforward curricular domain as it is consistent with the understanding of relationship as based on human-to-human interaction. how to extend and receive care. This applies across ages (Mayseless, 2015). Our view of these various relationships is informed by a holistic understanding of human beings grounded in affective and social neuroscience (Immordino-Yang, 2015). That is, when considering the enhancement of our ability to communicate we rely on advancements in these fields that show the substantial role of emotions and embodied processes in determining this ability (Damasio, 2006; Singer and Lamm, 2009). We further ground our case in growing evidence of the fact that interpersonal capabilities can be cultivated (MGIEP, 2020).

Taking relationships to be a fundamental aspect of education, this is probably the most straightforward curricular domain as it is consistent with the understanding of relationship as based on human-to-human interaction. This applies to the most pervasive relationships in educational spaces (**WG3-ch7**) concerning teacher–student, student–student and teacher– teacher relationships; however, adopting a broader view, we acknowledge these encounters beyond the institutional form of education under this curricular domain (**WG3-ch7**). Accordingly, formal, non-formal and informal relationships and encounters are to be considered here as well. In addition, the opportunities for curriculum development within this domain are diverse, spanning conventional classroom settings to outdoor activities, team sports, community projects and several others.

Concepts such as friendship and relationship building in the discourse of education date back to Aristotle and have been revisited by philosophers, such as Nel Noddings (2003a) who argues strongly that these are central and, often, even more important than various conventional topics, such as algebra. However, despite this history and the pervasiveness of relationships in an individual's life, throughout most of the twentieth century, the interpersonal cannot be said to have been a substantial curricular domain in much of public education. This has been



changing in the past three decades with the significant rise of the discourse focused on an aggregate of terms -'soft skills', 'twentyfirst century skills' and social and emotional learning (SEL), which we will adopt here given both its pervasiveness and its specific focus on the interpersonal domain (Jones and Bouffard, 2012; Durlak et al., 2015; MGIEP, 2020), (WG3-ch4). SEL has developed for a variety of reasons, including a growing awareness of the importance of social and emotional intelligence and its contribution to success in life (Goleman, 1995, 2008), evidence of the importance of nurturing relationships in childrens' and adolescents' development (Siegel, 2015) and the growing need for collaborative skills in the jobmarket (OECD, 2018). In the last decade, the focus on cultural competencies in SEL has increased based on various challenges, such as migration, racism, misogyny, poverty and mental health, which have led to a need to address the socio-emotional dimensions of educational institutions both from the perspective of preventative health and as a

proactive educational orientation (Greenberg et al., 2003). The learning environment has become complex as students and teachers deal with diverse racial, ethnic, gender, socio-economic and language contexts (Weissberg et al., 2015).

Social-emotional capabilities grant individuals the ability to conduct themselves wisely and considerately in relationships with others. Various components have been described and featured in different models of SEL. Jones and Bouffard (2012) focus on cognitive regulation (e.g. attention control, inhibiting inappropriate responses, working memory), emotional processes (e.g. emotional knowledge and expression, emotional and behavioural regulation, empathy and perspective-taking) and social/interpersonal skills (e.g. understanding social cues, interpreting others' behaviours, navigating social situations, interacting positively with peers and adults). The Collaborative for Social and Emotional Learning's (CASEL) model features five competencies of self-awareness,

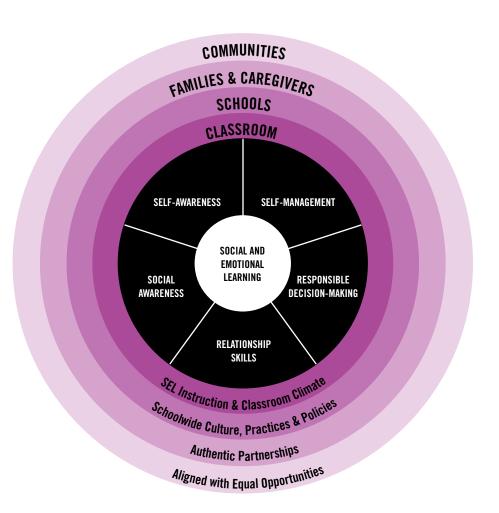
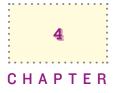


Figure 3: CASEL Wheel. See https://casel.org/fundamentals-of-sel/what-is-the-casel-framework/

Social-emotional capabilities grant individuals the ability to conduct themselves wisely and considerately in relationships with others.

self-management, social awareness, relationship skills and responsible decision-making (https://casel. org/). MGIEP (2020) emphasizes empathy as the capacity to recognize emotion and to also resonate with others' emotional states such as happiness, excitement or fear; perspective taking, as the ability to consider others' points of view, which includes understanding their thoughts, feelings, motivations and intentions; compassion as the ability to take positive action to alleviate suffering in the other.

While the overarching aim of SEL is to encourage tolerance for different cultures and drive equity in learning environments, it is important to approach it with sensitivity to socio-political contexts, such as racial issues in the United States, migration in Europe and multicultural heritage



... the interpersonal curricular domain intersects with the intrapersonal domain appearing hereafter as the domain of 'self '. in Australasia (Repetto et al., 2007; Durlak et al., 2011; Gregory and Fergus, 2017).

Importantly, the interpersonal curricular domain intersects with the intrapersonal domain appearing hereafter as the domain of 'self'. This is especially the case when focusing on faculties, such as attention and emotional regulation, which underpin social-emotional capabilities. The line that demarcates these two curricular domains is thin, and clearly some pedagogies applied toward the development of one domain can affect the other; nevertheless, the orientation and aim of the interpersonal domain is the enhancement of relationships with other individuals or groups, whereas the orientation of the domain of 'self' is inward as explained hereafter.

SELF

The proposal of 'self' as a curricular domain acknowledges the fact that individuals are in relationships not only with what is external to them but also with their own bodies and minds. This curricular domain focuses on embodied first-person experience, which can unfold in the form of thoughts, sensations and emotions. It is hence a curriculum as perceived from the perspective of the 'self' (Pinar and Grumet, 1976). It includes what the 'self' contributes to experience by virtue of its deliberate and non-deliberate responses to that presented both inside and outside formal educational settings. Furthermore, it encompasses the deliberate engagement of subjects with themselves through practices by which attention is turned in (e.g. reflection, mindfulness, other forms of meditation) to explore one's inner experience and to cultivate virtuous living (Ergas, 2017), as well as through practices that are pursued for purposes of mental and physical health (e.g. sports).

Looking back historically, several contexts and fields not only warrant the possibility to consider such relationships in curricular terms but also point

The proposal of 'self' as a curricular domain acknowledges the fact that individuals are in relationships not only with what is external to them but also with their own bodies and minds. This curricular domain focuses on embodied first-person experience, which can unfold in the form of thoughts, sensations and emotions. to its indispensability within a conceptual framework for education in and for flourishing and within curriculum theory writ large. The self domain hearkens back to the Delphic injunction 'know thyself', and Socrates's claim in the Phaedrus, 'I am still unable, as the Delphic inscription orders, to know myself and it really seems to me ridiculous to look into other things before I have understood that' (229e-230a). Twentieth century curriculum theorists have pointed to the need to reclaim this orientation in curriculum theory as part of an attempt to balance a growing preoccupation with standardization and accountability that tend to dehumanize education (Pinar and Grument, 1976; Palmer, 1998; Huebner, 1999).

During the first decades of the twenty-first century, the 'self' domain has received strong support with the development of 'contemplative science' that focuses on 'the core capacities, processes and states of the mind modified by contemplative practices' (**Dorjee, 2016, p. 1**).

Contemplative practices, also referred to as 'technologies of the self' (Foucault, 1988), have developed across cultures and throughout history and incorporate individuals learning to engage skillfully with their own experience toward cultivating awareness, connectedness and fulfilling lives (Roth, 2006). These practices feature a turning of the subjects' attention to, and an exercising of volitional control of, physical and mental habits (Davidson et al., 2012). The scientific study of contemplative practices and findings of their various mental and physical benefits and contributions to teaching and learning have led to an unprecedented rise in their incorporation in education (Shapiro et al., 2015; Schonert-Reichl and Roeser, 2016; Ergas and Hadar, 2019).

