

2. Education and training¹

Education, training and level of skills acquired influence people's well-being and open up pathways and opportunities that would otherwise be precluded. In Italy, the level of education and training that individuals manage to achieve is still largely correlated with social background, gender, socio-economic context and the geographic area in which one lives. Italy is far behind the European averages and the indicators of educational attainment and skill levels have suffered a setback in the last two years. The 2020 pandemic, with the consequent closure of schools and universities and the prevalence of distance and integrated education, have exacerbated the difficulties. The only exception was participation in lifelong learning by the population aged 25-64, which increased in 2021, not only catching up with the 2019 level but overcoming it.

In 2021, cultural activities taking place outside the home suffered a further sharp contraction after the one in 2020, with more significant reductions in attending theatre performances and going to a museum or exhibition. In-presence attendance of libraries also contracted significantly, but in 2021 the habit of online access compensated, at least partially, for the losses suffered in terms of users. In contrast, the indicator of reading books and/or newspapers remained stable.

Children attending nursery school in 2021 came to a standstill

Access to early childhood education services follows the geography of the availability of facilities on the Italian territory with strong deficits in the South and Islands, with the exception of Sardegna, and in small municipalities. In the 2019/2020 educational year, 13,834 early childhood services were active on the national territory² (about 500 more than the previous year) with a coverage of seats, compared to resident children up to 2 years of age, of 26.9%, still far from the 33% parameter set by the EU³.

While the availability of facilities and seats continues to expand, albeit still by a small margin, participation in early childhood education has suffered a setback. The closure of school and education facilities during the COVID-19 pandemic also affected early childhood services in both the 2019/2020 and subsequent education years (Figure 1). This is reflected in the substantial stability of the percentage of children aged 0-2 attending nursery schools, 28%, calculated as a three-year average for the period 2019/2021⁴. Looking at individual years,

1 This chapter was edited by Barbara Baldazzi. Contributors were: Emanuela Bologna, Claudia Busetti, Raffaella Cascioli, Francesca Dota, Donatella Grassi, Giulia Milan, Miria Savioli, Azzurra Tivoli. Box "Education between lockdown and persistence of the pandemic" by Sante Orsini and Alessandra Tinto.

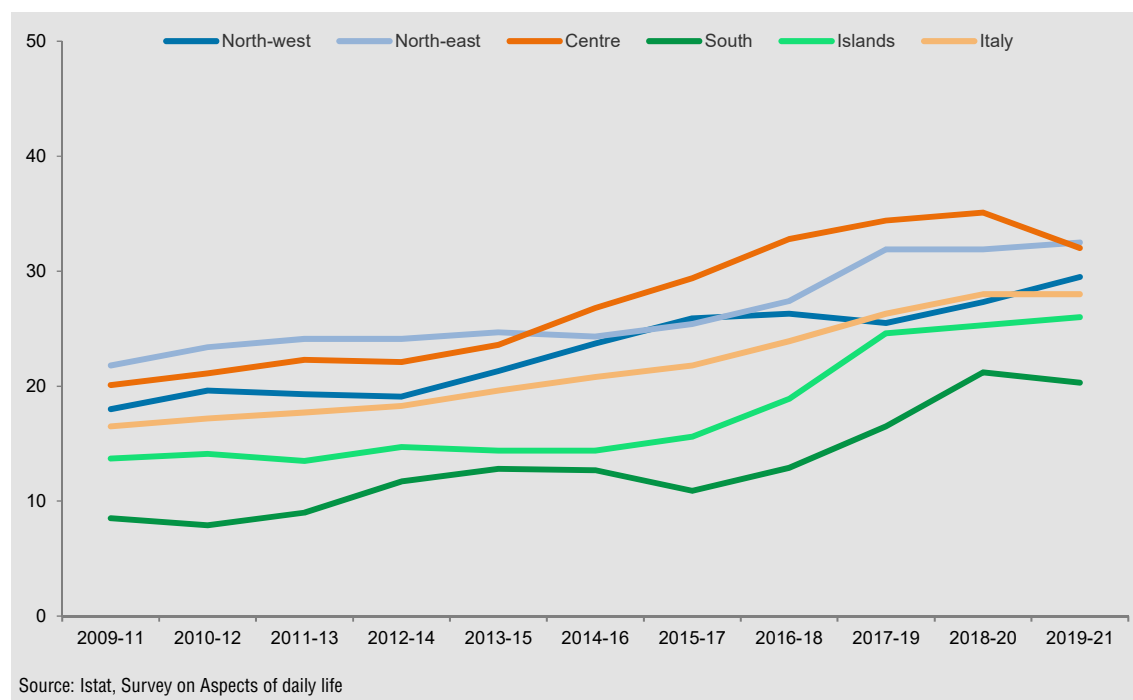
2 See Press Release "Nurseries and supplementary services for early childhood. Educational year 2019/2020", Istat, November 2021 <https://www.istat.it/it/archivio/263120>.

3 At the Lisbon European Council in 2000, the strengthening of services in pre-school age was identified as a priority. The strategy was subsequently broken down into two measurable objectives. For the age before compulsory schooling, between 3 and 5 years, the need was established to offer a seat to at least 90 per cent of children. For early childhood, under the age of 3, the target was set to offer at least 33 seats per 100 children.

4 The indicator on children aged 0-2 enrolled in nursery schools comes from the Sample Survey on Aspects of Daily Life and is constructed as a three-year average; due to the different methodology and the different reference period, the figure slightly exceeds the number of seats surveyed as of 31/12/2019 by the survey on nurseries and supplementary services for early childhood.

there was a decline in 2021 (26.1%, down from 29.2% in 2020) probably due to families' fear of the risk of contagion and the reshaping of family life. The highest inclusion is observed in the North-east regions (32.5% of children aged 0-2 enrolled in nursery schools) and the Centre (32%, down from 35.1% in the three-year average 2018-2020).

Figure 1. Children aged 0-2 years enrolled in nursery school by geographic area. Years 2009/11-2019/21. Percentages

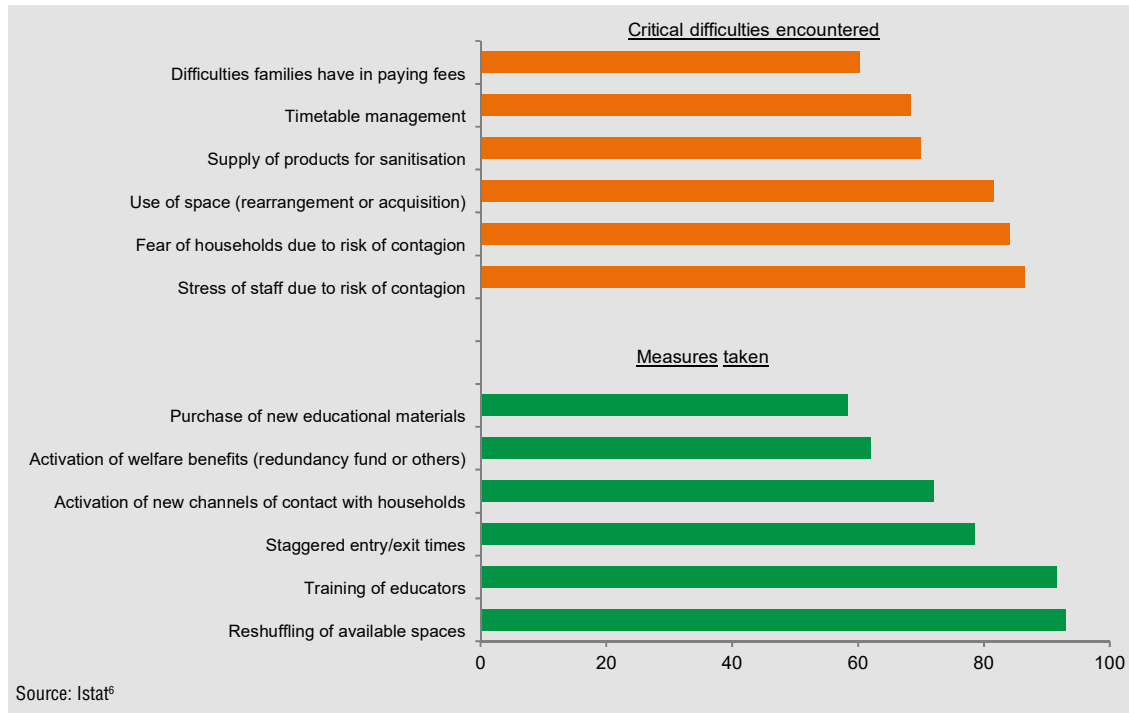


A survey conducted by Istat in April-May 2021⁵ on a sample of public and private crèches and early nursery school sections reveals the many difficulties encountered by the managers of the services, both of an organisational nature for the use of spaces (encountered by 82% of the structures) and timetables (68%), for the supply of products for sanitisation (70%), and of an economic nature such as the difficulties families have in paying fees (60%) and the increase in management costs (Figure 2). In addition, in order to guarantee the reopening of the services in September 2020, many measures and organisational readjustments were adopted: reshuffling of available spaces (in 93% of the facilities), training of educators (92%), staggered entry and exit times (79%), activation of new channels of contact with families (72%), purchase of new educational materials (58%) and recruitment of new staff (51%).

⁵ The survey was promoted by the Department of Family Policies and carried out in collaboration between Istat and Ca' Foscari University - Venice.

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Figure 2. Critical issues encountered and measures taken by public and private nurseries at the opening of the 2020/2021 education year.



Once they reach the age of 4-5, almost all children are, however, included in the educational pathways and even in the two years of the pandemic the share has remained stable: in the 2019/2020 educational year about 96% of children attended pre-school or the first year of primary school, a value that corresponds to the European target to be reached in 2020 (99.1% in the South, 98.4% in the Islands, 94.4% in the North and 94% in the Centre).

