ABSTRACT

The main objective of this study is to examine digital inclusion as a field of State activity and public policies. We first examine some of the meanings attributed to digital inclusion and the public policy dilemmas that arise from them. We do this by referring to the discussions present in human rights literature, understanding the right to communication as one aspect of the issue. We subsequently defend the importance of approaching digital inclusion as a social right through the establishment of a dialogue with the field of education. We then present the concept of digital literacy, which looks far beyond access to ICTs, requiring that the social skills and practices necessary for society’s current technological juncture be defined in order for them to become the focus of new public policies.

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KEYWORDS

Digital inclusion – ICT – Human rights – Public policies – Digital literacy

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DIGITAL INCLUSION AS PUBLIC POLICY: DISPUTES IN THE HUMAN RIGHTS FIELD*

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[...]

1 Introduction

In order to understand digital inclusion as a new field of State action and therefore, of public policies, it is crucial to observe that the term “digital inclusion” is involved in a wide-ranging dispute. Due to its objectives and the ways in which it is conceived, when viewed as one single concept, it transmits little of its complex field of meanings.

In this article, this field is examined on account of its richness on the one hand, and the difficulties that emerge in terms of public policy formulation on the other. It is not uncommon for digital inclusion to be understood as resulting from disputes involving innovations between corporations at the cutting edge of the technology market more than as a subject of public policy. It is also understood more as an issue that needs to be resolved ‘naturally’, expanding access to new technologies, and less as an area where the focus needs to be placed on the subjects, practices and skills necessary for their development.

Inspired by the dialogue with the literature produced in the field of human rights, and understanding the right to communication as part of it, we attempt to analyze the challenges faced by new information and communication technologies (ICT) as subjects of public policies. The results of the analysis lead to the necessity

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Notes to this text start on page 52.
of understanding of the field of digital inclusion as a dimension of citizenship. This understanding is encompassed in the concept of digital literacy, which focuses on the quality of access and the autonomy of the users as targets of government action.

The article begins by showing the context in which the field of digital inclusion emerged and the different roles played by the States in the development of telecommunications, as well as the massification of the new information and communication technologies (ICT). In this context, it is possible to identify different elements of policy among different countries, affording a view on how different visions of digital inclusion are applied. The ways in which human rights are conceived in each of these instances are good cues for understanding the differences.

Next, seeking an in-depth understanding of the disputes concerning the concept of digital inclusion as a human right, we have used public policy analytical models that emphasize “ideas”, that is to say, values and concepts present in the universe of public policy disputes. After examining some assumptions behind these models, we attempt to understand conflicts and meanings which are often not explicit in the discourse of digital inclusion stakeholders but which nevertheless influence the choice for certain policies and not others.

In order to analyze these dilemmas, we use as a reference the example of the emergence of education as a new social right at the beginning of the 20th century, when educating individuals became crucial to a new paradigm of economic development.

The article closes with a discussion of digital literacy as a crucial concept for channeling the struggle for recognition of digital inclusion as a social right and for promoting new public policies focused on the skills and social practices needed for the formation of autonomous citizens in contemporary society.

2 Digital inclusion: meanings that emerge in a new field of State activity

The incorporation of digital inclusion into the field of public policy is recent, especially when it is compared to other social policies, such as health and education, or infrastructure policies, such as telecommunications (MORI, 2011). In this context, the meaning of digital inclusion has become the object of dispute. In addition to defining a multi-faceted field – whose aggregating factor is the focus of new communication and information technologies (ICT), among them computers, cell phones and most importantly, the Internet -, digital inclusion is a term used to describe different actions, programs, and public policies geared towards ICT. Consequently, seeking to understand this concept in a plural way is not overzealous or mere faddism, neither is it uncommon to come across references to the idea of “digital divide/s” in opposition to different kinds of inclusions (BARZILAI-NAHON, 2006).

Castells stresses the importance of the great technological advances experienced at the end of the 20th century, which have given rise to the more recent “technological revolution” of humanity, “bringing about a pattern of discontinuity in the material bases of the economy, society and culture” (CASTELLS, 2005, p. 68). As an example of this extraordinary process, in the United States it took four years for the Internet to reach 50 million users, while it took thirteen, sixteen, and thirty-eight years respectively for
the television, computer and radio to reach that many users (Takahashi, 2000, p. 3).

Despite its capillarity and the acknowledgement of its importance, the distribution of new ICTs has never been equal; on the contrary, it has reproduced a pattern of inequality, first reaching regions where capitalism is at its most advanced and groups which live under the most favored socio-economic conditions. As an example, figures provided by the Brazilian Institute for Geography and Statistics – IBGE - for 2010 show that while in Africa the average of Internet users vary, depending on the region, from 6 to 10 per 100 inhabitants, in South America, the average is 33 users per 100 inhabitants. In North America (the United States and Canada) the average has already risen to 80 users per 100 inhabitants, and in Western Europe there are 82 users per 100 inhabitants. It is against this background that the significance of ICTs in the social structure has become an issue, in which a viewpoint emerges contrasting those who participate with those at the margin of utilization of the new technologies and the ensuing benefits of these transformations. This process has become known internationally as the digital divide or digital gap. In Brazil, we have translated this as ‘exclusion’ (exclusão) or ‘digital breach’ (breaça digital), and its opposite – which carries a positive meaning - is known as digital inclusion (inclusão digital). In English-speaking countries, where it is less commonly used, it is known as digital inclusion.

