



LOGGED-ON State-of-Art report - Italy

1. Italy: facts and figures¹

Italy occupies a total surface of 302,073 Km² (of which 35.2% are mountains, 41.6% hills and 23.2% plains)² and has a population of 60,795,612 people (29,501,590 males and 31,294,022 females)³ placing it 6th in the list of most populated European countries.

ITALY'S NUMBERS

Main territorial and demographic data

Latitude North	47° 06'	Longest river - Po (km)	652
Latitude South	35° 30'	Railway network (km)	16,742
Longitude West	6° 37'	Road network (km)	179,024
Longitude East	18° 31'	Regions	20
Maximum span (km)	1,200	Provinces	110
Territorial area (km ²)	302,071	Municipalities	8,048
Total area of woods (km ²)	104,675	Resident population	60,795,612
Total length of coastline (km)	7,375	Resident foreigners	5,014,437
High seismic risk area (km ²)	28,026	Number of households	25,816,311
Protected areas (km ²)	63,791	Households' average members	2.3
Highest mountain - Monte Bianco (m)	4,810	Population density (inhab./km ²)	201

TERRITORIAL AREA BY ALTITUDE AND GEOGRAPHICAL AREA

1 January 2015, hectares

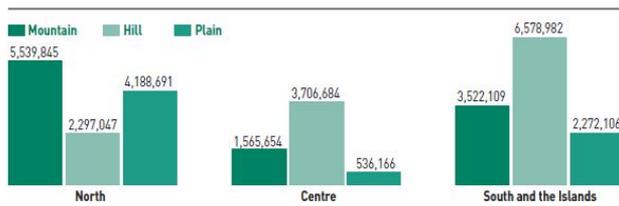


Fig. 1 From ISTAT, *Italy in Figures 2015*.



Fig. 2: Map showing population density, ISTAT, *Italy in Figures 2015*.

¹ Data from ISTAT, *L'Italia in cifre 2015/Italy in Figures 2015* and *Annuario statistico 2014*.

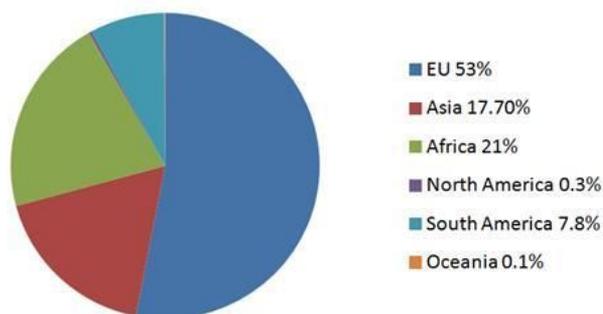
² This data does not include the Vatican and the Republic of San Marino.

³ Data is updated to 31.12.2014 as all data referring to 2015 is not available yet. Source: ISTAT, *L'Italia in cifre 2015*.

1.1 Ethnicities⁴

Italy counts 5,014,437 foreigners among its population (2,372,796 males and 2,641,641 females) divided into about 200 ethnicities coming from all over the world: 53% from European countries, 17.7% from Asia, 21% from Africa, 8.2% from the Americas (0.3% from North America, 7.8% from South America), 0.1% from Oceania. Of the European citizens, the Romanian community is the most numerous with 1,131,839 people (22.6%). The 3,874,726 non-EU citizens mainly come from Albania (490,483 – 9.8%), Morocco (449,058), the Republic of China (265,820), Ukraine (226,060), the Philippines (168,238), India (147,815), Moldavia (147,388), Bangladesh (115,301), Peru (109,668), plus other ethnicities in the total amount of EU and non-EU citizens (1,762,767). Most of the non-EU population lives in the north of the country (2,506,892). The average population density is 201 (people per sq. km of land area), though significant peaks are registered in some areas as can be seen in fig. 2. Despite the high percentage of migrants and babies born to foreign parents, statistics regarding 2014 confirm that Italy is a zero-population-growth country. The natural movement of the population (births-deaths registered almost -100,000 units on the whole⁵, almost -12,000 babies were born compared to 2013⁶, a peak that has never been reached since 1917-18 during World War I, which registers a worrying trend that goes hand in hand with the progressive ageing of the population (the average age is currently 44.4).

Foreigners in Italy classified by ethnicity



1.2 Minorities

It is estimated that the minorities who currently live in Italy make more than 3,000,000 people altogether: Albanian (up to 100,000), South-Tyrolean (500,000), Carintian (2000), Catalan (15,000), Cimbri (1072), Croatian (3,000), French-Provencal (up to 70,000), Francophone (up to 100,000), Furlan (900,000), Greek (13,000), Ladin (30,000), Mocheno (1660), Occitan (up to 40,000), Sardinian (1,269,000), Slovenian (60,000), Rom and Sinti travellers (130,000). Fig. 3 shows the exact distribution of minorities in Italy. Being taught at school and used as a co-official language in public administration, minority languages with historical roots are safeguarded by the Italian constitution.⁷

⁴ ISTAT, *Bilancio demografico nazionale 2014/2015*, June 2015, and *Gli stranieri al 15° censimento della popolazione*, December 2013.