Growth of graduates in the adult population and of tertiary qualifications among young people has come to a standstill

In order to monitor the attainment of an adequate level of education, the two main indicators are the share of 25-64-year-olds with at least an upper secondary degree and the share of 30-34-year-olds with a tertiary degree⁷. Although these two indicators have been steadily growing, it is evident that Italy has not been able to catch up with most European Union countries; moreover, in the last year the share of high school graduates and, for the third year running, the share of tertiary degrees have come to a standstill.

In 2021, in Italy, 62.7% of people aged 25-64 had at least a high school diploma, more than 16 percentage points lower than the European average (Figure 3)⁸. Among women, 65.3% had at least a high school diploma in Italy, while the European share reached 80%.

⁶ See footnote 2.

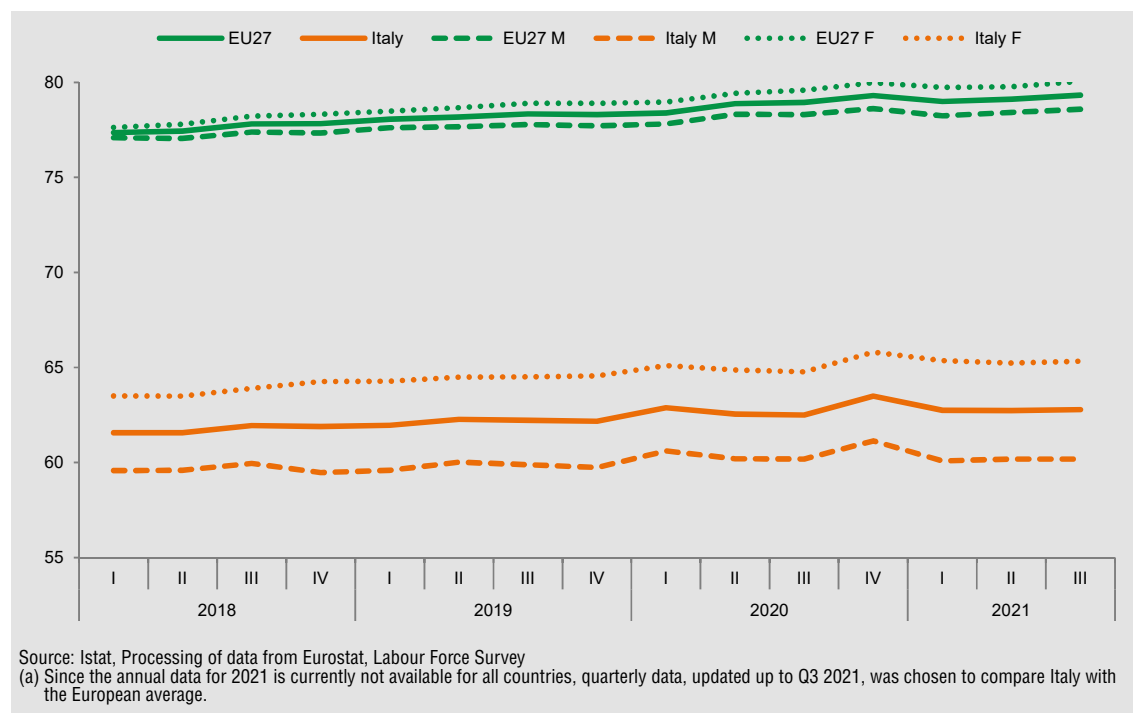
⁷ Tertiary degrees include university, academic (Afam) and ITS higher technical diplomas. Post-graduate or post-AFAM degrees (levels 5-8 of the 2011 Isced international classification) are included.

⁸ Since the annual figure for 2021 is currently not available for all countries, Italy's 2021 figure was compared here with the European average based on the first three quarters of 2021.

Among men, on the other hand, the share of graduates in Italy was 60.1% while in the EU it reached 78.6%. In the first three quarters of 2021, the gap between Italy and Europe remained wider among men, and at the same time, a particularly significant gender gap was observed in Italy (5.2 percentage points difference compared with 1.5 percentage points for the EU average).

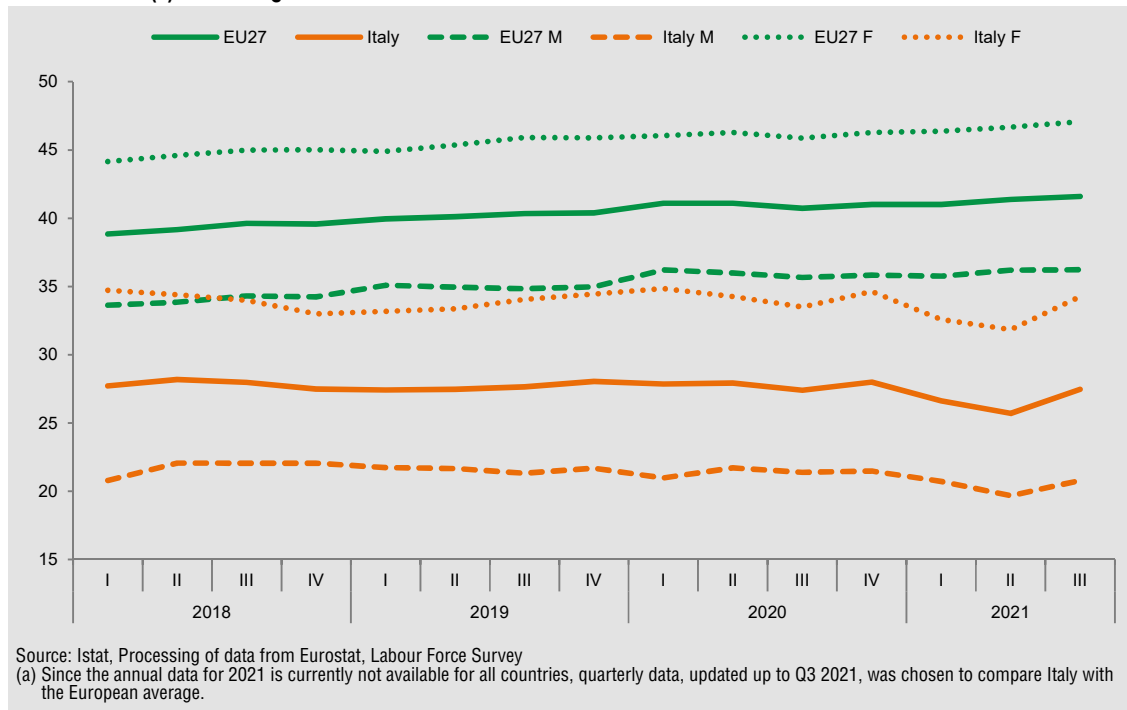
There was considerable heterogeneity throughout Italy, with values below 60% of the population having at least a high school diploma in Puglia, Sicilia, Campania, Sardegna and Calabria (51.7%, 52.4%, 53.4%, 54.2% and 55.7% respectively). Values above 70%, but still below the European average, were found in the Autonomous Province of Trento, Friuli-Venezia Giulia, Umbria and Lazio (respectively 70.4%, 70.6% and 71.3% for both Umbria and Lazio).

Figure 3. People aged 25-64 years having completed at least upper secondary education (ISCED level not below 3) in Italy and EU27. Quarterly data I 2018-III 2021 (a). Percentages



Young people aged 30-34 who held a tertiary degree were 26.8% in Italy compared to more than 41% among their peers in the European Union countries. Moreover, in 2019, 2020 and 2021, in Italy the steady, albeit slow, increase in the share of tertiary graduates came to a halt (Figure 4); the gap with Europe increased again, especially among men. In Italy, the extensive gap between males and females, in favour of the latter, which begins as early as secondary school graduation, continues in further education. 57.7% of female students who graduated in 2019 went on to tertiary education compared to 45.1% of male students. The geography of the phenomenon for the Italian regions confirms the figure for graduates. Less than 20% of tertiary degrees were in Sicilia (17.8%) and Puglia (19.1%); above 30% were in Lazio (30.3%), Veneto (30.8%), Lombardia (31.3%), Molise (33.1%), Emilia-Romagna (33.6%), the Autonomous Province of Trento (33.7%) and Umbria (33.9%). Again, even the regions with the highest percentages did not reach the EU average.

Figure 4. People having completed tertiary education (30-34 years old) in Italy and in EU27 (a). Quarterly data I 2018-III 2021 (a). Percentages



More women hold a tertiary degree than men, but fewer graduate in scientific subjects

Approximately 4 million people in the 27 EU countries obtained a tertiary degree⁹ in 2019. In order to compare data at an international level, this figure is conventionally related to the population aged 20-29. The indicator calculated in this way is about 8% on average in Europe, with considerable fluctuations between countries: from 14.6% in Ireland to 2.1% in Luxembourg.

In Italy, with 416 thousand individuals obtaining a tertiary degree in 2019, the value of the indicator stood at 6.7% (Figure 5) and was up compared to previous years (it was 5.7% in 2013). In almost all EU countries, women were more likely to obtain a tertiary degree. On average, women made up 57% of the total, with the exceptions of Germany and Switzerland where the percentage was around 50%.

In Italy, women account for 57.4% of those who obtained a tertiary degree.

The female record, however, is lost when it comes to the scientific-technological disciplines, the so-called STEM disciplines (science, technology, engineering and mathematics)¹⁰.

