

To educate and educate ourselves in time, pedagogically and socially*

Educar y educarnos a tiempo, pedagógica y socialmente

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Abstract:

This article emphasises the characterisation of time as a human social and cultural construct, while not neglecting other perceptions and representations of it. Reflections on the nature and scope of time have always interested the sciences, as a time of times, fostering an interdisciplinary dialogue which calls to all branches of knowledge including the educational sciences and, in particular pedagogy, as they accept the challenge of educating us about time as a civic task in which all of civil society must participate.

This piece, which takes the form of an essay bringing together different documentary sources, proposes two main objectives: a) to identify and

integrate a wide set of epistemological, theoretical-conceptual, methodological, and empirical viewpoints used in studies of time; and b) to affirm and assert the importance of time in educational and social research, educational policies, and people's everyday lives, projecting their achievements into conceptions and practices that extend learning to the entire life cycle.

Time educates and we educate ourselves in it, and so it is necessary to rethink — pedagogically and socially — its meanings in a society that is open 24 hours a day and is symbolically and materially globalised. The complexity inherent in processes of social, cultural, technological, economic, etc. change and transformation presents

* This article is part of the “Education and conciliation for equity: analysis of their impact on school and social times” (CON_TIEMPOS) research project, of which the PIs are Dr María Belén Caballo Villar and Dr Rita Gradañlle Pernas from the Social Pedagogy and Environmental Education research group (SEPA-interea) at the Universidad de Santiago de Compostela. The Project is funded by the Spanish government's Ministry of Science, Innovation, and Universities (Retos state R&D plan) and the European Union's ERDF funds (code RTI2018-094764-I00).

Revision accepted: 2020-06-14.

This is the English version of an article originally printed in Spanish in issue 277 of the **revista española de pedagogía**. For this reason, the abbreviation EV has been added to the page numbers. Please, cite this article as follows: Caride, J. A. (2020). *Educar y educarnos a tiempo, pedagógica y socialmente* | *To educate and educate ourselves in time, pedagogically and socially*. *Revista Española de Pedagogía*, 78 (277), 395-413. doi: <https://doi.org/10.22550/REP78-3-2020-03>
<https://revistadepedagogia.org/>

ISSN: 0034-9461 (Print), 2174-0909 (Online)

year 78, n. 277, September-December 2020, 395-413
revista española de pedagogía



us with the challenge of imagining an education without spatial or temporal limits. It also forces us to broaden its horizons as a right in the service of the people and the planet. This is stated in the Sustainable Development Goals and in their framework of action, in an attempt to guarantee quality inclusive, and equitable education that promotes lifelong learning opportunities for all. Paradoxically, in their goals, strategic approaches, means of implementation, and indicators, time is absent, unlike space and communication.

Keywords: social times, school times, social education, lifelong learning, quality education, education system, education policy.

Resumen:

Sin obviar otras percepciones y representaciones acerca del tiempo, pondremos énfasis en su caracterización como una construcción social y cultural, humana. Las reflexiones sobre su naturaleza y alcance han ocupado a las ciencias desde siempre, como un tiempo de tiempos, alentando un diálogo interdisciplinar al que están convocados todos los saberes. También las ciencias de la educación y, en particular, la pedagogía, asumiendo el desafío que supone educar y educarnos a tiempo como un quehacer cívico en el que debe participar toda la sociedad.

Adoptando el formato de un ensayo en cuya elaboración convergen distintas fuentes documentales, planteamos dos objetivos principales:

a) identificar e integrar un amplio conjunto de miradas epistemológicas, teórico-conceptuales, metodológicas y empíricas a las que se remiten los estudios sobre el tiempo; b) afirmar y reivindicar la importancia del tiempo en la investigación educativa y social, en las políticas educativas y en la vida cotidiana de la gente, proyectando sus logros en concepciones y prácticas que extiendan los aprendizajes a todo el ciclo vital.

El tiempo educa y nos educamos en él, por lo que es preciso repensar —pedagógica y socialmente— sus significados en una sociedad abierta las 24 horas, simbólica y materialmente globalizada. La complejidad inherente a los procesos de cambio y transformación social, cultural, tecnológica, económica... nos sitúa ante el reto que supone imaginar una educación sin límites, espaciales y temporales. También obliga a ampliar sus horizontes como un derecho al servicio de los pueblos y del planeta. Así se declara en los Objetivos de Desarrollo Sostenible y su marco de acción, tratando de garantizar una educación inclusiva y equitativa de calidad, promoviendo oportunidades de aprendizaje permanente para todos. Paradójicamente, en sus metas, enfoques estratégicos, medios de aplicación e indicadores, el tiempo —a diferencia de lo que sucede con el espacio y la comunicación— continúa ausente.

Descriptor: tiempos sociales, tiempos escolares, educación social, aprendizaje permanente, calidad de la educación, sistema educativo, política educativa.