⁵ Data refers to the year 2014 with 502,596 births and 598,364 deaths (-95,768 units). Source: ISTAT.

⁶ Of which -2.638 born to foreign parents.

⁷ Data derives from the synthesis of three sources: *Censimento della popolazione 2011*, Istat, a report by national newspaper *Corriere della Sera*, 2001, and a study by Fiorenzo Toso from *Enciclopedia Treccani La lingua Italiana* titled *Quante e quali minoranze in Italia*, available online at www.treccani.it.



Fig. 3: Minorities in Italy, www.treccani.it



Fig. 4: The 20 regions of Italy, d-maps.com

1.3 Regions

Italy is composed of 20 regions (fig. 4), 110 provinces and 8,048 municipalities. Trentino-Alto Adige, Valle d'Aosta, Friuli-Venezia Giulia, Sicily and Sardinia are “Regioni a Statuto Speciale”, that is to say they have been granted administrative and financial independence together with decisional and/or judicial autonomy by the State due to their historical specificity and/or the presence of minorities recognized by the law.

2. The Italian Educational System

The Italian Educational system is divided into five stages: kindergarten (scuola dell'infanzia, 3-6 years of age), primary school (scuola primaria, 6-11), lower secondary education (SSPG – Scuola Secondaria di Primo Grado, 11-14), upper secondary education (SSSG – Scuola Secondaria di Secondo Grado, 14-19), university (Laurea Triennale – Bachelor's Degree; Laurea Magistrale – Master's Degree; Laurea Ciclo Unico – Long single-cycle degree; Dottorato di Ricerca – PhD). Nursery schools are also available, although most of them are privately owned and run.

The school system is divided into six levels:

- pre-primary
- primary
- lower secondary
- upper secondary
- non-tertiary post-secondary (i.e. regional-funded post-secondary vocational training courses)
- tertiary (university, doctoral and specialisation courses)

Enrolment rate in upper secondary education: ratio of students enrolled to resident population aged 14-18, per 100. From school year 2006/07 to 2009/10 the indicator includes data on students of first and second classes of vocational schools of the autonomous Province of Bolzano (under the 2007 Budget law)

ENROLMENT RATE IN UPPER SECONDARY EDUCATION

1995/96	80.8
2000/01	87.6
2005/06*	93.0
2006/07	94.5
2007/08	94.9
2008/09	94.3
2009/10	93.8
2010/11	91.4
2011/12	93.0
2012/13	93.1
2013/14	93.0

* starting from 2005/06 school year, the reference population is that resulting from the Population Census 2011

Fig. 5: From ISTAT, Italy in Figures 2015.

Compulsory education goes from the age of 6 to the age of 16, that is from the 1st year of primary school to the 2nd year of high school. Pre-University education lasts 13 years altogether and students usually go to University at the age of 19, one year later than in the rest of Europe. Like the majority of universities, most of the schools providing compulsory schooling and upper secondary education are state run. However, also the privately run institutions are in part subsidized by the Government. The State owns and finances these schools, and directly selects and employs all the staff working in them. It is also responsible for laws, regulations and policies regarding state schools and the school system in general, with the exception of two of the five autonomous regions, Trentino-Alto Adige and Valle d'Aosta, which can decide on school matters and manage their share of funding for state education independently⁸.

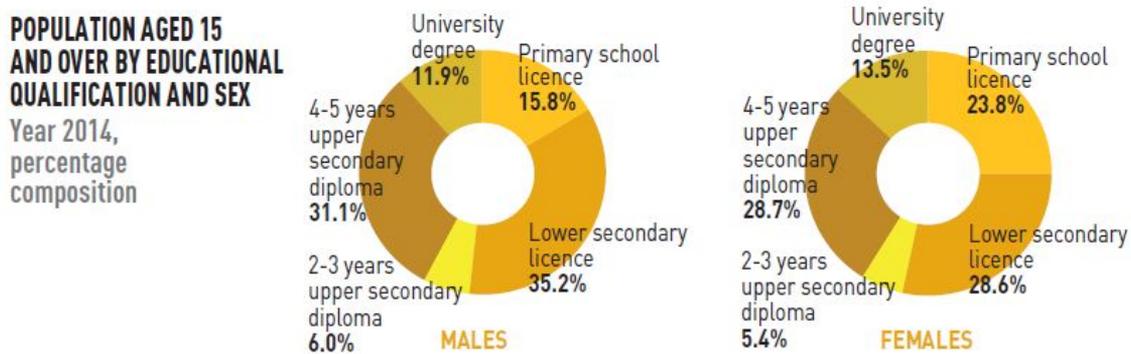


Fig. 6: From ISTAT, Italy in Figures 2015.