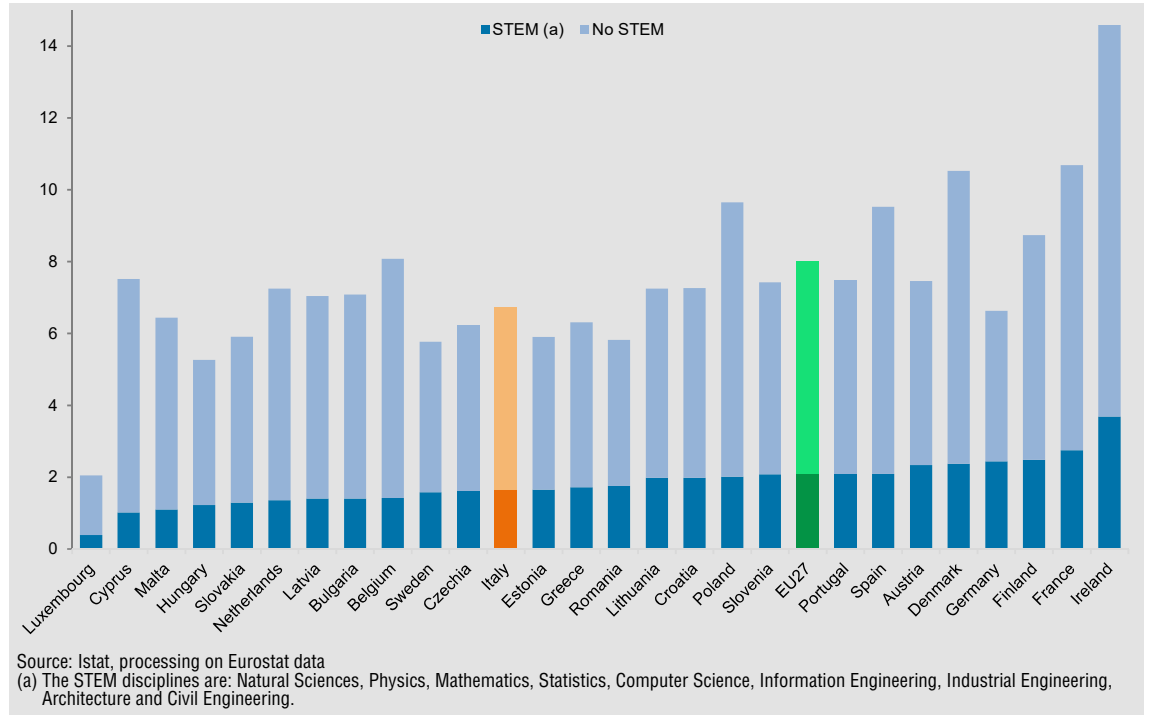
In times of rapid technological and digital innovation, skills in these disciplines assume particular relevance¹¹, one only has to think of the investments expected in the coming years on the dual ecological and digital transition. However, the increased employment opportunities in these areas have not, over time, implied a substantial increase in the number of individuals turning to STEM education and training.

⁹ Tertiary degrees include diplomas from Higher Technical Institutes, Level I and II degrees, PhD degrees, Masters and postgraduate specialisations (levels 5-8 of the 2011 Isced international classification).

¹⁰ Specifically, the STEM subject areas are: Natural Sciences, Physics, Mathematics, Statistics, Computer Science, Information Engineering, Industrial Engineering, Architecture and Civil Engineering.

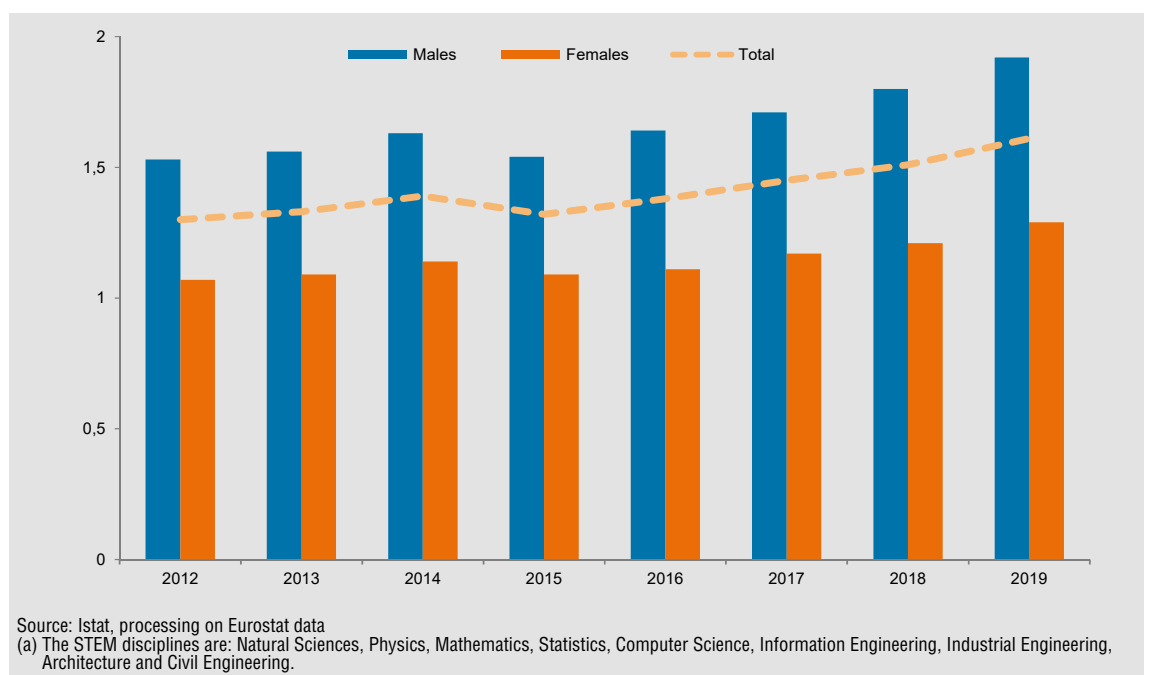
¹¹ The Skills Agenda for Europe proposes in Action 7 to "Increase the number of graduates in STEM subjects and promote entrepreneurial and transversal skills".

Figure 5. University graduates and other tertiary degrees by discipline of study in some European countries (a). Year 2019. Values per 1,000 inhabitants aged 20-29



At the European level, comparing the number of those who obtained a STEM tertiary qualification in the year to the total population aged 20-29, the indicator is in fact 2.1% (it was 1.9% in 2015) with double the value for males compared to females (2.8% versus 1.4%).

Figure 6. STEM graduates by gender in Italy (a). Years 2012-2019. Values per 1,000 inhabitants aged 20-29



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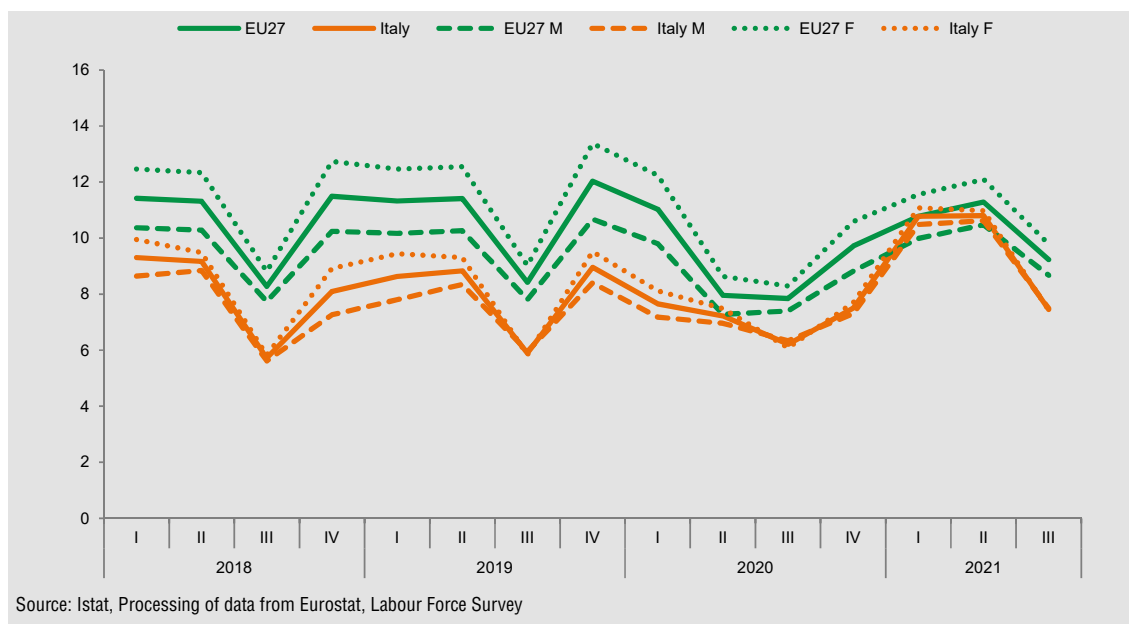
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In Italy, the indicator was below the European average for males and for females (1.9% and 1.3% respectively), highlighting both the strong gender gap - which at the national level was, however, less wide than at the European level - and the general lack of adequately trained figures in these areas (Figure 6).