Based on the above, a variety of possibilities emerge for curriculum design concerning the understanding of 'relationships' within the self curricular domain. From a neuroscientific perspective, relationships within the self emerge due to the fact



Advancements in the study and implementation of a variety of contemplative practices in educational settings, including mindfulness, meditation of various forms, yoga, tai chi and several others, yield an array of pedagogical and curricular possibilities. that the human brain produces a significant amount of content both as a response to what is presented to it deliberately and on its own accord, both in formal learning situations and outside them (Smallwood and Schooler, 2006; Schooler et al., 2011; Christoff et al., 2016). In the past two decades, studies demonstrate that this inner content substantially affects mental states, moods, performance, thought processes, behaviours and engagement with others, and is hence directly associated with flourishing (Bar, 2009; Killingsworth and Gilbert, 2010; Wammes et al., 2016). Diverse 'inner' relationships can be considered within this domain, for example, relationship with one's body associated with body image tied directly with contemporary physical and mental health issues (Kelly et al., 2018); relationship between the person one is now and the person one aspires to become or conversely with one's past; relationship between different experiences of one's sense of 'self' (Gallagher, 2000; Damasio, 2012); spirituality and inner relationship with God (James. 1985).

Advancements in the study and implementation of a variety of contemplative practices in educational settings, including mindfulness, meditation of various forms, yoga, tai chi and several others, yield an array of pedagogical and curricular possibilities (Bai, Scott and Donald, 2009; Schonert-Reichl and Lawlor, 2010; Kuyken et al., 2013; Lin, Oxford and Brantmeier, 2013; Roeser, 2014; Weare, 2019). Here students (as well as teachers) learn to engage with their own present-moment embodied experience toward cultivating various capabilities that are conducive to their development and flourishing, including self-regulated learning, self-compassion, compassion toward others, awareness and agency (Roeser and Peck, 2009; Rashedi and Schonert-Reichl, 2019).

Some have raised concerns in respect to various aspects of contemplative practices in education, including the ways in which they are sometimes detached from their original traditions, the potential of their engendering solipsism and



their association with religion/ spirituality (Ergas, 2019; Purser, 2019). It is hence essential to consider how these practices are presented in secular contexts and in line with the sensitivities of local culture or community (Garcia-Campayo et al., 2017; Proulx et al., 2020; Kumar, 2021). In addition to the mental aspects of the self, and closely connected to them, are the physical aspects. Research has found a correlation between years of education and various aspects of health (**DECD**, **2010**). Hence, the domain of physical education and various



practices that individuals undertake to maintain and enhance health as well as those that are associated with seeking personal meaning through indoor and outdoor sports can clearly be considered within this curricular domain. It is increasingly recognized that education can make a substantial contribution to adopting a healthier lifestyle, which is central to flourishing. The contribution of education can range from bringing students to engage in physical activity and keeping a more balanced diet to how to lower the risk of infection during a pandemic.

4.2 .2

CRITICAL ASSESSMENT OF THE CURRICULAR FRAMEWORK

At least two critical issues emerge as we consider the elaboration of the curricular framework aimed at flourishing:

CURRICULAR DOMAINS AS REDUCTIONISTIC

The demarcation of discrete curricular domains aims to facilitate the development of a curriculum that intends to promote flourishing. We are aware that the dissection of experience into domains is somewhat reductionist and can potentially result in oversimplistic ways of thinking (Eisner, 1994). To counter this, firstly, we reiterate the need to think of the curricular domains in light of Bronfenbrenner's ecological model, in which domains interact with each other and, in light of complexity theory, which views education as webs of interconnected and mutually influencing elements. The breaking of the curriculum into domains, then, aims to aid the conceptualization of education for flourishing and is not supposed to reflect existing rigid divisions. Secondly, we briefly demonstrate how an engagement with one curricular domain easily intersects with other domains to a point where interrelations between them arise and ameliorate the siloed

... we reiterate the need to think of the curricular domains in light of Bronfenbrenner's ecological model, in which domains interact with each other and, in light of complexity theory, which views education as webs of interconnected and mutually influencing elements. approach to some degree.

For example, when exploring the curricular domain of technology, one can easily envision an intersection with other domains, such as the social domain. Framing the learning of technology can be considered to be part of acquiring jobmarket skills; framing it in terms of social justice questions, such as who has access to technology and how does such access shape learning and flourishing, points to intersections with social values. Intersections with the cultural domain come into sharp relief as we consider that cultivating digital literacy can be done by adjudicating knowledge presented in various websites about historical facts (Wineburg and Reisman, 2015).

Pointing to additional intersections, a relationship between the personal, interpersonal and social domains becomes evident when we consider the development of SEL and contemplative practices as part of the enhancement of cognitive functions, which in turn

A CURRICULAR FRAMEWORK FOR FLOURISHING IN EDUCATION contributes to one's performativity in the job market, or conversely as cultivating pro-social behaviours toward citizenship education (Davidson et al., 2012; Ergas, 2019).

WHY SIX DOMAINS?

The curriculum is divided into six domains based on deliberations drawing on existing educational and curricular theories and insights from conceptions of flourishing, as well as global challenges and the scientific perspective presented earlier in this report. Building on the rationale for the ISEE Assessment, these have led us to identify central domains that already draw considerable educational attention (society, culture) as well as some domains that may have been underestimated, ignored or marginalized in most educational systems. Based on this, the six domain framework seems to be effective for operationalizing education for flourishing; however, we acknowledge that some may see this framework as incomplete (e.g. some countries may wish





The six domain framework provides a starting point from which to think about education in and for flourishing.

to consider 'nation-state' as a separate domain) and add further domains. This is certainly possible. Furthermore, as often happens in education and following our dynamic systems perspective, implementation may well yield the need to reconsider, change and reassess and, like any framework, its value will need to be tested.

Nevertheless, the six domain framework provides a starting point from which to think about education in and for flourishing. Each of the six domains makes its

own indispensable contribution to the promotion of flourishing. Ideally, after adjustments have been made to the local context and conditions in which education takes place, education should touch on all the mentioned domains (with a possibility of adding others). To best promote flourishing, education should not focus only on one or two domains, as is mostly the case today, with priority given to the economic and political aspects, while others are marginalized or neglected. An adequate level of educational engagement with each domain, which can, of course, vary according to the context, can significantly contribute towards increasing flourishing.



CHAPTER

4.3



Learning trajectories and flourishing aims and manifestations

Further developing the curricular framework, we turn to explain the six learning trajectories (Figure 4) and how they feature in our framework for education in flourishing. This allows us to describe the shift from pillars of education in the Delors Report (International Commission on Education for the Twenty-first Century, 1996) to the ISEE Assessment's learning trajectories.

Recapping on the links between curriculum-teaching-assessment, learning and flourishing aims

Recapping the links between curriculumteaching-assessment, learning and flourishing aims and manifestations we postulate a shift from pillars to trajectories. and manifestations (Figure 1) we postulate a shift from pillars to trajectories. This shift is the result of considering education, not only as an edifice/institution requiring 'pillars', but also as a complex process that unfolds based on students' relationships framed by the curricular domains (and their intersections). This process of a students' encounter with the curriculum yields a range of learning trajectories that reflect an individual's development through various modalities, experiences and processes of learning.

The frameworks we propose acknowledge curriculum and learning as combining topdown and bottom-up processes. The curricular domains were described as fields of knowledge, values and practices that can be designed top-down. The learning trajectories reflect the changes in an individual's knowledge, values and practices as they engage in that curriculum, reacting and responding to it, which supports the learning experience. In doing so, a bottom-up effect is introduced to the formal

and taught curriculum. As a consequence of this encounter, the learner internalizes (some of) the knowledge, skills and values to varying extents and develops in the above-mentioned along a continuum from familiarity and understanding to agency (i.e. becoming an active contributor to the knowledge, values and practices in these curricular domains if the individual is so inclined).