1. Introduction

For the artist Joseph Kosuth — whose work was noticeably influenced by Ludwig

Wittgenstein — time is a concept, object, and image. As one of the principal precursors of “conceptual art”, he depicted

this triple perception in his *Clock (One and Five)*, *English/Latin Version* (1965), combining on a 610 × 2902 mm panel, a working clock, a photograph of the same clock showing a different time, and the entries for “time”, “machination”, and “object” from an English/Latin dictionary with a brief explanation of what each of them means. Clocks softening and melting with the passage of time were also used by Salvador Dalí to illustrate the relativity of time, paying tribute in one of his celebrated works — *The persistence of memory* (1931) — to physics and the theories of Albert Einstein.

These two representations of time are very different from the one presented by the avant-garde composer John Cage when his work *4'33"* made its debut in 1952. In this piece, the musicians remain silent, without playing their instruments, for four minutes and thirty-three seconds, implying that time is a fragment of everyday life. They also differ from the works the British sculptor Andy Goldsworthy has produced over three decades. Goldsworthy travels the world creating figures using natural materials — leaves, branches, petals, ice, sand, water, stones, snow, etc. — which he leaves to their fate once they are complete, letting the passage of time finish off his work; he has only allowed five hundred photographs of these short-lived creations, in which time is another aesthetic resource, to be taken to show what once existed, before they self-destruct.

We turn to artistic creativity — without ignoring science — to present four “readings” of time as a social and cultural con-

struct. Or, perhaps, a human construct: in its excesses and in nothingness. The words that describe it — before, during, after, present, past, future, instant, succession, eternity, change, etc. — are loaded with hidden or visible questions that are open to many answers; few of them are definitive or exclusive, with most being provisional and complementary (Toulmin & Goodfield, 1990; Reis, 1994). According to Ángela Molina (2019), the responsibility for defining and interpreting time has moved from physicists to artists, creating suspicion of the logic on which these definitions and interpretations are based. Nonetheless, physicists have not stopped doing it, turning to time as one of their principal interests and objects of study. This has also been done by those in the humanities and the social sciences who extend the contributions made by the formal, natural, or “experimental” sciences, insisting — for centuries — on the need to provide knowledge with new perspectives on time and its circumstances.

Ways of counting time, conceiving it, and perceiving it are cultural and historically situated (Le Goff, 1991; Ramos, 1992), as are ways of knowing it and understanding it as thinking subjects. When recording it, without us being able to avoid it when expressing who we are, physical and social phenomena come into play, individually and collectively. These phenomena reflect — alongside other civilising processes — the confrontation between natural cycles and the bookkeeping artifices of calendars, regarded as one of the most emblematic instruments in the organisation, domestication, and command

of time. Anthropocentric, monochronic, and technical-rational doctrines that make human beings the measure and centre of all things, have contributed decisively to this being the case, with more or less historical significance.

The French and Bolshevik revolutionaries changed the secular calendars in use in their countries to show that in power one can “formally” modify relationships between society and time, albeit not for ever (Clark, 2019). And the Industrial Revolution, with its accompanying socio-economic and cultural upheaval, combined thorough social control of workers’ time — and, by extension, the time of families and social institutions, such as schools — with the progressive automation of their patterns of behaviour, subordinating personal decisions to the emerging concepts of capitalist production and work: individuals would have to learn to synchronise their activities without intermediaries, disciplining their behaviour through academic instruction, communal mechanisms of socialisation, and watches, which became another part of their clothing.

Since the end of the 20th century, digital technology has joined the analogue, mechanical, and electronic ones and has again revolutionised behaviour in almost all of the world: after thousands of years of guiding ourselves by the cycles of the seasons and the sun or looking at circular clockfaces, we constantly and even compulsively find we need computers and mobile telephones to set the time with pinpoint accuracy (Garfield, 2017). In this scenario, although it is tempting to believe

Castells’ hypothesis (1997) that in the age of the internet new information technologies will liberate us from capital’s time and the culture of the clock, this does not seem to be the case. Indeed, the corporations that supply these technologies do not set out to do so, in a society where the value of time no longer lies in the hours people have available but rather in the hours they lack to fulfil all of their obligations (Durán, 2007).

The Covid-19 coronavirus pandemic and its cruel pedagogy (Sousa Santos, 2020), confining hundreds of millions of people to their homes, mixing working time with rest time and leisure time, has, sooner than expected, led us into the 24/7 model of society (24 hours a day, 7 days a week), making an internet connection another requirement of the job market and for isolation and social connections (Crary, 2015), for the sake of protection and safety. Clocks are not disappearing: they are being integrated into or replaced by all types of screens, ceaselessly monitoring and supervising people who are chained to their networks, creating alerts, setting reminders and timers, scheduling events, etc. reaching unprecedented levels of sophistication and diligence. In her insightful reflection on the present, analysing the relationships between art and fiction, Gabriela Speranza (2017) warns that we cannot forget that clocks are the product of a history in which they were and continue to be instruments of power.