3. Connectivity, the use of new technologies and Web 2.0

⁸ Art.21 law no. 59/1997. For the Province of Bolzano also L.P no. 12/2000; for the Province of Trento also D.P.G.P. of 18th October 13-12/ Leg. And law no. 6/2005; for Val d'Aosta law no.19/2000.

3.1 National data⁹

64% of Italian families are on the internet, 62.7% use a broadband connection and 54% own a smartphone with internet access. Families with at least one teenage child are the most equipped in regards to technology: 87.1% possess a PC, 89% have an internet connection and almost 100% own a mobile phone. Families in the north of the country are better equipped than those living in the south (66% vs. 57.3% own a PC, 66.6% vs. 58,3% are on the internet). Families with no access to the internet indicate a lack of competences as the main reason for not using the web (55%), a significant number of people (24.3%) do not consider the internet a useful and valid tool, while only 15.8% complain about the high costs of connection. According to a study published by consumer association "Altroconsumo" and resumed by the economic newspaper "Il Sole 24 ore" ADSL in Italy is the most expensive in Europe and one of the poorest in quality.¹⁰ Broadband covers 99% of the country, but fast 20Mbps connection is available only to 21% of Italian internet users (vs. the European average of 62%) and 30Mbps speed only to 1% (vs. the European average of 21%).¹¹

There are still generational and gender differences in the use of ITC: 59.3% of men versus 50.2% of women use a PC, while 62.3% of men surf the net against 52.7% of women. Nonetheless, it could be interesting to point out that girls aged 11-17 and women aged 20-24 use a PC and the internet 3-4% more than their male counterparts. 54.7% of the population aged 3+ uses a PC and 53.7% of the population aged 6+ surfs the net. The habitual users of PCs and the internet in Italy (more than 83% and more than 89% respectively) are from 15 to 24 years old. Almost all students aged 15+ use a PC and the internet (89.8% and 93.2% respectively). Cloud services to store/share files are mainly used by people from 18 to 34. E-books are becoming more widespread (6.8%). Compared to other European countries, only 84% of Italian youths aged 16-24 regularly use ICT, a datum that places Italy at the third to last place in the list of internet users. 8 Italians out of 10 use the internet to send emails, 62.7% use chats, blogs and forums, 57% communicate via Facebook or Twitter, 37.3% make phone calls. These activities are more widely spread among teenagers from 11 to 17. The south of Italy boasts the record for the most social area of the country (63.1% vs 51.1% in the north-west have a Facebook or Twitter account, 24.5% vs. 16,9% interact with other users by exchanging views about social or political problems). The use of emails is constantly decreasing and being replaced by the more and more frequent use of social networks, chats, blogs, newsgroups, online forums and video calls. Social networks are not only used for getting in touch with friends but also to actively contribute to the social and political life of the country, usually to express opinions on important social and political matters (20.5%) or to take part in

⁹ ISTAT, *Cittadini e nuove tecnologie*, 2014.

¹⁰ The cheapest providers in Italy charge their customers €29,95 a month for flat ADSL, that is almost twice the price of the cheapest subscription option in France. Broadband penetration is below the European average, 13.6% vs. 15.6%. Source: Rusconi, Gianni, *L'ADSL in Italia è la più cara in Europa. Altroconsumo: "concorrenza ingessata"*, www.ilsole24ore.it. Even though this article is from 2007, data are still valid as it is sufficient to compare the offers of different providers online to see that the situation has not significantly changed since then.

¹¹ Biondi, Andrea, *L'Italia che rincorre i paesi UE su banda ultralarga e competenze digitali*, 24th May 2014, source: www.ilsole24ore.it.

surveys or polls (10.4%). 12% of the active population has joined a professional network like LinkedIn (12%). The availability of communication technology is progressively changing the way of accessing culture and making use of the different online resources. 55.8% of internet users search for information online and read e-editions of newspapers and magazines, while 15.6% read books online or download e-books. With 21% of the total, girls aged 15-24 are the eagerest e-bookworms. The internet is also a popular way to share media contents (42.9% download pictures, movies and music; 38.1% watch TV or films in streaming; 26.4% listen to the radio). Youths aged 15-24 are the most active users of the internet and of wikis, which are used by 60.8% of the population to find information regarding any topic.