Importantly, whereas the curricular domains have been demarcated as separate but intersecting, the learning trajectories are intentionally bundled together for two reasons.

1. Every curricular domain has the potential to contribute to all learning trajectories. Considering, for example, the encounter of a student with the cultural curricular domain, one can easily envision its contribution to learning to know, to learn, to think, to do and to become.

2. The dynamics of the human brain and mind as a bottom-



Following various trends and changes since the Delors Report ... we have shifted focus from learning to know, to do, to be and to live together, to learning to know and think, learning to do and evaluate, learning to learn, learning to live together, learning to live with nature and learning to be and become.

up influence on the curriculum within the learning experience suggests the need to consider a broader (and more realistic) understanding of learning. When examined from the neurophenomenology of the learner's experience, we note that the mind is not merely shaped by the curriculum but also by what it attends to from one moment to the next (Ergas, 2017). When considering the example of a classroom, the personal and interpersonal domains constantly introduce content into the planned curriculum (e.g. student inner thoughts, relationships between students as they communicate among themselves within a lesson). This content can be related or unrelated to the intended curriculum; regardless, it can yield unintended learning experiences (for better and for worse). Bundling the learning trajectories accounts for these dynamic processes, the fluidity of the learning experience and its less expected and planned outcomes.

Following various trends and changes since the Delors Report (International Commission on Education for the Twenty-first Century, 1996), we have shifted focus from learning to know, to do, to be and to live together, to learning to know and think, learning to do and evaluate, learning to learn, learning to live together, learning to live with nature and learning to be and become. All six are discussed and defined below, but briefly outlined here. Learning to learn, which was part of the Delors Report learning to know, is given its own treatment as we acknowledge the rise of independent and autodidactic forms of learning, which have proliferated in the past decades with the development of the internet, as well as the further development of meta-cognitive concepts, such as self-regulated learning (Zimmerman, 2002; Panadero, Jonsson and Botella, 2017). 'To think' is added to learning to know, reflecting the discourse around higher-order thinking, as well as the variety of ways that have been embraced and implemented in educational settings in this domain (Gardner, 2000; Lipman, 2003).



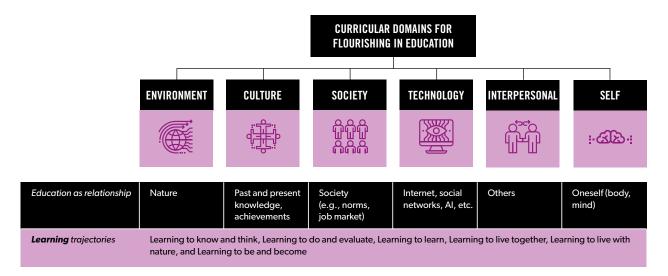


Figure 4.Six learning trajectories in the curricular framework for education in flourishing

'To become' is added to learning to be, stemming from conceptions of flourishing grounded in wisdom traditions across cultures, as well as from humanistic and positive psychology (Roth, 2006; Stock, 2006; Bai, Scott and Donald, 2009; Lin Lin, Oxford and Brantmeier, 2013). Finally, 'learning to live with nature' is added to learning to live together to account for the need to emphasize the place of the environment in this framework.

Learning to know and think

 reflects the trajectory of

knowledge acquisition and the ability to understand, modify and build on it. It refers to the pursuit of knowledge and the various modalities of thinking through which we advance toward broadening schemes of understanding. All curricular domains and relationships entail a variety of forms of knowledge spanning knowledge of culture, science, arts, environment and human rights to knowledge of self and other. We hence acknowledge the need to acquire knowledge but also to develop our thinking



skills by which we learn to draw connections and emerge with novel ideas, conjectures and possibilities. Learning to know and think entails both the pursuit of knowledge for preconceived instrumental reasons and also its pursuit for the mere joy of broadening one's horizons, and opening avenues for unexpected moments of understanding formed serendipitously by the human mind.

2. Learning to do and evaluate - concerns the various how-tos that are associated with deliberate action in pursuit of ethically based goals. This involves the trajectory of exercising skills, beginning with literacy, numeracy and manual skills (e.g. drawing, cutting) and extends to twentyfirst century and technological skills. However, we emphasize the importance of the relationships we have with the material and mental products we create by doing, as we learn to evaluate them with a growing sensitivity to their impact on ourselves, others and the environment. The value is not merely in the doing, but in

doing that is embedded within theconcept of flourishing.

3. Learning to learn – reflects the trajectory of developing sophistication, ease and/or speed in acquiring new skills and knowledge. Learning to learn is developed based on being exposed to and practising various methods of learning, developing our own ways of learning by ourselves and through externally imposed challenges. It is at the intersection of all curricular domains with the personal and interpersonal domains because it involves both cultivating metacognitive skills (e.g. self-regulation, attention) and capacities of collaborative learning toward ethically based ends. Learning to learn hence puts us in relation with ourselves and others, when engaged in particular learning tasks.

4. Learning to live together – All healthy human interactions depend on the ability to communicate, which depends on understanding and respect. Whether at the individual or at the social/national levels, our

Learning to be and become – situates the individual in relation to selfhood.

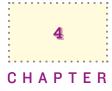
ability to survive and hopefully flourish depends on how well we can talk to each other, respect others' needs and wants and jointly work toward social justice and inclusion. Learning to live together concerns the trajectory of developing all aspects of human-to-human communication and relationships, as well as the understanding of social norms within one's context.

5. Learning to live with nature situated in the midst of an ecological crisis, with clear signs of global warming, anthropogenic climate change and species extinction, amongst others, sustainability is not a matter of choice. From young to old and across the globe, there is a need to learn about the current conditions and how we might confront them. Learning to live with nature hence involves the development of awareness and sensitivity to our place in, and responsibility for, the thriving of nature.

6. Learning to be and become – situates the individual in relation to selfhood. It stems from our

situatedness in the present moment amidst its concrete demands and the trajectory of our temporality as we seek meaning in existence. This implies learning to take care of ourselves physically and mentally, which is often necessary for attending to the needs of others. It expands toward learning how to live wisely amidst change, adversity and uncertainty as we contemplate who we are and who we want to become guided by an informed sense of purpose and meaning in life. It involves learning when to actively exercise agency and to change our and others' conditions as well as when to accept things as they are. Learning to be and become also encompasses when to try to bring about change and when to allow change to happen of its own accord.

Importantly, while the learning trajectories have been bundled to reflect the fluidity of the experience of learning, the intersections between them are to be acknowledged by curriculum developers and implementers.



As a final step in the elaboration of the proposed curricular framework for education in flourishing, we explain the curricular domains and learning trajectories as leading to flourishing aims and manifestations.

4.3.1

FLOURISHING AIMS AND MANIFESTATIONS

As a final step in the elaboration of the proposed curricular framework for education in flourishing, we explain the curricular domains and learning trajectories as leading to flourishing aims and manifestations. The following points describe the logic of our deliberations and Figure 5 presents the framework.

- Following **WG1-ch2** and **WG1ch3** we separate flourishing aims and manifestations into those that support the conditions of flourishing and those that provide the capacities for flourishing. The conditions apply to the external aims and manifestations of education in flourishing, namely to the desired state of affairs in the world to which education attempts to contribute. Capacities apply to the internal knowledge, skills and propensities acquired by individuals that can promote their flourishing and that of others. Education helps to enhance these within the individual as they engage in learning within the curricular domains.

- Ideally, enhanced external conditions recursively feed into education, so that the process of education is situated within a context of flourishing and is not only aimed at flourishing in an ideal future.

- Each curricular domain lends itself to certain conditions and capacities toward which it is oriented; however, here too, there will be clear intersections between domains.

