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Regulatory obstacles of distance learning technology for the promotion of equality in higher education

Os obstáculos regulatórios da tecnologia EAD para a promoção igualitária do ensino superior

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Abstract: The 4th Industrial Revolution led the world to experience technological transformations in a significantly fast pace. As a result of this movement, the Fundamental Right to Education has also undergone modifications: with the emergence of pieces of software for managing educational institutions and school activities and an increasing possibility of access to didactic contents, the proposal to replace the traditional learning model by distance learning has also emerged. However, regulations about the subject in the Brazilian legal system are sparse and inconsistent. Because of

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that, there is a massification of education due the economic interest of private institutions that choose to invest in this new type of education, also considering that they will benefit from lowering costs. The expansion of distance learning comes up against the lack of universalization of the technology itself, considering that the inequality of positions is evident when it comes to the access to technologies that are required for attending distance learning. Although the objective of distance learning is the universalization of education, the mismatch between regulation agent and technological innovations allows for verifying the non-fulfillment of the purpose, jeopardizing the fundamental right to education with quality, regardless of the economic exploration of the public service.

Keywords: Fundamental right to education. Distance learning, Digital inclusion. Equality. Regulation.

Resumo: Com o advento da 4ª Revolução Industrial, o mundo passa por transformações tecnológicas de forma significativamente rápida. Em decorrência desse movimento, o Direito Fundamental à Educação também tem sofrido modificações: com o surgimento de *softwares* para gerenciamento de instituições de ensino e atividades escolares e aumento da possibilidade de acesso aos conteúdos didáticos, surge também a proposta de substituição do modelo tradicional pelo ensino à distância. Entretanto, as normativas que dispõem sobre o tema no ordenamento jurídico brasileiro são esparsas e inconsistentes. Por isso, há massificação da educação pelo interesse econômico das instituições privadas que optam pelo investimento nesta nova modalidade de ensino, que ainda se beneficiam das reduções de custos. A expansão do EAD esbarra na ausência de universalização da própria tecnologia, uma vez que a desigualdade de posições fica evidente quando se trata de acesso às tecnologias necessárias para cursar o ensino a distância. Em que pese o objetivo do EAD seja a universalização da educação, o descompasso entre agente regulador e as inovações tecnológicas permite verificar o não cumprimento de tal finalidade, colocando o direito fundamental à educação com qualidade em xeque, à mercê da exploração econômica do serviço público.

Palavras-chave: Direito fundamental à educação. Ensino a distância. Inclusão digital. Igualdade. Regulação.

Contents: 1 Introduction – 2 The fundamental right to education and equal opportunities – 3 The Fourth Industrial Revolution and technology applied to education – 4 Distance learning (EaD) as an innovation modality and digital inclusion – 5 Conclusion – References

1 Introduction

The current political and organizational conjuncture of the Brazilian society in 2021 brings up new debates on fundamental rights in general, thus emphasizing even more the relevance of the fundamental social right to education.

Under criticism and as a result of a constant attempt for changes in the educational area, the position of Minister of Education in Brazil has already been filled by three different people within less than two years of government,¹ which shows instability in the conduct of the position, in addition to promoting the resumption of discussions about the religious interference in educational policies and new directions for the establishment of education guidelines in Brazil.²

¹ BERMÚDEZ, Ana Carla. *Sob Bolsonaro, MEC tem maior número de trocas desde a redemocratização*. Available on: <https://educacao.uol.com.br/noticias/2020/07/01/sob-bolsonaro-mec-tem-maior-n-de-trocas-desde-a-redemocratizacao.htm>. Access on: Aug. 2nd, 2020.

² See: “The appointment of Milton Ribeiro as Minister of Education brought relief to Congress, as it gave direction to one of the most important ministries in the country. But it also brought concern, as he was a

Despite the instability referred to here, the crisis generated by the advent of COVID-19 drew attention to the dismantling of public policies in the international arena. In a report, the United Nations mentioned that “austerity measures and cuts in the budget for public systems of education have weakened the capacity to manage the educational crisis and to guarantee protection for all”.³ Such a manifestation refers to the contingency of expenditures carried out by the Federal Government in 2019,⁴ which revealed the clear neglect of this fundamental right in the government’s priorities.

However, it must be initially emphasized that fundamental rights are historical constructions, instituted by confrontations between the civil society and the State; the former pleads for better conditions, while the latter represents the dominant power.⁵ Therefore, the right for education – the object of the present study – as well as the other fundamental social rights – has a close connection with social development, and consequently it requires strict observance when it comes to policies that can provide some form of regression.⁶

Within this scope, it is possible for one to notice a considerable increase in the proposals for transforming education, mainly in higher education, with its adaptation to disruptive technologies in view of the growth of the Distance Learning modality (EaD, in Portuguese).⁷

religious man. The fear is that, along the lines of the ideological war promoted by the predecessor, Abraham Weintraub, he will harm the secularity of Brazilian public schools, which have students from different religions” (CALCAGNO, Luiz. *Deputados e senadores repercutem nomeação de novo ministro da Educação*. Available on: https://www.correiobraziliense.com.br/app/noticia/politica/2020/07/13/interna_politica,871783/deputados-e-senadores-repercutem-nomeacao-de-novo-ministro-da-educacao.shtml. Access on: Aug. 2nd, 2020).

³ CHADE, Jamil. *Resposta do Brasil à pandemia gera onda de críticas na ONU*. Available on: <https://noticias.uol.com.br/colunas/jamil-chade/2020/07/06/resposta-do-brasil-a-pandemia-gera-onda-de-criticas-na-onu.htm>. Access on: Aug. 2nd, 2020.

⁴ ROSSI, Marina. *Corte ou contingenciamento, quem está certo na guerra de narrativas da educação?* Available on: https://brasil.elpais.com/brasil/2019/05/31/politica/1559334689_188552.html. Access on: Aug. 2th, 2020.

⁵ GIMENEZ, Charlise de Paula Colet; DEL’OLMO, Florisbal de Souza; ANGELIN, Rosângela. Dos Direitos Humanos e dos Conflitos na Sociedade Líquida pós-moderna. *Nomos – Revista do Programa de pós-graduação da UFC*, Fortaleza, v. 37. n. 2, p. 259-279, jul./dec. 2017.

⁶ About this topic, see: “The theme of development and fundamental economic and social rights must, therefore, integrate the agenda of today’s social administrative law, impacting on the essential topics of this legal branch, such as administrative organization, public services, public policies and the intervention of the Economic activity. Only in this way will it be possible to effectively transform the socioeconomic structures of the Brazilian reality, providing state action that is not limited to ensuring the minimum necessary for the exercise of freedoms” (HACHEM, Daniel Wunder. A noção constitucional de desenvolvimento para além do viés econômico: reflexos sobre algumas tendências do Direito Público brasileiro. *A&C – Revista de Direito Administrativo & Constitucional*, Belo Horizonte, v. 13, n. 53, p. 133-168, jul./sep. 2013).

