

EDUCATION IN LIQUID MODERNITY: EDUCATE AND FORMING IN AN  
UNCERTAIN WORLD

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## ABSTRACT

**Purpose:** This paper aims to reflect on the educational and formative issues in liquid modernity, characterized by fluidity, ephemeral relationships, and the constant obsolescence of knowledge and competencies.

**Methodology/Approach:** The research conducted is based on bibliographic research and narrative, supported by documents from the author of liquid modernity, authors who have already reflected on the subject, and international organizations, which guide us to future educational scenarios.

**Findings:** The metaphor of education in liquid modernity takes Bauman's sociological perspective. If there is a modern liquid society, there is a need to create a liquid education, capable of responding to the challenges of this society. This new social context, as opposed to the stable world of the previous solid modernity, implies an uncertain world.

**Research Limitation/implication:** We live in a time of unpredictable but constant transformation in a global society supported by digital technologies, where the challenges of education and training are increased. It is intended to raise awareness of the new challenges as well as the need to adapt the education and training systems.

**Originality/Value of paper:** The metaphor of liquid modernity allows characterizing today's society. The well-known digital society can be deepened and better contextualized through liquid modernity.

**KEYWORD:** liquid modernity, liquid education, educational challenges.

## A EDUCAÇÃO NA MODERNIDADE LÍQUIDA: EDUCAR E FORMAR NUM MUNDO INCERTO

## RESUMO

**Propósito:** O presente trabalho tem como objetivo refletir acerca das questões educativas e formativas na modernidade líquida pautada pela fluidez, relações efêmeras e desatualização constante de conhecimentos e competências.

**Metodologia:** A investigação realizada baseia-se na investigação bibliográfica e narrativa, sustentada em documentos do autor da modernidade líquida, de autores que já refletiram sobre a temática e de organizações internacionais, que nos orientam para cenários educativos de futuro.

**Resultados:** A metáfora da educação na modernidade líquida assume a perspetiva sociológica de Bauman. Se existe uma sociedade moderna e líquida, existe a necessidade de criar uma educação líquida, capaz de dar resposta aos desafios da mesma sociedade. Este novo contexto social, em oposição ao mundo estável da modernidade sólida anterior, implica num mundo incerto.

**Limitações da pesquisa/Implicações:** Vivemos um tempo de transformação imprevisível, mas constante, numa sociedade global suportada pelas tecnologias digitais, onde os desafios da educação e da formação se encontram acrescidos. Se pretende tornar conscientes os novos desafios bem como a necessidade de adequar os sistemas de educação e formação.

**Originalidade/Valor do trabalho:** A metáfora da modernidade líquida permite caracterizar a sociedade atual. A conhecida sociedade digital pode ser aprofundada e melhor contextualizada através da modernidade líquida.

**KEYWORD:** Modernidade líquida, educação líquida, desafios educativos.

## 1. INTRODUCTION

We live in times of accelerated social transformation that pose new challenges to education and training systems. Zygmunt Bauman has called these times "Liquid Modernity". This expression was used to conceptualize a post-modern society that is based on the fluidity and speed of events, and which, as a result, transforms and seeks to adapt, without preserving its form for a long time.

Sociologist Bauman was born in Poland in 1925, the son of Jews, who fought in World War II. In 1968 he was expelled from his country and moved to Great Britain. Bauman compared the changes in relationships and in the functioning of society, which, according to him, is no longer solid and has become liquid. The new generations were already born in a liquid world, which makes it much more unstable, fast and dynamic, in constant mutation, in an unpredictable way, unlike the time of the previous generations, identified by Bauman, as secure and constant, of more cohesive, strong and perennial relationships, giving it the name of "solid modernity". One of the most fitting metaphors to characterize the society we live in, supported by digital technologies.

Liquid modernity walks a very individualistic path, focused on the wants and desires of human beings in a singular way, seeing their way of life transformed (Furlan & Maio, 2016; Cleary, 2020; Lee, 2022). With the lack of adaptive skills, people become more prone to psychological illnesses such as anxiety and depression, also due to the belief that "happiness only depends on us" and the uncertainties about the ever-changing future. When transposing to society the metaphor of the behavior of liquid components, we find that in liquids the bonds that are established between molecules are much more fragile than in solids, flow more easily and adapt to the shape of the context where they are inserted, which can generate a constant dynamic and instability. In this conjuncture of constant movement and agitation, the author believes that the notion of time is transformed and that there is a need to "shorten" distances and make time instantaneous and influenced by the evolution of the internet and consequent transformation in digital society (Bauman, 2001).