- The terms that have been chosen are to be understood as illustrative and not prescriptive. We intentionally refrained from arriving at a comprehensive list of conditions and capacities for each domain for the following reasons:

• no list would be sufficiently comprehensive;

			FLOOKISHING IN EDUCATION				
		ENVIRONMENT	CULTURE	SOCIETY	TECHNOLOGY	INTERPERSONAL	SELF
EDUCATION AS RELATIONSHIP		NATURE	PAST AND PRESENT Knowledge, Achievements	SOCIETY (Norms, Job Market)	INTERNET, SOCIAL Networks, AI, etc.	OTHERS	ONESELF (BODY, MIND)
Learning trajectories		Learning to know and think, learning to do and evaluate, learning to learn, learning to live together, learning to live with nature, learning to be and become.					
FLOURISHING AIMS AND MANIFESTATIONS	Conditions	Sustainability, (needs elaboration from experts), etc.	Preservation and innovation, scientific progress, etc.	Economic growth, peace, social justice, etc.	Ethical vision-based development, value-driven entrepreneurship, etc.	Inclusion, tolerance, dignity, etc.	Freedom, mobility, actualization, etc.
	Capacities	Sensitivity, environmental responsibility, awareness, etc.	Appreciation, cultural literacy, innovativeness, critical thinking, etc.	Literacy, numeracy, citizenship, human capital (job market skills), etc.	Digital literacy critical thinking, innovativeness, etc.	Empathy, perspective taking, communication skills, etc.	Agency, mindfulness, executive functions, self-regulation, growth mindset, etc.

CURRICULAR DOMAINS FOR Flourishing in Education

Figure 5: Flourishing aims and manifestations

- respect for diversity and multiculturalism to grant Member States with freedom to apply culture-specific terms;
- freedom of interpretation within the bounds of the curricular domain is conducive to creative curricular design.

The above framework lends itself to considering various assessment practices that can be introduced in each of the curricular domains; from a schooling perspective to a policy making perspective. Further development in this direction opens as Member States can consider behaviours that are likely

to reflect the learning trajectories of flourishing. Merely offering some illustrative examples, in the environment domain we would hope to see more sustainability practice; in the cultural curricular domain, more reading of literature, growing interest in arts; in the social domain, improved literacy, economic growth and higher rates of voting; in the technological domain, wiser consumption of news and reduced rates in consumption of unethical content; in the interpersonal domain, reduction in racism and growing inclusion; in the personal domain, higher levels of wellbeing, health, satisfaction and meaning in life.



CHAPTER



4.4

Recommendations

1) Education is a dynamic

system: Education cannot be fully understood by reducing it to its

constitutive parts. For promoting flourishing, this implies the following.

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The promotion of flourishing should be multi-scalar, and advance from micro to macro, that is, from the level of the individual student and teacher to that of policy, and vice versa.

should be multi-scalar, and advance from micro to macro, that is, from the level of the

that is, from the level of the individual student and teacher to that of policy, and vice versa. Interventions that are limited to one level (e.g. students only) are unlikely to create sustainable change if not supported by a systemic approach.

a) Systemic approach to change

- The promotion of flourishing

b) *Sensitivity to context* – It is essential that education for flourishing be sensitive to the context in which it takes place. Successful models and best practices might not be easily emulated if flourishing is the aim. Local conditions and culture need to guide the adaptation of interventions in order to increase chances of success.

c) Embracing multidisciplinary and interdisciplinary

approaches – No field exhausts the understanding of human beings, social systems and their flourishing. Diverse disciplines and fields are necessary as different

A CURRICULAR FRAMEWORK FOR FLOURISHING IN EDUCATION entry points for promoting, as well as overcoming, hindrances to flourishing.

2. *Results of education in and for flourishing:* Education for flourishing should have three main end results.

a) *Capacities, capabilities and propensities* – Education should provide individuals with a range of mental, physical and practical capacities and capabilities that increase their ability to choose and follow their own path towards a flourishing life. Education should also develop the propensity to act on these spontaneously, by will or as an acquired habit.

b) Interpersonal flourishing

- Each individual has the power to affect not only their own flourishing but that of others. Education should bring individuals to contribute to flourishing in widening interpersonal circles (e.g. through acts of caring or enabling others to develop their own agency).

4 CHAPTER

c) *Conditions of flourishing*– Education should encourage

individuals to contribute to the creation, maintenance and enhancement of the conditions (e.g. environmental, political, economic, cultural) that facilitate flourishing (e.g. protecting the environment).

3) *Framework for education in and for flourishing:* Curriculum, teaching and assessment should all be coherently oriented towards generating learning that is conducive to promoting flourishing in order to reach the three end results listed above (see Figure 4).

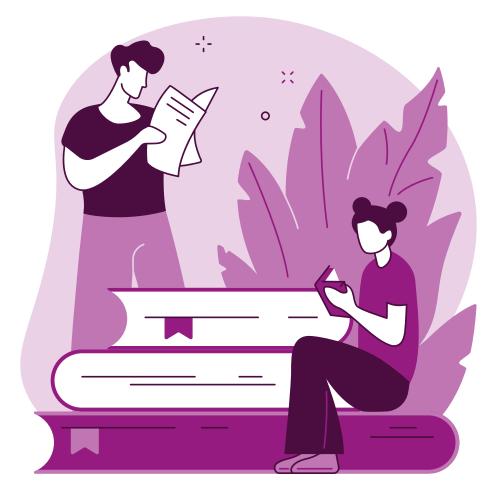
4. Curricular framework for education in and for flourishing:

To promote flourishing it is recommended that the curriculum encompass the following six domains (see Figure 5). Each domain can be viewed as engaging an individual in a relationship with a different aspect of the curriculum. The curricular domains are as follows. a) *The environment* – Learning to live harmoniously with the environment, to appreciate it and be able to enjoy it. In addition, protecting the environment and potentially even restoring it has become essential for our ability to live a flourishing life. The curriculum must provide us with the capacities and capabilities needed to conserve the environment as well as the drive to put this into practice.

b) *Culture* – By supporting people to engage in a relationship with culture (e.g. humanities, arts, leisure), education makes an indispensable contribution to flourishing. It opens avenues for developing potentialities, finding meaning, strengthening a sense of belonging and new forms of pleasure. Moreover, the cultural domain bears the potential to strengthen interconnectedness in a globalized world. The significance of engaging with culture for flourishing should not be overshadowed by instrumental and economic considerations.

By supporting people to engage in a relationship with culture (e.g. humanities, arts, leisure), education makes an indispensable contribution to flourishing.





c) *Society* – Education should prepare students to integrate with the political and economic aspects of social life. To effectively promote flourishing, education should go beyond preparing students for existing social arrangements. It should also teach them to think critically about these, formulate proposals, exercise

A CURRICULAR FRAMEWORK FOR FLOURISHING IN EDUCATION



agency and strive to improve them. In addition, education should go beyond the state and the economy and deal with the global and communal aspects of contemporary life.

d) *Technology* – Education must deliberately engage with technology and help learners progress from a level of familiarity with technology, through acquiring digital literacy skills to having the ability to become active agents in shaping technology toward ensuring that it will be in the service of human flourishing. This demands that students learn to engage with technology ethically.

... individuals are in relationship not only with what is external to them, but also with their own bodies and minds. This has far reaching implications for individuals' sense of flourishing.

e) *Interpersonal* – Education should enhance the abilities of individuals to conduct themselves wisely and considerately in relationships with others. It should contribute to the development of the cognitive, emotional and social capabilities needed for promoting relationships that contribute to the flourishing of oneself and others. Education should also strive to encourage tolerance for different cultures and drive equity in learning environments while remaining sensitive to sociopolitical contexts.

f) *The self* – individuals are in relationship not only with what is external to them, but also with their own bodies and minds. This has far reaching implications for individuals' sense of flourishing. It is therefore essential that education for flourishing provide individuals with inner capacities that enable them to affect their physical and mental experiences (i.e. by means of a variety of practices that direct attention deliberately to their first-person experience).