Participation in lifelong learning was on a strong upswing, matching European levels for the first time

Lifelong learning is useful to build and participate in a modern society. In Italy, lifelong learning, in the 4 weeks preceding the interview, concerned 9.9% of the population aged 25-64 in 2021, after the sharp drop in 2020 (7.1%, it was 8.1% in 2019). The quarterly trend fluctuated and depended on training opportunities, which were more frequent from September to May, and strongly influenced in the last 2 years by the pandemic crisis closures (Figure 7). In 2020, the opportunity to participate in learning activities was abruptly

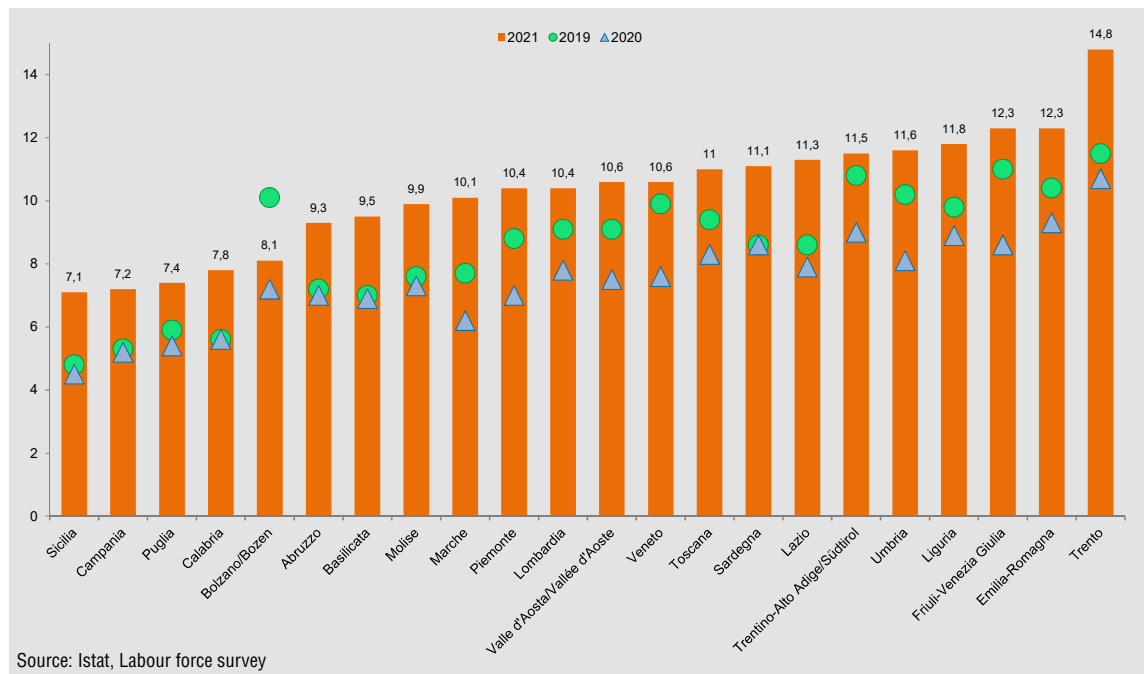
Figure 7. Participation in life-long learning in Italy and EU27. Quarterly data I 2018-III 2021. Percentages



discontinued in March, April and May, and partially switched to other forms. Already in 2021, people started to attend learning activities again, with even higher participation than in previous years, especially for the employed, reaching the participation levels of the average of the European Union countries for the first time in the first quarter 2021, also due to the different intensity of the pandemic in the other countries in 2021.

The recovery in participation in learning characterised all regions, and the share was also substantially higher than in 2019. Residents of Emilia-Romagna, Friuli-Venezia Giulia and the Autonomous Province of Trento participated more in training, with values above 12%; below 8%, on the other hand, Sicilia, Campania, Puglia and Calabria (Figure 8).

Figure 8. Participation in life-long learning by region. Years 2019, 2020 e 2021. Percentages



Students' skills deteriorate

In 2020 and 2021, the school path of students underwent one of the most radical and unexpected transformations, moving from totally face-to-face to distance learning and then proceeding with mixed learning in the school year 2020/21. Therefore, it became important to monitor students' learning levels and participation in lessons and school life.

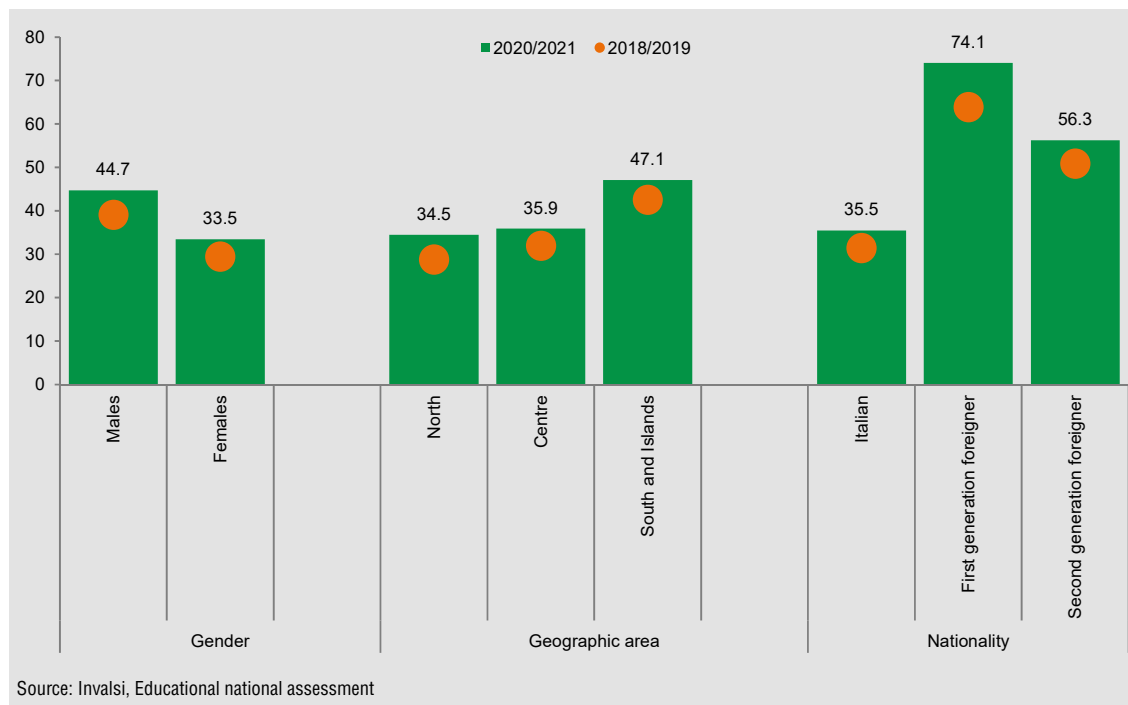
If students' acquired competencies already appeared very compromised, the situation has worsened, despite the efforts of schools, teachers and families. In the school year 2020/21, boys and girls in the third grade of secondary lower school¹² who had failed to reach at least a sufficient level of skills (the *low performers*) were 39.2% for literacy skills (+4.8 percentage points compared to 2018 and 2019 - Figure 9) and 45.2% for numeracy skills (+5.1 percentage points compared to 2018 and +6.5 percentage points compared to 2019 - Figure 10). In some regions of the South and Islands the indicator showed highly critical situations with more than 50% of boys insufficient in literacy skills (in Campania, 54.1%; Calabria 59.2%; Sicilia 52.8% and Sardegna 56.9%) and more than 60% of girls insufficient in numeracy skills (in Campania 64.3%; Calabria 68% and Sicilia 63.3%).

Inequalities are also extensive by citizenship with 74.1% *low performers* in literacy skills among first-generation foreign students compared to 35.5% among students born in Italy with Italian parents.

The depletion of skills was even greater for students in the final year of secondary school,

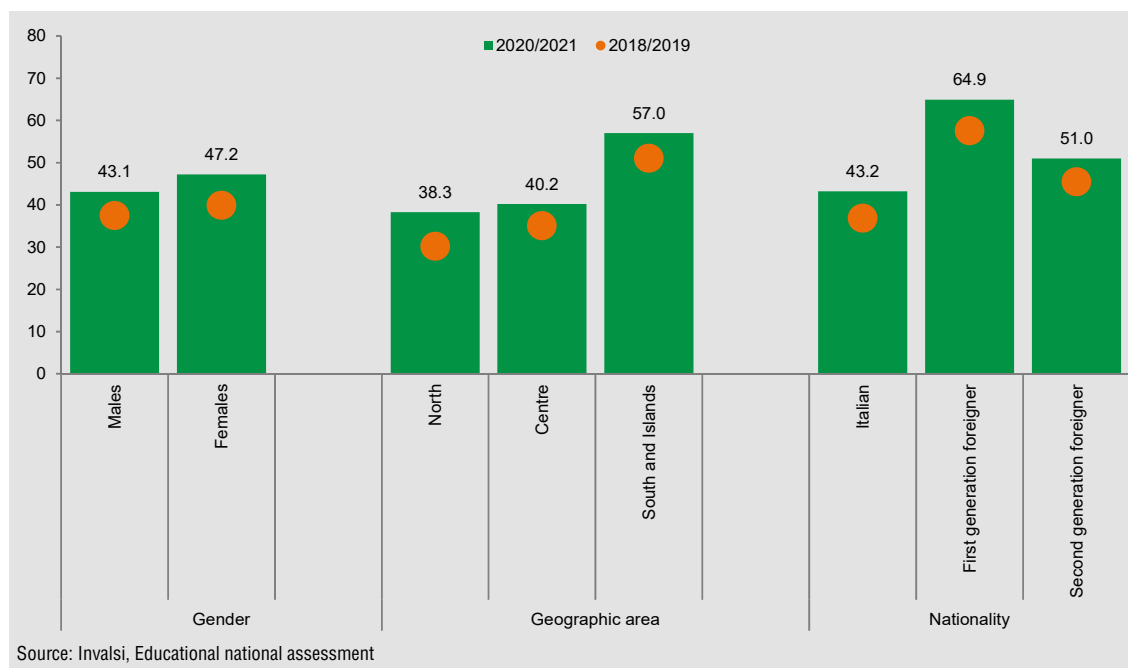
¹² From this edition of the Bes Report, it was decided to replace the indicators on literacy and numeracy skills referring to students in the second grade of secondary school with indicators referring to the literacy and numeracy skills of students in the third grade of secondary school. This was motivated by the fact that while in the school year 2019/2020 the tests were not carried out for any school grade, in the school year 2020/2021 the tests were not carried out for the second grade of secondary school. In addition, the third grade of the secondary school is a key moment for the choice of the next study path and the performance obtained in this grade influences the future path as well as being a good predictor of the performance that will be obtained later.