Mori (2011) finds in international literature the word ‘divide’ meaning misunderstanding, division between parties or the segregation of social groups, which harks back to the civil rights struggles in the United States in the 1960s. It could be said that inclusion is related to debates often concerned with economic, political, social, cultural, and gender inequalities (Mori, 2011, p. 34). In Brazil, the word “inclusion” is also loaded with meaning, given the struggle for social rights set against a historically unequal society, marked by dictatorial regimes during which important advances have been witnessed in the field of social rights in the 20th century, despite the limits imposed on civil and political rights (Carvalho, 2012). Such struggles have disseminated the idea of “social inclusion,” mainly from the middle of the 1970s, as a result of the birth of “new social movements” which to a large degree influenced the content of the 1988 Constitution, known as the “Citizens’ Constitution” (Silva; Yasbek; Di Giovannni, 2004, p. 22). In this context, it does not appear to us that it was by chance that the concept of digital divide – historically more germane to the discussions concerning civil rights – has been the one to prevail in the United States, a country whose society is founded on egalitarian ideas, independence, and personal initiative (Kowarick, 2003, p. 63), while in Brazil, the concept which is taking form is that of “digital inclusion”, marked by the struggle for socials rights, which have historically featured prominently in the country.

3  Different concepts

Throughout the years, the issue of digital inclusion versus exclusion has been approached in different ways, distancing itself from binary logic – having or not having access - with the progressive realization that several possible gradations exist, (Warschauer, 2006) or the concept of “digital inequality” among users (Dimaggio; Hargittai, 2001).
In a bibliographic survey, Mori (2011) identifies three dimensions in which the concept of digital inclusion may be understood: as “access,” as “basic digital literacy,” or as the “appropriation of technologies.” The first focuses on the distribution of goods and services to guarantee access to infrastructure and ICTs. The second dimension focuses on basic ICT skills, which allow the individual to make use of these technologies; and, in this case, both access to the physical means and academic literacy are the necessary requirements for it. The third dimension adds a step to so-called basic digital literacy: more than knowing how to use ICTs, individuals must develop an understanding of the new means that enables them to “own” these resources, “reinventing their uses, and not being mere consumers” (MORI, 2011, p. 40).

Although this last dimension may be understood as a conceptualization of digital inclusion, it has been called by different monikers by some authors concerned with highlighting the sense of appropriation of new technologies, as well as the one of autonomous development of individuals confronted with them, that it encompasses. This is why Schwartz (2006) calls the process that enables individuals to use technologies for building knowledge “digital emancipation”. Silveira (2008) uses the concept of “autonomous digital inclusion”, understanding that both individual knowledge and infrastructure – which is the target of the logic of market competition - are inseparable from the expected autonomy. Warschauer (2006) also discusses the difficulty of encompassing the idea of a form of social development that is greater than mere physical access to computers and connectivity within the concepts of “digital inclusion-exclusion”.

Another concept that emerges is that of digital literacy (SILVA et al., 2005; BUZATO, 2009; ROSA; DIAS, 2012). It originates in the field of education, in which literacy means more than merely being able to read and write and includes the ability to apply knowledge within a context (SOARES, 2004).

Although common sense defines literacy as an individual skill of being able to read and write, theoreticians of the “new literacy” prefer a more wide-ranging definition, which takes into account social contexts of practice associated with literacy [...] that which is considered as skilful reading or writing varies widely according to historical, political and socio-cultural contexts.


As regards ICT, this approach assumes that a digitally literate individual goes beyond dexterity when using digital tools, and is able to find a social use for ICT skills in their day-to-day life, acting in a conscious manner according to their needs. Thus, it can be seen that digital literacy is not to be confused with the idea of basic literacy, which is more geared towards initial technological skills.

We shall return to this theme further on, but let us now turn our attention towards the greater scope and political content established by the line of thought that defends digital inclusion as the appropriation of technology.
3.1 Various goals

Besides the various meanings associated to the concept of digital inclusion, it is also important to pay attention to the various purposes linked to it. As Mori (2011) notes, they are: digital inclusion as an element of economic development; as a solution to social problems; and as a tool for the multidimensional development of the individual, relating to the guarantee of citizen rights.

The approach advocating that economic development is a goal of digital inclusion is founded on the perceived need to give workers skills to increase their opportunities on the marketplace. The line of thinking associating digital inclusion with the solution of social problems bets on the power of technology as a catalyst for change and seeks to make digital inclusion synonymous with social inclusion. According to the author, however, this thinking implies a technological determinism, because it attributes to technology the power to solve problems of very different natures.

Finally, the approach relating digital inclusion to citizen rights is centered on the actors and focuses on the use of ICTs by individuals and communities in various daily activities, in ways that improve their quality of life. It takes into consideration the various dimensions surrounding these individuals and communities as well as the ICTs.

It should be noted that authors advocating for digital inclusion as the appropriation of technologies, discussed above, tend to see the goal of digital inclusion as the fulfillment of rights. Silveira, for example, argues that “[...] it is crucial that people be cognitively skilled, enabled to seek the satisfaction of their needs and the defense of their rights at the same speed as the elites” (SILVEIRA, 2008, p. 37).