5. *Flexibility in the curricular framework:* It is important that the six-domains curricular framework be flexible to allow modifications to the proposed domains and to adapt to the local context and needs.

a) *Adding domains:* The six domains framework provides a starting point from which to think



Learning trajectories: The process of a students' encounter with the curriculum domains will be oriented towards six learning trajectories, which reflect the individual's development through various modalities, experiences and processes of learning. about education for flourishing. Other domains can be added to it. It is recommended, however, that after adjustments have been made to the local context and conditions, education for flourishing touches at least upon these six domains.

b) Combining domains: We

recommend using the domains both as ways to design curricula within the particular domains and to dissolve the boundaries between the domains by combining them (e.g. cultivating environmental sensitivity by means of digital literacy).

6. *Learning trajectories:* The process of a students' encounter with the curriculum domains will be oriented towards six learning trajectories, which reflect the individual's development through various modalities, experiences and processes of learning.

a) *Learning to know and think* – knowledge acquisition, understanding and critical thinking. b) *Learning to do and evaluate* – developing skill and dexterity and cultivating an ability to evaluate their undertakings.

c) *Learning to learn* – becoming a selfregulated learner as well as a group collaborator.

d) *Learning to live together*– developing social-emotional capabilities, communications skills and compassion.

e) *Learning to live with nature*becoming knowledgeable about and caring for the environment.

f) *Learning to be and become* – taking care of physical and mental health, finding meaning.

7. *Flourishing aims and manifestations:* The curricular domains and learning trajectory lend themselves to improved external conditions and inner capacities, which reflect aims and manifestations of education in and for flourishing (see Figure 5).

R E F E R E N C E S

Abram, D. (2014) 'On depth ecology', The Trumpeter, 30(2), pp. 101–104.

Abram, D. (2018) Storytelling and wonder: on the rejuvenation of oral culture. Available at: http://wildethics.org/ essay/storytelling-and-wonder

Akar, B. (2019) Citizenship education in conflict-affected areas: Lebanon and beyond. London: Bloomsbury Academic.

Andersen, L., Boud, D. and Cohen, R. (2000) 'Experience-based learning', Understanding Adult Education and Training, 2, pp. 225–239.

Appiah, K.A. (2017) Cosmopolitanisms. New York: NYU Press.

Bai, H., Scott, C. and Donald, B. (2009) 'Contemplative pedagogy and revitalization of teacher education', Alberta Journal of Educational Research, 55(3), pp 319–334.

Banks, J.A. (2017) 'Failed citizenship and transformative civic education', Educational Researcher, 46(7), pp. 366–377.

Baptiste, I. (2001) 'Educating lone wolves: pedagogical implications of human capital theory', Adult Education Quarterly, 51(3), pp.184–201.

Bar, M. (2009) 'The proactive brain: memory for predictions', Philosophical Transactions of the Royal Society B: Biological Sciences, 364.1521, pp. 1235–1243.

Barbezat, D.P. and Bush, M. (2013) Contemplative practices in higher education: powerful methods to transform teaching and learning. New York: John Wiley & Sons.

Bartram, J., Lewis, K., Lenton, R. and Wright, A. (2005) 'Focusing on improved water and sanitation for health', The Lancet, 365(9461), pp.810–812.

Bassok, D., Latham, S. and Rorem, A. (2016) 'Is kindergarten the new first grade?', Aera Open, 1(4), pp. 1-31.

Becker, G.S. (2009) Human capital: a theoretical and empirical analysis, with special reference to education. Chicago: University of Chicago Press.

Beiner, R. (ed.) (1995) Theorizing citizenship. New York: State University of New York Press.

Biesta, G. (2007) 'Why "what works" won't work: evidence-based practice and the democratic deficit in educational research', Educational Theory, 57(1), pp. 1–22.

Biesta, G. (2009) 'Good education in

an age of measurement: on the need to reconnect with the question of purpose in education', Educational Assessment, Evaluation and Accountability, 21(1), pp. 33–46.

Blenkinsop, S. and Morse, M. (2017) 'Saying yes to life: the search for the rebel teacher', in Jickling, B. and Sterling, S. (eds.) Post-sustainability and environmental education: remaking education for the future. Switzerland: Palgrave Macmillan, pp. 49–61.

Bok, D. (2009) Universities in the marketplace: the commercialization of higher education (vol. 49). Princeton: Princeton University Press.

Boulton, J.G, Allen, P.M. and Bowman, C. (2015) Embracing complexity: strategic perspectives for an age of turbulence. Oxford University Press: Oxford.

Brighouse, H. (2006) On education. London: Routledge.

Bronfenbrenner, U. (1979) The ecology of human development. Cambridge, MA: Harvard University Press.

Bruner, J.S. (1960) The process of education. Cambridge, MA: Harvard University Press.

Buck, M.F. (2020) 'Of chimæras and trojan horses—critical remarks on digitalization in democratic societies', in Binder, U. and Drerup, J. (eds.) Demokratieerziehung und die Bildung digitaler Öffentlichkeit. https://doi. org/10.1007/978-3-658-28169-4_11, pp. 183–196.

Byrne, D. (2001) Complexity theory and the social sciences – an introduction. London: Routledge.

Callan, E. and White, J. (2002) 'Liberalism and communitarianism', in Blake, N., Smeyers, P., Smith, R. and Standish, P. (eds.) The Blackwell guide to philosophy of education. Oxford: Blackwell Publishing, pp. 95–109.

Capra, F. (1982) The turning point: science, society, and the rising culture. New York: Bantam.

Carr, N. (2010) The shallows: how the internet is changing the way we think, read and remember. London: Atlantic Books Ltd.

Checkley, W., Gilman, R.H., Black, R.E., Epstein, L.D., Cabrera, L., Sterling, C.R. and Moulton, L.H. (2004) 'Effect of water and sanitation on childhood health in a poor Peruvian peri-urban community', The Lancet, 363(9403), pp. 112–118.

Choi, M. (2016) 'A concept analysis of digital citizenship for democratic citizenship education in the internet age', Theory & Research in Social Education, 44(4), pp. 565–607. Christoff, K., Irving, Z.C., Fox, K.C., Spreng, R.N. and Andrews-Hanna, J.R. (2016) 'Mind-wandering as spontaneous thought: a dynamic framework', Nature Reviews Neuroscience, 17(11), pp. 718–731.

Colander, D. and Kupers, R. (2016) Complexity and the art of public policy: solving society's problems from the bottom up. Princeton, NJ: Princeton University Press.

Curry, O., Whitehouse, H. and Mullins, D. (2019) 'Is it good to cooperate? Testing the theory of morality-as-cooperation in 60 societies', Current Anthropology, 60(1), pp. 47–69.

Damasio, A.R. (2006) Descartes' error. New York: Random House.

Damasio, A.R. (2012) Self comes to mind: constructing the conscious brain. New York: Vintage.

Davidson, R. J., Dunne, J., Eccles, J.S., Engle, A., Greenberg, M., ... and Vago, D. (2012) 'Contemplative practices and mental training: prospects for American education', Child Development Perspectives, 6(2), pp. 146–153.

Davis, B. and Sumara, D. (2014) Complexity and education: inquiries into learning, teaching, and research. London: Routledge.

Dewey, J. (1933) How we think. Chicago: Heath & Co. Publishers. Dewey, J. (1938) Experience and education. New York, NY: Collier Books.

Disinger, J. (1989) 'The current status of environmental education in U.S. school curricula', Contemporary Education, 60 (3), pp. 126–136.

Dorjee, D. (2016) 'Defining contemplative science: the metacognitive self-regulatory capacity of the mind, context of meditation practice and modes of existential awareness', Frontiers in Psychology, 7, pp. 1788–1795.

Durkheim, E. (1972) Emile Durkheim: selected writings. Cambridge: Cambridge University Press.

Durlak, J.A., Domtirovich, S.E., Weissberg, R.P. and Gullota, T.P. (eds.) (2015) Handbook of social and emotional learning: research and practice. New York: Guilford Publications.

