The history of the first Brazilian device for ongoing teacher training through information technology*

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Abstract

The article presents an autobiographical narrative approach to the genesis of the first Brazilian device for ongoing teacher training through information technology, known as the Emerging Technological Information Dissemination System (SDITE). Launched in 1987, during the transition period between the Military Regime and the Democratic Regime, through an initiative funded by the Coordination for the Improvement of Higher Education Personnel (Capes), SDITE was reconfigured in 1992 under the name Latin American Data Communication Network for Technological Education (RedeLET) and, in 2006, became the basis for the e-Tec Brazil Network, which aims to expand and democratize access to public, free technical high school courses through digital networks, through collaboration among the federal government, states, the Federal District, and municipalities. The article brings to light little-known or even unknown facts from the history of Educational Computing in the country and evokes the conceptual foundations of SDITE, which already indicated several innovative perspectives that are currently prominent when it comes to exploring Digital Information, Communication, and Expression Technologies (TICE). SDITE, adopted from 1987 to 1996, followed by RedeLET, adopted from 1996 to 2006, and more recently, the e-Tec Brazil Network, inaugurated in 2006 and still in full operation, together constitute the longest-running experience of ongoing teacher training mediated by TICE in Brazil.

Keywords

Educational Computing – Ongoing Teacher Training – Sociotechnical Network – Internet.

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Introduction

In 1987, Brazil was the stage for the first national initiatives in the field of Educational Computing. That year, within the context of a strategic project by the then Subsecretariat of Technical Education (Setec), part of the structure of the Secretariat of Primary and Secondary Education (SEPS) of the Ministry of Education and Culture (MEC), the first Brazilian device aimed at ongoing teacher training through data communication networks was conceived, designed, and implemented. Through an initiative funded by the Coordination for the Improvement of Higher Education Personnel (Capes), the Emerging Technological Information Dissemination System (SDITE) was created, linking all schools of the Federal Network of Technical Education (Gracindo *et al*., 1986).

Intended to operate in the same manner as the Ciranda project, a pioneering initiative for collaborative network training by the Brazilian Telecommunications Company (Embratel), and strongly inspired by Paulo Freire's concept of dialogics (1980, 1981, 1982, 1983), a pilot project of the system was implemented in 1987 through the circulation and daily distribution of 5 1/4-inch floppy disks and a database management system. Soon after, with the implementation of a telematic network connecting the schools of the Federal Network of Technical Education, SDITE began to function as a digital device for ongoing teacher training, linking all the schools in the network and promoting a series of actions aimed at improving the educational relationships of technical and vocational education in the country.

Starting in 1992, when it was renamed the Latin American Data Communication Network for Technological Education (RedeLET), SDITE was expanded to include technical schools from other countries in Latin America (Lacerda Santos, 1996). The main objectives of RedeLET were the national integration of federal institutions of vocational education, the promotion of ongoing teacher training programs for these institutions, the exchange of knowledge, support for South American countries (Argentina, Uruguay, Chile, Colombia and Ecuador) in interconnecting their databases related to this type of education, as well as the encouragement of exchange among these countries regarding workforce training.

The deactivation of RedeLET in 2006 gave rise to the current e-Tec Brazil Network, launched in the same year. In addition to continuing the goal of providing ongoing teacher training for the current Federal Network of Vocational and Technical Education, e-Tec Brazil aims to expand and democratize access to public and free technical high school courses, always through digital networks, in a collaborative regime between the federal government, states, the Federal District, and municipalities. Just as SDITE had been, the e-Tec Brazil Network was presented on the Ministry of Education's portal as one of the strategic initiatives of the current Secretariat of Vocational and Technical Education to stimulate the development of professional qualification courses, including initial and ongoing training for teachers, administrators, and technical staff, in the distance education modality.