⁷ Distance learning is defined by Resolution No. 1/2016 of the Ministry of Education in the following terms: “(...) distance education is characterized as an educational modality in which didactic-pedagogical mediation in teaching and learning processes occurs with the use of information and communication means and technologies, with qualified personnel, compatible access, monitoring and evaluation policies, among others, in order to provide even greater articulation and effective interaction and complementarity between presence and “real” virtuality, the local and the global, subjectivity and democratic participation in the teaching and learning processes in the network, involving students and education professionals (teachers, tutors and

Such a teaching modality is widely known throughout the world. In Brazil, the first records date back to 1904, when the TV news program entitled “Jornal do Brasil” registered an advertisement that offered professionalization by over snail mail for typists, passing through radio programs on commerce and services (1983) and the implementation of programs for teacher training in public schools by the Ministry of Education (2004).⁸

Due to the current wide technological advance and the increase in access to the Internet, the convergence between technology and education, besides being considered as a guaranteed phenomenon, has developed unstoppably, thus it impacts on traditional teaching and learning methods.⁹

According to data from the Ministry of Education, the growth of distance learning (EaD) in higher education is expressive: while in 2007 this modality represented only 7% of undergraduate enrollments, in 2017 distance education increased by 17.6% (more than 1.7 million students), which represents 21.2% of the total number of undergraduate students in the entire Brazilian territory. The data conclude that there is an increase in 226% of newcomers in the distance modality, against an increase of 19% in enrollment in on-site courses.¹⁰

The increase in adherence to the distance learning modality, which is indeed already expressive, tends to grow, considering that it is a government proposal included in the program of the current President of the Republic since the 2018 electoral dispute. By analyzing the electoral proposals made by the new government the Federal Senate states that “The president understands this as an effective way to fight the supposed political indoctrination, by extending it also to the basic education of the public network, especially in rural areas. The proposed method of distance learning aims at using technology as a way to lower costs and expand the reach of the school in remote places”.¹¹ Thus, the Executive Power’s focus is to extend distance learning to the entire public education network, with special attention to primary and secondary education.¹²

managers), who develop educational activities in different places and / or times” (BRASIL. Ministério da Educação. 2016. *Resolução CNE/CES 1/2016*. Estabelece Diretrizes e Normas Nacionais para a Oferta de Programas e Cursos de Educação Superior na Modalidade a Distância. Available on: <http://portal.mec.gov.br/docman/marco-2016-pdf/35541-res-cne-ces-001-14032016-pdf/file>. Access on: Aug. 24th, 2020).

⁸ ALVES, Lucineia. Educação a distância: conceitos e história no Brasil e no mundo. *Revista Brasileira de Aprendizagem Aberta e a Distância*, São Paulo, v. 10, 2011, p. 87-89.

⁹ DEFANTI, Francisco. *O descompasso entre a tecnologia e o regulador*: Breves sugestões de como o regulador pode lidar com inovações disruptivas. Available on: <https://www.jota.info/opiniao-e-analise/artigos/o-descompasso-entre-a-tecnologia-e-o-regulador-04032019>. Access on: Aug. 3rd, 2020.

¹⁰ MINISTÉRIO DA EDUCAÇÃO. *Censo mostra que ingresso de alunos cresceu 8,5% em 2008*. Available on: <http://portal.mec.gov.br/component/tags/tag/32123>. Access on: Aug. 3rd, 2020.

¹¹ SENADO FEDERAL. *Novo Governo promete mudanças profundas na educação*. Available on: <https://www12.senado.leg.br/noticias/materias/2019/01/28/governo-promete-mudancas-profundas-na-educacao>. Access on: Aug. 4th, 2020.

¹² It is worth noting that such policies must be related to the development of the educational field in a way that is apart from ideologies or even from governmental seasonality, in order to set guidelines that are not

Currently, considering the need to reassess activities that require human contact, in order to avoid crowding and the transmission of Coronavirus, distance learning has proved to be a necessary tool to keep the curriculum and to avoid causing damages to students. Governments took the initiative in order to immediately implement the distance learning modality, with the recording of classes, flexible schedules, development of applications for the elaboration of activities, among other tools.¹³

On the other hand, the initiative to implement EaD has revealed the other side of the new technological construction in the educational field: the existence of difficulties for students due to lack of access to the Internet or the absence of a family structure, in addition to the lack of preparation of educators to operate new systems. Educators also report that they have faced an oppressive demand, with a high number of messages from parents and students via instant messaging applications and voice calls – besides the tension caused by the whole situation – under threats of absences and disciplinary administrative processes in case of non-compliance with all the syllabus of the subjects.¹⁴

Such questions are raised at this point in order to verify on the effectiveness of distance education. While there are those who affirm that the change to the distance modality is a path of no return as a positive factor;¹⁵ others report that the modality promotes even more inequality, considering the difficulties of access.¹⁶ On the one hand, therefore, there are premises for an attempt to reduce inequalities, expand accessibility, and also to decrease religious and political interference in education. On the other hand, there are narratives of decreased quality of education, increased differences in social strata, difficulties in access and family structure, and also the burden on education professionals.

influenced by restrictive policies. Therefore, they must be considered State policies, not government policies. In this sense, the difference stands out: “government policies are those that the Executive decides in an elementary process of formulating and implementing certain measures and programs, aiming to respond to the demands of the internal political agenda, even though they involve complex choices. State policies, on the other hand, are those that involve more than one State agency, generally passing through Parliament or through different discussion forums, resulting in changes to other preexisting rules or provisions, with an impact on broader sectors of society” (OLIVEIRA, Dalila Andrade. *Das políticas de governo às políticas de estado: reflexões sobre a atual agenda educacional brasileira. Revista Educação & Sociedade*, Campinas, v. 32, n.135, apr./jun. 2011).

¹³ PARANÁ. Secretaria da Educação e do Esporte. *Informações sobre o EAD da Secretaria de Estado da Educação e do Esporte, em implantação nesta semana*. Available on: <http://www.educacao.pr.gov.br/Noticia/Informacoes-sobre-o-EAD-da-Secretaria-de-Estado-da-Educacao-e-do-Esporte-em-implantacao>. Access on: Aug. 4th, 2020.

¹⁴ BORGES, Dani. *Ensino a distância na quarentena esbarra na realidade de alunos e professores da rede pública*. Available on: <https://www.bbc.com/portuguese/brasil-52568678>. Access on: Aug. 4th, 2020.

¹⁵ BORGES, Dani. *Ensino a distância na quarentena esbarra na realidade de alunos e professores da rede pública*. Available on: <https://www.bbc.com/portuguese/brasil-52568678>. Access on: Aug. 4th, 2020.

¹⁶ CARDOSO, William. *Pais e professores reclamam de problemas nas aulas a distância em SP*. Available on: <https://agora.folha.uol.com.br/sao-paulo/2020/05/pais-e-professores-reclamam-de-problemas-nas-aulas-a-distancia-em-sp.shtml>. Access on: Aug. 4th, 2020.

Equality is the element that unites both positions, as the analysis of distance education is essential as a means to reduce inequalities. On the other hand, the effectiveness of the distance modality must correspond to parameters capable of safeguarding the fundamental right to education, preserving the quality of teaching, in addition to following regulation on the topic, which can also, like the teaching method itself, result (in) effective.

Therefore, using the hypothetical-deductive method and bibliographic analysis, the aim of this article is to explore whether distance education is essential in light of the fundamental right to quality education, investigating whether its use promotes equal access to higher education. The study permeates the analysis of the fundamental right to education in the context of distance learning with a focus on the element of equality, as well as the insertion of education in the technological context, in which the distance learning modality appears.

2 The fundamental right to education and equal opportunities

Some historical constructions show that societies can perish due to two types of poverty: one of a social order, whereby opportunities are denied to certain people, while they are open to others; and another, named biological poverty, which puts the lives of individuals at risk due to the absence of shelter and food.¹⁷

Thus, in modern societies two types of injustice would be present: one that occurs due to distribution problems, of a socioeconomic nature and resulting from an unequal sharing of resources; and another (injustice) that occurs due to problems of recognition, caused by cultural and symbolic differentiations that determine how certain groups are seen within society. This can imply serious damages to the well-being of the members of these groups.¹⁸ Within this scenario, equality prevails as an element capable of propagating fundamental social rights to the detriment of social disparities.

Along these lines, the law cannot materialize privileges or persecutions, but it must become an instrument capable of regulating social life in order to treat all citizens equally, and this must be the legal-political content of the principle of isonomy.¹⁹ Thus, the rules are able to accommodate some points of difference that it considers relevant for the purpose of discriminating situations, imposing parallel legal effects and, consequently, unequal to each situation.²⁰ Therefore, legal

¹⁷ HARARI, Yuval Noah. *Sapiens: uma breve história da humanidade*. Porto Alegre: L&PM, 2015. p. 275.