Figure 9. Inadequate level of literacy (students in grade 8) by gender, geographic area, nationality. Scholastic year 2018/19 and 2020/21. Percentages



who already had large shares of inadequate levels in 2019. In 2021, 44 out of every 100 students did not reach a sufficient level in literacy (+9.3 percentage points compared to 2019) and 51 out of every 100 students did not reach a sufficient level in numeracy (+9.2 percentage points compared to 2019).

Figure 10. Inadequate level of numeracy (students in grade 8) by gender, geographic area, nationality. Scholastic year 2018/19 and 2020/21. Percentages



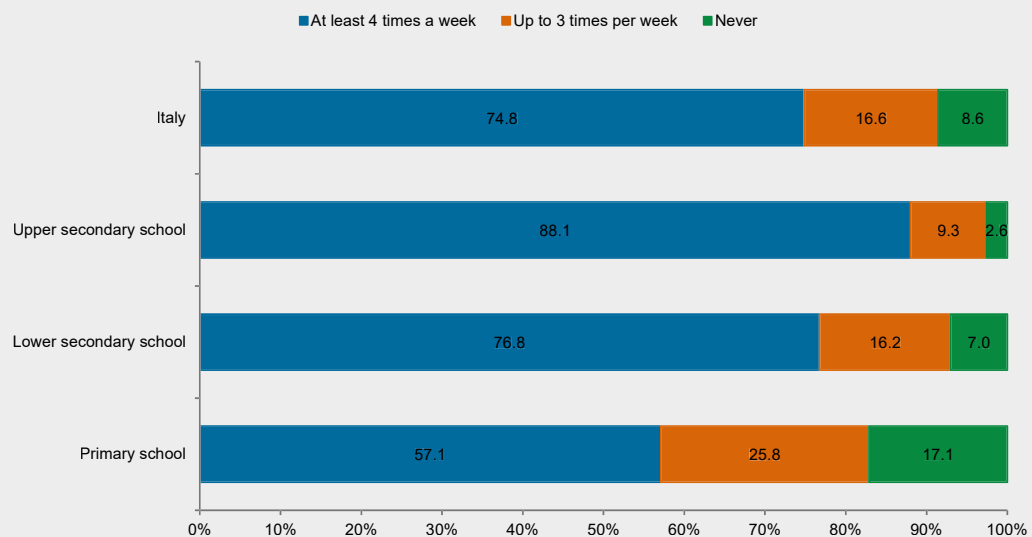
EDUCATION BETWEEN LOCKDOWN AND PANDEMIC PERMANENCE

Following the declaration of a state of emergency for the COVID-19 pandemic, with the Prime Minister Decree of 4 March 2020, in-presence teaching activities in schools of all grades were suspended throughout the Country. For the entire duration of the suspension, which lasted until the end of the 2019/20 school year, school headmasters were called upon to activate distance teaching. In the period between March and June 2020, 91.4% of students aged 6-19 claimed to have done online lessons. A significant share of children remained excluded (8.6%), which rose to 10% in the northern regions and 10.6% in the Islands, especially in Sicilia (11.8%); the percentage was smaller in the Centre and the South, where students excluded were 6.7% and 6.9% respectively.

The situation appeared particularly critical for primary school children, 17.1% of whom never had online lessons with teachers in the March-June 2020 period. The proportion of secondary school pupils completely excluded from online lessons was lower: 7% in lower-secondary schools and only 2.6% in upper-secondary schools.

Even focusing on those who took lessons online, primary school pupils were the most penalised in terms of attendance of lessons. Among the youngest 57.1% attended lessons from home assiduously (four or more times a week), this percentage rose to 76.8% among those enrolled in lower-secondary school and to 88% among those enrolled in upper-secondary school (Figure A).

Figure A. Students by frequency of attending online lessons with teachers and school grade type. March-June 2020. Percentage values



Source: Istat, Survey on Aspects of daily life

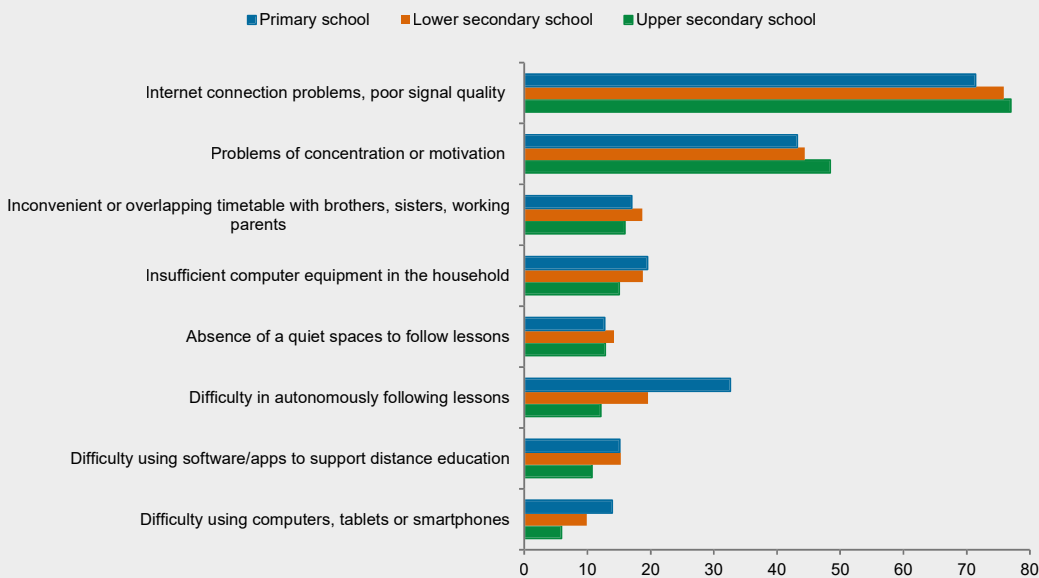
Students faced some obstacles in the use of online lessons. In fact, 65.8% of the students who attended online lessons report having had some difficulty, and the percentage rose to almost 70% in the North-west and in the Centre, while it was lower in the North-east and equal to the average in the South and Islands.

The difficulties encountered were mainly related to the quality of the connection, which was reported as a problem by three-quarters of the pupils who took online lessons (Figure B), a share that reached almost 80% in the South and Islands. Another major issue was represented by problems of concentration and motivation, which affected 45.8% of those who had taken online lessons, increasingly from primary (43.2%) to upper-secondary school (48.4%). Difficulties in following the lessons autonomously were indicated by a fifth of the

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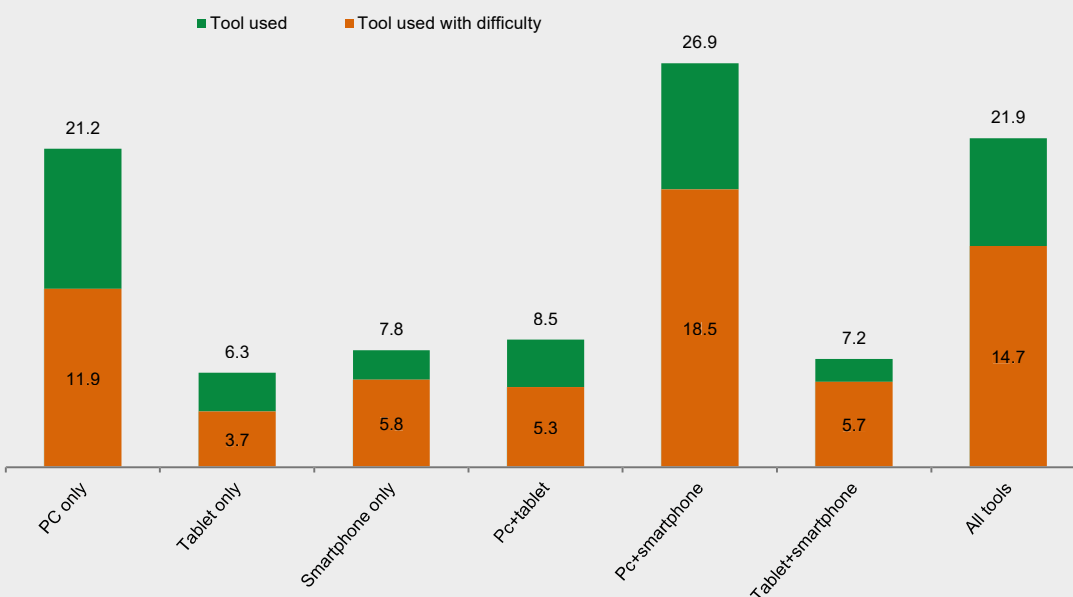
students, particularly if they were primary school students (32.6%). A slightly smaller share complained of insufficient family computer equipment (17.3%): this problem concerned 20.2% of the students who took online lessons in the South and 21.6% in the Islands. This was followed by problems related to inconvenient timetables or overlapping with other family members (16.9%), difficulties in using software or apps to follow lessons (13.2%), lack of suitable spaces (13.1%) and difficulties in using tools to connect to lessons, especially for primary school (13.9%).

