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ICT in Education Survey 2024

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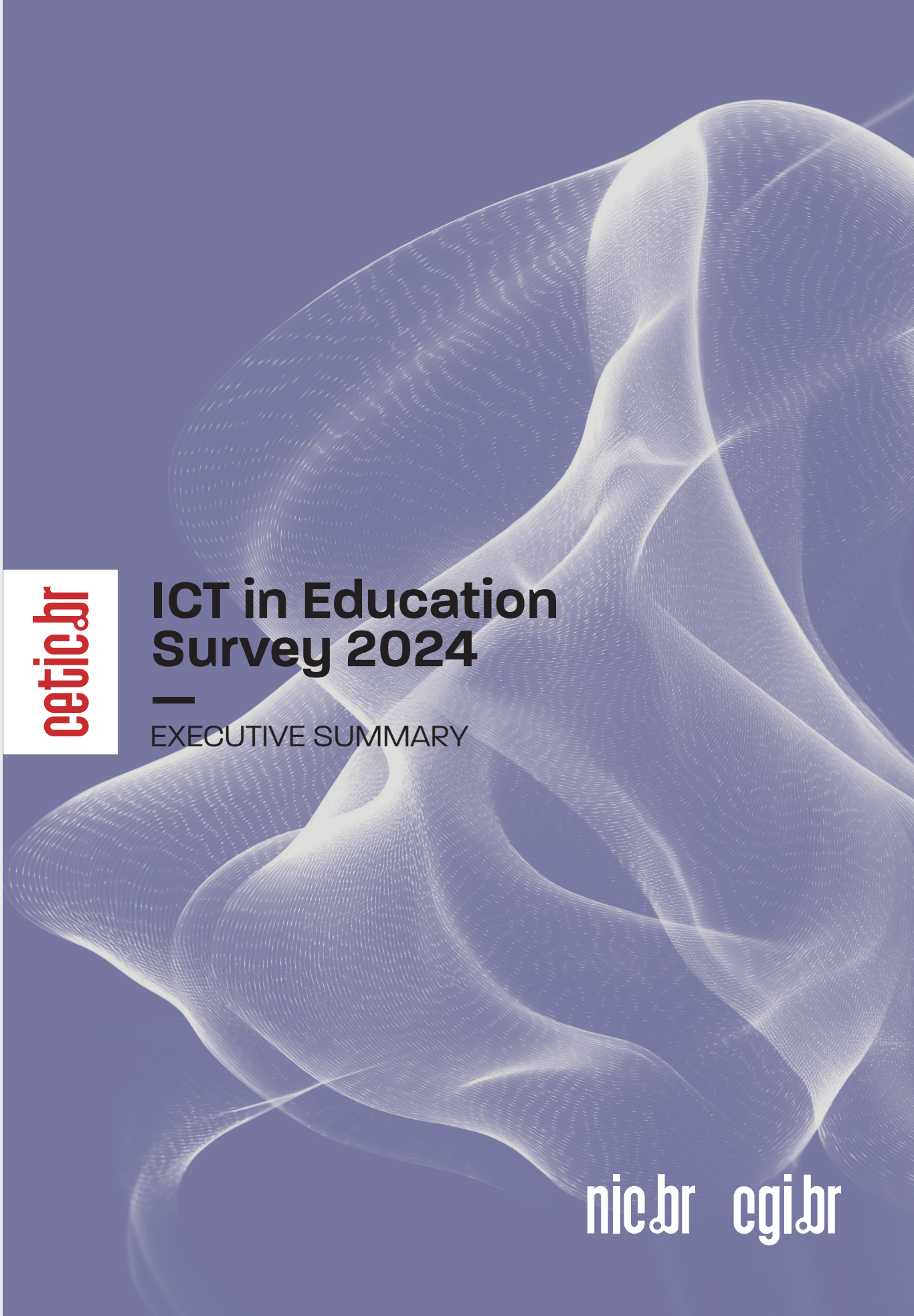
EXECUTIVE SUMMARY



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Executive Summary ICT in Education 2024

Law No. 15.100 was enacted on January 13, 2025, and CNE/CEB Resolution No. 2 was published on March 21, 2025, with the goal to offer digital education and restrict the use of personal digital devices by students in school environments. They introduced new practices related to the use of digital technologies in educational activities in Brazil. According to data from the 2024 edition of the ICT in Education survey,[1] restrictive or reduced use measures were already evident in the data on the adoption of digital resources with students before this period.