Durlak, J.A., Weissberg, R.P., Dymnicki, A.B., Taylor, R.D. and Schellinger, K.B. (2011) 'The impact of enhancing students' social and emotional learning: a meta-analysis of school-based universal interventions', Child Development, 82(1), pp. 405–432.

Egan, K. (1997) The educated mind: how cognitive tools shape our understanding. Chicago: University of Chicago Press.

Eisner, W.E. (1994) The educational imagination: on the design and evaluation of school programs. New York: Macmillan.

R E F E R E N C E S

Entwistle, N. (2003) Promoting deep learning through teaching and assessment: conceptual frameworks and educational contexts. Paper presented at the ESRC Teaching and Learning Research Programme, First Annual Conference, University of Leicester, November 2000. Available at: https://www.etl.tla.ed.ac.uk/ docs/entwistle2000.pdf.

Ergas, O. (2017) Reconstructing 'education' through mindful attention: positioning the mind at the center of curriculum and pedagogy. Berlin: Springer.

Ergas, O. (2019) 'Education and mindfulness practice: exploring a dialog between two traditions', Mindfulness, 10(8), pp. 1489–1501.

Ergas, O. and Hadar, L.L. (2019) 'Mindfulness in and as education: a map of a developing academic discourse from 2002 to 2017', Review of Education, 7(3), pp.757–797.

Falk, R. (1993) 'The making of global citizenship', in Brecher, J., Childs, B. and Cutler, J. (eds.) Global visions: beyond the new world order. Boston: South End Press, pp. 39–50.

Finell, E. and Nätti, J. (2019) 'The combined effect of poor perceived indoor environmental quality and psychosocial stressors on long-term sickness absence in the workplace: a follow-up study', International Journal of Environmental Research and Public Health, 16(24). doi:10.3390/ijerph16244997. Fogarty, R. (1991) 'Ten ways to integrate curriculum', Educational Leadership, 49(2), pp.61–65.

Foucault, M. (1988) Technologies of the self: a seminar with Michel Foucault. Cambridge, MA: University of Massachusetts Press.

Franck, O. (2017) Highlighting ethics, subjectivity and democratic participation in sustainability education: challenges and contributions, in Franck, O. and Osbeck, C. (eds.) Ethical literacies and education for sustainable development young people, subjectivity and democratic participation. Cham, Switzerland: Palgrave Macmillan, pp. 1–18.

Freire, P. (1970) Pedagogy of the oppressed. London: Continuum.

French, M. (1986) Beyond power: on women, men, and morals. New York: Ballantine Books.

Gagne, R.M. (1970) The conditions of learning. London: Holt, Rinehart & Winston.

Gallagher, S. (2000) 'Philosophical conceptions of the self: implications for cognitive science', Trends in Cognitive Sciences, 4(1), pp. 14–21. García-Campayo, J., Demarzo, M., Shonin, E. and Van Gordon, W. (2017) 'How do cultural factors influence the teaching and practice of mindfulness and compassion in Latin countries?', Frontiers in Psychology, 8. doi:10.3389/ fpsyg.2017.01161.

Gardner, H.E. (2000) Intelligence reframed: multiple intelligences for the 21st century. London: Hachette.

Geyer, R. and Rihani, S. (2012) Complexity and public policy: a new approach to 21st century politics, policy and society. London: Routledge.

Gilead, T. (2017a) 'Education's role in the economy: towards a new perspective', Cambridge Journal of Education, 47(4), pp. 457–473.

Gilead, T. (2017b) 'Justifying the teaching of the humanities: a new economic approach', Policy Futures in Education, 15(3), pp. 346–359.

Giroux, H.A. and Penna, N.A. (1979) 'Social education in the classroom: the dynamics of the hidden curriculum', Theory & Research in Social Education, 7(1), pp. 21–42.

Goleman, D. (1995) Emotional intelligence. New York: Bantam Books.

Goleman, D. (2008) 'The secret to success', The Education Digest, 74(4), pp. 8–9.

Gonzalez, W.J. (2015) 'On the role of values in the configuration of technology: from axiology to ethics', in Gonzalez, W.J. (ed.) New perspectives on technology, values, and ethics. Cham, Switzerland: Springer, pp. 3–27.

Green, A. (1990) 'Education and state formation', in Green, A. (ed.) Education and state formation: the rise of education systems in England, France and the USA. London: Palgrave Macmillan, pp. 76–110.

Greenberg, M.T., Weissberg, R.P., O'Brien, M.U., Zins, J.E., Fredericks, L. Elias, M.J. (2003) 'Enhancing schoolbased prevention and youth development through coordinated social, emotional, and academic learning', American Psychologist, 58(6–7), pp. 466–474.

Gregory, A. and Fergus, E. (2017) 'Social and emotional learning and equity in school discipline', The Future of Children, 27(1), pp. 117–136.

Gross, R. (2015) Psychology: the science of mind and behaviour. London: Hodder Education.

Habermas, J. (1991) The structural transformation of the public sphere: an inquiry into a category of bourgeois society. Cambridge, MA: MIT Press.

Hansen, D.T. (2010) 'Cosmopolitanism and education: a view from the ground', Teachers College Record, 112(1), pp.1–30. Harari, Y.N. (2018) 21 lessons for the 21st century. New York: Random House.

Hattie, J. (2009) Visible learning: a synthesis of over 800 meta-analyses relating to achievement. Abingdon: Routledge.

Henry, G., Osborne, E. and Salzberger-Wittenberg, I. (2003) The emotional experience of learning and teaching. London: Routledge.

Hirst, P. H. (1971). 'What is teaching?', Journal of Curriculum Studies, 3(1), pp. 5–18.

Hoskins, B. (2006) Draft framework on indicators for active citizenship. Ispra: CRELL.

Huba, M.E. and Freed, J.E. (2000) Learner-centered assessment on college campuses: shifting the focus from teaching to learning. Needham Heights: Allyn & Bacon.

Huckle, J. (1993) 'Environmental education and sustainability: a view from critical theory', in Fien, J. (ed.) Environmental education: a pathway to sustainability.Victoria, Australia: Deakin University Press, pp. 43–68.

Huebner, D.E. (1999) The lure of the transcendent: collected essays by Dwayne E. Huebner.

Immordino-Yang, M.H. (2015) Emotions, learning, and the brain: exploring the educational implications of affective neuroscience. New York: WW Norton.

Immordino-Yang, M.H., Darling-Hammond, L. and Krone, C.R. (2019) 'Nurturing nature: how brain development is inherently social and emotional, and what this means for education', Educational Psychologist, 54(3), pp.185–204.

International Commission on Education for the Twenty-first Century (1996) Learning: the treasure within. Report to UNESCO of the International Commission on Education for the Twenty-first Century. Paris: UNESCO.

James, W. (1985) The varieties of religious experience. Boston: Harvard University Press.

Januszewski, A. and Molenda, M. (eds.) (2013) Educational technology: a definition with commentary. Abingdon: Routledge.

Jickling, B. (2017) 'Education revisited: creating educational experiences that are held, felt, and disruptive', in Jickling, B. and Sterling, S. (eds.) Post-sustainability and environmental education: remaking education for the future. Cham, Switzerland : Palgrave Macmillan, pp. 15–30.

REFERENCES

Jones, S.M. and Bouffard, S.M. (2012) 'Social and emotional learning in schools: from programs to strategies and commentaries', Social Policy Report, 26(4), pp. 1–33.

Kahneman, D. (2011) Thinking, fast and slow. New York: Macmillan.

Kelly, Y., Zilanawala, A., Booker, C. and Sacker, A. (2018) 'Social media use and adolescent mental health: findings from the UK Millennium Cohort Study', EClinicalMedicine, 6, pp. 59–68.

Killingsworth, M.A. and Gilbert, D.T. (2010) 'A wandering mind is an unhappy mind', Science, 330(6006), pp. 932–932.