Norbert Elias (1989) also did this, noting that the bargain between clocks and humankind is a discouraging one. Both are

constantly changing as time passes: clocks change cyclically with the movement of their hands — and now increasingly their digits — while living beings change in a linear way, on their route to aging and death. Furthermore, when incorporating new technological devices, making visible and audible “realities” that are not touched, seen or heard, they create a new notion of time, psychologically and socially strewn with paradoxes and metaphors (Boscolo & Bertrando, 1996; Zimbardo & Boyd, 2010). Hence the insistence on an appropriate distribution of time, which for some authors means choosing slowness over acceleration, as something intrinsic to quality of life and happiness (Poelmans, 2005; Novo, 2000; Safransky, 2017).

One way or another, these authors show how our own temporal condition and the need to *have* time to be able to *be* in time (Heidegger, 2012; Cruz, 2016) complicate what we say about it. According to Boscolo and Bertrando (1996, p. 39), “this is probably due to the self-reflexive character of time (when we speak of time, we are still living in time) or the presence of a multitude of ‘times’ related to different levels of reality.” Furthermore, human experience is inseparable from the importance attributed to time as a symbolic and material category that affects very varied aspects of social thought and action (Elias, 1989).

We allude to a time of times that encompasses everything and everyone (Mataix, 1999), the understanding of which no branch of knowledge has eschewed. And although it is not easy to ponder, with suf-

ficient exhaustiveness and rigour, how and to what extent the sciences have taken an interest in studying time, it continues to be an endless source of knowledge that without it would lose much of its interest and, even, its *raison d’être* for humankind (Alfonseca, 2008) and the disconcerting world we inhabit. For Hawking (1989), time — and space — make it possible to go from the most everyday facts to the most fundamental and yet not least complex concepts in theoretical physics and the laws governing the universe, which do not stop questioning what we see around us. Nothing is entirely predicted in its coordinates. With the theories of general relativity and Edwin Hubble’s findings, what was thought to be “a unique absolute time” turned into “a more personal concept, relative to the observer who measured it” (Hawking, 1989, p. 221).

2. Grammars of time and scientific knowledge

Although it is through words that time makes visible many of the consensuses about its meanings, even the aspects of it that are supposedly most objective are not the same for everyone. While each day lasts 24 hours, each hour 60 minutes, and each minute 60 seconds, the experience of what takes place in them gives them other private and non-transferable durations: measuring time is one thing; the subjective experience of it is another. While it is a physical phenomenon in the former case, in the latter various structures interact, such as memory, attention, motivation, context, and the liberty inherent in situations.

This is highlighted in the commentary on the sensation of time that Thomas Mann builds in *The Magic Mountain* when he narrates the young Hans Castorp's singular experience of adapting to the habits of a sanatorium in the Swiss Alps where he went as a visitor and ended up staying as a patient. Speaking with his cousin Joachim Ziemssen, who has recovered from tuberculosis, Castorp says:

time *isn't* "actual." ... when it seems short, why then it is short. But how long, or how short, it actually is, that nobody knows. ... Space we perceive with our organs, with our senses of sight and touch. Good. But which is our organ of time. (Mann, 2005, p. 112-113).

This work, which its author described as a "novel about time", is a clear example of the emotional weight of time in the world of letters and in narratives about everyday life, masterfully captured in the work of authors such as Proust, Kafka, Joyce, and Kundera. Their pedagogical value, which we will not linger on here, is one of the issues pedagogy has not resolved with literature (Larrosa & Skliar, 2005).

Giving a convincing answer to any question that tries to establish what time is remains a challenge at the start of the third millennium, which neither lexicons nor dictionaries have been able to resolve satisfactorily. As María Ángeles Durán noted (2007, p. 20), speech "is rich in modulation of time, and where grammar does not reach, it turns to metaphors or interjections for help as well as the added effect of body language and tone." What verbs cannot express with their tools, temporal

adverbs, conjugations, and prepositions are expected to do.

In the most recent version of the *Diccionario de la Lengua Española*, the dictionary of the Spanish language published by the Spanish Royal Academy, which was updated in 2019, the word *tiempo* (time) has eighteen definitions. These include ones that relate to the weather ("hace buen tiempo" means "the weather is good" in Spanish), ones that relate to a grammatical category or to verb conjugations, to age, or to each of the parts of the same duration into which the rhythm is divided in a musical composition and performance. Neither the *Gran Enciclopedia del Mundo Durvan*, nor the *New Hutchinson 20th Century Encyclopedia*, the *Encyclopaedia Britannica*, the *Grand Dictionnaire Encyclopédique Larousse*, nor *Wikipedia, the Free Encyclopedia* have managed to perfect the definitions they provide in their successive editions and revisions. Turning to Saint Augustine (1990) by citing Book XI, chapter 14, of his *Confessions* often avoids going into denser explanations. That references to time are among the most familiar and commonly used in all languages does not stop them from being amongst the most elusive and mysterious.