75% OF STUDENTS WHO USED THE INTERNET SAID THEY ACCESSED IT AT SCHOOL

Connectivity and use of digital technologies

According to the survey, 75% of Internet users accessed the Internet at school, and 55% of them said they used the institution's computers, including tablets (21%), desktops (38%), and laptops (42%). Among state school students, the use of school tablets grew between the 2022 and 2024 editions of the study, from 5% to 32%.

At the same time as the data indicates widespread access by students to connectivity resources, it also points to inequalities: 29% of students in the North region and 31% of those in the Northeast region accessed the Internet at school via a computer belonging to the institution, a proportion that was 54% in the Center-West, 64% in the Southeast, and 87% in the South.

Between the 2020 and 2024 editions of the survey, the proportion of schools with Internet access increased, especially in municipal schools located in the North and Northeast and in rural areas. However, a smaller proportion of institutions (62%) had digital devices for use by students in educational activities, such as in municipal schools (51%) and those located in rural areas (33%).

Of all the schools, 59% had at least one school space with Internet access and at least one computer for students to use in educational activities (Chart 1). Between the 2020 and 2024 editions, the classroom was the school space that showed the highest levels of growth in the proportion of schools with Internet access, rising from 68% to 88% of all schools.

However, while the proportion of public schools with Internet access available for students to use in the classroom showed an upward trend between the 2020 and 2024 editions of the survey, in private schools these proportions fell from 70% to 52% (Chart 2).

Mediating the use of digital devices by students

According to the 2022 edition of the ICT in Education survey, 55% of students who

[1] Data collection for the 2024 edition of the ICT in Education survey took place between August 2024 and March 2025, mainly covering the period prior to the enactment of Law No. 15.100/2025 by the Ministry of Education (MEC).

used the Internet accessed it at school via their personal mobile phones. In the 2024 edition, this proportion decreased to 45%. The greatest differences in the proportions of students using mobile devices between the two editions of the study were observed among students in municipal, private, and rural institutions.

Concerning the implementation of restrictive measures by schools, between the 2023 and 2024 editions of the survey, the proportion of institutions that did not allow students to use mobile phones increased (from 28% to 39%). The proportion of those that allowed use in certain locations and at certain times decreased (from 64% to 56%). A greater proportion of schools that did not allow the use of the device was observed among municipal and private institutions, as well as those catering to students up to primary education (Chart 3).

These findings were also reflected in the activities carried out during the lessons. Discussions promoted by teachers regarding the rules for the use of personal mobile phones on school premises were mentioned by a large number of students, especially those in lower secondary education (89%) and upper secondary education (92%).

Adoption of digital services in school surveys

The data collected from the students also showed intense use of digital resources in learning activities outside the school environment. Of all the students, 86% said they had searched for information on the Internet about a subject they did not understand well, and 84% had searched the Internet to carry out schoolwork.

Research into the resources used in these activities revealed changes in the way students access information. Although most students still used search engines (74%), video channels or apps had also come to play an important role in students' information habits (72%). Video apps were used by 76% of students in lower secondary education and 89% in the upper secondary education.