In this article, through the methodology of autobiographical narrative, the history of SDITE is presented, interspersed with various facts from the history of Educational Computing in Brazil. The starting point is a narrative about the emergence and evolution of this first initiative by the Ministry of Education (MEC) for the ongoing distance

training of its technical education teachers. The text then progresses to an explanation of how the system worked and the vectors that influenced its design. Following this is an introduction to the conceptual foundations of SDITE, based on the concepts of collaborative, dialogical, and cooperative learning in networks. The article concludes with some reflections and future perspectives on the evolution of governmental public policies aimed at ongoing teacher training, mediated by Digital Information, Communication, and Expression Technologies (TICE).

Methodology for approaching the history of SDITE

According to Camasmie (2007), the narrative of personal stories relies primarily on memory to take shape. In turn, Trahar (2009) discusses narrative inquiry as a dialogical experience, interested in the meaningful experiences of the narrator himself, who, in this case, is the researcher. Thus, the researcher is not merely an observer but he describes the investigation that interests him as a journey through his own concrete experience and lived history. The narrator presents his own perception and reconstructs a historical account of interest to his field of knowledge. (Auto)biographical research is based on the description, reflection, and introspection, both intellectual and emotional, of the narrator, in tune with authors he selects within a sociocultural context for theoretical dialogue, and with the reader/interlocutor of the (auto)biography (Deloroy-Momberger, 2011; Passegi, 2023).

Evidently, in a self-narrative dynamic, the researcher, disguised as the narrator of his own experience, is not neutral (Oliveira; Satriano, 2021). He lives a duality of proximity and distance, appropriation and estrangement, comfort and anxiety inherent in the fact of telling his own story and judging it worthy of being recorded. Regardless of the approach adopted, self-narrative research must adhere to scientific rigor and be conducted with method, using data production and collection instruments that ensure the reliability of the narrative constructed. The approach may draw from sources such as field diaries (written, recorded, or filmed), created during or after the narrated situation, recollection of experiences through personal documents like agendas, notes, photos, and drawings, or even official documents, published records in the form of articles, books, reports, etc.

Thus, the entire narrative constructed and presented in this article was based on a sequence of memories from the narrator himself, interviews with actors involved in the described events, official documents from the Ministry of Education, research reports, articles published in journals, and full papers published in conference proceedings. The construction of the self-narrative account was also supported by documentary research in libraries and digital repositories and by establishing contacts with individuals likely to corroborate quotes and situations, and, evidently, by recovering memories that had not yet been formally recorded. All of the data was organized into a narrative spreadsheet, which structured them into a timeline, highlighted gaps, and ultimately allowed for the structuring of the self-narrative text presented in the following sections.

SDITE: emergence and evolution

In November 1984, at the peak of General João Figueiredo's government, the last of the military dictatorship that ruled Brazil from April 1, 1964, to March 15, 1985, with the participation of representatives from the Special Secretariat for Informatics (SEI), the National Council for Scientific and Technological Development (CNPq), state education departments, and various bodies of the Ministry of Education (MEC), a Working Meeting on Education and Computing was held, in which I participated as a representative of the then Minister of Education, Esther de Figueiredo Ferraz, the first woman to hold the position of Minister of State in Brazil, whose technical advisory I was part of. The event took place as a result of a series of issues raised in 1983 by the Legislative Chamber of São Paulo to the National Education Council (CNE) in the form of a motion requesting measures for the introduction of computing in primary and secondary schools in that state (Brasil, 1987). The response from the CNE, through the Technical Opinion No. 9., dated January 24, 1984, resulted in a set of recommendations sent to the MEC, aiming to promote the use of computing in education across the country (Brasil, 1984).

All this movement was happening at the same time as the development of the Educom project, a pioneering initiative in educational computing in Brazil, promoted by the Federal Government as part of the project for the computerization of Brazilian society within a set of public policies carried out between 1964 and 1985. These policies aimed for technological autonomy in the fields of computing and microelectronics, associated with a perspective of economic and social progress (Moraes, 1997).