As far as school is concerned, 70% of classrooms are connected to the internet (via Ethernet or Wi-Fi), though the quality of connection itself proves inadequate for digital interactivity in most cases. 41.9% of them are equipped with an interactive white board and 6.1% with an interactive projector. There is a total of 65,650 computer rooms. Of these, 82.5% have either a cabled or wireless internet connection, 43.6% are equipped with interactive white boards and 16.9% with an interactive projector. A summary estimate suggests that there are 1,300,000 ICT devices in Italian schools (605,000 in schools, 650,000 in classrooms and the remnant amount in libraries). Each device serves an average of 7.9 students.¹²

Services have undergone a process of dematerialization since 2012¹³: digital communication between school and families has been activated in 58.3% of state schools (49.7% of private schools), while enrollments must be done exclusively online. A class e-register is compiled by 69.2% of state schools and 73.6% of teachers fill in a personal e-register (versus respectively 25.4% and 24.7% of private schools). 99.3% of state schools have their own website (against 67.6% of private schools) but only 16.5% use a LMS.¹⁴

Books and other learning materials must comply with governmental regulations and can be either fully digital or in blended version (paper materials + digital ones + interactive e-book).¹⁵

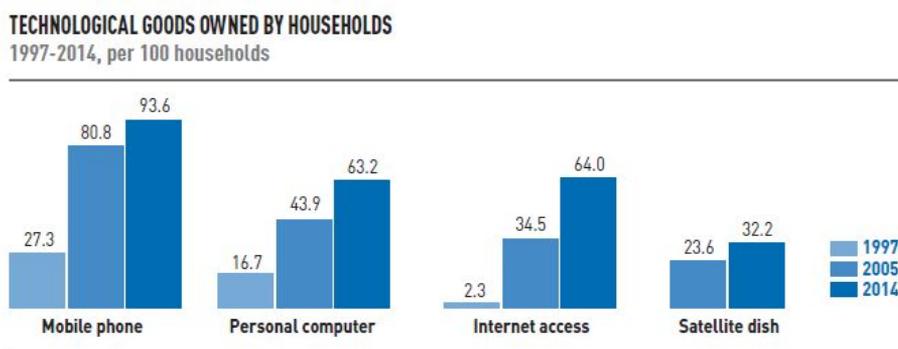
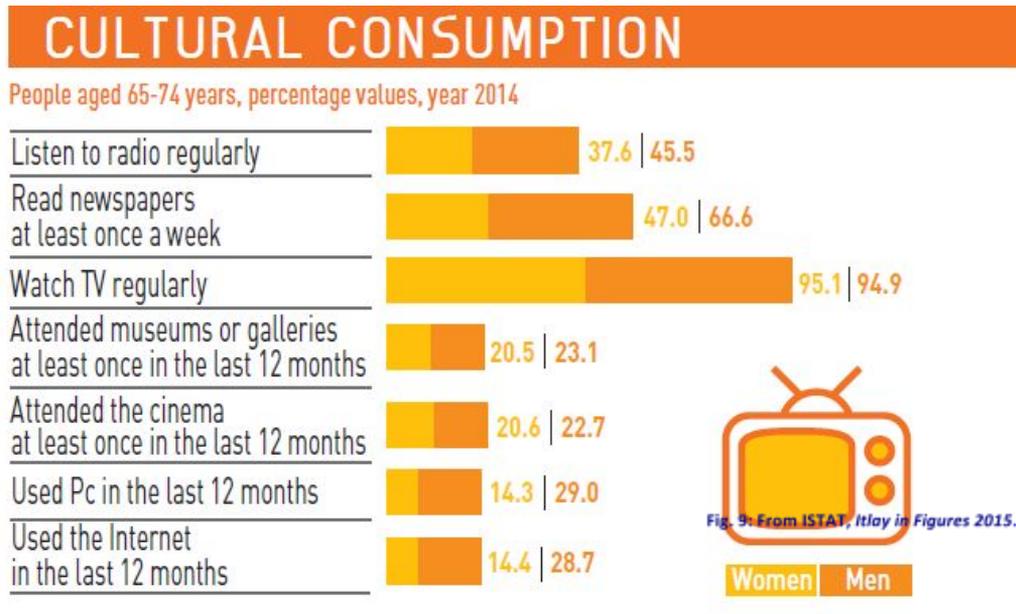


Fig. 7: From ISTAT, Italy in Figures 2015.

AVERAGE ACTUAL EXPENDITURE FOR DURABLES BY GEOGRAPHICAL AREA
2014, euro

	North	Centre	South and the Islands	Italy
Dishwasher	487	508	425	482
Air conditioner, climate control, dehumidifier	961	1,255	616	901
Television and decoder	386	313	316	348
Personal computer and tablet PC	526	420	366	464
Mobile phone, including smartphone	260	233	200	236
E-book readers and digital photo frames	119	119	85	113
New car	17,315	15,225	15,216	16,559

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3.2 Provincial data¹⁶

In the province of Trento 21.7% of students use a PC every day, 30.2% several times per week, 6.8% once a week, 19,5% several times a month, 9% less than once a month, 12.8% never. 3.5% of them surf the net every day, 10.5% several times a week, 3.4% once a week, 20.7% several times a month, 27.6% less than once a month, 34.3% never.