If the best words, as Daniel Gamper (2019) suggests, are those that enable us to name the world, using them to maintain and reproduce it, statements about time — and times — have resulted in controversial approaches, focuses, decisions, actions, etc. that directly impact people's lives:

reflection on time and attempts to measure it are as old as humankind; the trace of these attempts is found in mythical tales, calendars, and the grammatical structure of languages. Many of the concepts that currently seem *natural* in reality conceal centuries of ideological debate and political conflict. (Durán & Rogero, 2010, p. 9).

And, inevitably, scientific, academic, and literary confrontation; but, if we focus on its most positive part, it also contains the opportunity to encourage interdisciplinary dialogue and shared knowledge.

It can do this on condition that it accepts the challenge of transcending the most reductionist and conventional readings, amplifying and diversifying the possibilities that understanding it offers (Gómez et al., 1981) in the field of the natural, experimental, and life sciences and in the social sciences and humanities. If, looking back, it has been this way, there is all the more reason for it to be so in future, following the lead of the multi- and interdisciplinary work that is being done in fields like chronobiology, chronopsychology, neuroscience, and artificial intelligence among many others. We should recall, with Asimov (1984), that time has always played a key role in the peaks of science, its “variables” being associated with discoveries that revolutionised the world of technology and thought, helping transform the social, economic, political, cultural etc. structures of its era.

For Ilya Prigogine (1997, p. 213), “the renewal of science is largely the history of the rediscovery of time.” Then and now. Indeed, the time of Parmenides or Zeno,

will not be the time of Aristotle, Saint Augustine, or Newton, and even less the times that Bergson, Heidegger, Sartre, or Einstein conceived. And although the metaphors and paradoxes of time “are born from and live in language” (Boscolo & Bertrando, 1996, p. 16), its realities embrace the life of each organism and living being, because

time is deeply embedded in our genes. The cells of the body, bacteria, plants, and other animals are capable of measuring time: in this sense, biological clocks are perfect adaptations to our environment that manage to synchronise astronomical time with the internal time of the organism. (Punset, 2011, p. 180).

In humanistic and/or social studies, interest in time in people’s lives is apparent in the work of numerous classical and modern authors: from Plato to Heidegger and Ricoeur, and including Aristotle, Husserl, Durkheim, Bergson, Merleau-Ponty, Sorokin, Veblen, Eliade, Bauman, and Giddens. In their works we can see that this is a scientific concern that, like so many others, was marked by gender until well into the 20th century, even though a considerable part of the uses of time and their impact on our day-to-day lives are found in the activities of women. This is shown in the reflections and/or research on personal and social times that are led and/or dominated by women from different disciplinary perspectives: philosophy, anthropology, history, sociology, psycho-sociology, law, politics, etc. (Adam, 1990; Balbo, 1991; Husti, 1992; Lasén, 2000; Romero, 2000; Valencia & Olivera, 2005; Tabboni, 2006; Durán, 2007).

In his analysis of the grammars of time and the problems of the globalised world, Sousa Santos (2006) underlined how the options available to us in the ecology of temporalities, must make all of the multiple times that come together in the past, present, and future visible. In them there are different scenarios (domestic-family, productive, environmental, etc.) and potentials, with those that appeal to citizens and their rights in liberty, equality, justice, or peace standing out. Comprehending time, learning *in* and *of* time, requires reasons and emotions that epistemologically, methodologically, and morally deny neither our humanity nor the values that most and best represent it in all of its diversity. Because talking about time is talking about ourselves and shared life (Tabboni, 2006), with its blessings and conflicts, between the public and the private, the sacred and the profane, work and leisure, social exclusion and inclusion, and so on, with everything they entail for the fullest exercise of the rights and duties that underpin coexistence.

3. Time and times in social research

That chronological indications are intelligible and expressible for us (Savater, 1999) explains why social studies *of* and *about* time—from the end of the 19th century to the present day—have taken an interest in topics, processes, situations, etc. that reflect the heterogeneity of their priorities in aspects such as the conciliation of family life and gender equality, movement and transport, working schedules and hours, the regulation

of markets and commercial centres, biological rhythms and their impact on health, the harmonisation of face-to-face and virtual learning, or dedication to caring for others, confronting or mitigating dependencies in order to favour personal autonomy or emancipation, etc. This variety reaches the methodologies and procedures through which information is obtained and processed, quantitatively and qualitatively, in research design and in their empirical expressions.