The growth of children in an instantaneous digital age of liquid modernity is quite different from the behavior of children in solid modernity. Children are not just spectators of this reality, they are influenced by it and also influence and shape an increasingly fluid society. Children spend much more time connected to digital technologies than in the company of their own parents or at school. Children's relationships are established in this mediated digital landscape. Digital technologies are part of the subjective construction of these children, where they are already born, dealing with this new reality, involved in a kind of "nervous game" (Green & Bigum, 1993; Romero-Rodríguez et al., 2021; Moreno-Morilla et al., 2021). Digital technologies are to the new generations, as natural as the air we breathe and children form their mental schemas based on these technologies. Adapting to technological evolution seems to be something normal. For adults, who grew up in a solid society, with less flexible mental schemas, they may be subject to a greater effort to adapt.

In this paper we intend to reflect on how the emergence of liquid modernity can influence education and training in today's society. This kind of approach is not very well known and can contribute to make the various educational actors more aware of the need to educate for a world guided by uncertainty. A difficult time for education and training, where the routine educational practices of solid modernity have become decontextualized and no longer make sense.

## 2. EDUCATION AND TRAINING IN THE LIQUID SOCIETY

We live in a technological and social context, where we need to deal with the characteristics of a liquid modernity, in which everything flows, is created, changes, and disappears very quickly. Through digital technologies, children can find a way to entertain, study, and interact with each other without having to leave home. The street as a play space is no longer a safe place. The bedroom, has become a place of physical safety, but of digital insecurity. Children are increasingly using technologies to have fun, interact, and learn in a multimedia way. This recurrent interaction

and proximity of the child with information and multiple languages is conceptualized by Dornelles (2015) as cyber-childhood. This childhood is an unknown, misunderstood childhood that provokes different reactions in adults. "A certain feeling of fear of this childhood is produced in adults since it escapes us. One sees in cyber-childhood a danger, perhaps because not enough knowledge has been produced to control it or because one cannot govern it." (Dornelles, 2005, p. 78)

"This is the space of Lan Houses, that is, the online childhood, the childhood of those who are connected to the digital sphere of computers, games, mouse, self-service, remote control, joysticks, and zapping. This is the childhood of multimedia and new technologies." (Dornelles, 2005).

Since the end of the first decade of the century that this problem has increased, with the emergence of mobile communication through the internet and the development of Apps for communication and interaction, through writing, image, video and audio.

It is important to analyze that children are not a separate part of liquid modernity, even though they have their own peculiarities, they are as integrated into the current way of life as adults are. These children are inserted in a context of competition and concern about the future, and grow up with the thought that they need to be always connected to the modern world, which dissipates and reconstitutes itself, and which is not easily controllable. According to Buckingham (2013) in both social and psychological terms, the anxieties caused by new media can be seen as reflecting a generic fear of the loss of control, because there is always something that escapes us.

With just one click, children can go from youtube to Facebook or another social network. They insert photos on Instagram, comment, like and share posts with their friends. They talk to distant relatives by video call on WhatsApp, start a chat on Omegle, study English with duolingo, and create videos for Tik Tok. A childhood characterized by the intense use of technologies, where being offline for a few hours seems unbearable. It is the hyper-connected generation, or the generation that won't turn off.

This mass use of the various possibilities that the Internet offers consequently reveals another characteristic of liquid modernity: consumerism. Just like adults, children have become exacerbated consumerists. Whether veiled or unveiled advertisements, cyberspace provides a great advertisement for consumption, through the creation of new products and new needs, where everything that is created is ephemeral. Borges (2015) also highlights that in this society the individual is the focus and consumerism is an escape valve. We must develop the awareness that today advertising exists without control and children and adults navigate in a sea full of unregulated advertising information that seeks to influence them. This, as well as other emerging issues related to digital security, fake news, information overload, require a new digital citizenship, for digital responsibility and conscious navigation in the choppy sea of information.