Regarding ICT equipment, there are 1784 white interactive boards in the schools of Trentino, of which 379 were bought directly by institutions thanks to an extra grant from PAT.¹⁷

3.3 Local data¹⁸

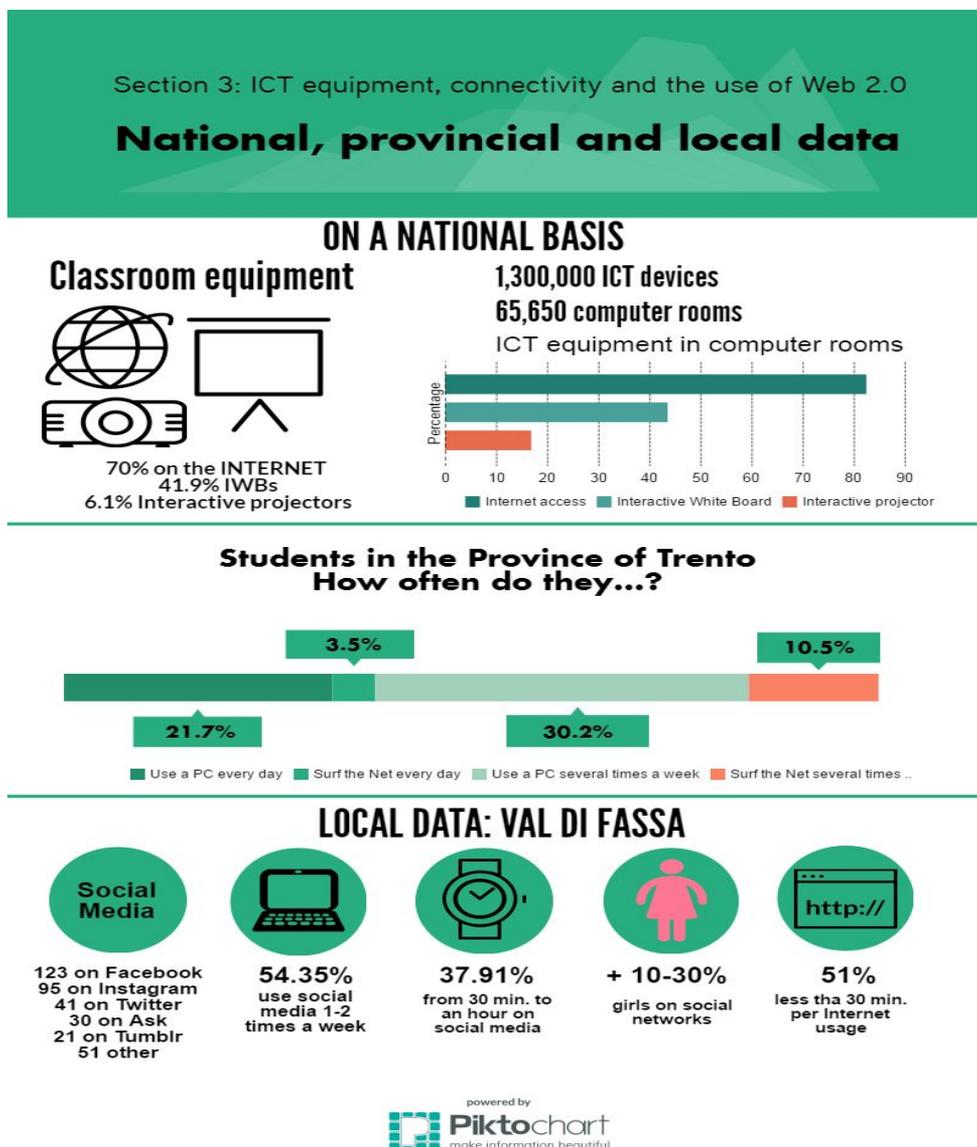
According to a survey carried out by a group of students from our institution in spring 2015, 123 students have a Facebook account, 95 are on Instagram, 41 on Twitter, 30 on Ask, 21 on Tumblr, 51 use other social networks. 54.35% use social networks 1-2 times a week, 26.63% 3-5 times a week, 4.35% more than 5 times a week, 14.67% never or just occasionally. Among students who regularly go on social networks, 29.67% spend less than 30 minutes per visit, 37.91% between 30 min. and 1 hour, 28.57% from 1 to 3 hours, 3.85% more than 3 hours. More girls than boys are on social networks (from 10% up to 30% more) but when registered, both sexes are equally active and engaged with social media. As far as browsing the web is concerned, 51% of students spend less than 30 min online per internet usage, 37% from 30 min. to 1 hour, 11% from 1 to 3

¹⁶ ISPAT, 2013.