¹⁸ SARMENTO, Daniel. Direito constitucional e igualdade étnico-racial. In: PIOVESAN, Flávia; SOUZA, Douglas de (Coord.). *Ordem Jurídica e Igualdade Étnico-Racial*. Brasília: SEPPIR, 2006. p. 61.

¹⁹ BANDEIRA DE MELLO, Celso Antônio. *O conteúdo jurídico do princípio da igualdade*. 3. ed. São Paulo: Malheiros, 1993. p. 10.

²⁰ BANDEIRA DE MELLO, Celso Antônio. *O conteúdo jurídico do princípio da igualdade*. 3. ed. São Paulo: Malheiros, 1993. p. 13.

protection is provided according to each individual's needs, taking into account the situation each one is dealing with.²¹

It should be noted that “any element residing in things, people or situations may be chosen by the law as a discriminatory factor, which means that, as a rule, it is not in the chosen differentiation trait that any contempt of the isonomic principle ought to be sought”.²²

Starting from the legal content of the principle of equality developed by Celso Antônio Bandeira de Mello, it can be concluded that the existence of a normative set that aims at protecting people who are in a situation of disparity in terms of access to education is in itself a practical demonstration of the application of the principle of equality.

By establishing equality in the caput of article 5, the Constitution of the Republic in Brazil guarantees an isonomy that is not only formal, but also sets a goal by which the State must act positively in order to promote it, seeking to reduce the extreme levels of inequality that plague the society.²³ Likewise, by setting an expressive list of fundamental rights, the Constitution established a social state of law in a material sense.²⁴

The constituent power used action verbs in the Constitution when dealing with the subject of equality, starting from the premise that in Brazil this is something that must be built, demanding positive benefits from the State and society.²⁵ In this way, the fight against inequalities has been done through affirmative actions and public policies endowed with “positive discrimination”, while favoring members of minority groups, in order to guarantee equal conditions already experienced by other segments of society.²⁶

It is wise to remember that the Brazilian constitutional system established a protective regime in relation to fundamental rights, safeguarding them through a double perspective that has a negative meaning: protecting them against abuse of the reforming constituent power, by prohibiting their modification through constitutional amendments that tend to abolish them; in addition to a positive sense: providing that fundamental rights have immediate applicability, thus avoiding omissions by

²¹ TAVARES, André Ramos. *Curso de direito constitucional*. São Paulo: Saraiva, 2015. p. 454.

²² BANDEIRA DE MELLO, Celso Antônio. *O conteúdo jurídico do princípio da igualdade*. 3. ed. São Paulo: Malheiros, 1993. p. 17.

²³ SARMENTO, Daniel. Direito Constitucional e Igualdade Étnico-Racial. In: PIOVESAN, Flávia; SOUZA, Douglas de (Coord.). *Ordem Jurídica e Igualdade Étnico-Racial*. Brasília: SEPPIR, 2006. p. 63.

²⁴ SCHIER, Paulo Ricardo. Constitucionalização no contexto da Constituição de 1988. In: CLÊVE, Clèmerson Merlin (Org.). *Direito Constitucional brasileiro*. v. 1. São Paulo: Revista dos Tribunais, 2014. p. 45.

²⁵ SARMENTO, Daniel. Direito constitucional e igualdade étnico-racial. In: PIOVESAN, Flávia; SOUZA, Douglas de (Coord.). *Ordem Jurídica e Igualdade Étnico-Racial*. Brasília: SEPPIR, 2006. p. 63.

²⁶ FERREIRA FILHO, Manoel Gonçalves. *Princípios fundamentais do direito constitucional: o estado da questão no início do século XXI, em face do direito comparado e, particularmente, do direito positivo brasileiro*. 4. ed. São Paulo: Saraiva, 2015. p. 220-221.

the legislator, the judge and the public administrator.²⁷ The Brazilian legal system based on the Constitution of the Republic adequately addresses inequality from an economic perspective and from other aspects, as it “is concerned with the general development of the personality of living citizens in their space of interference”.²⁸

In the judgment of the direct case of unconstitutionality nº 3,330-1 / DF, which had as the object some provisions of Provisional Measure (*Medida Provisória* – MP) nº 213/04 that instituted the “University for All Program” (PROUNI), the Federal Supreme Court analyzed the role of equality. The rapporteur in that case, Minister Carlos Ayres Britto, stated on his vote that “there is no other way of realizing the constitutional value of equality than through the determined fight against the real factors of inequality – the devaluation of inequality to proceed and justify the imposition of the value of equality”.²⁹

The different levels of the fundamental right to education reveal the importance of regaining the foundations of the theme, in terms of providing a fundamental social right of utmost importance aimed at eliminating inequalities and promoting sustainable national development.

The purposes of education, established in Law No. 9,394 / 1996,³⁰ deserve to be highlighted for the continuation of this analysis. It can be seen that the Law of Directives and Bases of Education places the following as the purposes of teaching: the full development of the student; their preparation for the exercise of citizenship; and their qualification for performing jobs.³¹ Thus, the provision of the fundamental rights to education must correspond to the aforementioned purposes, so that it does not correspond only to a minimum portion of the established levels of education.

Initially, it appears that the higher courts, in their jurisprudence, express the minimum existing elements in terms of education in the provision of early childhood education, for children aged zero to five years old, in daycare centers and preschools. It should be noted that the thesis established by the Supreme Federal Court and the Superior Court of Justice corresponds, in reality, to “a subjective right to the necessary

²⁷ HACHEM, Daniel Wunder. Mínimo existencial e direitos fundamentais econômicos e sociais: distinções e pontos de contato à luz da doutrina e jurisprudência brasileiras. In: BACELLAR FILHO, Romeu Felipe; HACHEM, Daniel Wunder (Coord.). *Direito público no Mercosul: intervenção estatal, direitos fundamentais e sustentabilidade*. Belo Horizonte: Fórum, 2013. p. 207.

²⁸ GABARDO, Emerson. A felicidade como fundamento teórico do desenvolvimento em um Estado Social. *Revista Digital de Direito Administrativo*, v. 5, n. 1, p. 99-141, jan./jun. 2018. DOI: <https://doi.org/10.11606/issn.2319-0558.v5i1p99-141>.

²⁹ SUPREMO TRIBUNAL FEDERAL. ADI 3.330-1/DF. Relator: Min. Carlos Ayres Britto. DJ: 03.05.2012. Available on: <http://redir.stf.jus.br/paginadorpub/paginador.jsp?docTP=TP&docID=353011>>. Access on: Aug. 10th, 2020.

³⁰ BRASIL. *Lei nº 9.394, de 20 de dezembro de 2016*. Available on: http://www.planalto.gov.br/ccivil_03/leis/19394.htm. Access on: Aug. 24th, 2020.

³¹ “Article 2 – Education, duty of the family and the State, inspired by the principles of freedom and the ideals of human solidarity, aims at the full development of the student, their preparation for the exercise of citizenship and their qualification for work.”

assistance to parents who have nowhere to leave their children so they can be able to perform their usual work activities. In this way, the minimum guarantee for the Superior Courts does not in fact aim at education itself, but rather to a subjective right of the worker, established in article 7, XXV of the Constitution of Brazil”.³²

Therefore, regarding equity in terms of the labor market, professional training, access to education and quality of education, there is no way to consider that the herein mentioned position of the courts is capable of guaranteeing equality, for such a position does not even guarantee the right to education itself.

From the perspective of the French sociologist François Dubet, who claims that the focus of equality of positions (also called equality of status) is the reduction of differences in living and working conditions between workers and executives,³³ one could consider that the reduction of inequalities in education can be directly related to the provision of access to the highest levels of education for society.