Figure B. Students who have attended online lessons with teachers by school type and difficulties encountered. March-June 2020. Percentage values



Source: Istat, Survey on Aspects of daily life

Figure C. Students by tool used to connect to online lessons and difficulties encountered. March-June 2020. Percentage



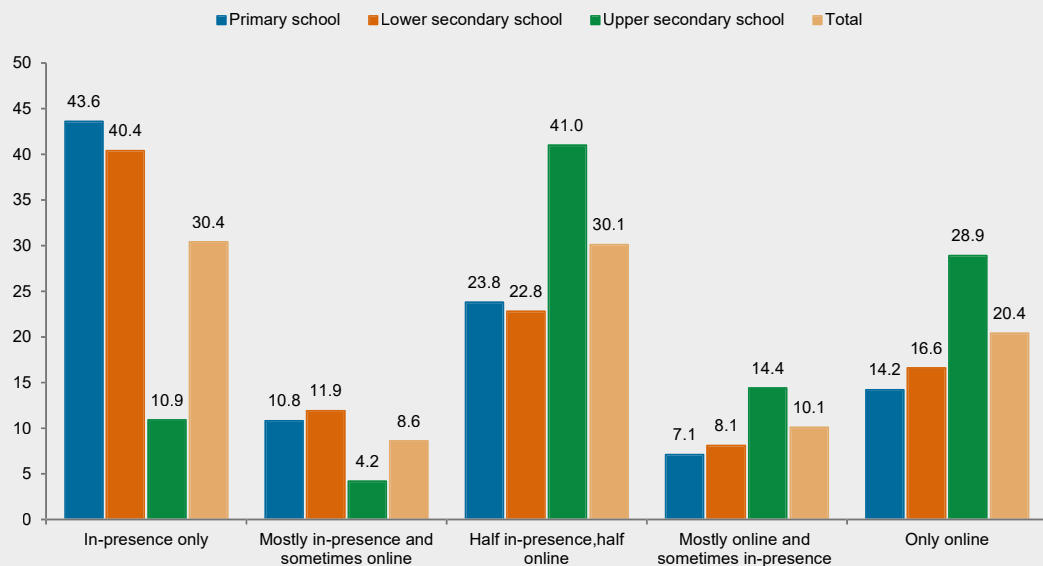
Source: Istat, Survey on Aspects of daily life

The situation became even more complicated in relation to the tool used to connect. Among those who were only able to use the most suitable tools (PC or tablet), amounting to 27.5% of those who followed online lessons, the share of those who declared difficulties was smaller, but still involved more than half of the users (Figure C). Those who used mobile phones certainly had more difficulties. When it was used as the only tool (this was 7.8% of the students) 3 out of 4 students said they had problems following online; but even when it was used in combination with other tools (56% of the students) over 70% had difficulties.

In the 2020/2021 school year, schools followed national and local guidelines, with periods of total, temporary or mixed closure. The return to school was therefore conditioned as much by the geography of the pandemic and regulations as by the logistical complexity of the school segment. Tracking the four weeks prior to the interview, 30.4% of the students returned to lessons entirely in presence or predominantly in presence (8.6%). However, 30.1% attended half in presence and half from home, and a substantial proportion attended lessons entirely or predominantly online (30.5% - Figure D).

The return to face-to-face teaching was more pronounced for primary and lower-secondary schools (more than 50% had completely or predominantly face-to-face lessons), while for upper-secondary students there was a greater persistence of the online mode. At a territorial level, the return in presence was greater in the Islands (54.7%) and in the Centre (46.6%), while in the other areas the online mode maintained a greater role. The difficulties encountered by students in distance learning diminished compared to the lockdown experience, but still affected 62.6% of students, and difficulties in connection (71.1%) and concentration/motivation (47.7%) continued to be the most frequently reported negative aspects.

Figure D. Students who attended lessons by school grade and mode of attendance. School year 2020/2021. Percentage values



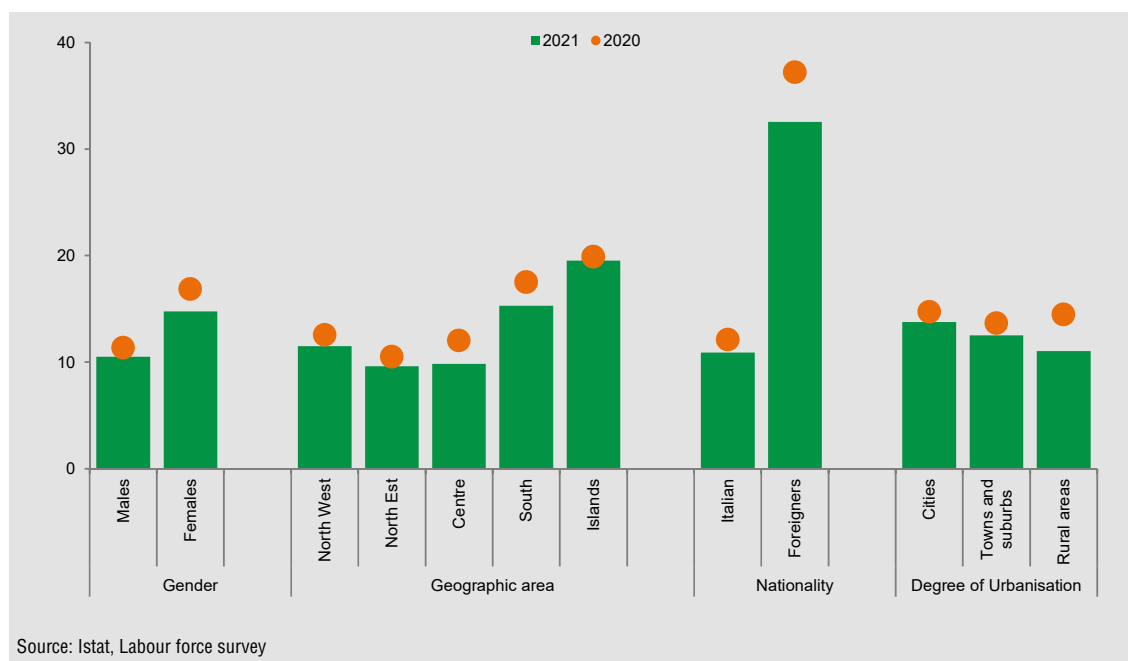
Source: Istat, Survey on Aspects of daily life

The share of young people leaving the education and training system early is still high and uneven across the territory

The difficulty for some young people to continue education and training starts early within the school system. Inadequate skills influence the decision to stay in or drop out of school. The share of young people who left the education and training system prematurely after obtaining only a lower secondary school qualification was still high, although declining. In 2021, in Italy 12.7% of young people aged between 18 and 24 interrupted their education and training pathway early, a decrease compared to the previous year (14.2%). More boys (14.8%) than girls (10.5%) left school, and the decrease of *early leavers* compared to 2020 was most marked among boys, among whom the share dropped by 2 percentage points (Figure 11).

Leaving the education and training system is a phenomenon that concerns more frequently subgroups of young people who, come from more difficult socio-economic backgrounds. The share of early school leavers was higher in the Islands (19.5%, stable compared to 19.9% in 2020) and in the South (15.3%, down compared to 17.5% in 2020). In Sicilia, Puglia, Calabria and Campania the share was particularly high for males, among whom it exceeded 18% (24.8%, 19.6%, 18.6% and 18.4% respectively).

Figure 11. Early leavers from education and training by gender, geographic area, nationality and degree of urbanisation. Years 2021 and 2020. Percentages



The share of young people neither studying nor working dropped in 2021 but did not recover the pre-pandemic level

Widening the reference age group and also looking at the world of work, another group of young people was experiencing great difficulty in entering the active life of the country. In 2021, among 15-29-year-olds, 23.1% were not in education, employment or training down

from 23.7% in 2020, an increase of 1.6 percentage points compared to the year before the pandemic. Among women, 25% were neither in education nor employment (they were 25.8% in 2020), while among men they were 21.2%, they were 21.8% in 2020; however, among both women and men, the decrease does not compensate for the increase in NEETs observed in the first year of the pandemic. Regional differences remained high and followed the North-South dichotomy. The regions with the highest share of NEETs were Puglia (30.6%), Calabria (33.5%), Campania (34.1%) and Sicilia (36.3%).

Participation in cultural activities taking place outside the home collapsed in 2021

From 2020 onwards, the restrictions on access to cultural venues, which were imposed in order to curb the spread of *COVID-19*, significantly affected the enjoyment of most cultural participation activities taking place outside the home. If already between 2019 and 2020 the indicator monitoring participation outside the home in the 12 months before the interview had suffered a major decrease from 35.1% to 29.8%, thus losing more than 5 percentage points in a single year; between 2020 and 2021 there was a real collapse in cultural participation outside the home, which reached 8.3% (less than a quarter of what was observed in 2019 - Figure 12).

Between 2019 and 2020, the most pronounced reductions concerned the enjoyment of theatre performances and going to a museum or exhibition (which lost about 4.5 percentage points). In 2021, the enjoyment of museums/exhibitions and archaeological sites and monuments, although they concerned a higher percentage of people than the other forms of cultural participation considered (8.9% and 10.3% respectively), were the activities that decreased the most (-18.4 percentage points the former and -15.4 percentage points the latter).