¹⁷ Comitato Provinciale del Sistema Educativo, *Mettere a sistema la qualità delle scuole del Trentino. Rapporto 2012*, April 2013, p. 131.

¹⁸ Available data is from school year 2014/2015 and was collected via a paper questionnaire directly by students of class 3LLLA through a survey related to a school project on the responsible use of the internet and social networks.

hours, 1% more than 3 hours. Details about connectivity, digital equipment and use of ITC in our school will be extensively treated in section 5.1.

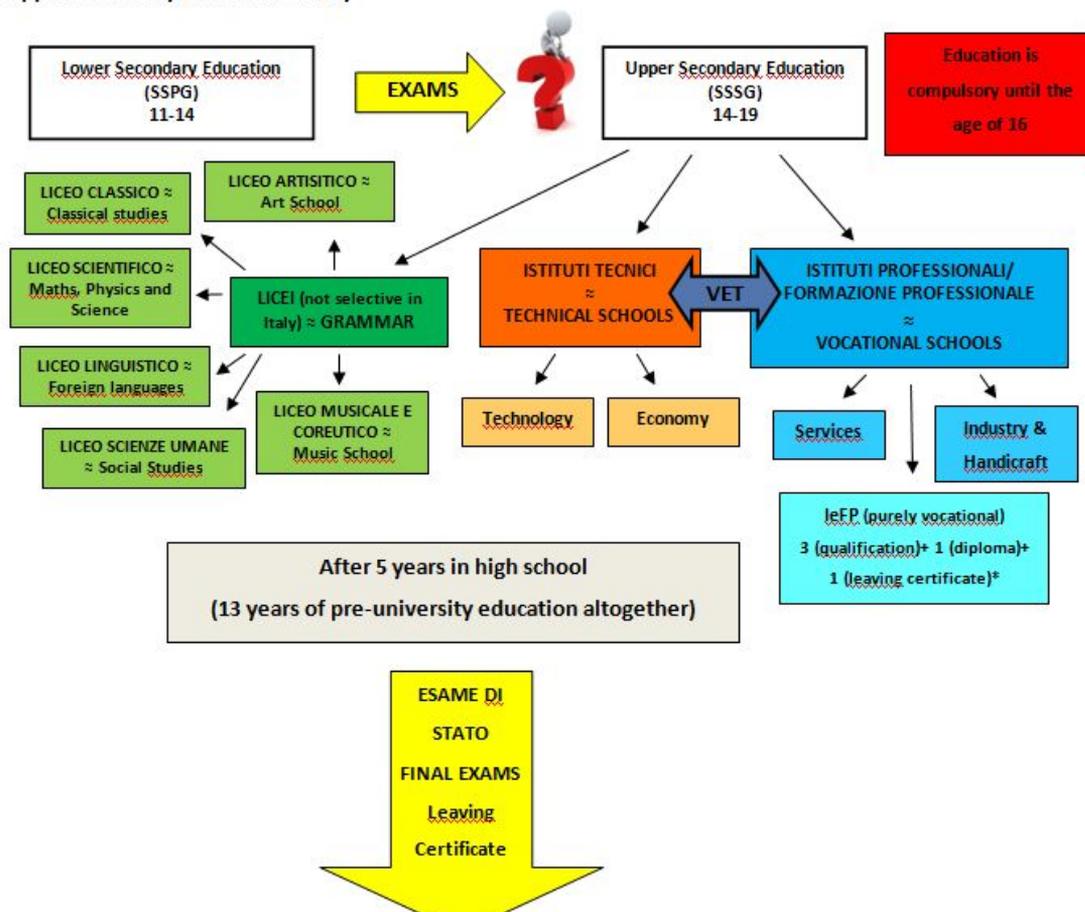


4. A close-up on upper secondary education

An important reform of upper secondary education took place in 2010. It reduced and rationally re-ordered the options available for upper secondary schooling in all the country. This drastic measure was partly due to the necessity of creating and developing a new national curriculum based on developing competences in conformity with the European standards in order to guarantee students a more complete educational experience and better employment opportunities in the future. The new curriculum is more specialized and differs according to each type of school, but in general they all commonly focus on the need to reinforce the study of European languages and the use of ICT at school in an effective and productive way so that students can develop competences useful for life in a perspective of lifelong and life-wide learning. The curriculum is quite standardized in primary school and lower secondary education in terms of subjects studied and objectives to be attained; it starts to be slightly different according to the type of school in the first two years of high school (which is still compulsory education) but it significantly changes relating to the specialization

chosen by each students in the last three years of high school. Here follows a diagram to better understand the range of options a teenage student is offered after completing lower secondary education (SSPG – fig. 10):