In the case of an existing minimum regarding education, it is clear that access to secondary education as the minimum necessary for decent living conditions is correct, as it provides greater chances of insertion in the labor market.³⁴ From another perspective, this level of education is shown as a guideline that guarantees access to other fundamental rights, which are only tangible after a certain level of formal education, not failing to include its role as an integrating element of the individual to technologies and an essential element for their joining further education programs.³⁵

In short, it can be said that the high school level of education is a condition for the full development of the personality of each citizen, in addition to enabling their participation in public decisions and allowing them to have access to other fundamental rights. This represents having a minimal, dignifying existence.³⁶

However, it is worth mentioning that “there is no legal basis for supposing that it is up to the State to provide citizens with only those portions of social rights that make up the existing minimum condition, since the content of such rights, disciplined by the Federal Constitution, clearly imposes duties on the Public Power

³² DOTTA, Alexandre Godoy; CABRAL, Rodrigo Maciel. Mínimo existencial na hermenêutica da jurisprudência brasileira referente às políticas públicas relativas ao direito à educação. *Revista de Estudos Constitucionais, Hermenêutica e Teoria do Direito*, São Leopoldo, v. 10, n. 2, p. 138-149, may/aug. 2018.

³³ DUBET, François. *Status e oportunidades: como repensar a justiça social*. Vargem Grande Paulista: Cidade Nova, 2015. p. 12.

³⁴ DOTTA, Alexandre Godoy; CABRAL, Rodrigo Maciel. Mínimo existencial na hermenêutica da jurisprudência brasileira referente às políticas públicas relativas ao direito à educação. *Revista de Estudos Constitucionais, Hermenêutica e Teoria do Direito*, São Leopoldo, v. 10, n. 2, p. 138-149, may/aug. 2018.

³⁵ FREITAS, Daniel Castanha de. Direito fundamental à educação no Brasil e o acesso gratuito à educação básica obrigatória incluindo o ensino médio: a consagração da igualdade de posições à luz do desenvolvimento. In: SANTANO, Ana Claudia; GABARDO, Emerson; NAGARATHNA, Annappa (Coord.). *Direitos Fundamentais, Tecnologia e Educação*. Curitiba: Íthala, 2019. p. 29-50.

³⁶ HACHEM, Daniel Wunder; BONAT, Alan. O ensino médio como parcela do direito ao mínimo existencial. *Revista Opinião Jurídica, Fortaleza*, v. 14, n. 18, p. 144-176, jan./jun. 2016.

to go beyond such existing minimum”.³⁷ Thus, expanding access to higher education is not excluded from the duty to implement public policies, as it does not make part of the essential core of the fundamental right to education.

The implementation of policies aimed at reducing inequality of conditions is fully in line with the very logic of fundamental social rights, for it reaches both the formal and the material dimension of the constitutional statement.

In this perspective, the emergence of new technologies reveals an impact on the area of education and isonomy, in view of the development of disruptive innovations that aim at an increase in the access to teaching and remodeling of the learning processes, especially in higher education.

However, as it has been already discussed, the high number of adherences to distance learning models, for example, does not necessarily mean a reduction in inequalities or improvements in the quality of teaching. The broad access to the fundamental right to education with the aim to eliminate inequalities depends, of course, on the correlation that will be developed between education, technology, regulation and public policies.

3 The Fourth Industrial Revolution and technology applied to education

It is necessary to consider that the historical evolution of information, automation and technology processes have a direct impact on the approach to the theme of education within current models. This is so because technological development has a direct impact on the way services are provided as they are traditionally known.

The first industrial revolution developed automation processes, having a direct impact on how to take advantage of energy sources, which is also known as a revolution in energy conversion.³⁸ In the current phase, we can see unrestrained development of disruptive technologies, with interconnection between systems and improvement of existing technologies.

New technologies, which are increasingly sophisticated, have significant impacts on society and on the global economy.³⁹ Thus, the fourth industrial revolution becomes unique precisely because of the harmonization and integration of multiple discoveries, promoting interdisciplinarity.⁴⁰ It would not be different with regard to the provision of fundamental rights in contemporary times, since the previously

³⁷ HACHEM, Daniel Wunder; BONAT, Alan. O ensino médio como parcela do direito ao mínimo existencial. *Revista Opinião Jurídica*, Fortaleza, v. 14, n. 18, p. 144-176, jan./jun. 2016.

³⁸ HARARI, Yuval Noah. *Sapiens: uma breve história da humanidade*. Porto Alegre: L&PM, 2015. p. 349

³⁹ SCHWAB, Klaus. *A quarta revolução industrial*. São Paulo: Edipro, 2016. p. 16.

⁴⁰ SCHWAB, Klaus. *A quarta revolução industrial*. São Paulo: Edipro, 2016. p. 19.

known models are being questioned before the emergence of a new technology, which can improve, or at least modify the previous paradigm.

In regard to the current technological advancement, it may even be suggested that there is a new paradigm of consciousness; it is incomplete and composed of a myriad of human and technological possibilities that are still unknown.⁴¹ It appears that the technologies are so developed that the human being does not have a single spectrum of how to act, in the face of such a wide disruptive ground. And in the realm of public power, there is the same movement: the disruption of historical processes for the provision of public services, which urgently demand adaptation to innovative realities.⁴²

As previously discussed, the emergence of proposals for the digitization of further education material does not become discordant with the given picture, considering the technological context it is inserted. Under the constitutional normative spectrum, it is necessary to consider a duty of technological update for the Public Administration. In this sense, the crossover of technological development with the fundamental right to education is configured.⁴³

Article 218 of the Constitution of the Republic creates an obligation to promote technological development and innovation for the State, determining that “the State will promote and encourage scientific development, research, scientific and technological training and innovation”. The constitutional text still guides the development of technological research, by establishing that it should focus on the solution of Brazilian problems, as well as on the development of the productive system.⁴⁴

Technological development can be linked to the provision of public services or to the exercise of any administrative activity that promotes technological innovation as a means of development. However, it is worth mentioning that this does not mean that the Public Administration should entirely replace traditional teaching methods by distance learning. The wording of the provision reveals again the imposition of the duty to innovate, which may mean the implementation of new instruments aimed at promoting equal and quality education.

⁴¹ HARARI, Yuval Noah. *Homo Deus: uma breve história do amanhã*. São Paulo: Companhia das Letras, 2016. p. 362-363.

⁴² KREUZ, Letícia Regina Camargo; VIANA, Ana Cristina Aguilar. Admirável mundo novo: a Administração Pública do século XXI e as tecnologias disruptivas. *Interesse Público*, Belo Horizonte, v. 20, n. 110, p. 51-68, jul./aug. 2018.

⁴³ KREUZ, Letícia Regina Camargo; VIANA, Ana Cristina Aguilar. Admirável mundo novo: a Administração Pública do século XXI e as tecnologias disruptivas. *Interesse Público*, Belo Horizonte, v. 20, n. 110, p. 51-68, jul./aug. 2018.

⁴⁴ “Article 218. The State will promote and stimulate scientific development, research, scientific and technological training and innovation. [...] § 2 Technological research will focus mainly on the solution of Brazilian problems and the development of the productive system at national and regional level.”

In this context, hierarchical institutions characterized by simplicity, control, predictability, slowness and stability are learning to adapt to connected, complex, out of control, unpredictable, fast and unstable individuals.⁴⁵ It can be seen, therefore, that the developers of software for education themselves report that educational institutions had an obligation to include technology in teaching, precisely to meet a new profile of students,⁴⁶ one that fits the individual linked to the era of the Fourth Industrial Revolution.

It should be emphasized that “everyone going to prepare courses on digital networks must be aware that teachers and students are social beings and that they learn best in a cooperative system, based on the exchange of information and opinions and on collective work”.⁴⁷ Therefore, the use of technology should promote a cooperative environment that guarantees not only access to education, but the quality of teaching required to ensure that social interaction is effective in the teaching and learning process.