It was within this movement that Minister Esther de Figueiredo Ferraz coordinated the acquisition, by the MEC, for experimental purposes in education, of a set of microcomputers that were only delivered the following year, when the Minister of Education was Mr. Marco Maciel. Thus, in mid-1985, the SEPS, under the management of Professor Anna Bernardes da Silveira Rocha, received a batch of 60 Itautec PC/XT computers, which were entrusted to the Subsecretariat of Technical Education, headed by Professor Zeli Isabel Roesler. Founded in 1979, Itautec S/A was a Brazilian company that manufactured computing equipment, commercial automation, and banking automation, originating from a department of Banco Itaú. It was a 100% national company among the many computer companies created in Brazil in the mid-1980s under the protection of the market reserve established by the national information technology policy, through Law No. 7.232, approved on October 29, 1984, by the National Congress during the Military Regime (Cardi, 2002).

At that moment, the then Secretary of Technical Education, Maurício de Pinho Gama, tasked me with proposing a use for those 60 I 7000 microcomputers, focusing on improving the quality of the teaching staff of the Federal Network of Technical Education, which consisted of 24 Federal Technical Schools, 4 Federal Centers for Technological Education, and 36 Federal Agricultural Schools. It was such an innovative technological arsenal that it even attracted the curiosity of the Minister of Education herself, who, to understand what it was about, went to see those futuristic machines in person.

After several months of addressing the problem and conceptualizing a solution, the proposal for a database system emerged, aimed at disseminating information that the teachers themselves, as specialists in the schools of the Federal Network, considered innovative or 'Emerging Technologies.' This system was named SDITE, and its general configuration was presented to the assembly of directors from all the schools of the Federal Network, gathered on July 4, 1986, in the MEC auditorium, during the launch of the Expansion and Improvement Program for Technical Education (Protec), under the government of President José Sarney, the first civilian president since 1964, who assumed the presidency after the death of the elected president Tancredo Neves. SDITE was developed by a team of systems analysts that included Daltro Xavier Brandão Gracindo, Marco Antônio Longo, Maria Célia Cerqueira, and Sônia Maria Duarte Fávero. It was a pioneering initiative that introduced several innovations, as it marked the first national experience promoted by the MEC, specifically aimed at the ongoing training of teachers through Information Technology.

In 1988, SDITE was implemented experimentally through the BITNET (Because It's Time Network), a mainframe network that transmitted email messages using technology originally developed for another purpose by IBM, as well as through the mailing of diskettes. More than 140 specialists were selected for the project, covering all schools in the Federal Network of Technical Education and all areas of training (specialties in the agricultural, industrial, and services sectors). About 40 educational institutions were interconnected through SDITE, giving rise to one of the first school networks connected through computing in the world, just over a decade after the launch of ARPANET, which pioneeringly connected U.S. higher education institutions to support advanced research work (Lins, 2013).

SDITE was officially presented to its target audience during the 1rst National Congress of Technical Education, held in 1988 in the city of Curitiba, at the Federal Center for Technological Education of Paraná, an event conceived and proposed by Undersecretary Maurício de Pinho Gama. Its excellent reception and the enthusiastic expressions of interest around the project confirmed the urgency and importance of the initiative. The SDITE proposal allowed us to envision a new facet of educational computing, especially when it came to using the computer as an individualized, autonomous educational tool adapted to the interests and needs of each user. For active teachers in the classroom, it was a substantial gain in improving the quality of the pedagogical content offered to students. Students, indirectly benefiting from SDITE, were able to count on teachers motivated by the experience of collaborative network, in a process of continuous knowledge updating.

In 1989, the SDITE proposal was consolidated and was even included, by the Minister of Education at the time, Hugo Napoleão do Rego Neto, in the National Report presented during the 41st Session of the International Conference on Education in Geneva, as one of the ongoing projects within the national strategy to overcome the difficulties and problems facing secondary education. According to this historic document, maintained on the Public Domain portal of the MEC, SDITE was an effort aimed at systematizing the collection and dissemination of information relevant to the agricultural, industrial, and services sectors. Essentially, it aimed at updating and monitoring technological advancements by the teaching staff of federal technical and agricultural schools (Brasil, 1989).