72% OF STUDENTS WHO ARE INTERNET USERS HAD ADOPTED VIDEO APPS AS SOURCES OF INFORMATION FOR SCHOOL RESEARCH

The widespread use among students of social networks, video channels or apps, and generative AI platforms as sources of information makes the provision of digital and media educational activities in schools even more relevant. In the 2024 edition of the survey, 47% of students said that their teachers had taught them to check the accuracy

BOX 1

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ADOPTING GENERATIVE AI IN EDUCATIONAL ACTIVITIES

In addition to searching for information on Internet search engines and video applications, 37% of students also mentioned using generative Artificial Intelligence (AI) platforms to do research for educational activities. Among secondary education students, this proportion reached 70%. Of all the teachers, 43% used generative AI to prepare didactic content. However, the inclusion of topics on the critical use of these technologies in the curriculum was not yet widespread, according to the survey data. Of all the students, 33% said that their teachers had taught them how to identify errors and biases in content produced using AI systems, and 19% said that their teachers had talked to them about how to use generative AI applications in school activities — 32% among upper secondary school education students (Chart 4).

CHART 1

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Schools with computers and Internet access for student use, by area and administrative jurisdiction (2020–2024)

Total number of primary and secondary education schools (%)

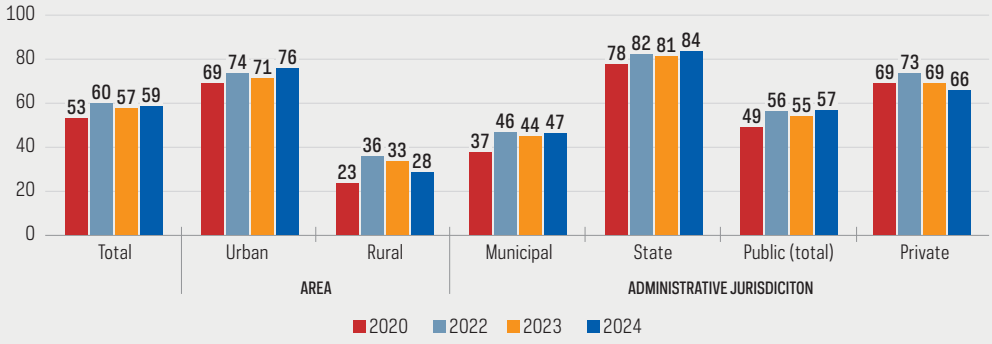

CHART 2

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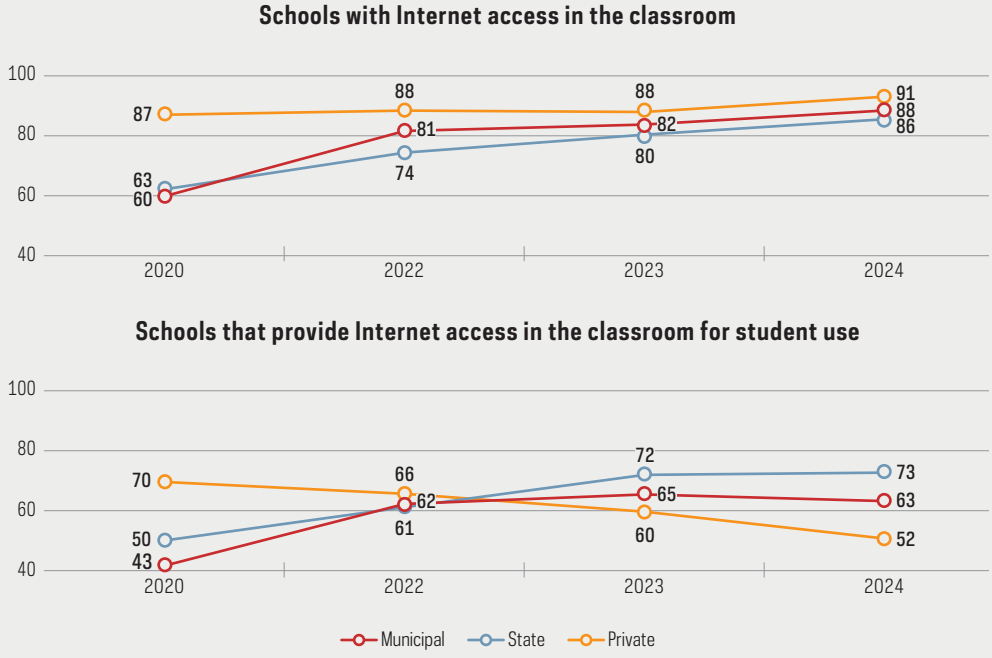
Schools with Internet access, by presence of Internet access in the classroom and availability of access for students in educational activities, and administrative jurisdiction (2020–2024)

Total number of primary and secondary education schools with Internet access (%)



of information and news on the Internet, and 35% said that their teachers had asked them to compare information on different sites.