Based on these elements, it can be seen that the use of technology in the field of education is not limited to distance learning. In education, there are several hybrid elements by themselves, such as mixtures of knowledge, values, interdisciplinarity, methodologies, activities, as well as technologies that can be hybrid, and that include activities in the classroom or in digital format, both face-to-face and virtual ones.⁴⁸

Technology appears as an instrument to optimize the provision of the fundamental right to education, guided by scientific evidence to choose the methods to be used, whether by the Public Administration or by the private sector. Thus, it is essential to seek in administrative law elements capable of safeguarding fundamental social rights, considering the fact that it is an activity primarily attributed to the Public Administration.⁴⁹

4 Distance learning (EaD) as an innovation modality and digital inclusion

Combining the duty to encourage technological innovations with the provision of the fundamental right to education, the field of teaching and learning undergoes

⁴⁵ THYMUS. *Thymus – Natura: Contexto de Mundo*. (2016). (11m03s). Available on: <https://www.youtube.com/watch?v=EdPS5LJT6Ts>. Access on: Aug. 24th, 2020.

⁴⁶ SOPHIA. *Conheça os impactos da tecnologia no ensino*. Available on: <https://www.sophia.com.br/blog/gestao-escolar/conheca-os-impactos-da-tecnologia-no-ensino>. Access on: Aug. 5th, 2020.

⁴⁷ KENSKI, Vani Moreira. *Novos processos de interação e comunicação no ensino mediado pelas tecnologias*. São Paulo: Universidade de São Paulo, 2008. p. 14.

⁴⁸ MORAN, José. Educação híbrida: um conceito-chave para a educação, hoje. In: BACICH, Lillian; TANZI NETO, Adolfo; TREVISANI, Fernando de Mello (Org.). *Ensino híbrido: personalização e tecnologia na educação*. Porto Alegre: Penso, 2015. e-PUB Kindle.

⁴⁹ HACHEM, Daniel Wunder. *Tutela administrativa efetiva dos direitos fundamentais sociais: por uma implementação espontânea, integral e igualitária*. Curitiba, 2014. 614 f. Tese (Doutorado) – Programa de Pós-Graduação em Direito, Universidade Federal do Paraná. p. 58.

mutations to adapt to the new digital reality. In this sense, the new tools linked to the provision of the fundamental right to education are closely linked to the need of the public services to undergo adaptations and, consequently, align to the same activity provided by the private sector.⁵⁰

Within the universe of methodologies and possibilities of using technology as an instrument of education, there is distance learning.⁵¹ It is clear that EaD falls within the disruptive innovations, as these are qualified as the actions that use new performance standards, consequently causing misalignment in the rules created by the State in terms of regulation.⁵² It is about the maintenance of fundamental rights and not of new rights to be protected – an expressive paradigmatic change that allows a re-reading of content and form of safeguard.⁵³ In this context, innovations require adequate regulation in order to guarantee the quality of service provision, in addition to promoting qualified training and the elimination of inequalities. In relation to the regulation and structuring of Distance Education, the Law of Directives and Bases of Education – LDB (Law No. 9,394/96) provides different approaches, which consists of reduced transmission costs in commercial channels and means of communication; concession of channels for educational purposes, exclusively; minimum time reserved for commercial channel concessionaires (article 80, §4).

Regarding the levels of education, the LDB has general provisions establishing that elementary education must be in person and, at the same time, that distance learning can be “used as a complement to learning or in emergency situations” (article 32, §4). Subsequently, article 80 states that “The Public Power will encourage the development and placement of distance learning programs at all levels and modes of education”. It places elementary education in person as mandatory, and it provides that distance learning be used in a complementary condition; though it opens the possibility of using distance education for all modalities and levels of education.

⁵⁰ In this sense, it is important to point out that the Constitution of the Republic of Brazil conditions the educational activity to the fulfilment of general norms of education in the national level, so it is paramount that the Public Power allows “Art. 209. Teaching is an available activity for private institutions, provided that the following conditions are fulfilled: I – keeping the general norms for education at national level; II – authorization and quality assessment by the Public Power”.

⁵¹ FIALHO, Sérgio Hage; BARROS, Manoel Joaquim Fernandes de; RANGEL, Marcia Tereza Rebouças. Desafios da regulação do EaD no Ensino Superior no Brasil: Estrutura, diálogo e autonomia institucional. *Revista Gestão e Planejamento*, v. 19, p. 110-125, jan./dec. 2019.

⁵² BAPTISTA, Patrícia; KELLER, Clara Iglesias. Por que, quando e como regular as novas tecnologias? Os desafios trazidos pelas inovações disruptivas. *Revista de Direito Administrativo*, Rio de Janeiro, v. 273, p. 123-163, sep./dez. 2016, p. 131.

⁵³ On the subject, it should be mentioned that: “It seems to me that what is being discussed here is not exactly other generations, but new forms of traffic of fundamental rights (equality, freedom, intimacy, property, information, communication, etc.). These points keep being the same, subjected to other means of exercise, aggression and protection. There is already a draft of the European Union’s Charter of Digital Rights that portrays some of these concerns and expands the sense of fundamental rights for the digital world” (MOREIRA, Egon Bockman. *Direitos fundamentais para pessoas digitais*. Available on: <https://www.gazetadopovo.com.br/vozes/egon-bockmann-moreira/direitos-fundamentais-para-humanos-digitais/>. Access on: Aug. 11th, 2020).

Decree No. 9,057 / 2017, which regulates the aforementioned article 80 of the LDB,⁵⁴ allows the use of the distance learning modality for all levels of education,⁵⁵ defining competences for state, municipal and district authorities to allow the creation of courses and the functioning of institutions in the distance modality in elementary, secondary, technical, youth and adult education, as well as special education.⁵⁶ Finally, in regard to higher education, the Decree only provides for the need for accreditation of private educational institutions that will use the distance modality, according to articles 11 to 19.

The effective regulation of distance learning is provided by Resolution No. 1/2016 of the Ministry of Education, whose contents establish national guidelines and standards for the provision of higher education courses in distance learning. However, the resolution basically restricts the regulation and efficacy assessment of the implementation of distance education through the accreditation and re-accreditation procedures of educational institutions; but it does not monitor the quality and compliance with the program over the year.⁵⁷

Based on such norms, it can be seen that the regulation of distance learning depends on sparse and not so robust rules in terms of regulation. This puts the quality of education in check, in view of the lack of monitoring and effective evaluation of education programs at universities. It is not just a matter of registering educational

⁵⁴ BRASIL. *Decreto nº 9.057, de 25 de maio de 2017*. Available on: http://www.planalto.gov.br/ccivil_03/_ato2015-2018/2017/decreto/d9057.htm. Access on: Aug. 24th, 2020.

⁵⁵ "Article 2 – Basic education and higher education may be offered on a distance basis under the terms of this Decree, subject to the conditions of accessibility that must be ensured in the spaces and means to be used."

⁵⁶ "Article 8 – It is up to the authorities of the state, municipal and district education systems, within the scope of the federative unit, to authorize the courses and the operation of distance education institutions at the following levels and modalities: I – elementary education, under the terms of § 4 of article 32 of Law No. 9,394, as of December 20, 1996; II – high school, under the terms of § 11 of article 36 of Law No. 9,394, as of 1996; III – technical vocational education at secondary level; IV – youth and adult education; and V – special education. Article 8 – It is incumbent upon the authorities of the state, municipal and district education systems, within the scope of the federative unit, to authorize courses and the operation of distance education institutions at the following levels and modalities: I – elementary education, under the terms of § 4 of art. 32 of Law No. 9,394, of December 20, 1996; II – high school, under the terms of § 11 of art. 36 of Law No. 9,394, of 1996; III – technical vocational education at secondary level; IV – youth and adult education; and V – special education."