This churning of information and interaction intensified at the beginning of the century with the emergence of web 2.0. The consequence of its effects emerged as children became increasingly dependent on technologies in their processes of interaction, communication, and socialization. Buckingham (2003) summarized some ideas on the subject, such as the fact that technologies transcend borders and cultures and contribute to the creation of a "common culture", with consequences that may be positive or negative. In a context guided mainly by a digital age, children don't need to leave home to establish friendship bonds and use the networks to connect with friends through a relationship based on a constant dynamic. If on the one hand, the maintenance and creation of friendship bonds is encouraged, on the other hand, children become much more vulnerable to the dangers and abuses of cyberspace, since they are exposed globally. Awareness of this issue is raising the need to educate for global digital citizenship.

Borges (2015) makes a reflection regarding the possibilities of society to circumvent the problems that may arise in this liquid environment.

"For this, it is necessary to problematize liquid modernity itself, to become aware of the current human condition (and here we highlight the importance of education). We see this possibility mainly through the participatory culture that has been developing among children and young people in the use of digital technologies" (Borges, 2015, p. 105).

Liquid modernity has imprinted profound changes in the way we relate to consumption, to ourselves, to others, and to all the elements that conform societies (Ferreira and Werneck, 2019). Education cannot escape these changes. In fact, education has never been faced with a situation similar to the one we live in today's society of liquid modernity. Educating to live in a society saturated with information and with an unpredictable and constantly changing future will still require a great effort from educational and training systems.

The speed with which knowledge is produced, and quickly transforms the old into the old, is amazing. The newly created is predestined to age even faster. The fugacity and volatility of the liquid world means that each succeeding episode requires new skills and knowledge that outdates previous skills and knowledge. In this context, learning a large amount of information and facts based on memorization is presented as a pure waste of time, as it quickly loses its timeliness.

Learning and education were created in a world that was expected to last. In our volatile and erratic world, established customs, solid cognitive referents, and a preference for stable values, those ultimate goals of orthodox education, become disadvantages (Bauman, 2005). Morín (2000) mentioned that in today's world the unexpected becomes possible and is realized, and that often the improbable is realized more than the probable.

Learning in the liquid world contradicts the very essence of school-centered education as we know it, based on a sequential and structured learning process, based on a rigid curriculum. Learning in the liquid world exerts a "de-institutionalizing" pressure on the education and disciplinary knowledge of the school institution. Learning, to be useful, must be continuous and full-time, that is, lifelong. No other kind of education is conceivable. Each of us must be aware of the need to be always learning, in a constant process, never to be complete.

From the "lifelong education" of the solid world we move to the "lifelong education" of the liquid world (Bauman 2009, in Porcheddu, 2010). From Bauman's ideas we can extrapolate new concepts and a new lexicon that can be enhancers of educational transformation.

### 3. VECTORS OF NECESSARY CHANGE

From these ideas we can glimpse some fundamental educational pillars or vectors of necessary change:

- A school focused on the development of skills, creativity and innovation, with differentiated rhythms of development of skills and knowledge. This perspective requires moving from a crystallized organization to a dynamic functioning in constant adaptation and transformation. A school that enables adaptation in changing contexts, where the person is always being reinvented. Investing in difference, with knowledge, skills and ideas of our own. Investing in creativity to generate different ideas, exceptional projects, never before shown. Investing in people, in the development of individual skills, that is, in what we are now beginning to talk about as personal development potential.

- A vision of educational institutions (from basic to higher education) always evolving. It is not about evolving from a stable situation to a more evolved but static future scenario. The future scenario of educational and training institutions is one that is always evolving, constantly changing in an attempt to adapt to new times, or even to create new times. We need not a routine school, but a school in constant reconfiguration.

- A professional teaching profile where the degree is not for life, because the validity period of the knowledge and skills acquired quickly expires. This vision requires a professional development in permanent acquisition of new skills and adaptation to new situations and new pedagogical proposals that we can now glimpse such as adaptive learning and mentoring. Also a constant training in dynamic structures, such as learning and practice communities, which quickly emerge, evolve, and die out according to the will of the participants. Esteve (2003), already asserted that teacher training institutions continue to train teachers for a world that no longer exists. This training process has not yet been changed.

- A less disciplinary and more transdisciplinary approach, based on curricular flexibility, allowing each student or trainee to select the knowledge and skills they need according to the moment, with a focus on collective work. Also a more practical vision of education: that which is to be learned to do we must learn by doing (Bauman, 2002). A more competent school, supported by a new ecosystem of active pedagogies.