Upper Secondary Education in Italy



SCHOOLS, CLASSES AND STUDENTS BY TYPE OF SCHOOL

School year 2013/2014

	Pre-primary	Primary	Lower secondary	Upper secondary
Schools	23,855	17,322	8,133	7,101
Classes*	72,580	145,995	82,335	127,002
Students	1,663,963	2,827,109	1,761,142	2,668,067
% of female students	48.0	48.4	48.0	48.6
% of students enrolled in public schools	71.1	93.4	96.2	95.8
Foreigners per 100 students enrolled	10.1	10.0	9.6	6.8
Repeaters per 100 students enrolled	-	0.4	3.4	7.5
Teachers**	81,874	200,798	138,915	206,479
Students per teacher**	12.4	12.6	11.9	12.1

* pre-primary values refer to sections ** data refer to public schools only

ACTUAL AVERAGE HOUSEHOLD EXPENDITURE ON EDUCATIONAL SERVICES

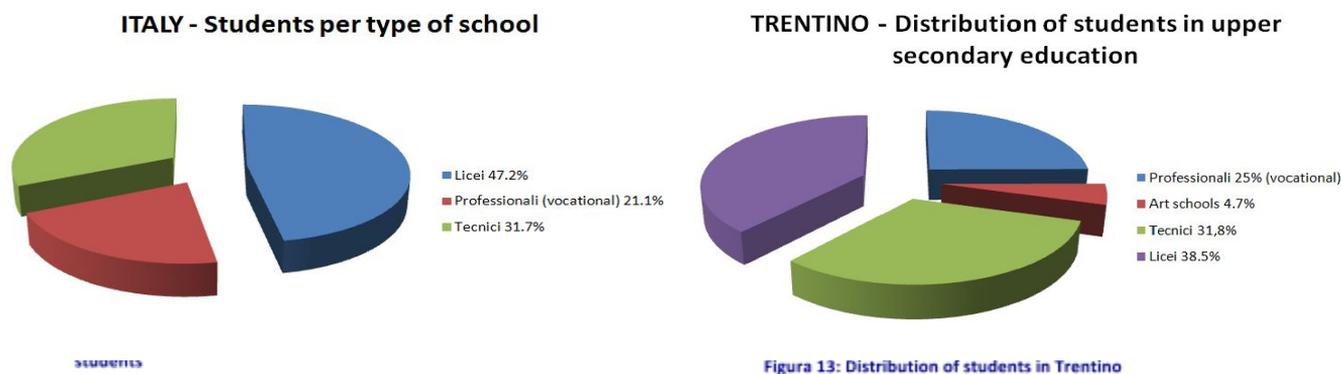
2014, euro

Fig. 11: From ISTAT, Italy in Figures 2015.

4.1 Upper secondary education and autonomous regions: a complex mosaic

There are 7,101 high schools in Italy with a total amount of 127,002 classes, 2,666,067 students (52.4% males, 48.6% females) and 206,479 teachers. The average number of students per teacher is 12.1. The average number of foreign students is 6.8 out of 100 students enrolled. 95.8% of students attend a state school, the remaining in a private school or private vocational institution. It is important to underline that 2 of the 5 special regions mentioned above (Trentino-Alto Adige and Valle d'Aosta) are allowed to independently decide on matters regarding schooling and education, provided their laws are not in conflict with national ones. They also autonomously issue their own statistics. The autonomous region Trentino-Alto Adige is further divided into two provinces, Trento and Bolzano, each with its own internal regulations.

These three regions have been granted autonomy in the education system because of the presence of minorities or bilingual populations in their territories (Francophone population in Valle d'Aosta; German-and/or Ladin-speaking inhabitants in the province of Bolzano; Ladins, Cimbri and Mocheni in the province of Trento). As the Italian educational system proves to be a quite complicated one, it could be interesting to analyze the current trends in enrolment by comparing national data regarding the distribution of students according to type of school (fig. 12) with statistical data coming from Trentino, our province (fig. 13).



It is interesting to notice that in the data provided by PAT, despite the 2010 reform, art schools are still regarded as a separate category due to their semi-vocational nature.

5. Scuola Ladina di Fassa: the school in numbers

Scuola Ladina di Fassa serves the entire area of the Val di Fassa (fig. 14), a valley lying in the Dolomites of Trentino in the north-east of the Italian peninsula which is inhabited by 10,119 people.¹⁹ The local population is mainly bilingual. Both Italian and a minority language called Ladin are spoken in the valley, taught at school and used in public administration.²⁰ Scuola di Fassa runs 3 primary schools, 3 middle schools and 3 high schools for a total of 1246 students and 190 teachers. About 20,000 euros are spent on inventory supplies (durable equipment) every year. To take part in this project, we chose Liceo Artistico "G.Soraperra", which is a semi-vocational school and will be described in next section.