Kolstad C., Urama, K., Broome, J., Bruvoll, A., Cariño Olvera, M. ... and Minx, J.C. (eds.) Fifth assessment report of the intergovernmental panel on climate change. Cambridge: Cambridge University Press.

Kraftl, P. (2013) Geographies of alternative education: diverse learning spaces for children and young people. Bristol: Policy Press.

Kumar, S. (2021) 'Mindfulness in a Moroccan university: exploring students' transformational journey through an academic course in mindfulness', Journal of Transformative Learning. doi: 10.1177/1541344620986218 Kuyken, W., Weare, K., Ukoumunne, O., Vicary, R., Motton, N., ... and Huppert, F. (2013) 'Effectiveness of the mindfulness in schools Programme: non-randomised controlled feasibility study', The British Journal of Psychiatry, 203(2), pp. 126–131.

Kyza, E.A. (2017) 'Technologyenhanced learning: a learning sciences perspective', in Spector, M.J., Lockee, B.B. and Childress, M.D. (eds.) Learning, design, and technology: an international compendium of theory, research, practice, and policy. Cham: Springer International Publishing, pp. 1–24.

Lamm, Z. (1986) 'Ideologies and educational thought', in Bar-Tal, D. (ed.), Psychology and counseling in education. Jerusalem: Israel Ministry of Education, pp. 5–19.

Lengyel, A., Szőke, S., Kovács, S., Bába, E.B. and Müller, A. (2019) 'Assessing the essential pre-conditions of an authentic sustainability curriculum', International Journal of Sustainability in Higher Education, 20(2), pp. 309–340.

Lin, J., Oxford, R.L. and Brantmeier, E.J. (eds.) (2013) ReEnvisioning higher education: embodied pathways to wisdom and social transformation. Charlote, NC: IAP.

Lipman, M. (2003) Thinking in education. Boston: Cambridge University Press. Macgilchrist, F. (2018) 'Cruel optimism in Edtech: when the digital data practices of educational technology providers inadvertently hinder educational equity', Learning, Media and Technology, 44(1), pp. 77–86.

MacIntyre, A. (2013) After virtue. London: Bloomsbury Academic.

Marx, K. (2000) Karl Marx: selected writings. Oxford: Oxford University Press.

Mason, M. (2008) 'Complexity theory and the philosophy of education', Educational Philosophy and Theory, 40, pp. 4–18.

Mayer, M. (2004) 'What can we do in schools for ESD? Reflections and proposals from the ENSI International Network', in Quality environmental education in schools for a sustainable society, proceeding of an international seminar and workshop on environmental education (25-26 August 2004). Cheongju, Korea: Cheongju National University of Education, pp. 135–151.

Mayer, R.E. (1977) Thinking and problem solving: an introduction to human cognition and learning. Glenview, IL: Scott, Foresman.

Mayseless, O. (2015) The caring motivation: an integrated theory. London: Oxford University Press.

McLaughlin, T. (1992) 'Citizenship, diversity and education: a philosophical perspective', The Journal of Moral Education, Special Issue: Citizenship and Diversity, 21(3), pp. 235–250.

Meyer, H. and Boyd, W.L. (2001) (eds.) Education between state, markets, and civil society: comparative perspectives. Abingdon: Routledge.

MGIEP (2020) Rethinking learning – a review of social and emotional learning for education systems. Summary for decision makers. New Delhi: UNESCO. Available at: https://d1c337161ud3pr.cloudfront. net/files%2F826f3ee4-e808-44e3-9da6-49c2c744e0c9_Rethinking%20 Learning%20SDM.pdf.

Mogensen, F. and Mayer, M. (2005) ECO-schools trends and divergences: a comparative study on ECO-school development processes in 13 countries. Vienna: Austrian Federal Ministry of Education, Science and Culture, Dept. V/11c, Environmental Education Affairs.

Morin, E. (1992) Toward a study of humankind: the nature of nature (vol. 1). New York: Pete Lang.

Morrison, K. (2008) 'Educational philosophy and the challenge of complexity theory', Educational Philosophy and Theory, 40, pp. 19–34. Newfield, C. (2012) 'Ending the budget wars: funding the humanities during a crisis in higher education', Profession, 1, pp. 272–286.

Nickerson, R.S., Perkins, D.N. and Smith, E.E. (2014) The teaching of thinking. London: Routledge.

Noble, K.G., Houston, S.M., Brito, N.H., Bartsch, H., Kan, E., ... and Schork, N.J. (2015) 'Family income, parental education and brain structure in children and adolescents', Nature Neuroscience, 18(5), pp.773–778.

Noddings, N. (2003) Happiness and education. Cambridge: Cambridge University Press.

Noddings, N. (2003) 'Is teaching a practice?', Journal of Philosophy of Education, 37(2), pp. 241–251.

Noddings, N. (2006) Critical lessons: what our schools should teach. Boston: Cambridge University Press.

Nussbaum, M. (1994) 'Patriotism and cosmopolitanism', in Brown, G.W. and Held, D. (eds.) The cosmopolitan reader. Cambridge and Malden, MA: Polity Press, pp. 155–162.

Nussbaum, M. (2010) Not for profit: why democracy needs the humanities. Princeton, NJ: Princeton University Press. O'Neill, G. and McMahon, T. (2005) 'Student-centred learning: what does it mean for students and lecturers', in O'Neill, G., Moore, S. and McMullin, B. (eds.)Emerging issues in the practice of university learning and teaching. Dublin: AISHE, pp. 27–36.

OECD (2018) Education at a glance: OECD indicator. Paris: OECD Publishing.

Orr, D.W. (2017) 'Foreword', in Jickling, B. and Sterling, S. (eds.) Post-sustainability and environmental education: remaking education for the future. Cham, Switzerland: Palgrave Macmillan, pp. xii–xi.

Osler, A. and Starkey, H. (2005) Changing citizenship: democracy and inclusion in education. Maidenhead: Open University Press.

Owusu, G. (2010) 'Social effects of poor sanitation and waste management on poor urban communities: a neighborhoodspecific study of Sabon Zongo, Accra', Journal of Urbanism, 3(2), pp.145–160.

Palmer, P.J. (1998) The courage to teach: exploring the inner landscape of a teacher's life. San Francisco: Jossey-Bass.

Pan, S.L. and Zhang, S. (2020) 'From fighting COVID-19 pandemic to tackling sustainable development goals: an opportunity for responsible information systems research', International Journal of Information Management, 55, 102196.

R E F E R E N C E S

Panadero, E., Jonsson, A. and Botella, J. (2017) 'Effects of self-assessment on self-regulated learning and self-efficacy: four meta-analyses', Educational Research Review, 22, pp. 74–98.

Parsons, T. (1985) Talcott Parsons on institutions and social evolution: selected writings. Chicago: University of Chicago Press.

Peters, R.S. (ed.) (2010) The concept of education (International library of the philosophy of education vol.17). Abingdon: Routledge.

Pinar, W. (2014) Curriculum: toward new identities. London: Routledge.

Pinar, W. and Grumet, M.R. (1976) Toward a poor curriculum. Debuque, Iowa: Kendall/Hunt Publishing Company.

Posch, P. (1991) 'The educational perspective', in CERI/OECD, Environment, school and active learning. Paris: OECD, pp. 97–103.

Posch, P. (1999) 'The ecologisation of schools and its implications for educational policy', Cambridge Journal of Education, 29(3), pp. 341–348.

Postman, N. (2011) The end of education: redefining the value of school. New York: Vintage. Pressley, M. and McCormick, C. (1995) Cognition, teaching, and assessment. New York: HarperCollins College Publishers.

Proulx, J., Croff, R., Hebert, M. and Oken, B. (2020) 'Results of a mindfulness intervention feasibility study among elder African American women: a qualitative analysis', Complementary Therapies in Medicine, 52. doi:10.1016/j. ctim.2020.102455

Purser, R. (2019) McMindfulness: how mindfulness became the new capitalist spirituality. London: Repeater Books.