⁵⁷ The following articles of the Resolution, regarding regulation, are highlighted: "Art. 10. For evaluation purposes, EISs that opt for simultaneous accreditation in the face-to-face and distance modalities must formulate, in an integrated manner, the PDI, PPI and other institutional documents, in accordance with the provisions of this Resolution. Single paragraph: For regulatory purposes, accreditation in the DE mode will be, if approved, subsequently and articulated with the institutional accreditation of the EISs. Article 11 – In any case, institutional re-accreditation must cover all IES activities, programs and actions, including those related to distance education, when applicable. Single paragraph: The Ministry of Education should organize the evaluation and regulatory process of the accreditation and re-accreditation stages, in order to preserve the unity of the IES institutional project, in the form of this Resolution" (BRASIL. Ministério da Educação. 2016. *Resolução CNE/CES 1/2016*. Estabelece Diretrizes e Normas Nacionais para a Oferta de Programas e Cursos de Educação Superior na Modalidade a Distância. Available on: <http://portal.mec.gov.br/docman/marco-2016-pdf/35541-res-cne-ces-001-14032016-pdf/file>. Access on: Aug. 24th, 2020).

institutions and their programs, but ensuring regulation capable of satisfying the fundamental social right in question, namely, education.⁵⁸

Despite the awareness that the referred modality consists of online classes and materials, with flexible schedules for students, it must be emphasized that the LDB itself does not even require attendance control in distance education programs.⁵⁹ This allows for the unusual situation of the students' completion of a higher education course without proving compliance with the workload and the curriculum in relation to effective learning of the subjects.

It is necessary to consider that the emergence of new educational institutions, addressing the varied forms of teaching, demonstrates a drop in quality. As an example, Law courses make evident the absence of adequate regulation of the quality of teaching. In 2018, the number of Law courses amounted to 1,502 and, out of the 1,212 courses that were evaluated then, only 161 were granted the OAB seal of approval. This represents 13.3% of the total number of evaluated courses.^{60 61}

Such pieces of data demonstrate a scenario that is contrary to the purpose of higher education, which is “to train graduates in different areas of knowledge, suitable for insertion in professional sectors and for participation in the development of the Brazilian society, and also to collaborate with their continuous training” – as set by article 43, II of the LDB. The growth of distance education may mean the mere granting of a diploma, without preparation and aptitude for professional life.

Bearing in mind that the acceptability criterion remains negative, since it is linked to quality of education, we start to check adaptability, which deals with obligations related to the diverse needs of individuals. Such needs include people with disabilities, education of youth, adults and other groups,⁶² in addition to serving as a basis for analyzing accessibility in cases where there is no equality of positions in general.

⁵⁸ It is essential to monitor the provision of the service, as well as the development of public policies. In this sense, see: “A fundamental social right (which requires positive benefits from the State) demands not only an immediate obligation of State sponsorship, but a complex chain of governmental actions aimed at satisfying social needs. Therefore, public policies for implementation are necessary. [...] As the maximum provider, the State must act in order to reconcile public investments and expenditures, based on the constitutional and legal provision of social rights” (DOTTA, Alexandre Godoy; CABRAL, Rodrigo Maciel. *Mínimo existencial na hermenêutica da jurisprudência brasileira referente às políticas públicas relativas ao direito à educação*. *Revista de Estudos Constitucionais, Hermenêutica e Teoria do Direito*, São Leopoldo, v. 10, n. 2, p. 138-149, may/aug. 2018).

⁵⁹ “Article 47 – In higher education, the regular academic year, regardless of the calendar year, has at least two hundred days of effective academic work, excluding the time reserved for the final exams, if there is any. [...] §3 The attendance of students and teachers is mandatory, except in distance education programs.”

⁶⁰ FREITAS, Hyndara. *Brasil tem mais de 1.500 cursos de Direito, mas só 232 têm desempenho satisfatório*. Available on: <https://www.jota.info/carreira/brasil-tem-mais-de-1-500-cursos-de-direito-mas-so-232-tem-desempenho-satisfatorio-14042020>. Access on: Aug. 11th, 2020.

⁶¹ Para mais informações, confira-se: ORDEM DOS ADVOGADOS DO BRASIL. Conselho Federal. *OAB recomenda: instrumento em defesa da educação jurídica brasileira*. Brasília: OAB, Conselho Federal, 2019.

⁶² RANIERI, Nina Beatriz Stocco. Educação obrigatória e gratuita no Brasil: um longo caminho, avanços e perspectivas. In: RANIERI, Nina Beatriz Stocco; ALVES, Angela Limongi Alvarenga (Coord). *Direito à educação e direitos na educação*. São Paulo: Cátedra UNESCO de Direito à Educação/Universidade de São Paulo, 2018. p. 40.

In this sense, the point to be analyzed is the possibility of achieving digital inclusion and reducing inequalities through distance learning. It is wise to remember, in this section, that “equality of positions considers that society is distributed in a set of different social positions. It is a kind of ‘network’, in which each individual [...] occupies a specific point and, with the help of the others, form the entire social structure. The main objective of measures that seek equality of positions is to promote social justice by reducing the distance between these social positions”.⁶³

At first, it must be considered that, on the one hand, there are people who have access to state-of-the-art technologies and luxurious living conditions; on the other hand, separated by a few meters, there are people without any access to such material goods, living in peripheral regions.⁶⁴

At this point, it must be emphasized that access to distance learning necessarily depends on basic instruments, such as computers, tablets, smartphones and the Internet. According to official from the Brazilian Institute of Geography and Statistics (IBGE) data from 2018, 55.9% of permanent private households do not have microcomputers or tablets; 66.4% have cell phones only, while 26.8% have cell phones and landline phones; 9.7% reported a non-functioning mobile network service for telephone services or Internet at home; 20.9% of the households do not have access to the Internet.⁶⁵ Such data immediately show that the implementation of a system that depends exclusively on technology is not effective, nor is it able to resolve inequalities.

The pandemic of COVID-19 highlights the unequal conditions of access and ineffectiveness of online platforms as a method of digital inclusion: instability in the treatment of the topic by teachers, who use different platforms and methods, or have not yet adapted to the new reality; students studying on their own due to the difficulty of access to the Internet at home; the feeling of being under pressure and overloaded, which demands more organization from the student for monitoring his learning, among other situations.⁶⁶ In recent surveys performed by the Union of Municipal Education Directors (*União dos Dirigentes Municipais de Educação*

⁶³ FREITAS, Daniel Castanha de. Direito fundamental à educação no Brasil e o acesso gratuito à educação básica obrigatória incluindo o ensino médio: a consagração da igualdade de posições à luz do desenvolvimento. In: SANTANO, Ana Claudia; GABARDO, Emerson; NAGARATHNA, Annappa (Coord.). *Direitos Fundamentais, Tecnologia e Educação*. Curitiba: Íthala, 2019. p. 29-50.

⁶⁴ ROSSI, Danilo Valdir Vieira. Do ativismo judicial na formação de políticas públicas: a falta de vagas em creches. In: RANIERI, Nina Beatriz Stocco; ALVES, Angela Limongi Alvarenga (Coord). *Direito à Educação e direitos na educação*. São Paulo: Cátedra UNESCO de Direito à Educação/Universidade de São Paulo, 2018. p. 330.

⁶⁵ IBGE. *Pesquisa Nacional por Amostra de Domicílios Contínua – PNAD Contínua*. Available on: <https://www.ibge.gov.br/estatisticas/sociais/populacao/17270-pnad-continua.html?edicao=27138&t=resultados>. Access on: Aug. 11th, 2020.

⁶⁶ OLIVEIRA, Maria Victória; OLIVEIRA, Vinícius de. *Aula remota exige maior organização de estudantes e esbarra na falta de internet*. Available on: <https://porvir.org/como-alunos-de-ensino-medio-tem-estudado-durante-a-quarentena/>. Access on: Aug. 11th, 2020.