With less coordination than is desirable for a systematic, complete, and holistic study of time and times, they are aspects that motivate areas of knowledge, research groups and institutes, scientific societies, etc., whose headquarters—physical and virtual—are located all over the world: from the Research Institute for Time Studies (RITS) to the Grupo de Investigación Tiempo y Sociedad (Time and Society Research Group), which is affiliated to Spain's Consejo Superior de Investigaciones Científicas (CSIC - Higher Council for Scientific Research), as well as the International Association for Time Use Research (IA-TUR), the International Society for the Study of Time (ISST), the Deutsches Institut für Internationale Pädagogische Forschung (DIIPF), or the World Leisure Organization (WLO). In the case of Europe, the work done by the EUROSTAT observatory since 2008 through the Harmonised European Time Use Surveys (HETUS), in which participants from 18 countries record their daily activities in 10-minute intervals stands out for its scope and comparative nature.

By their own initiative or joining forces with other bodies linked to public administrations, universities, publishers, etc., these groups have for decades organised academic conferences and meetings complemented by the publication of their work in journals with a high relative quality index (JCR, WoS, Scopus, ESCI, etc.) such as *Times & Society*, *Journal of Leisure Research*, *Leisure Sciences*, *Leisure*, *Leisure Studies*, *Electronic International Journal of Time Use Research*, etc. In addition to these, there are documentary resources — books, reports, doctoral theses, supplements, audiovisual materials, etc. — dedicated solely to content relating to time and/or particular aspects of it.

In this context, without overlooking their interdependencies with other social times (family, work, leisure, etc.), the presence of school and educational times — especially since the early 1980s — has increased significantly in social debates, educational research, and the media. Their presence has also increased in reports compiled and/or spread by different national and international organisations in the European Union, the OECD, and UNESCO, facilitating access to comparative analyses that were until recently non-existent or not viable.

UNESCO includes teaching time in its World Education Indicators Programme. The OECD also does this, contemplating this variable within the international education indicators and analysing questions relating to it both in the Programme for International Student Evaluation (PISA) reports and in the Teaching and Learning

International Survey (TALIS). In the European Union, the EURYDICE network maintains a database of school calendars from Europe and periodically compiles information on teaching time (Egido, 2011, p. 259).

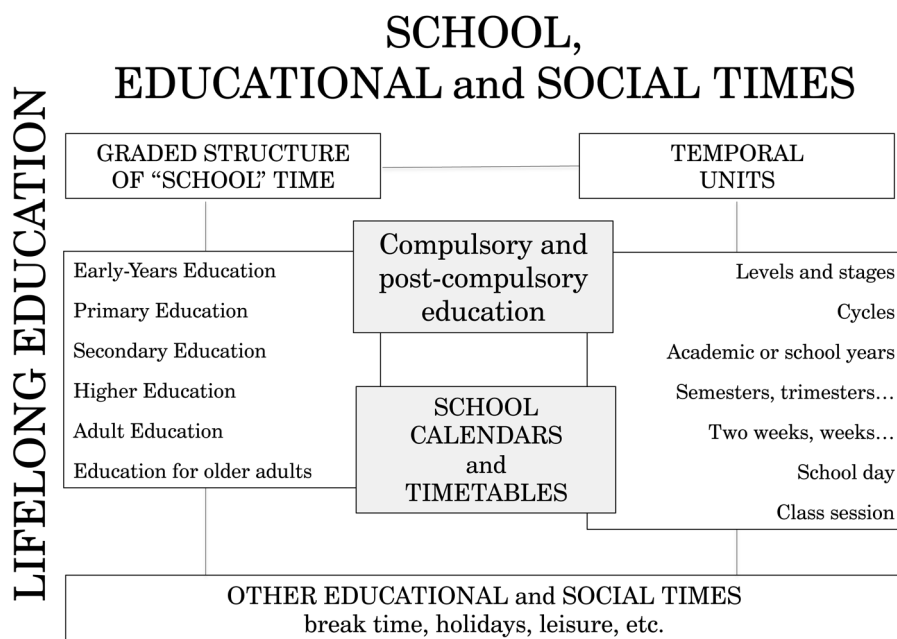
This network and its reports are part of the Education and Youth Policy Analysis Unit in the Education, Audiovisual and Culture Executive Agency (EACEA), providing sectoral, longitudinal, etc. studies of educational systems and policies in 38 countries, and since 1980, it has been recognised as one of the principal sources of information about education in Europe. The annual series (by academic years) since the early 1990s on the structure of teaching periods and the organisation of school periods, with data about their duration, start and end dates, holidays, and the school days they comprise are especially noteworthy. Furthermore, it reports on the state of the question in compulsory education/training in 43 European educational systems. The works by Pereyra (1992), Egido (2011), as well as the work coordinated by Gabaldón and Obiol (2017) are good examples of the interest in exploiting and interpreting the documentation on school periods that EURYDICE provides.