In the light of this summarized explanation, it seems clear that digital inclusion appears as a new field of action in societies at the end of the 20th century. The question here is not whether new technologies are important or insignificant – although the way in which they are used, as well as the actors who take advantage of their effects, are the subject of some criticism. (CASTELLS, 2005; SILVEIRA, 2012). The main point in the debate which we identified above concerns what is understood by digital inclusion (access, digital literacy or appropriation of technology) and what is its goal (economic development, solution of social problems or fulfillment of rights), so that citizens may enjoy minimum standards that enable them to develop themselves, within a social scenario which requires the ability to use and the knowledge of new tools and digital resources. Despite partnerships with non-governmental players for technological development and expansion of access in different countries (TAKAHASHI, 2000, p. 33), as well as the strong presence of markets, producing ever more accessible digital tools, digital inclusion, principally in its sense of access to infrastructure, has gained the status of government action in various ways.

3.2 Different approaches, universalization and focalization

An example of a scenario in which the State’s active role is highlighted was the defining of Internet access as a basic right by the French Constitutional Council in a pioneering move, in 2009. Also in France at the end of the 1970s, the Minitel system, which connected a screen to telephones, was developed and distributed free
of charge by the government-owned telecommunications agency. For one of the agency's employees, the goal of the Minitel was: “[...] to computerize French society and assure France's technological independence” (SCHOFIELD, 2012). The device also offered services such as access to medical test results, banking, travel reservations, chats etc. In 1982, it was rolled out nationally and, in the 1990s, it was still used by over 25 million people. Curiously, the Minitel only started to become extinct in 2012, thirty years after its launch, due to its evident limitations compared to the Internet (SCHOFIELD, 2012).

Another experience of State-sponsored technology is the first tele-cottages, made available by Scandinavian governments since 1985, as spaces to provide communications to small towns and rural villages. The object of this action, initially set up in Sweden and Denmark, was more social than technical, and came to be known as the Scandinavian model of telecenters, as opposed to the Anglo-Saxon model. The latter was based on telecenters owned jointly by the public and private sectors, without any focus on vulnerable populations, such as with the first model. The goals of the Anglo-Saxon telecenters were more commercial. Its aims were to provide public access to the most modern technological resources available, to offer courses for businesspeople and workers, and hire out rooms for those wanting to work outside the home, but who did not have an office or tools to do this, in an incentive to telecommuting (MOLNÁR; KARVALICS, 2002).

The Brazilian Communications Ministry in recent years has also provided support to the implantation of public and community telecenters in areas where access is difficult, through cooperation agreements with social organizations. In addition to furniture, equipment, and broadband Internet access, the government offers training grants to local monitors in partnership with non-government organizations (NGOs).

Other countries offer examples involving different players and implantation strategies. In the United States, Computer Technological Centers (CTC) – maintained since the 1990s by non-governmental organizations and subsidies from universities and business – provide access and training courses in ICTs for vulnerable populations with support from sector giants, such as Apple and AT&T. Although this American case does not involve the State, it is interesting in that it highlights the differences in program design, as well as the non-exclusive character of players who might be responsible for digital inclusion activities. Despite the differences in their design, telecenter programs in Brazil and the United States are similar to the Scandinavian model in that they focus on people with little or no access.

Although these programs are obviously not representative of all digital inclusion policies in these countries, they offer a panorama of various possible ways of responding to social demands. At the same time, these experiences are examples of differences both in program conception and in the roles that can be played by the State, which leads to the important debate on universalization and focalization of public policies. In the French example, the role of the State is universal, while the cases chosen from Scandinavia, Brazil and the United States are examples of focalized programs. There are two distinct concepts behind these choices: universalization presupposes that a given good or service is a right, and, therefore, the State must guarantee that the whole population has access to it; focalization, on the other hand,
sees a good or service as a capacity, meaning that the State must provide it only to those unable to obtain it through their own means.

The choice for one approach or another is conditioned by the historical construction of options and political paradigms, as well as by the presence of players (BÉLAND; HACKER, 2004). Although digital inclusion is a recent field, the various ways of conceiving it dialogue, explicitly or not, with a territory of meanings concerning either civil rights, social rights or political rights, depending on the approach. They form a territory of “ideas” (FARIAS, 2003; KINGDON, 2011) that plays an important role in the trajectory followed by the field of digital inclusion as a public policy.

4 Why observe “ideas” and arguments in the analysis of public policy

We understand “ideas” as “the affirmation of values, […], causal relationships, […] solutions for public problems, symbols and images that express public and private entities, as well as worldviews and ideologies” (FARIAS, 2003, p. 23). This concept forms the basis of public policy analytical models that highlight the role of ideas and knowledge. For Kingdon (2011), ideas may be more important than pressure groups in the choice of a particular political agenda. He states: “The content of the ideas themselves, far from being mere smokescreens or rationalizations, are integral parts of decision-making in and around government” (KINGDON, 2011, p. 125). This means that, in decision-making processes, analyzing the ideas at play in the arena – beyond strategies, influence and pressure - is a significant step for understanding both the selection of alternatives to compose the political agenda and the formulation of the policies themselves.