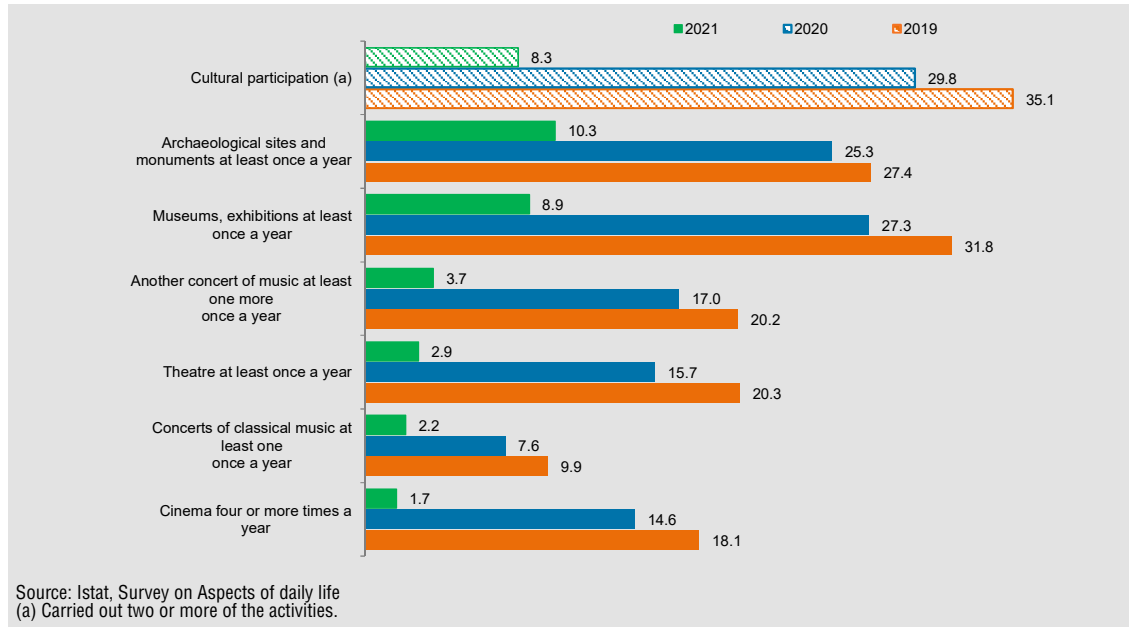
Cultural participation outside the home declined by a wide margin for both men and women, but more sharply for the latter (-22.5 percentage points compared to 2020, -20.5 among men). Therefore, women, after having been characterised since 2017 by higher levels of cultural participation outside the home than men, in 2021 realigned themselves with men (women 8.1%; men 8.5%), thus losing their previously acquired advantage.

The distribution of cultural participation outside the home by age group shows a curve that gradually flattens out between 2020 and 2021 at the younger ages, which are known to have higher levels of cultural participation, but which in the pandemic years have experienced the greatest reductions, moving closer and closer to the other age groups.

In 2020 and 2021, the decrease in cultural participation outside the home was found to be across the whole country, however, in both years higher levels of participation were confirmed in the regions of the Centre-north than in the South and Islands.

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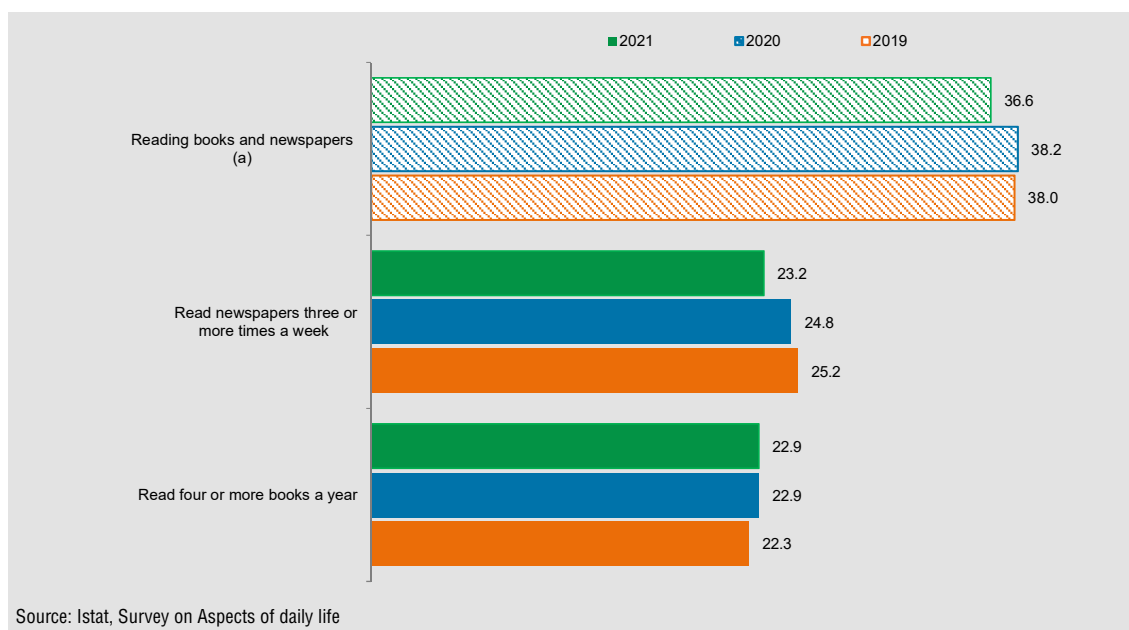
Figure 12. Persons aged 6 years and older who engaged in 2 or more cultural activities outside the home in the 12 months before the interview. Years 2019, 2020 and 2021. Percentages



In 2021, newspaper reading decreased slightly, book reading remained stable

More stability can be observed, on the other hand, when analysing the indicator monitoring the reading of books and/or newspapers. Unlike cultural enjoyment outside the home, in 2020, thanks to more time spent inside the home, there was an upturn in the reading of at least one book in the year, which had increased for the first time in the last five years (from

Figure 13. Persons aged 6 and older who read at least 4 books in the year and/or at least 3 newspapers per week (print or online). Years 2019, 2020 and 2021. Percentage values



40.0% in 2019 to 41.4% in 2020); the reading of 4 or more books between 2019 and 2020 had also tended to pick up slightly (from 22.3% to 22.9%), while the reading of newspapers had remained stable at around 25%, maintaining the overall indicator at 2019 levels (around 38% - Figure 13).

In 2021, on the other hand, while book reading remained completely in line with 2020 (standing at exactly 22.9% as in 2020), newspaper reading decreased (from 24.8% to 23.2%), bringing the overall reading indicator down (36.6%).

The gender analysis shows a reduction in the habit of reading books and/or newspapers among men, who fall from 39.0% to 35.7% between 2019 and 2021 and lose a total of 8.5% of readers (around 3% between 2019 and 2020 and a higher share of 5.4% between 2020 and 2021). For women, on the other hand, after there had been a significant increase in the reading of books and/or newspapers between 2019 and 2020 and which had brought the share of female readers to 38.6% (it was 37.1% in 2019), there was a decrease between 2020 and 2021 and female readers approached the levels of 2019 (37.4%). The described trends, however, keep gender differences unchanged, with higher levels of book and/or newspaper reading among women who, as of 2020 for the first time, exceed men.

Between 2019 and 2021, reading books and/or newspapers remained more frequent among adults aged 45-74, with around 4 in 10 individuals in this age group engaging in this activity. However, whereas between 2019 and 2020 an increase in readers was observed among adults aged 55-64 and substantial stability among young people up to the age of 24 and among people aged 65 and over, between 2020 and 2021 decreases were observed in all age groups, with the only exception of young people aged 25-34, who increased by about 1.5 percentage points in their share of readers.

From a territorial point of view, a strong North-South gradient was observed in both 2020 and 2021, with shares of readers being higher in the northern and central regions and lower in the southern regions and in the Islands. Whereas in the northern regions, after the slight increase between 2019 and 2020, which saw the share of readers rise from 45.7% to 46.7%, there was a significant decrease between 2020 and 2021 (in 2021 the share of readers stood at 43.5%), in the regions of Central Italy, after the slight decrease recorded between 2019 and 2020 (bringing the no readers from 40.6% to 39.1%), substantial stability was observed in 2021 and finally, in Southern Italy and Islands, reading levels remained stable throughout the period (around 26%).

Decline in the habit of going to the library in 2020 and 2021

In 2020 and 2021, the situation brought about by the pandemic certainly had an impact on the share of library users aged 3 and over, which between 2019 and 2020 decreased by about 3 percentage points (from 15.3% to 12.2%) and between 2020 and 2021 almost halved to 7.4%.

In both 2020 and 2021, the decreases were observed across the board among users in all areas of the country and mainly affected the young and very young aged 6-24, being much smaller in the other age groups. The closure of schools and universities, especially in the early periods of the pandemic, certainly produced changes in the study habits of children and young people, who, despite the reductions recorded, also had the highest percentages of frequent users in 2020 and 2021 (28.8% in 2020 and 14.3% in 2021, re-

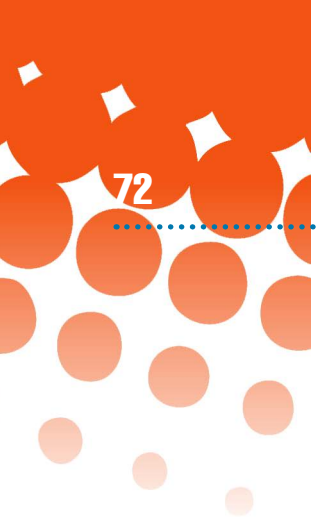
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spectively). Already from the age of 25, on the other hand, library attendance decreased significantly to its lowest level after the age of 54.

The prevalence of women library users was higher: 14.1% versus 10.6% among men in 2020 and 8.2% versus 6.5% in 2021, with larger gender differences in both years among 11-24-year-olds.

Although to a much lesser extent than in the pre-pandemic period, in the two-year period 2020-2021 it was people from the North who attended libraries the most (17.5% in 2020 and 10.6% in 2021 respectively) followed by those from the Centre (10.3% in 2020 and 6.2% in 2021), while the lowest percentages were found in the South and Islands (6.7% in 2020 and 3.8% in 2021).

It is noteworthy that, in the face of the reductions in physical library users recorded in the pandemic years, in 2021 the online access to libraries affected 6.7% of people aged 3 years and over, bringing overall access to libraries ("real" or "virtual") to 11.6% and thus compensating, albeit partially, for the losses suffered in terms of users who physically went to the library.