In 1993, ideas about the educational possibilities of Information Technology were already well advanced and grounded within the MEC, with many supporters across the country. Nine years after the pioneering event promoted by INEP, the journal Em Aberto, from the same institute, had its first edition, now historical, dedicated exclusively to the topic, with contributions from José Armando Valente, Maria Cândida de Moraes, Neide Santos, Ana Regina Rocha, Gilda Campos, Carlos Seabra, Afira Ripper, and Jorge Fróes (INEP, 1993). In the early 1990s, within this positive climate and great expectations about the impact of Information Technology on education at all levels, SDITE's modus operandi was reinforced, and with the start of the dissemination of telematics technology, it evolved into a new, broader, and more agile network. This network, named the Latin American Data Communication Network for Technological Education (RedeLET), was established by SEMTEC/MEC Ordinance No. 467 on August 19, 1992 (Brasil, 1992), remained operational until 2006, and enabled academic-scientific exchange of interest within the technological education community of Latin America (Lacerda Santos, 1996). The Regional Cooperation Center for Adult Education in Latin America and the Caribbean (CREFAL), based in Mexico, was the hub responsible for connecting RedeLET with countries in Central America (Honduras, Costa Rica, Panama, El Salvador, and Nicaragua). Nationally, the network had its headquarters at the Federal Technical School of Goiás, now the Federal Institute of Goiás (Penna, 1992), and was part of the Action Plan of the Department of Educational Policies of the Secretariat for Secondary and Technological Education of the MEC (Brasil, 1994).

That reinvented SDITE, then called RedeLET, had as its main objectives the digital network integration of federal institutions of technological education, the promotion of the continuous updating of teachers from these institutions through continuing education programs, and the exchange and support for Mercosur countries in interconnecting their databases related to technological education (Lacerda Santos, 2002). As indicated by Pablo da Silveira Penna, former coordinator of the system, RedeLET allowed access to other computer networks, such as the previously mentioned BITNET, which extended RedeLET's reach to over 2,000 entities and databases worldwide (Penna, 1992). The use of telematics to achieve this technical-pedagogical goal opened, in the early days of educational computing in Brazil, perspectives of great interest for continuous and distance education activities, both in terms of facilitating access to information and in terms of active participation in the process of knowledge socialization via telematics networks. Just like SDITE, RedeLET addressed the use of telematics networks, now made feasible through the Internet, as a tool for continuing education, communication, or as a means to expand knowledge, by providing teachers with access to updated material in their teaching area (Silva, 2002).

As explained by Ramon de Oliveira in his study on the reform of federal technical education in Brazil (Oliveira, 2003), RedeLET was deactivated due to lack of updates. However, in 2006, the functionalities of SDITE were migrated, along with its expansion, to Rede e-Tec Brasil, which was established immediately after, in 2007, with the aim of democratizing access to public and free technical courses at the high school level, and expanding the offer of continuous education for professional education teachers, through collaboration among the federal government, states, the Federal District, and

municipalities. With more than 600,000 students trained across the country, Rede e-Tec Brasil now has around 400 partner institutions, surpassing 450,000 available spots across federal, state, and municipal educational bodies, and continues the mission envisioned for SDITE: to become a major tool to promote the improvement of professional training at the technical and technological level across Brazil.