In seeking to understand the complex universe of policy-making involving digital inclusion, with the goal of discerning the paradigms or themes about which there is confrontation and convergence of ideas in decision-making processes, the field of ideas of human rights stands out.

Firstly, as we have already seen, to speak about digital inclusion/exclusion or about a digital means to allude to meanings linked to rights: in Brazil, inclusion/exclusion is a vocabulary used in the fight for social rights; in the United States, divide reminds us of the struggle for civil rights. We have also seen that the field of rights is explicitly referred to in some approaches to digital inclusion, such as the one that sees it as a right of citizens. Moreover, the contrast between universalization and focalization in digital inclusion policies makes clear the dilemma over whether access to and use of ICTs is a right of all, to be provided by the State, or constitutes an individual responsibility, meaning that the State needs to act only to support those do not use it and do not have access to it.

Another evidence that the human rights field strongly influences discussion on digital inclusion is the existence of movements that fight, on the one hand, for freedom of expression, in the field of civil rights, and on the other, for the democratization of communications media, as social and political rights. Such movements include new ICTs in the debate on access to media, disseminating different views of digital inclusion in this disputed territory.
Nevertheless, the recognition of something as a right does not mean an absence of impediments to its achievement, given that human rights are an ideal, and, in some ways reflect what a society should be and not what it is. For this reason, due to its peculiar characteristics, the rights field becomes fertile ground for clashes in the political arena, and the themes pertaining digital inclusion, as we shall see, are a good example of this.

5 Human Rights: spaces for discussing meanings

5.1 An approach to protection of individual freedoms: ICTs as a means

As stated in article 19 of the Universal Declaration of Human Rights, “Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers” (NAÇÕES UNIDAS, 1948).

In addition, article 13 of the American Convention on Human Rights (Pact of São Jose, Costa Rica), in effect since 1978, states that:

Everyone has the right to freedom of thought and expression. This right includes freedom to seek, receive, and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing, in print, in the form of art, or through any other medium of one’s choice. [...] The right of expression may not be restricted by indirect methods or means, such as the abuse of government or private controls over newsprint, radio broadcasting frequencies, or equipment used in the dissemination of information, or by any other means tending to impede the communication and circulation of ideas and opinions. (ORGANIZAÇÃO DOS ESTADOS AMERICANOS, 1969, emphasis added).

In a more recent document, published by the OAS in 2009 through the Inter-American Commission on Human Rights (ICHR), titled A hemispheric agenda for the defense of freedom of speech, one can see an example of the way the debate has developed around the right to freedom of expression. Firstly, this right is associated with the function of protecting the individual right of each person “to share with other people one’s own thoughts and the thoughts of others” (COMISSÃO INTERAMERICANA DE DIREITOS HUMANOS, 2009). Secondly, the importance of freedom of expression is attributed to its “structural relationship to democracy” (COMISSÃO INTERAMERICANA DE DIREITOS HUMANOS, 2009). Finally, freedom of expression is credited with being “an important instrumental function, as it is an essential tool for the exercise of all other fundamental rights” (COMISSÃO INTERAMERICANA DE DIREITOS HUMANOS, 2009), such as the right to participation, education, and religious freedom. Therefore, “given the important instrumental role it plays, this right is located squarely in the center of the hemisphere’s system for the protection of human rights” (COMISSÃO INTERAMERICANA DE DIREITOS HUMANOS, 2009, our translation).

We can see in the international documents dealing with the defense of freedom
of expression the construction of this defense as a **civil right**, protecting the individual. In this context, ICTs, understood as a **means for exercising this right**, gain relevance, and access to them becomes a necessary condition because of their potential and growing popularity as means for disseminating ideas.

### 5.2 Approaching the defense of political and social rights: ICT as spaces of power

According to Spenillo (2008), the right to communication gains strength as a collective right in Brazil and internationally at the beginning of the 21st century, when communication acquires an important role and multiple demands emerge for its questioning and recognition as a right. In this context, ICTs are seen not only as a means that must be accessed, but also as spaces of awareness-raising and power. **Focus on access** to new technologies becomes insufficient.

*The freedoms of information and of expression currently in question are concerned not only with access of individuals to information as receptors, nor with the right to express oneself by ‘any means’ – which sounds vague and does not guarantee, for instance, access and control by citizens to the mainstream media – but with ensuring the right of citizens and of their collective organizations to access means of communication as emissaries – producers and broadcasters – of content.*


*The television and the Internet are, as well as communication practices, far-reaching means of communication maintained by private or public companies which act politically as established players who foster, sustain and hold powers in the current system. It is, therefore, against them that one must fight right of communication for all.*

(Spênillo, 2008, p. 15).

The concept found in these excerpts, which reformulates the idea of freedom of expression, aligns itself with the concept of **media literacy**, which requires individuals that are discerning when faced with traditional written and audiovisual sources, such as television and radio. More recently, it has also incorporated an expectation of the emergence of more active users, who are less consumers of information than participants in the construction of information in the Internet environment. As pointed out by Livingstone (2002, p. 2), “[...]* media literacy is not reducible to a characteristic or ability of the user, but is better understood as a coproduction of an interactive engagement between technology and user.”