In education, as in other social practices, time is a flourishing “variable”, whose proposals and initiatives move among the realities and utopias of educating and being educated (Gadamer, 2000). A time which is valuable because of everything it activates and provides for communal life. A “civilising instrument”

(Compère, 2002, p. 11) of the first order when constructing our identifying features, educational institutions, and education in general, whose stages, cycles, levels, forms of teaching, organisation,

and sequencing of activities, etc. are strongly expressed through temporal expressions: early-years, primary, secondary, lifelong, adult, academic year, school day, etc. (Graph 1).

GRAPH 1. School, educational and social times.



Source: Own elaboration.

With the complexity that characterises it as a constituent, structural, and structuring variable of the institutional culture of schools and their relationships with communities and with society, time is the cause or origin of many of the problems that hold back educational reforms, the school environment, or the transition from education to active life. Unemployment is also a time.

According to Vázquez (1981), some of the most significant setbacks affecting education and pedagogy relate to time:

overloaded syllabuses, forgetting what has been learnt, uniformity in pace of learning, repeating years or continuous progress, etc. These often derive from mismatches between previously determined times, the objectives formulated, and the results achieved. Meanwhile, for Hargreaves (1996), time is an enemy of freedom and of teachers, preventing them from fulfilling their desires. It goes against their will, makes innovation difficult, and confounds the implementation of changes. Joseph Leif went further with an argument that thirty years later remains valid:

the problem of time and of the rhythms of school nowadays concerns all of the nation. Not just pupils, teachers, and parents, but also, as a result of holidays and time off, workers from all branches, including people in the hotel trade and employers. (Leif, 1992, p. 31).

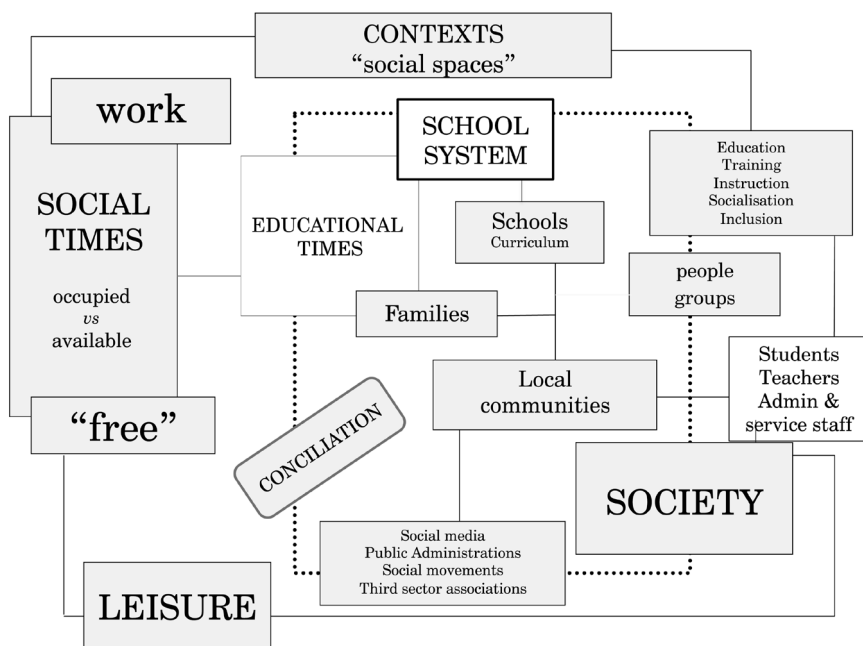
Furthermore, schooling in itself is insufficient:

school as an institution fills or occupies its own physical time (that of the school timetable), but its presence and impact on the life of individuals goes beyond the boundaries of the physical time of timetables and calendars, becoming a powerful

instrument that regulates the social time of the pupils and their family environments. (Gimeno, 2008, p. 92).

Hence the importance of differentiating between the pedagogical or didactic structures of educational time (*of* and *for* education) and those that simply order or articulate different timing units (Gairín, 1993), both in the educational system and in other social contexts, not always with the best organisational, curriculum, educational-psychology, etc. criteria (Graph 2). That this is all related does not mean it is harmonised.

GRAPH 2. Contextualisation and articulation of educational, school and social times.



Source: Own elaboration.

The decisions adopted in both micro- and macro-policy (relating to the duration and distribution of the school year, the typology

of teaching weeks and days, the division of the educational system into levels, stages, and cycles, etc.) are essential for any inter-

vention aimed at improving the quality of education, the transition from education to employment, respect for human rights, and achieving the minimum levels of dignity inherent to personal and social well-being. However obvious it might seem, we should underline the fact that educational times go far beyond schooling (Gimeno, 2008).