SDITE: mode of operation and inspirational agents of its conception

SDITE was conceived as a collaborative, cooperative, community-based device for the continuing education of teachers from the Federal Network of Technical Education. It was inspired by the structure of the first two sociotechnical networks implemented in the country, based on a technology created in France and known as 'packet switching' (Packet Switched Network), which were widely used during that decade but lost popularity with the rise of the Internet (Benakouche, 1997): Transdata (Specialized Data Communication Service), created in 1980, and the National Data Communication Network by Packet Switching (Renpac), created in 1985. These two initiatives, especially Renpac, were important initial references for constructing positive representations of the then unprecedented possibilities for distance learning for teachers in the Federal Network of Technical Education, without the usual and costly logistics of travel across the country. In the mid-1980s, as a member of the technical advisory team of SEPS, I was assigned to monitor the implementation and operation of Renpac, the first public Brazilian data transmission network, which had 13 switching centers and 13 concentration centers distributed across the national territory. From this emerged the idea of establishing a data communication network among the schools in the Federal Network of Technical Education to provide updates and continuing education for teachers in the various areas covered by this network.

In this perspective, the main guiding idea of SDITE was the concept of continuing education provided by peers, organized in a network, a community of teachers, interconnected by microcomputers, collaborating with other teachers in search of improvement, updates, and enhancement of their own teaching practices as conductors of technical-level training. The system had as its backbone a dynamic of data collection (the so-called emerging technological information) by a group of experts selected for this purpose; the aggregation of this information into a communication device (a digital newsletter), and the distribution of this device to all teachers in the Federal Network of Technical Education, both by postal mail and via the emerging packet distribution technology, following the model of Renpac.

In fact, the structure of SDITE was in the form of a network of networks, bringing together virtual communities of teachers from the same area of knowledge in a dialogical interaction for their own continuing education. For example, volunteer teachers from the field of Electrotechnics were flooded with information from their field of expertise (subscription to journals, participation in conferences, etc.); they identified what seemed interesting and innovative (through summaries, reviews, reports) and sent their 'findings' to the central SDITE hub in Brasília. Then, a digital newsletter was prepared and disseminated

to all Electrotechnics teachers in the Federal Network of Technical Education, which acted as a catalyst for various possibilities of continuing education, especially short-term courses, either remotely through the network itself or in person during the annual National Technical Education Congresses.

It was based on the premise that teachers, being aware of theoretical and empirical innovations in their respective fields of knowledge, would be motivated to seek updates, knowledge, and continuing education, which would be provided by the Ministry of Education (MEC), either remotely through SDITE or in person, in the form of seminars, lectures, technical visits, subscription to journals, and the acquisition of bibliographic material for school libraries.

In 1988, SDITE was implemented experimentally. More than 140 specialists were selected for the project, covering all schools of the Federal System of Technical Education and all areas of training (specialties in the agrotechnical, industrial, and services sectors). About 40 educational institutions were interconnected, and the methodology for collecting information was tested over several months. The pedagogical role of the system was also assessed in relation to its function as a trainer of trainers through a strategy of ongoing distance education. Approximately 600 technological pieces of information were collected, and the databases were prepared and tested. Five communication devices, containing emerging scientific and technological information, were published and distributed through the means adopted by the project, highlighting its effectiveness. After the first year of testing, SDITE was officially implemented, consolidating its mode of operation as a collective promoting its own ongoing education, making the initiative an innovative model of collaborative, networked continuing education.

Another important agent that contributed to the idealization of SDITE was the Ciranda project, created by the Brazilian Telecommunications Company (Embratel) in 1982, which gave shape to the first known data communication network community in the country. The Ciranda project connected about 2.000 Embratel employees, distributed across approximately a hundred different cities, who had CP 500 microcomputers interconnected with a central COBRA 530 computer, both made by Prológica, a leading Brazilian microcomputer company that reached its peak in the mid-1980s when it ranked third among national companies in the sector. Among other objectives, Ciranda aimed to create a strategy for the ongoing training of Embratel employees, making it the first national device with this purpose. Driven by the goal of identifying a solution to improve the logistics of ongoing teacher training for the federal network of professional and technological education, we established intensive contacts with the management team of the Ciranda project to discuss operational modes, limitations, and possibilities, particularly those related to adapting the model and implementing it in the schools of the aforementioned network.