Digital education

According to 89% of directors of studies, in the 12 months prior to the survey, the school where they worked promoted activities with students on the safe, responsible, and critical use of the Internet. The topics most mentioned by the directors of studies whose schools offered activities for students were cyberbullying, hate speech, and discrimination on the Internet (86%).

Other issues, such as physical and mental health problems caused by the use of digital technologies (77%) and Internet exposure, harassment, or dissemination of images without consent (75%), were also mentioned in relevant proportions. On the other hand, topics related to privacy, data protection, AI, and algorithms were mentioned to a lesser extent.

Also, according to the directors of studies whose schools offered digital education activities to students, 54% said that these topics were addressed in multiple subjects in the curriculum, 7% said that they were addressed in one specific subject, and 9% said they were addressed via extracurricular activities. Furthermore, 30% of the directors of studies said that these activities were carried out only when it was necessary to address these topics, such as when students had questions or when they encountered sensitive situations on the Internet.

Survey methodology and access to data

Carried out annually since 2010, the ICT in Education survey investigates access to, use of, and appropriation of information and communication technologies (ICT) by educational communities, especially students and teachers, in teaching and learning activities and in school management.

Data collection for the ICT in Education 2024 survey took place between August 2024 and March 2025 using the computer-assisted personal interviewing (CAPI) technique. A total of 10,756 interviews was carried out in 1,023 primary and secondary education schools, both public and private, located in urban and rural areas. Among the school community, 7,476 students in the 4th year of primary education to the 3rd year of secondary education, 1,462 teachers, 864 directors of studies, and 954 school managers were interviewed. The results of the ICT in Education survey, including tables of proportions, total values, and margins of error, are available on the website (https://www.cetic.br/en/). The "Methodological Report" and the "Data Collection Report" can be accessed both in the printed publication and on the website.

CHART 3

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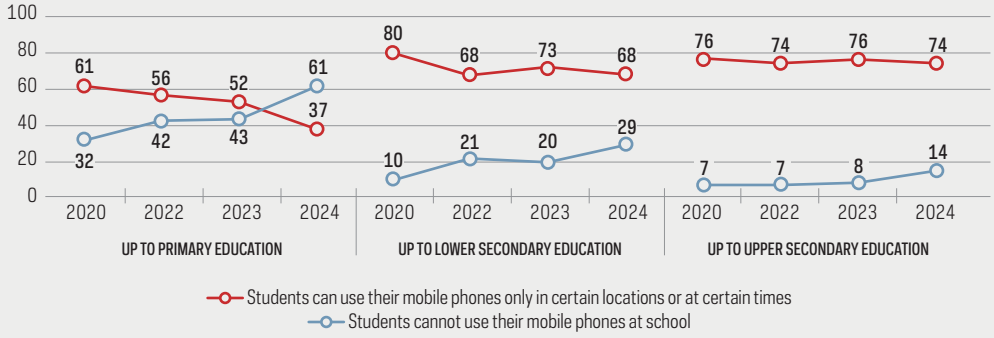
Schools by criteria for students' use of mobile phones at school and highest level of education offered (2020–2024)

Total number of primary and secondary education schools (%)



Among upper secondary school students who sought information for school research...