Some authors discussing the characteristics intrinsic to the new technologies and the risks of their usurpation have described which are the necessary conditions for the maintenance and expansion of Internet freedoms and for the appropriation of technologies that warrant the right to communication. “Asymmetries” due to the speed of the networks and the neutrality of the information circulating through them can strongly impact the environment so that autonomous individuals can play an important role in the digital media, whether to browse freely and create contents...
of their own interest, or to alter standards, create solutions and innovate existing technological resources, independently of large corporations (SILVEIRA, 2011).

Complementing this picture, which shifts the approach on the role of ICT in societies, the civil society mobilization campaign Communication Rights in the Information Society (CRIS),4 plays an important and original role, by broadening the discussion to the area of human rights after the World Summit on the Information Society, sponsored by the United Nations in the 2000s.

The campaign defends four pillars to sustain the above-mentioned right: communication in the public sphere, which deals with the debate over political participation in society; knowledge of communications, which involves knowing how knowledge generated by society is communicated or blocked, benefiting certain groups; civil rights in communication, in defense of individual freedoms by means of communication and, finally, so-called cultural rights in communication, which involve communication between different cultures and identities, at the individual and social levels.

Under this approach, communication is understood as a right that goes beyond the field of civil rights, progressing in terms of political and social rights by including political participation and cultural rights. ICTs are not only the means for advancing them, but are themselves the object of the dispute for appropriation.

5.3 ICTs as means versus ICTs as spaces of power

By confronting the two approaches presented above, it is possible to conclude that defending the right to communication on the basis of freedom of expression, and considering ICTs as the means for exercising this right, presupposes, in Marshall’s (1967) terms, an equality of status in a context of power inequality – an independent blogger complaining about a media group, for example, would express the full use of this freedom. But when one expands the debate, as some authors do, to question the ways in which ICTs are appropriated by users, as well as their degree of ability to use these technologies, one threatens the established social structure, entering into a dialogue with social rights and even progressing beyond them, if we consider that, historically, social rights have not been aimed at altering the social structure.5

In this sense, someone who learns how to use the new technologies in a critical and independent way may, depending on his degree of literacy, question standards and formats and create new solutions outside the market. There are no logical limits to its development. This observation shows how crucial are the arguments that, in the disputes over the meanings of digital inclusion, see ICTs as spaces of power and broaden the meaning of defending freedom of expression. Converting such ideas into public policies becomes, by this mode of argument, an even greater challenge.6

In this scenario, the debate leaves the exclusive field of civil rights, whose historic ideal is State abstention, to include the field of social rights, based on the expectation of active behavior by the State (MATTEUCCI, 2004). This has direct consequences on the disputes over public policy agenda-building and design that could arise from this scenario, as well as on which players that might be involved in them and which should be the goals of such activities.
We are not dealing only with enabling access to ICTs, but rather with providing it. In this case, the defense of ICTs as spaces of power can make room to the inclusion of independent access to ICTs and digital literacy for all citizens, in order to provide them with tools to appropriate the technology and exercise their civil rights in the context of their lives. Brought to the limit, this approach creates the conditions for advocating for digital literacy to be included in the school curriculum. This would be the crucial moment in which digital inclusion would reach the status of a social right. But there are various challenges to be overcome before this can happen.

6 Digital literacy as social right

6.1 Why digital literacy

We have seen that there is much literature arguing for and many movements and social organizations demanding an expansion of the concept of digital inclusion to include, at the infrastructure level, the guarantee of independent standards in the area of ICTs, and at the social level, autonomous individuals able to appropriate these resources.

This paper is aligned with such a view, but recognizes that the discussion is still limited to communities of cyber-activists and specialists, while most of the population is unaware of the conflicts over ICTs. This makes it difficult to increase pressure for effective public policies and regulatory frameworks dealing with these issues. We feel it is of fundamental importance that efforts to disseminate these issues be done via education, because we see it as the most consistent route, and with greater potential for transformation.

Digital literacy is not a meaningless neologism, but a concept with a history in the field of education. It enables one to foster discussion, in educational terms, of the complex world of new technologies, and to contribute to a society that is capable of both using the new ICTs and of thinking critically about the impacts they produce. In this way, its advocates aim to contribute to the formation of a society capable of building the conditions to reach “digital emancipation” of individuals (SCHWARTZ, 2006) and “autonomous digital inclusion” (SILVEIRA, 2008). Digital literacy can therefore be seen as a synthesizing element that brings with itself the environment best suited for its dissemination: schools.

Educating citizens for making use of ICT tools and developing themselves in their own particular roles should be the key to effective and permanent digital inclusion, viewing it from a rights-based, multidimensional perspective (MORI, 2011), with focus on the users. This education is necessary not only for exercising freedom on the Internet, but also for the autonomous development of individuals, as we have already discussed. It is also crucial for the social, economic, and democratic development of countries, which, when faced with technological changes, increasingly depend on citizens who can adequately use their ability to communicate, coexist, and appropriate the ICTs. Not focusing on this fertile public policy space could mean increased inequality between individuals and societies, within a context in which the concept of citizenship is undergoing transformation.