4. Rethinking times *in* and *from* education: a pedagogical and social task

Scientific, academic, and professional concerns with educational times have tried to take this distinction into account, although their achievements are far from matching this premise and all that rethinking education as a common good implies (UNESCO, 2015, p. 64), inspired by the “recognition and validation of knowledge and competencies acquired through multiple learning pathways ... [as] part of a lifelong learning framework.” In truth, neither existing lines of research nor the results associated with them match up with the advances in studies of time in general and social times in particular.

Even so, it should not be inferred, as Paciano Feroso already noted (1993, p. 164), “that pedagogy has not taken an interest in the time variable, unless what is meant is that it has not been investigated rigorously.” A remark that starts from García Carrasco’s reflections from years earlier (1984) after considering how the technological perspective had been introduced into educational theory and practice, transforming the pedagogical variables of time and space:

We are blind as to whether the right moment and the time invested for a pedagogical intervention are at reasonable intervals, ... most educational failure occurs because pedagogical interventions do not occur at the right time. (García Carrasco, 1984, p. LXXIII).

In fact, like then and at least in Spain, it cannot be said that time is given position in the curriculum (for example, in the teaching and learning from applied or specific didactics) that is in line with its importance as an essential milestone in evolutionary development in early childhood and all through life (Piaget, 1978; Trepát & Comes, 1998).

Nonetheless, time *in* and *of* schools educates, even if it does so silently, by accepting and imposing the temporal concepts that underpin economic interests and the organisational rationality of each era, merging into the pedagogical order of instruction in its social and cultural values (Escolano, 2000). School institutions and their teaching, despite overlooking teaching about time, have been and continue to be instruments for instilling particular notions about time, at the service of industrialisation and urbanisation from the 19th century onwards:

a notion of time based on ‘precision of encounters’, ‘sequencing of activities’, ‘forecasting’, the ‘sense of progress’, and the idea of time as ‘a value in itself’... [although] its genesis occurred much earlier. It is linked to the very birth of the school as an institution in ancient Egypt or Sumeria. (Viñao, 1994, p. 35).

Today we might be present at its disappearance as we have known it for over two hundred years.

However, owing to the debates that cross the world, in contrast with other subjects-problems that concern educational sciences and particularly pedagogy, it could be said that we are still in an early phase, with some exceptions concentrated on studying the effect of the time variable in academic performance, cognitive styles and the optimisation of teaching-learning processes, school organisation and the performance of the teaching profession, educational policies, and the public administrations' management of school calendars and times, as well as the transitions between study times and complementary, extracurricular, or out of school activities (recreational, leisure and free time, homework, etc.), or — more recently — in balancing family life with school activity.

Social media and political debates play a role in this interest, essentially on the basis of the preparation and publication of the report *Prisoners of time*, by a commission formed especially by the United States Department of Education (National Commission on Time and Learning, 1994). This line of work, which, as Pereyra (1992) has summarised and analysed in detail, featured among other antecedents the works on school time done — under the direction of Wolfgang Mitter — by the Deutsches Institut für International Pädagogische Forschung in Frankfurt, and by the National Association of Head Teachers, in the United Kingdom, led by Brian Knight, research by Francois Testu and others on the chronopsychological perspective of the organisation of time and

its effects on academic performance in France, and the compilations on different perspectives and realities of school times done by authors like Charles Fisher and David Berliner in the USA or Michel Ben-Peretz and Rainer Bromme with data from various countries (Germany, Canada, China, USA, and Israel).

Other contributions have been added to these since the 1990s that have shared their results with society through national and international academic conferences and meetings (symposia, seminars, etc.), as well as in a growing body of monographic publications in books and journals; including in: *Revue Française de Pédagogie*; *Le Monde de l'Éducation*; *Loisir et Société/Society and Leisure*; *Riforma della Scuola*; *Cuadernos de Pedagogía*; *Arbor. Ciencia, Pensamiento y Cultura*; *Pedagogía Social. Revista Interuniversitaria*; *Educació Social. Revista d'intervenció socioeducativa*; *Educar em Revista*, etc. Hundreds of collaborations have found a place in these publications, as well as in other periodicals, works in which the increasing academic and social relevance of the “invention of school time” (Escolano, 2008, p. 33) has made apparent.

In Spain, as well as the interest the topic has inspired in the boards of various publishing houses and in some of the most recognised journals, since the final decades of the 20th century, there have been a large number of works linked to research projects or contracts funded by competitive calls or through cooperation agreements with public administrations,

as well as doctoral theses and final degree and master's projects. Looking at the teaching day — and not what happens outside it — the principal contributions revolve around its format (continuous *vs* split), free time and leisure education, and the convergence between school and family life, etc. Both in the context of Spain and in nearby countries, many studies and publications have emphasised some of the concerns that have motivated educational and social agents (mothers and fathers, teachers, students, teaching unions, pedagogical reform movements, etc.), calling for new times for school and the rhythms that shape its calendars and timetables.