The perception that was being built regarding the possibilities of using Information Technology in the continuing education of teachers was also an important agent for guiding the efforts towards the implementation and consolidation of SDITE. The development of this very positive perception occurred on various occasions, among which I highlight my appointment by the Minister of Education, Marco Maciel, to represent him as a member

of the Board of Directors of the then Federal Center for Technological Education of Paraná, now the University of Technology of Paraná. This appointment allowed, during my numerous trips for meetings in the city of Curitiba, an approach to the project of implementing, in 1988, a Computing in Education Center at the Teacher Training Center of Paraná (Cetepar). The implementation of this center was a result of the transfer of the Computing in Education Center (Cied), located at the Regional Education Center of the city of Maringá, to the state capital, which became a hub for research in computing in education. In 1987, the creation of Educational Computing Advisory Committees also occurred, and their actions had a significant impact on the development of Educational Computing in Paraná through future initiatives, such as the Formar Project (1987, 1989, and 1992), courses in Educational Computing specialization, and educational software competitions (1987 to 1989).

Moreover, the conception of SDITE was also driven by an increasingly intense personal engagement with the field of Educational Computing. This involvement was facilitated, among other things, by my participation in 1987 at the now-defunct National Center for Personnel Improvement for Professional Training (Cenafor) in São Paulo, in a course titled Computing and Pedagogical Communication, which covered the foundations of computer-assisted teaching and the LOGO Programming Language. It was also driven by my work with the Ministry of Education's delegation at the Luso Latin American Educational Computing Workshop. Organized by INEP and the Ministry's Information Technology Secretariat, this event was held in Petropolis in May 1989, to identify areas of common interest related to research and human resource development for this emerging field in the participating countries. It was at a parallel meeting during this workshop that the Brazilian Society for Educational Computing (SBIE) was established.

It is important to add that, prior to my involvement with the technical staff of the Ministry of Education, I had already participated, as a Mathematics student, in the First National Seminar on Educational Computing, held at the University of Brasília, from August 25 to 27, 1981. From this participation, my strong interest in Educational Computing emerged, which remains strong to this day and was concretely manifested for the first time in the conception, implementation, and management procedures of this first official government initiative in Brazil exclusively aimed at the continued education of teachers, the SDITE.

From Mindstorms to SDITE: Conceptual Foundations of the System

The South African Seymour Papert (1928-2016), a mathematician, researcher in the Epistemology and Learning group at the Massachusetts Institute of Technology (MIT), and one of the founders of the Media Lab, was one of the greatest visionaries in the use of computers in education. As early as the 1960s, he asserted that every child should have a computer in the classroom. At the time, his theories seemed unrealistic and, at times, excessively futuristic. Between 1967 and 1968, Papert developed the Logo programming language, entirely focused on education and inspired by the constructivist approach. This language gained significant recognition and had a global impact, including in Brazil, where

Papert visited in July 1975 and July 1976 at the University of Campinas, accompanied by the American cognitive scientist Marvin Minsky (1927-2016). These visits sparked true brainstorming sessions among Brazilian researchers, who were already engaged with the educational possibilities arising from the advancement of computing and the growing popularization of microcomputers. However, it was only after the publication of Mindstorms: Children, Computers, and Powerful Ideas, first released in 1980 (Papert, 1980), that the scientific community in the field of education made a significant qualitative leap in the use of computers as a tool to support teaching and facilitate learning.

Having been introduced to Papert's work through a roundtable at the First National Seminar on Computers in Education, held at the University of Brasília in 1981, three components of his theoretical approach regarding the educational possibilities of computers later became conceptual foundations for the development of SDITE.

The first conceptual component derived from Papert's thinking and applied in the design of SDITE was the idea that networked computers would provide children with a greater degree of independence in accessing information about the world, without relying on adults. This idea, which already pointed to collaborative networked learning and autonomy in the learning process, was reinforced by observations of the Ciranda Project, developed by Embratel in 1982, as previously mentioned in this text. This concept was crucial in shaping SDITE as a continuing educational tool, structured around a community of teachers connected remotely through a network. This connection fostered self-directed learning processes, which were autonomous, relevant, and driven by real and concrete professional development needs.