– UNDIME) and the Council for Innovation of Education (*Conselho de Inovação para a Educação* – CONSED), in partnership with other institutions, it was established that 79% of students said they have access to the Internet, out of whom 46% have access only by mobile phone, which limits the activities developed by teachers, as well as the students' learning conditions.⁶⁷

From another perspective, the attempt to universalize teaching through technology needs to overcome the absence of the spread of the technology itself. As a result, the desired equality ideal highlights social contrast even more. It should be noted that, within the scope of accessibility, distance learning must meet the inclusion criteria for people with disabilities, in view of the intrinsic needs of each group that require special attention. In this sense, the Statute of Persons with Disabilities is the main rule responsible for adapting the Brazilian legal system to the parameters of protection and valuation of persons with disabilities arising from the New York Convention of 2007 (International Convention on the Rights of Persons with Disabilities). Based on such regulations, it is necessary for the public agent to formulate public policies capable of actually implementing accessibility, considering that about 23.92% of the Brazilian population has some type of disability,⁶⁸ and that development is a socializing component in the welfare state.⁶⁹

It should also be noted that in Law No. 8,429 / 92 the above mentioned Statute included the possibility of configuring administrative improbity arising from the willful acts by public agents who fail to comply with the accessibility requirements. This has a direct impact on the acts that authorize the operation of distance learning courses.⁷⁰ It is relevant to mention that non-observance of the accessibility criteria means an offense to the principle of impersonality, since the conduct of the agent that does not fulfill such duties will unbalance the conditions of equality.⁷¹

Therefore, there is a legal imposition that even allows for the accountability of public agents – and individuals who benefit from the act⁷² – who do not comply

⁶⁷ OLIVEIRA, Vinícius de. *Pesquisas mostram o impacto da pandemia em diferentes áreas da educação*. Available on: <https://porvir.org/pesquisas-mostram-os-impactos-da-pandemia-em-diferentes-areas-da-educacao/>. Access on: Aug. 12th, 2020.

⁶⁸ BRASIL. *Cartilha do Censo 2010: pessoas com deficiência*. Available on: https://bibliotecadigital.mdh.gov.br/jspui/bitstream/192/754/1/SNPD_cartilha_2012.pdf. Access on: Aug. 24th, 2020.

⁶⁹ GABARDO, Emerson. *Interesse Público e Subsidiariedade: o Estado e a sociedade civil para além do bem e do mal*. Belo Horizonte: Fórum, 2009. p. 328.

⁷⁰ CARIBÉ, Leonardo Brito. A improbidade administrativa como instrumento de defesa da educação inclusiva da pessoa com deficiência. *Revista Jurídica da AMPPE*, Recife, v. 1, n. 1, p. 114-141, mar. 2016.

⁷¹ PIO, Nuno R. Coelho. A tipificação do descumprimento do dever de acessibilidade como ato de improbidade administrativa. *Revista Brasileira de Estudos da Função Pública – RBEFP*, Belo Horizonte, v. 5, n. 14, p. 173-202, may/aug. 2016.

⁷² In this sense, Law No. 8,429/92 sets that “Article 3 – The provisions of this law are applicable, where applicable, to those who, even if not being a public agent, induce or contribute to the practice of impropriety or benefit from it in any direct or indirect form” (BRASIL. *Lei nº 8.429, de 2 de junho de 1992*. Available on: http://www.planalto.gov.br/ccivil_03/leis/18429.htm. Access on: Aug. 24th, 2020).

with the accessibility criteria set out in the Statute for Persons with Disabilities (*Estatuto da Pessoa com Deficiência*). For this reason, distance learning must establish criteria to guarantee access to people with disabilities, taking into account the various existing disabilities, in order to enable the inclusion and elimination of inequality, even under the risk of incurring administrative impropriety.

Accessibility for people with disabilities suffers the same consequences of digital inclusion to any individual. The possibility of using software to help access for people with disabilities in general⁷³ through assistive technologies is not unknown.⁷⁴ Nevertheless, more than the creation of such tools, access to them must be guaranteed; otherwise, the tools themselves will be useless.

The efficiency of the teaching model analyzed here faces the absence of previous public policies that guarantee accessibility to systems that allow for distance learning. However, one cannot ignore the expressive increase in courses offered through distance learning, as they are not always sought due to the quality of teaching or to effective equal opportunities of access, but to the vigorous lobby promoted by private education institutions that have high profitability with this new model.⁷⁵

In the case of undergraduate courses in Law, for instance, it is evident that the interest in opening and offering new distance learning courses would serve exclusively the economic interests of educational institutions; and perhaps it would not even serve the public interest in such a situation.⁷⁶ After all, the possibility of increasing the hours allowed to be taught in the distance mode, in this way, would certainly result in lower cost with payroll.⁷⁷

⁷³ On the theme: "With regard to Distance Education, one of the main barriers is communication, since this modality requires the use of the computer and the Internet. To use the computer, users with disabilities often need specific tools and software, tools that are known as assistive technologies. Partially sight impaired users, for example, can use screen magnifying software; sight impaired users, on the other hand, often use pieces of software called "screen readers". These pieces of software turn into sound the contents that are on the computer screen, allowing their users to listen to the contents, but a screen reader does not read the images and animations. For this to happen, it is necessary that these graphic elements are associated with textual descriptions that the software can read, thus guaranteeing access to the entire content of the web page. The Internet is a technology tool that has been growing as an important source of information, leisure and education" (SILVA, Solange Cristina da; BECHE, Rose Clér Estivalet; SOUZA, Márcio Vieira de. *A Acessibilidade na Educação à Distância*. Available on: <http://www.labmidiaeconhecimento.ufsc.br/files/2012/07/Artigo-Acessibilidade-na-EaD-ESUD.pdf>. Access on: Aug. 12th, 2020).

⁷⁴ BORGES, Wanessa Ferreira; TARTUCE, Dulcéria. Tecnologia assistiva: concepções de professores e as problematizações geradas pela imprecisão conceitual. *Revista Brasileira de Educação Especial*, Marília, v. 23, n. 1, p. 81-96, jan./mar. 2017.

⁷⁵ GUERRA, Marcel Vitor. Educação superior no Brasil: oferta na OMC, uma reflexão desmistificada, com base em dados estatísticos. *Revista Brasileira de Políticas Públicas*, Brasília, v. 5, n. 1, p. 208-222, jan./jun. 2015.

⁷⁶ CRISTÓVAM, José Sérgio da Silva. *Não há interesse público na autorização de cursos virtuais em Direito*. Available on: <https://www.conjur.com.br/2019-dez-01/jose-cristovam-empresas-beneficiam-cursos-ead-direito>. Access on: Aug. 12th, 2020.

⁷⁷ RIVEIRA, Carolina. *Menos professores, mais margem: a portaria que muda as faculdades privadas*. Available on: <https://exame.com/negocios/menos-professores-mais-margem-a-portaria-que-muda-as-faculdades-privadas/>. Access on: Aug. 12th, 2020.

Therefore, the increase in distance education means a reduction in the quality of teaching, a decrease in costs and an increase in profits for private institutions, an aspect that justifies the significant increase in distance undergraduate courses.

5 Conclusion

The scenario of unrestrained technological development has direct impacts on various sectors of society: the economy, politics and fundamental social rights. From a simple payment procedure – which today does not even need to be made in cash or by using a magnetic card – to biomedicine instruments have been impacted by science and technology.

Within the scope of the fundamental right to education, it is very clear that a paradigmatic change has taken place, with the advent of communication portals, assessments and online work. Amounting to that, even a complete replacement of the classroom by the virtual environment is also clear.

Of the constitutional commandment inscribed in article 218, it can be understood that the State has the duty to encourage scientific and technological development, as well as innovation. Nevertheless, it must be emphasized that this stimulus cannot reach unbridled levels that do not fulfill fundamental rights.