Indicators

- 1. Children aged 0-2 years enrolled in nursery school:** Pupils aged 0-2 years enrolled in early childcare services (per 100 children aged 0-2 years).
Source: Istat, Survey on Aspects of daily life.
- 2. Participation in the school system of children aged 4-5:** Percentage of children aged 4-5 years participating in pre-primary education or in primary education on total children aged 4-5 years.
Source: Istat, Processing of data from Ministry of Education.
- 3. People with at least upper secondary education level (25-64 years old):** Percentage of people aged 25-64 years having completed at least upper secondary education (ISCED level not below 3) on total people aged 25-64 years.
Source: Istat, Labour force survey.
- 4. People having completed tertiary education (30-34 years old):** Percentage of people aged 30-34 years having completed tertiary education (ISCED 5, 6, 7 or 8) on total people aged 30-34 years.
Source: Istat, Labour force survey.
- 5. First-time entry rate to university by cohort of upper secondary graduates:** Proportion of new-graduates from upper secondary education enrolled for the first time at university in the same year of upper secondary graduation (cohort-specific rate). Students enrolled in "Istituti Tecnici Superiori", "Istituti di Alta Formazione Artistica, Musicale e Coreutica", "Scuole superiori per Mediatori linguistici" and at foreign universities are excluded.
Source: Ministry of Education; Ministry of University and Research.
- 6. Early leavers from education and training:** Percentage of people aged 18-24 years who have achieved only lower secondary (ISCED 2) and are not included in a training program on total people aged 18-24 years.
Source: Istat, Labour force survey.
- 7. People not in education, employment, or training (NEET):** Percentage of people aged 15-29 years that are not in education, employment, or training on total people aged 15-29 years
Source: Istat, Labour force survey.
- 8. Participation in life-long learning:** Percentage of people aged 25-64 years participating in formal or non-formal education on total people aged 25-64 years.
Source: Istat, Labour force survey.
- 9. Inadequate level of literacy (students in grade 8):** Share of students in grade 8 (third year of lower secondary education) who do not reach an adequate level of proficiency in literacy competence (level 2 out of 5 levels).
Source: Invalsi, Educational national assessment.
- 10. Inadequate level of numeracy (students in grade 8):** Share of students in grade 8 (third year of lower secondary education) who do not reach an adequate level of proficiency in numerical competence (level 2 out of 5 levels).
Source: Invalsi, Educational national assessment.
- 11. People with high level of IT competencies:** Percentage of people aged 16-74 with advanced competences in all 4 groups identified in the "Digital competence framework".
Source: Istat, Survey on Aspects of daily life.
- 12. STEM graduates:** Graduates in tertiary education, in science, math., computing, engineering, manufacturing, construction per 100 residents aged 20-29. The numerator includes graduates with a Short-cycle tertiary education, Bachelor's or equivalent level, Master's or equivalent level, Doctoral or equivalent level (levels 5-8 of Isced 2011).
Source: Istat, Processing of data from Ministry of University and Research.
- 13. Cultural participation outside the home:** Percentage of people aged 6 years and over who have carried out 2 or more activities in the 12 months before the interview out of total people aged 6 years and over. The activities considered are 6: going to the cinema at least four times; at least once to: theatre; exhibitions and museums; archaeological sites, monuments; concerts of classical music, opera; concerts of other kind of music.
Source: Istat, Survey on Aspects of daily life.
- 14. Reading books and newspapers:** Percentage of people aged 6 and over who have read at least four books a year for reasons not strictly educational or professional (paper books, e-books, online books, audio books) and / or have read newspapers (paper and/ or online) at least three times per week out of total people aged 6 years and over.
Source: Istat, Survey on Aspects of daily life.
- 15. Use of libraries:** Percentage of people aged 3 and over who went to the library at least once in the past 12 months before interview out of total people aged 3 years and over.
Source: Istat, Survey on Aspects of daily life.

Indicators by region and geographic area

REGIONS GEOGRAPHIC AREAS	Children aged 0-2 years enrolled in nursery school (a)	Participation in the school system of children aged 4-5 (b)	People with at least upper secondary education level (25-64 years old) (c)	People having completed tertiary edu- cation (30-34 years old) (d)	First-time entry rate to university by cohort of upper secondary graduates (e)	Early leavers from education and training (f)
	2019/2021	2019/2020	2021	2021	2019	2021
Piemonte	32.2	96.0	64.2	27.4	54.2	11.4
Valle d'Aosta/Vallée d'Aoste	35.1	95.4	62.0	27.7	50.0	14.1
Liguria	26.7	96.6	69.0	26.2	55.9	12.9
Lombardia	28.7	93.6	64.9	31.3	55.9	11.3
Trentino-Alto Adige/Südtirol	29.1	96.0	70.0	29.2	33.9	10.9
<i>Bolzano/Bozen</i>	<i>19.1</i>	<i>96.6</i>	<i>69.7</i>	<i>24.7</i>	<i>13.0</i>	<i>12.9</i>
<i>Trento</i>	<i>40.0</i>	<i>95.2</i>	<i>70.4</i>	<i>33.7</i>	<i>53.7</i>	<i>8.8</i>
Veneto	35.3	94.6	65.5	30.8	50.5	9.3
Friuli-Venezia Giulia	28.8	95.1	70.6	26.0	53.8	8.6
Emilia-Romagna	31.5	93.6	68.7	33.6	54.9	9.9
Toscana	37.3	96.0	65.3	29.0	52.9	11.1
Umbria	30.6	97.7	71.3	33.9	57.4	12.0
Marche	33.4	96.3	66.0	28.9	57.5	7.9
Lazio	29.1	91.7	71.3	30.3	55.2	9.2
Abruzzo	20.1	97.7	68.3	27.1	58.0	8.0
Molise	31.3	95.1	63.1	33.1	53.9	7.6
Campania	15.6	99.7	53.4	21.2	43.0	16.4
Puglia	29.6	99.0	51.7	19.1	50.2	17.6
Basilicata	15.3	98.8	63.3	24.7	54.6	8.7
Calabria	15.1	99.0	55.7	21.6	50.0	14.0
Sicilia	24.4	98.6	52.4	17.8	46.6	21.2
Sardegna	32.3	97.8	54.2	21.8	50.8	13.2
North	30.8	94.4	66.2	30.4	53.5	10.7
North-west	29.5	94.5	65.1	29.8	55.4	11.5
North-east	32.5	94.4	67.7	31.3	51.0	9.6
Centre	32.0	94.0	68.8	30.0	55.0	9.8
South and islands	22.2	98.9	54.5	20.7	47.5	16.6
South	20.3	99.1	55.2	21.6	47.5	15.3
Islands	26.0	98.4	52.8	18.7	47.5	19.5
Italy	28.0	95.9	62.7	26.8	51.4	12.7

(a) Per 100 children aged 0-2;

(b) Per 100 children aged 4-5;

(c) Per 100 persons aged 25-64;

(d) Per 100 persons aged 30-34;

(e) Specific cohort rate;

(f) Per 100 persons aged 18-24;

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People not in education, employment, or training (NEET) (g)	Participation in life-long learning (c)	Inadequate level of literacy (students in grade 8) (h)	Inadequate level of numeracy (students in grade 8) (h)	People with high level of IT competencies (i)	STEM graduates (j)	Cultural participation outside the home (k)	Reading books and newspapers (k)	Use of libraries (l)
2021	2021	2020/2021	2020/2021	2019	2019	2021	2021	2021
19.2	10.4	30.4	39.5	23.6	1.50	9.6	42.1	7.6
18.0	10.6	25.4	34.8	28.3	1.21	10.3	47.5	15.2
19.6	11.8	47.1	49.9	22.0	1.67	7.5	43.7	6.5
18.4	10.4	36.8	40.2	26.6	1.50	9.3	43.8	12.1
15.4	11.5	....	....	25.7	0.85	10.7	55.5	23.2
13.3	8.1	44.9	46.2	23.6	0.26	9.4	59.4	27.1
17.6	14.8	23.9	27.6	27.8	1.47	12.0	51.7	19.4
13.9	10.6	31.1	33.1	23.8	1.61	9.0	40.2	9.2
16.2	12.3	28.5	30.5	25.8	1.61	10.9	49.4	9.3
15.1	12.3	35.7	38.5	25.0	1.68	9.8	42.9	10.1
17.9	11.0	41.7	41.0	23.8	1.40	9.9	41.5	8.9
19.2	11.6	29.5	37.2	22.3	1.66	8.1	35.8	5.0
16.0	10.1	29.0	36.1	21.5	1.77	7.2	34.8	6.4
21.6	11.3	35.2	41.3	23.9	1.80	12.3	39.7	4.6
21.1	9.3	36.7	40.5	21.5	1.89	5.6	32.1	3.6
27.7	9.9	35.3	40.9	18.9	1.97	4.1	27.8	2.8
34.1	7.2	49.0	61.1	16.6	1.58	5.8	22.3	2.5
30.6	7.4	42.7	50.0	18.0	1.57	5.0	24.6	3.4
25.2	9.5	44.5	52.1	17.8	1.79	4.3	22.6	4.2
33.5	7.8	53.6	63.6	16.7	1.59	3.6	22.7	4.6
36.3	7.1	48.7	60.7	14.4	1.27	5.5	23.9	3.8
23.6	11.1	48.7	53.3	23.0	1.40	7.0	45.0	8.6
17.0	10.9	34.5	38.3	25.0	1.53	9.4	43.5	10.6
18.7	10.5	....	....	25.3	1.51	9.2	43.3	10.4
14.7	11.5	....	....	24.6	1.56	9.7	43.6	10.8
19.6	11.1	35.9	40.2	23.5	1.67	10.6	39.4	6.2
32.2	7.8	47.1	57.0	17.2	1.52	5.4	25.7	3.8
31.5	7.7	....	....	17.6	1.62	5.2	24.1	3.2
33.6	8.1	....	....	16.6	1.30	5.9	29.2	5.0
23.1	9.9	39.2	45.2	22.0	1.61	8.3	36.6	7.4

(g) Per 100 persons aged 15-29

(h) Per 100 students attending grade III of secondary school;

(i) Per 100 persons aged 16-74;

(j) Per 100 inhabitants aged 20-29;

(k) Per 100 persons aged 6 and over;

(l) Per 100 persons aged 3 and over.