Quaynor, L. (2012) 'Citizenship education in post-conflict contexts: a review of the literature', Education, Citizenship and Social Justice, 7(1), pp.33–57.

Radford, M. (2008) 'Prediction, control and the challenge to complexity', Oxford Review of Education, 34, pp. 505–520.

Rashedi, R.N. and Schonert-Reichl, K.A. (2019) 'Yoga and willful embodiment: a new direction for improving education', Educational Psychology Review, 31, pp. 725–734.

Reiss, M. and White, J. (2013) An aimsbased curriculum: the significance of human flourishing for schools. London: IoE Press. Repetto, E., Pena, M., Mudarra, M.J. and Uribarri, M. (2007) 'Guidance in the area of socio-emotional competencies for secondary students in multicultural contexts', Electronic Journal of Research in Educational Psychology, 5(1), pp. 159–178.

Roderick, L. and Merculieff, I. (2013) Stop talking. Anchorage: University of Alaska Press.

Roeser, R.W. (2014) 'The emergence of mindfulness-based interventions in educational settings', Motivational Interventions, 18, pp. 379–419.

Roeser, R.W. and Peck, S.C. (2009) 'An education in awareness: self, motivation, and self-regulated learning in contemplative perspective', Educational Psychologist, 44(2), pp.119–136.

Room, G. (2011) Complexity, institutions and public policy – agile decision-making in a turbulent world. Cheltenham: Edward Elgar.

Rose, D. (2005) 'An indigenous philosophical ecology: situating the human', The Australian Journal of Anthropology, 16(3), pp.294–305.

Roth, H.D. (2006) 'Contemplative studies: prospects for a new field', Teachers College Record, 108(9), pp.1787–1815.

Rousseau, J.J. (1762/2001) Emile. London: Everyman.

Sapolsky, R.M. (2017) Behave: the biology of humans at our best and worst. London: Penguin.

Savery, J.R. and Duffy, T.M. (1995) 'Problem based learning: an instructional model and its constructivist framework', Educational Technology, 35(5), pp. 31–38.

Schnack, K. (1998) 'Why focus on conflicting interests in environmental education?', in Ahlberg, M. and Filho, W.L. (eds.) Environmental education for sustainability: good environment, good life. Frankfurt am Main: Peter Lang, pp. 83–96.

Schonert-Reichl, K.A. and Lawlor, M.S. (2010) 'The effects of a mindfulness-based education program on pre-and early adolescents' well-being and social and emotional competence', Mindfulness, 1(3), pp.137–151.

Schonert-Reichl, K.A. and Robert W.R. (eds.) (2016) Handbook of mindfulness in education: integrating theory and research into practice. New York: Springer.

Schooler, J.W., Smallwood, J., Christoff, K., Handy, T.C., Reichle, E.D. and Sayette, M.A. (2011) 'Meta-awareness, perceptual decoupling and the wandering mind', Trends in Cognitive Sciences, 15(7), pp. 319–326.

Schwab, J.J. (1982) Science, curriculum and liberal education: selected essays. Chicago: University of Chicago Press. Scitovsky, T. (1992) The joyless economy: the psychology of human satisfaction. Oxford: Oxford University Press.

Senge, P. (2006) The fifth discipline. New York: Random House.

Shapiro, S.L., Lyons, K.E., Miller, R.C., Butler, B., Vieten, C. and Zelazo, P.D. (2015) 'Contemplation in the classroom: a new direction for improving childhood education', Educational Psychology Review, 27(1), pp. 1–30.

Siegel, D.J. (2015) The developing mind: how relationships and the brain interact to shape who we are. New York: Guilford Publications.

Singer, T. and Lamm, C. (2009) 'The social neuroscience of empathy', Annals of the New York Academy of Sciences, 1156(1), pp. 81–96.

Smallwood, J. and Schooler, J.W. (2006) 'The restless mind', Psychological Bulletin, 132(6), pp. 946–958.

Spector, J.M. (ed.) (2015) The SAGE encyclopedia of educational technology. Thousand Oaks: Sage Publications.

Sterling, S. (2017) 'Assuming the future: repurposing education in a volatile age', in Jickling, B. and Sterling, S. (eds.) Post-sustainability and environmental education. Remaking education for the future. Cham, Switzerland: Palgrave Macmillan, pp. 31–48. Stiglitz, J.E. and Greenwald. C.B. (2014) Creating a learning society: a new approach to growth, development, and social progress. New York: Columbia University Press.

Stock, B. (2006) 'The contemplative life and the teaching of the humanities', Teachers College Record, 108(9), pp.1760–1764.

Taylor, C. (1994) Multiculturalism: examining the politics of recognition. Princeton: Princeton University Press.

Throsby, D. (2001) Economics and culture. Cambridge: Cambridge University Press.

Turkle, S. (2017) Alone together: why we expect more from technology and less from each other. London: Hachette.

UNESCO (2004) United Nations Decade of Education for Sustainable Development 2005–2014: draft international implementation scheme. Paris: UNESCO.

UNESCO (2005) United Nations Decade of Education for Sustainable Development 2005–2014: international implementation scheme. Paris: UNESCO.

Van Poeck, K., Goeminne, G. and Vandenabeele, J. (2016) 'Revisiting the democratic paradox of environmental and sustainability education: sustainability issues as matters of concern', Environmental Education Research, 22(6), pp. 806–826.

R E F E R E N C E S

Wals, A.E. (2010) 'Between knowing what is right and knowing that is it wrong to tell others what is right: on relativism, uncertainty and democracy in environmental and sustainability education', Environmental Education Research, 16(1), pp. 143–151.

Wals, A.E. (2011) 'Learning our way to sustainability', Journal of Education for Sustainable Development, 5(2), pp. 177–186.

Wammes, J. D., Seli, P., Cheyne, J. A., Boucher, P. O. and Smilek, D. (2016) 'Mind wandering during lectures II: relation to academic performance', Scholarship of Teaching and Learning in Psychology, 2(1), pp. 33–48.

Weare, K. (2019) 'Mindfulness and contemplative approaches in education', Current Opinion in Psychology, 28, pp. 321–326.

Weinstein, H.M., Freedman, S.W. and Hughson, H. (2007) 'School voices: challenges facing education systems after identity-based conflicts', Education, Citizenship and Social Justice, 2(1), pp.41–71.

Weissberg, R.P., Durlak, J.A., Domitrovich, C.E. and Gullotta, T.P. (2015) 'Social and emotional learning: past, present, and future, in Durlak, J.A., Domitrovich, C.E., Weissberg, R.P. and Gullotta, T.P. (eds.) Handbook of social and emotional learning: research and practice. New York: Guilford Publications, pp. 3–20. Westheimer, J. and Kahne, J. (2004) 'What kind of citizen? The politics of educating for democracy', American Educational Research Journal, 41(2), pp. 237–269.

White, J.P. (2011) Exploring well-being in schools: a guide to making children's lives more fulfilling. London: Taylor & Francis.

Wineburg, S. (2018) Why learn history (when it's already on your phone). Chicago: University of Chicago Press.

Wineburg, S. and Reisman, A. (2015) 'Disciplinary literacy in history: a toolkit for digital citizenship', Journal of Adolescent & Adult Literacy, 58(8), pp. 636–639.

Yates, L. and Young, M. (2010) 'Globalisation, knowledge and the curriculum', European Journal of Education, 45(1), pp. 4–10.

Young, M. (2013) 'Overcoming the crisis in curriculum theory: a knowledge-based approach', Journal of Curriculum Studies, 45(2), pp. 101–118.

Zajonc, A. (2006) 'Love and knowledge: recovering the heart of learning through contemplation', Teachers College Record, 108(9), pp. 1742–1759.

Zimmerman, B.J. (1990) 'Self-regulated learning and academic achievement: an overview', Educational Psychologist, 25(1),pp. 3–17. Zimmerman, B.J. (2002) 'Becoming a self-regulated learner: an overview', Theory into Practice, 41(2), pp.64–70.