- A greater concern with citizenship. This should prepare young people for this new hypersaturated reality of information and much more fluid social ties. Currently the concept of soft skills is emerging, which can contribute to a more conscious use of the technologies that support this paradigm of society. A new digital ethic will be required to live in the ever-changing global world. The art of human beings living in this society has yet to be learned (Baumann, 2002). The emerging concept of global digital citizenship may contribute to learning to live in this globalized world with acceleration syndrome.

The idea of education as a product of solid society contrasts with the idea of education as a process, always unfinished, of liquid modernity. Knowledge no longer has lasting value. Almost all the knowledge that a child will need in the future does not yet exist. The constant erosion of the knowledge and skills necessary to live in the liquid society does not match the learning methods of the solid world.

Educating for the uncertainty of the liquid world requires equipping people with self-regulation, self-direction, and self-learning skills that allow them to adapt quickly to new and ever-emerging professional contexts. International organizations such as UNESCO and the OECD integrate these skills into the so-called 21st Century Skills. The liquid character of this new century imposes on education and training systems, to rethink their function, to be transformative. This reorganization becomes necessary in basic education, but also in lifelong education (OECD, 2022).

#### 4. CONCLUSION

Liquid modernity, seems to us, in fact, a powerful and adequate metaphor to conceptualize the current society. Fluidity, speed, instantaneity, instability, and the certainty that everything is changeable, characterize the way we interact, relate, and behave in community. The fluidity of digital information contrasts with the solidity of information in analog media. In today's society it is imperative to create a new paradigm of education, the education of liquid modernity. From Bauman's perspective, "lifelong education" fits this liquid society. Some fundamental pillars of education are at stake: the rethinking of the educational institution from a solid world to a liquid and changeable world, the constantly evolving professional teaching profile, a more transdisciplinary approach to knowledge, and a citizenship that makes young people more aware of the problems of the liquid society.

In the world of liquid modernity, solidity must be interpreted as a threat (Bauman, 2005). Based on this idea, we can look at routine work and solid institutions as maladjusted, inoperable, and an obstacle to solving the challenges and problems that arise in the liquid world. In the world of liquid modernity, no institution should remain unchanged, because the fundamental characteristic of institutions is their ability to continuously transform themselves.

The art of living in an uncertain world, where information is raw material that quickly circulates and becomes a commodity, has yet to be created. Education should have a role to play in order to enable people to live in the society of liquid modernity. We have to learn the difficult art of preparing future generations to live in an ever-changing world, an uncertain world characterized by unpredictability.

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**DECLARATION OF CONTRIBUTIONS TO THE ARTICLE - CRediT**

ROLE	MMeirinhos	LPortela
Conceptualization – Ideas; formulation or evolution of overarching research goals and aims.	X	X
Data curation – Management activities to annotate (produce metadata), scrub data and maintain research data (including software code, where it is necessary for interpreting the data itself) for initial use and later re-use.	X	
Formal analysis – Application of statistical, mathematical, computational, or other formal techniques to analyze or synthesize study data.	X	X
Funding acquisition - Acquisition of the financial support for the project leading to this publication.	X	X
Investigation – Conducting a research and investigation process, specifically performing the experiments, or data/evidence collection.	X	
Methodology – Development or design of methodology; creation of models.	X	X
Project administration – Management and coordination responsibility for the research activity planning and execution.	X	X
Resources – Provision of study materials, reagents, materials, patients, laboratory samples, animals, instrumentation, computing resources, or other analysis tools.	X	X
Software – Programming, software development; designing computer programs; implementation of the computer code and supporting algorithms; testing of existing code components.	--	--
Supervision – Oversight and leadership responsibility for the research activity planning and execution, including mentorship external to the core team.	X	
Validation – Verification, whether as a part of the activity or separate, of the overall replication/reproducibility of results/experiments and other research outputs.	X	
Visualization – Preparation, creation and/or presentation of the published work, specifically visualization/data presentation.	X	X
Writing – original draft – Preparation, creation and/or presentation of the published work, specifically writing the initial draft (including substantive translation).	X	X
Writing – review & editing – Preparation, creation and/or presentation of the published work by those from the original research group, specifically critical review, commentary or revision – including pre- or post-publication stages.	X	X