6.2 Digital literacy and citizenship

The process of emergence of new rights is always surrounded by conflict in societies. Advocating for perspectives that motivate users of ICTs to be not only consumers of available information, but also producers of knowledge, endowed with criticality and autonomy, enters into direct conflict with the private territory of established media and large telecommunications corporations. As Peruzzo points out, “the possibility of the emergence of an unlimited number of ‘journalists’ arises, favoring alternative communications and the attainment of the right to communication” (PERUZZO, 2005, p. 281). The term “journalists”, in this case, refers to any member of the public who is willing to describe and discuss ideas and events independently. This predisposition is crucial, given that the interest of individuals and communities in digital media tends to increase by the extent to which they can find, through its use, information meaningful to their contexts (WARSCHAUER, 2006). The dilemma that arises from this expansion of the right to communication and production of knowledge cannot therefore be ignored. Bobbio summarizes it as follows:

One cannot affirm the existence of a new right in favor of a particular category of people without suppressing some old right, from which other categories of people benefited: recognition of the right not to be enslaved implies the elimination of the right to possess slaves; recognition of the right not to be tortured implies the suppression of the right to torture. [...] But, in most cases, the choice is dubious and needs to be motivated. This depends on the fact that both the right being affirmed and that which is being denied have good reasons behind them [...] The difficulty of choice is resolved with the introduction of limits to the extension of one of the two rights, in such a way that part of the other is also safeguarded.

(BOBBIO, 2004a, p. 14).

The author provides elements for a debate on the barriers that may arise when both the right to independent knowledge from new technologies and the right to ownership of the means of communication are considered legitimate by society. At its limit, this debate challenges the possible changes that the meaning of citizenship may undergo when societies face the appearance of new rights.

According to Marshall, citizenship can be understood as “[... ] a status granted to those who are integral members of a community. All those possessing this status are equal in terms of the rights and obligations pertinent to the status” (MARSHALL, 1967, p. 76). The author continues:

There is no universal principle that determines what these rights and obligations will be, but societies in which citizenship is an institution under development create an image of an ideal citizenship in relation to which success can be measured and in relation to which aspiration can be directed.

(MARSHALL, 1967, p. 76).

Since there are no fundamental principles that define what these rights should be, citizenship is a social and historical construction, which means that what today
is considered a right could cease being so because of social, economic or political changes, among other reasons, since citizenship represents the ideals of societies, or what they wish to be. “What seems important in an historical era and in a certain civilization is not important in other eras or other cultures” (BOBBIO, 2004a, p. 13).

In this context, understanding the process of the emergence of social rights is of great value, and the construction of education as new field of State action in an advanced capitalist country is elucidating.

Until the beginning of the 20th century, in England, while social programs in were generally interpreted as attacks on freedom and civil rights and thus strongly opposed, education took a different route as a social policy because it was understood, even by liberals who supported a minimal State, as necessary for the development of society at the time. Thus the predominant view of “self-improvement” as a solely individual responsibility gave way to a perspective according to which it was a social duty, once it was understood that a fully-functioning society depended on the education of its members (MARSHALL, 1967). The construction of the discourse that inverted the predominant reasoning can be seen in the excerpt below:

*The right to education is a genuine social right of citizenship, because the aim of education during childhood is to shape the future adult. Fundamentally it should be regarded, not as the right of the child to go to school, but as the right of the adult citizen to have been educated.*

(MARSHALL, 1967, p. 73).

It is interesting to note that education, differently from previous social policies, was not expressed in opposition to civil rights, which at the time were only granted to citizens who knew how to read and write. Education, the first social right to be established in England, went from bête noir to promoter of civil freedom. In addition, the transformation of education into a right occurred with an eye to development: the State educates children because it needs educated adults. And it educates all children; education becomes a condition for the enjoyment of individual freedoms. It was thus that an area of individual responsibility was converted into a social duty.

We can say that digital literacy represents, in the twenty-first century, what the paradigm of education represented at the beginning of the twentieth century, since it links the skills needed to deal with the technological revolution and faces the dilemmas inherent to this paradigm. Warschauer (2006) argues that, while school literacy (education) was a pre-requisite for the participation of individuals in the first stages of capitalism, access to ICTs is a condition for participating in the information stage in which we currently find ourselves. A stage that, we must add, imposes new means and standards on the exercise of freedom of expression, a landmark of civil rights.

Despite the affinity among these paradigms, we cannot ignore that the mediation of the market, in the case of digital literacy, is imperative, and it is a great challenge to be overcome. Both proprietary hardware and software are goods that intermediate the relationship between the user and the world of digital knowledge, imposing constraints on the user’s autonomy. An elucidating example of this problem
is given by Silveira (2012) when he affirms that human memory is being “imprisoned” as more users of ICT save their information on digital media with proprietary software formats (languages). This means, he argues, that users can access their information only as long as the formats in which they were saved exist. Considering that proprietary software formats are closed and controlled by the companies that produce them, users’ digital memories are also under their control, and may become inaccessible at the mere whim of corporations.