Another central idea in Papert's thinking, integrated into the conceptual principles of SDITE, was that learning should always be an enjoyable experience. Given that, as indicated in the previous paragraph, the goal was to create a continuing education dynamic based on individual autonomy, content relevance, and concrete learning experiences, pleasure became an essential component. Indeed, as demonstrated in the 1987 pilot project, teachers' engagement in the continuing education system was directly proportional to the satisfaction derived from an ongoing process of professional development. This was made possible through the continuous exchange of relevant information, tailored to each educator's field of knowledge and teaching practice.

Consequently, this brings us to the third conceptual component of SDITE, also derived from Papert's mindstorms: individual construction was a crucial factor in building meaningful, relevant, and lasting knowledge. From this perspective, the system for disseminating emerging technological information was designed precisely to serve as a catalyst for individual self-learning processes. It aimed to spark teachers' personal interest in updating their knowledge, enabling them to create educational experiences for their students that were more up to date, relevant, and innovative.

Evidently, other conceptual elements influenced the design of SDITE, such as Paulo Freire's concept of dialogism. However, the three principles derived from Papert's proposals for rethinking education in the digital age were the core foundations of the initiative and remain relevant and valid even today, three decades after the system's conception and implementation. Just as they form the basis of SDITE, those principles also underpin

Constructionism, the educational theory developed by Papert. According to this theory, direct interaction with knowledge—either without intermediaries or in networked learning environments mediated by peers—leads to relevant and meaningful learning experiences. In this model, the learner takes the lead in his own education, as learning depends on his willingness to seek knowledge and engage with it. Thus, at the heart of SDITE was the premise that students—in this case, teachers from the Federal Network of Technical Education—should take direct responsibility for their own continuing education. They were expected to assimilate and attribute meaning to new knowledge, as true learning only occurs when it holds personal significance.

Some future perspectives by way of conclusion

The conception, development, and implementation of SDITE, briefly outlined in this text, were based on the appropriation of Papert's principles and the operational dynamics of the Ciranda Project. From this perspective, SDITE was initially structured around the triad of Information-Knowledge-Expression. By the late 1980s, this triad represented the process of seeking information, individually processing it into knowledge, and sharing it through expressive actions. In this way, SDITE's operational model already pointed toward the concept of a networked learning community, a perspective that remains relevant today and serves as a guiding framework for future technology-mediated teaching and learning initiatives.

The Information-Knowledge-Expression triad, still innovative today and at the forefront of Educational Computing and Distance Education fields, made SDITE a unique experience. Thirty years after the creation and proposal of this system, which started the Ministry of Education's (MEC) efforts in formulating and adopting public policies aimed at continuing teacher education at a distance, several lessons can be learned from this experience. Particularly when considering the peculiarities of each phase, the longevity and continuity of the initiative stand out.

SDITE, which operated from 1987 to 1996, followed by RedeLet from 1996 to 2006, and more recently Rede e-Tec Brasil, launched in 2006 and still in full activity, together represent the longest-running Brazilian experience of continuing teacher education mediated by ICTs. However, despite the knowledge accumulated so far, we are still seeking solutions to provide high-quality distance education that considers the holistic development of the learner and the use of increasingly advanced technological tools. Even though these are three structurally distinct systems, resulting from the technological possibilities available at the times they were conceived, the persistence of the conceptual elements initially adopted in SDITE's 1987 design reveals their relevance and potential as promoters of effective distance learning experiences. SDITE, situated at the start of MEC's official distance education projects, already signaled that the future of the field lies in recognizing the power of networked learning communities, the strength of students when endowed with autonomy in constructing their own knowledge, the consistency of educational relationships that value individual learning paths, and the adoption of active methodologies where ICTs serve as powerful tools in shaping individuals engaged in the Information Society.

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