It has been observed, in the construction of the research arguments, an increase of 226% in adherence to the distance learning modality, only in 2017, to the detriment of the 19% increase in enrollment in face-to-face courses. This means that the absence of adequate regulation on the theme is an important factor to be considered, since it is consistent with a scenario of broad market development without guaranteeing the quality of education.

The increase in adhesions – in a much greater extent in the pandemic scenario, in view of the restrictions to the circulation of people imposed by the authorities – demonstrates that there is a mismatch between the development of technology and the respective appropriate regulation. Such disparity is due to the pacing problem, that means, delay in adapting existing regulatory norms and bureaucracy in the development of adequate regulation, in addition to information asymmetry between the regulator and the entrepreneur, due to the lack of technical knowledge. For this reason, the growth of distance learning must take into account the proportional increase in the State's regulatory sector, in view of the link between the provision of educational services – whether by the public or private sectors – to the purposes established in the regulation.

The distance learning modality emerged outside the regular educational institutions, out of business actions that sought new market opportunities, thus persisting as market interest to the detriment of the quality of teaching. In addition, distance learning models based on pedagogical quality are not regulated, considering

that the regulations are aimed at the mere registration of educational institutions without a proper analysis of the program's efficiency, thus aimed at mass education.

The offer of distance education is hindered by lack of equality, due to the lack of equity in the universalization of technologies proven to be the crucial point for such modalities of courses. Therefore, it distances itself from the welfare state, which is inclined to promote happiness beyond freedom, with the reduction of inequalities.

It is relevant to see also that there are other modalities that include technological innovations, thus creating a hybrid educational system. Institutions that innovate in this area emphasize a life project geared to the individuality of each student, with individualized mentoring, culminating in emphasizing values and skills that encompass both knowledge and socio-emotional factors. We must not fail to include the relevance of reestablishing the balance between personal and group learning, observing the learning mode, and having as scope the integration of digital technologies to learners.

Finally, it is certain that the non-use of technology in learning cannot be sustained. However, it is necessary, at all costs, to ensure that innovations are used as a means of optimizing teaching, characterized as another ally of quality in the provision of the fundamental right to education.

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Sumário

Contents

EDITORIAL.....	7
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EDITORIAL.....	9
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Public foment for innovation in artificial intelligence: an assessment based on technological data from patents

Fomento público à inovação em inteligência artificial: uma avaliação a partir dos dados tecnológicos de patentes

Elisa Coimbra, Flávio Luiz de Aguiar Lôbo	11
1 Introduction	12
2 The complexity of innovation, especially when associated with artificial intelligence and the legal mark	15
3 Presentation of patent technology data	19
4 Discussions of results	22
5 Conclusions.....	24
References	25

O reconhecimento do direito à proteção de dados pessoais como direito subjetivo autônomo na ordem jurídica brasileira

The recognition of the right to protection of personal data as an autonomous subjective right in the Brazilian legal system

Fernando César Costa Xavier, Maria Carolina de Oliveira Camargo	27
1 Introdução	28
2 Fundamentos do direito à proteção de dados pessoais	29
2.1 Evolução do direito à privacidade.....	29
2.2 O direito à proteção de dados pessoais	34
3 Proteção de dados pessoais no ordenamento jurídico brasileiro.....	37
3.1 Na Constituição	37
3.2 No Código de Defesa do Consumidor.....	40
3.3 Na Lei Geral de Proteção de Dados Pessoais	40
3.4 Proteção de dados pessoais como direito fundamental implícito	41
4 Reconhecimento do direito à proteção de dados pessoais como direito autônomo ..	42
4.1 Proposta de Emenda à Constituição nº 17/2019.....	42
4.2 Proteção de dados na jurisprudência do Supremo Tribunal Federal.....	44
4.2.1 Mandado de Segurança nº 21.729/DF.....	44
4.2.2 Recurso Extraordinário nº 418.416-8/SC e Habeas Corpus nº 91.867/PA.....	45
4.2.3 Habeas Corpus nº 89.083/MS.....	46
4.2.4 Agravo Regimental no Recurso Extraordinário nº 766.390	47
4.2.5 Recurso Extraordinário nº 673.707/MG	47
4.2.6 Habeas Corpus nº 168.052/SP.....	47
4.2.7 Medida Provisória nº 954 e ADIs nºs 6.387, 6.388, 6.393 e 6.390	48
5 Considerações finais	52
Referências	53

Metaverso: novos horizontes, novos desafios

Metaverse: new horizons, new challenges

Rodrigo Pironti, Mariana Keppen	57
1 Introdução	58
2 Alguns dos desafios jurídicos impostos pelo metaverso	60
3 Metaverso e o <i>compliance</i>	62
4 Metaverso e a Lei Geral de Proteção de Dados.....	63
5 Conclusão	66
Referências	67

Regulatory obstacles of distance learning technology for the promotion of equality in higher education

Os obstáculos regulatórios da tecnologia EAD para a promoção igualitária do ensino superior

Rodrigo Maciel Cabral, Daniel Castanha de Freitas	69
1 Introduction	70
2 The fundamental right to education and equal opportunities	74
3 The Fourth Industrial Revolution and technology applied to education	78
4 Distance learning (EaD) as an innovation modality and digital inclusion.....	80
5 Conclusion.....	87
References	88

Perspectivas e desafios à implementação de Saúde Digital no Sistema Único de Saúde

Perspectives and challenges to the implementation of Digital Health in the Unified Health System

Barbara Mendonça Bertotti, Luiz Alberto Blanchet	93
1 Introdução	94
2 De e-Saúde à Saúde Digital: principais normativas sobre a temática	95
2.1 Normativas da Organização Mundial da Saúde (OMS).....	96
2.2 Normativas do Ministério da Saúde	99
3 Ações da Saúde Digital no SUS	101
4 Considerações sobre desigualdade digital e proteção de dados	104
5 Considerações finais	107
Referências	108

Soft skills na advocacia contemporânea e nos meios consensuais de resolução de conflitos

Soft skills in contemporary law and in consensual means of conflict resolution

Micaella Dallagnolli Freitas, Moisés de Almeida Goes	113
1 Introdução	114
2 O que são <i>soft skills</i> : contexto histórico, conceito e aplicabilidade	117
2.1 Diferença entre <i>hard skills</i> e <i>soft skills</i>	119
2.2 Como desenvolver habilidades interpessoais (<i>soft skills</i>).....	121

3	Inovação jurídica: <i>soft skills</i> na advocacia contemporânea.....	123
4	Competências necessárias para atuar nos meios consensuais de resolução de conflitos	124
5	Considerações finais	128
	Referências	130

The urgency of regulating and promoting artificial intelligence in the light of the precautionary principle and sustainable development

A urgência da regulação e do fomento da inteligência artificial à luz do princípio da precaução e do desenvolvimento sustentável

	Adriana Ricardo da Costa Schier, Cristina Borges Ribas Maksym, Vitória Dionísio Mota	133
1	Introduction	134
2	Artificial Intelligence: what it is, how it works and which functions does it have?....	135
3	Regulating technologies in light of the precautionary principle	140
4	The entrepreneurial state and AI	147
5	Conclusion	150
	References	150

Uma *smart* democracia para um *smart* cidadão: análise de uma plataforma digital gamificada para o exercício de deliberação pública e do controle social

A smart democracy for a smart citizen: analysis of a gamificated digital platform for the exercise of public deliberation and social control

	André Afonso Tavares, Caroline Müller Bitencourt, Carlos Ignacio Aymerich Cano	153
1	Introdução	154
2	Uma <i>smart</i> democracia para um <i>smart</i> cidadão	157
3	Plataforma digital gamificada para exercício de deliberação pública e do controle social.....	162
4	Conclusão	173
	Referências	174

DIRETRIZES PARA AUTORES..... 177

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Política de privacidade

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Conditions for submissions.....

Privacy statement.....