This is just one example, which, added to the issues discussed above, allows us to observe the impact this could have on the formulation of public policies. If digital literacy is composed of gradations, as Warschauer (2006) explains in the context of access to ICTs, and does not consist of a relationship of opposition between literate and illiterate, then we can imagine that it must be easier to reach a consensus among society’s heterogeneous players about certain levels of literacy to the detriment of others. This means that a literacy level that expresses an individuals’ ability to operate on the labor market as a user of office software, for example, can be more easily granted the status of right – and, consequently, be more easily incorporated into a public policy agenda – than levels of literacy that enable an individual to challenge proprietary software closed formats, given that these would foster questioning of the social order established in the world of ICTs.

Debates such as this highlight the need to define digital literacy in operational terms as well as the importance of identifying literacy levels in order to insert this theme into the agenda of citizenship and public policies. Obviously, this will not occur without conflict; but it will tend to become more concrete as the debate expands to a larger part of society.

6.3 A definition to operationalize the concept of digital literacy

In order to contribute to raising digital literacy from a particular concept in the field of education, concerned with issues still restricted to certain debate circles around digital inclusion, to a subject of broader discussion, we propose an operating definition for the concept. Rosa and Dias (2012) developed a definition of digital literacy based on the study of primary data and literature: “the condition that enables an individual to use information and communication technologies to serve the needs of his/her social milieu and to develop himself/herself autonomously in the information society” (ROSA; DIAS, 2012, p. 51). With an eye to the need to progress in the practical field, whether by creating a school curriculum or by producing an indicator to measure its progress, we suggest that this concept be operationalized through the conjunction of two complementary dimensions of functional skills that an individual must possess: technical-operational skills in ICTs and informational skills in ICTs.

Technical-operational skills are the knowledge necessary to be able to handle ICTs and their tools so as to carry out an activity in a digital environment. For example, if the activity is to communicate with another person virtually, via computer, the technical-operationally literate person must know how to switch on the equipment, use an internet browser, find the appropriate toolbar to type an
address, whether of a social network or an e-mail provider, access his account, type a message in the appropriate place, and send it. Successful accomplishment of these activities denotes a technical-operationally literate person suited to today’s needs (ROSA; DIAS, 2012, p. 51).

**Informational skills**, on the other hand, imply: (a) an ability to handle and integrate information of different levels and formats in the digital environment so that they can be transformed into useful information suited to the intended purposes of the individual; (b) an ability to evaluate information and situations to which one is exposed while using ICTs; and (a) an ability to understand working patterns that allow one to autonomously develop oneself in this environment. To stay with the example of communication between people, an informationally-literate person must be able to use language in a way that suits the medium, so as to express him/herself according to expected norms in the activity being carried out, preparing their message with different language elements – not only textual, if necessary – and with awareness of the veracity and security of the information and the situation (ROSA; DIAS, 2012, p. 51).

However, a digitally literate person will not necessarily fully reach high levels in both dimensions. Some people may possess only some of the operating skills and a greater development of the informational skills, or vice-versa.

In all cases, the skills described only make sense in context, in situations that reproduce day-to-day problems encountered in various social spheres. They are thus less skills of dexterity and more problem-solving skills.

### 6.4 Next steps

As an expression of the recognition of digital literacy as social right, which must be assured through public policies, we are of the opinion that it is first necessary to establish which skills and social practices are needed in order to consider a person as digitally literate. These requirements must point to citizens who are able to use ICTs and are aware of the role and the power these have in society: “Nowadays everything is high-tech, wi-fi, internet, bluetooth, awesome / digital heat proximity, virtual contact / [...] / It’s up to us to know where we stand / know how to use the means without letting the means use us” (EMICIDA, 2010). In Rosa and Dias (2012), we see a prototype developed for a framework of ICT skills and competencies aimed at creating a digital literacy indicator in Brazil. In this study, included in the technical-operational skills are the pillars of recognition and use, and, in the informational skills, the photo-visual, reproduction, ramification, information, and social interaction pillars with their descriptors, with room for expansion in the face of the preeminent need to encourage the integral appropriation of ICTs by citizens.

Simultaneous to the definition of skills and practices, a dialogue should be opened and disseminated within schools – allowing for the content to be appropriated by teachers and educators – without differentiation of disciplines and focused on the first years of schooling. The dichotomy between school literacy and digital literacy must be overcome, and progress made toward an integrating perspective, involving the interaction of skills and knowledge.
Finally, the development of a pedagogical methodology to share and transmit this content is required. This is no small challenge, bearing in mind that the new generations’ interest and desire for discovery about digital tools are not compatible with any of the traditional approaches to transmission of knowledge.

We recognize the challenge in operationalizing this task, considering the complex relationship between society, technology, and the market. As Buzato points out, technologies are not neutral instruments “whose social effects are totally conditioned by the ways in which they are used, or by the intentions of those by whom they are being used” (BUZATO, 2007, p. 39). We cannot fall into the determinist discourse according to which there is a correct way of using these tools or this knowledge, and that this use would naturally generate improvements in living conditions. This would be a “naïve idea about technology [...] which ignores the fact that all technologies reify visions of the world and meanings in the contexts in which they are created” (BUZATO, 2007, p. 40).

The defense of digital inclusion in the context of digital literacy therefore requires a critical eye if we are to avoid being seduced by a normative concept of literacy that does not respect individual and local realities, implying unbalanced power relations between those who define criteria and curriculum and those who have to respond to them. The author throws further light on this:

[][...] a more suitable approach to the relationship between society, technology and culture regarding the issue of digital inclusion should assume that technologies, like language, both influence the contexts in which they arise (or are introduced), and have their meaning, their form and their function transformed in time and in space by the way in which they are practiced in heterogeneous contexts.