A list showing them with their authors and source documents, doing justice to the volume and value of their contributions, would require hundreds of pages. We will not do this, but will insist that education, as a social practice with broad civic horizons, needs time to establish itself as a human right that is also responsible for raising awareness of all that the full exercise of human rights implies, about citizenship, about well-being and quality of life with the values that invoke liberty, justice, or equality. There are many works that insist on this from very different fields: gender conciliation and equality (Cardús et al., 2003; Prieto, 2007; Caride, 2018), personal self-esteem and social interactions (Han, 2014; Safranski, 2017), or the construction of a more relational, inclusive, and cohesive society (Bauman, 2007; Mückenberger, 2007; Cuenca & Aguilar, 2009; Concheiro, 2016; Muntadas, 2016; Rosa, 2016; Wajcman, 2017).

5. Conclusion: there is no future without a present to build it

Education is a journey through time, towards the interior of each person and the world. It is so in school times and in times that precede and/or prolong its teaching-learning processes in other institutional and social settings: families, media, civic and cultural facilities, workplaces, or the technological resources that underpin online training.

As has been noted with some frequency, alluding to elements of a physical-biological, psycho-social, socio-political, or strictly pedagogical nature, time is a key part of socialisation processes, planning and reform of educational systems, and innovation and quality in education: it is a central point in the functioning of any educational establishment, in family life, and in the life of society (Husti, 1992). As a subject-problem that affects almost all forms of teaching, learning, and, in general, any formative or educational practice, “it comes with the territory in which we move” (Hargreaves, 2003, p. 109). Education, we could say using the words of Eduardo Galeano (2004), is woven with the threads of time.

Time educates and we are educated in it, and so it is necessary to rethink — pedagogically and socially — its meanings in a society that is symbolically and materially open 24 hours a day. It does this in a globalised society with the complexity intrinsic to processes of social, cultural, technological, economic, etc. change and transformation that place us before the challenge of imagining and activating an

education that does not have spatial or temporal limits. But one that also makes it necessary to expand the horizons of education as a right that serves people in a planet with almost eight billion inhabitants. This is stated in the *Sustainable Development Goals* and in their framework for action, in an attempt to guarantee quality inclusive and equitable education with lifelong learning opportunities for all. Sadly, with goals, strategic focuses, means of application, and indicators where time —unlike space and communication— remains absent.

Consequently, it is striking how in the most important reports and/or statements sponsored by UNESCO from the 1970s to the present day, time is not mentioned or is mentioned only in passing. In the report coordinated by Edgar Faure (1973), the only references to (school) time are associated with individualised teaching and its requirements for a break with the uniform rhythms of the dominant time distribution in schools. In the report led by Jacques Delors (1996, p. 14), time is only named when linked with “the concept of lifelong learning with its advantages of flexibility, diversity, and accessibility in time and space” and the recommendation to “debate and study in-depth the proposal for a time-credit for education which is succinctly formulated in the report” (*Ibid.*, p. 38); which, according to the report, should result in the right to a certain number of years of teaching.

In the report that suggests reformulating education as a global public good

(UNESCO, 2015), the only mentions of time relate to its circular, non-linear conception, in many rural societies, and it is only mentioned when the report postulates how expanding access to knowledge requires moving towards new networks in which

changes in the spaces, times and relations in which learning takes place favour a network of learning spaces where non-formal and informal spaces of learning will interact with and complement formal educational institutions. (UNESCO, 2015, p. 48).

Finally, in the Incheon Declaration and its *Action Framework for the implementation of the Sustainable Development Objective 4, Education 2030*, approved at the World Education Forum in this South-Korean city, the only reference to time is in the implementation methods for its strategies and initiatives (no. 73), stating that

there is strong evidence that teachers are open to change, and keen to learn and develop throughout their careers. At the same time, they need the time and space to take more initiative to work with colleagues and school leaders and to take advantage of opportunities for professional development. (UNESCO, 2016, p. 54).

A minor contribution when, as the title of the document states, the aim is to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.”

If this is the aim, everything indicates that educational and social times can no

longer be conceptualised and/or articulated by following the monochronic and uniform conventional principles, that have supported them until the present day. Information and communication technology make it possible to bring education to more people than conventional classrooms ever managed: especially when it offers the possibility to transcend the barriers of time, simultaneously or on a delayed basis, reaching any corner of the world. Education, which is always a project and a journey towards a better future, must anticipate and not subordinate itself. It must critically and reflexively predict its circumstances, and not just do this in a meek and adaptative way. Doing so requires a change of course in how its times are conceived and implemented, in schools and in society. Educating and being educated pedagogically and socially, with time and in the times of a network society accepts no delay.

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