89%	88%	72%	70%
used video channels or apps	used search engines	searched for information on websites	adopted generative AI tools

CHART 4

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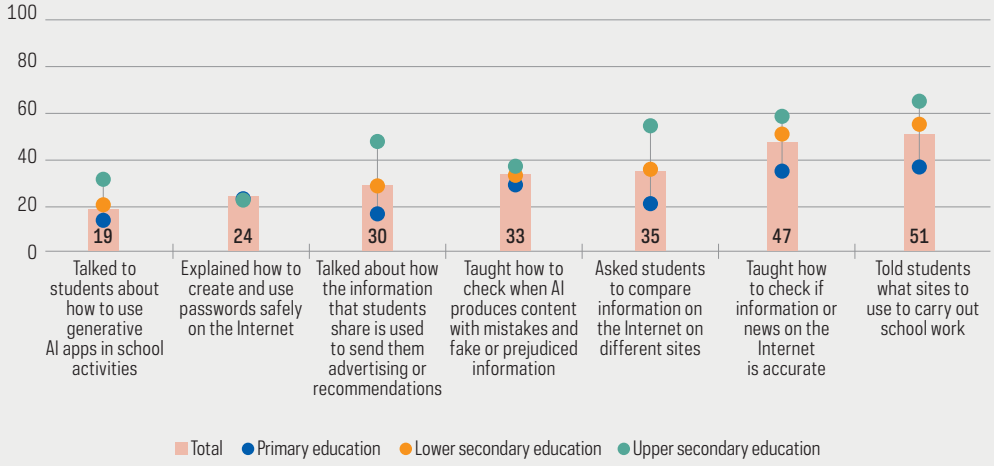
Students who received guidance and support from teachers about the use of digital technologies in the three months prior to the survey, by level of education (2024)

Total number of primary and secondary school students who are Internet users (%)



Access the full survey data

In addition to the results presented in this publication, the tables of indicators, questionnaires, information on how to access the microdata, and the presentation of the results of the launch event are available on the Cetic.br|NIC.br website, as well as other publications on the subject of the survey.

The tables of results (https://cetic.br/en/pesquisa/educacao/indicadores/), available for download in Portuguese, English, and Spanish, present the statistics produced, including information on the data collected and cross-checks for the variables investigated in the study. The information available in the tables follows the example below:

Code and indicator name

Population to which the results refer

F7 - STUDENTS BY INTERNET USE OUTSIDE CLASS HOURS TO CARRY OUT SCHOOL ACTIVITIES IN THE LAST THREE MONTHS

Total number of primary and secondary education school students who are Internet users

PERCENTAGE (%)		SEARCHED THE INTERNET TO CARRY OUT SCHOOLWORK	SEARCHED FOR INFORMATION ON THE INTERNET ABOUT A SUBJECT THEY DID NOT UNDERSTAND WELL	CARRIED OUT GROUP ASSIGNMENTS ON THE INTERNET	WATCHED VIDEO CLASSES OR TUTORIALS ON THE INTERNET	USED DIGITAL TECHNOLOGIES TO PRACTICE SOMETHING THEY ARE LEARNING
TOTAL		84	86	54	74	78
SEX	Female	87	89	57	74	83
	Male	81	82	50	73	72
AREA	Urban	85	86	55	75	78
	Rural	79	79	43	63	72
LEVEL OF EDUCATION	Primary education (4th and 5th year)	72	79	28	63	72
	Lower secondary education	89	89	64	76	78
	Upper secondary education	95	92	80	87	86
ADMINISTRATIVE JURISDICITON	Municipal	75	80	39	65	72
	State	92	90	68	80	81
	Public (Municipal, State and Federal)	83	85	53	72	77
	Private	87	88	55	79	83

Indicator responses

Results tabulation cut-outs: total (population as a whole) and characteristics of analysis (region, age group, etc.), different in each survey

Results: can be in % or totals

Source: Brazilian Network Information Center. (2024). *Survey on the use of information and communication technologies in Brazilian schools: ICT in Education 2024* [Tables].

How to reference the tables of indicators

This publication is also available in Portuguese on the Cetic.br|NIC.br website.