(BOZATO, 2007, p. 41).

Defining what citizens must learn in this context is a thorny subject. Nevertheless, the initial step must be taken, otherwise we will be ignoring the potential of new ICTs to reduce inequality and catalyze development, as well as the important distributive role of the State. Qualifying the way it is used and placing the focus on the users is essential, but this is still far from implying a consensus.

7 Final considerations

In light of the discussion proposed here, we understand that, at the actual stage of ICT development, it is not enough to discuss digital inclusion without pressing for a broader meaning of citizenship. In considering the challenges to social development in terms of the relationship between society, technology and the market, digital literacy stands out as the most essential among multiple approaches to digital inclusion, as its features tend to make a stronger contribution towards overcoming these obstacles and attaining the emancipation of individuals, especially when compared to other approaches for accessing and learning how to use ICTs.

Nevertheless, the elevation of digital literacy to the status of a right in a political arena, with heterogeneous players and various interests, will certainly require
negotiations in terms of the levels of knowledge that are to be attained by individuals. There is evidence that, in the field of struggles for rights, the emancipatory knowledge defended by cyber-activists is not the same that is desired by corporations acting to gain new customers. The consequences of this clash are unpredictable.

We need, at any rate, to broaden this discussion beyond the arena of specialists in order to promote widespread awareness of the potential of these new technologies, preventing citizens from reacting passively, as has historically happened in the development of traditional media.

Due to its great importance, digital literacy is a necessary condition for strengthening education and development in today’s society. It would be a mistake to continue ignoring it in the public policy sphere.

REFERENCES

Bibliography and other sources


NOTES

3. We refer here to the classic definitions of Marshall (1967). The author considers that citizenship is a composition of three parts: civil, political and social rights. The civil right groups together the rights needed for individual freedom, such as freedom to come and go, freedom of the press, thinking and faith, the right to property and the right to justice. The political right is composed of the right to participate in the exercise of political power, whether as a member of a political body or as a voter. Finally, the social right groups together rights ranging from the right to the minimum of economic wellbeing and security to the right to take part fully in the social sphere and live the life of a civilized being in accordance with the society’s prevailing standards (MARSHALL, 1967, p. 63-64).
5. For Marshall, as social class awareness develops, the most unpleasant signs of inequality are transformed into something making society uncomfortable. With social rights, better conditions are sought for those who are at the base of the pyramid without, however, altering its structure. Social rights mean, therefore, the right to equality of opportunity, “the equal right to be seen as unequal” (MARSHALL, 1967, p. 101).
6. This fact does not remove the importance of the struggle for freedom of expression as a civil right, which continues to be complex. The organization Article 19 (2012) (www.artigo19.org) reports cases of reclusion and attacks on life, among other situations of violence that members of the public have suffered for having tried to express themselves freely on the web.
7. Proprietary software are programs produced by companies that maintain under their ownership the source-code of the former and charge for their use, normally by the purchase of a license package. Free Software, on the other hand, have open source-codes and cooperative construction, normally involving communities of developers.
8. The pillars of informational skills benefit widely from the composed model of digital literacy proposed by Eshet-Alkalai (2008).
RESUMO

Este estudo tem como principal objetivo abordar a área de inclusão digital como um campo de ação do Estado e de políticas públicas, imersa numa pluralidade de concepções e num espaço de disputa por seus significados. Para isso, examinamos alguns sentidos dados à inclusão digital e os dilemas que deles advêm para a formulação de políticas públicas, tendo como referência as discussões presentes na literatura de direitos humanos e a compreensão do direito à comunicação como uma das faces dessa temática. Defende-se a importância de abordar a inclusão digital como um direito social, a partir do diálogo com a Educação e do conceito de letramento digital, o qual implica um olhar muito além do acesso às TIC e pressupõe a definição das habilidades e práticas sociais necessárias no atual estágio informacional da sociedade, para que sejam foco de novas políticas públicas.

PALAVRAS-CHAVE

Inclusão digital – TIC – Direitos humanos – Políticas públicas – Letramento digital

RESUMEN

El objetivo de este estudio es abordar el área de la inclusión digital como un campo de acción perteneciente al Estado y a las políticas públicas, inmersa en una pluralidad de concepciones y en un espacio de disputa por sus significados. Para ello, examinamos algunos sentidos dados a la inclusión digital y los dilemas que surgen a partir de ellos para la formulación de políticas públicas, utilizando como referencia las discusiones presentes en la bibliografía de derechos humanos y la comprensión del derecho a la comunicación como una de las vertientes de esa temática. Se defiende la importancia de abordar la inclusión digital como un derecho social, a partir del diálogo con la Educación y con el concepto de literacidad digital, lo que implica una mirada que va más allá del acceso a las TIC y presupone la definición de las habilidades y prácticas sociales necesarias en la actual etapa informática de la sociedad, para que se conviertan en el eje de nuevas políticas públicas.

PALABRAS CLAVES

Inclusión digital – TIC – Derechos humanos – Políticas públicas – Literacidad digital