¹⁹ Official data on 31st December 2015.

²⁰ L.P. no. 4 of 13th February 1997 and L.P. no.5 of 7th August 2006.

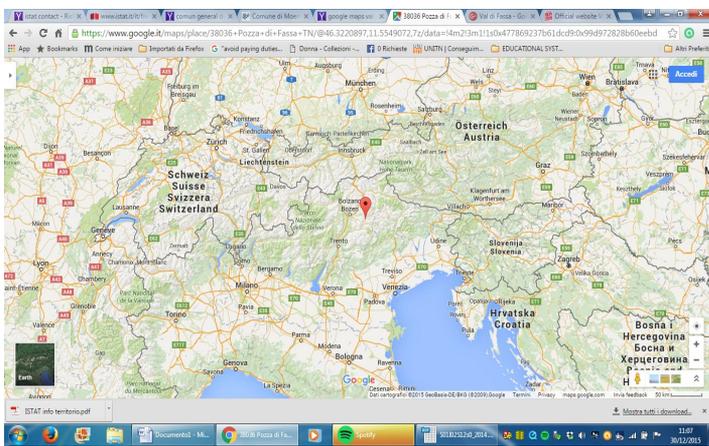


Figura 14: Val di Fassa pinned on a Google map

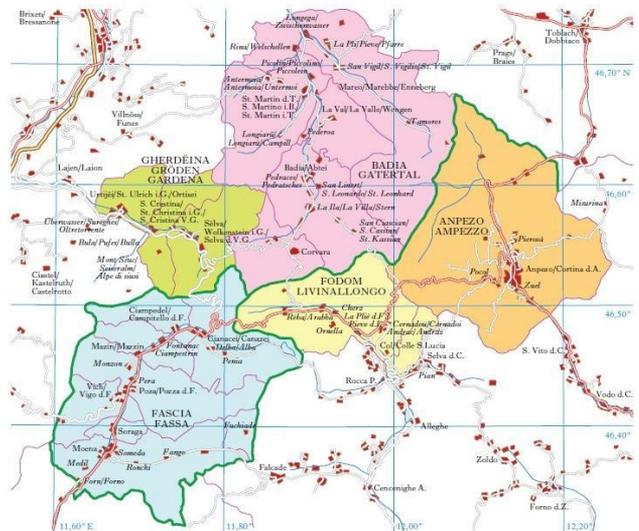


Figura 15: The 5 Ladin valleys in the Dolomites, www.treccani.it

5.1 Liceo Artistico “G.Soraperra”

Liceo Artistico “G.Soraperra” is a state art school located in Pozza di Fassa which was a vocational school²¹ before the reform of upper secondary education of 2010. We have 159 students currently enrolled (84 males and 75 females) divided into 5 levels and 10 classes. Classes vary in size from min. 6 to max. 24 students. Of our students just one is foreign (from Romania) and 17 have special needs (8 with disabilities, 9 suffering from dyslexia). Early leavers are an exception and just a few students are to repeat every year.²² At present, the number of teachers employed is 42 (21 males and 21 females). Of these 42 teachers, 2 teach students with special needs only, while another 5 teachers teach both students with special needs – usually helping them with academic or core subjects such as Mathematics, Humanities and/or practical subjects – and a curricular subject. 2 assistant educators are employed to further aid students with disabilities. The school has been temporarily relocated in an extension of the middle school since the school year 2012/2013, as the old building where it used to be, dating back to 1941, was no longer safe and was demolished in November 2015. The school currently has 7 all-purpose classrooms, a small teachers’ room, 3 art rooms (1 for visual arts and 2 for design drawing), 6 art labs (carpentry, modelling, carving and sculpture, plastic disciplines, restoration, painting and decoration), a computer room with 17 computers running Windows7 as OS (fig. 18), an adjoining canteen, a gym. We are also planning to open a Fab Lab for our students in the near future. 5 classrooms are equipped with a Smart Board, a projector and speakers (fig.19). An average classroom measures approximately 45 m². The seating layout of a regular classroom is in rows of desks (fig. 16 and 17).



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Fig. 16: A class of History of Art

Fig. SEQ Figura * ARABIC 17: Design drawing classroom



Fig. 18: Computer room



Fig. 19: Interactive white board, projector and speakers

Students are at school 38 hours per week, from Monday to Friday, from 7:45 am to 1 pm (with a 15-minute break). They have afternoon tuition twice a week from 2:10 pm to 5:40 pm (with a 10-minute break). A lesson lasts 50 minutes. Additional classes are available in various subjects on free afternoons. To get an idea of how the curriculum is exactly structured, please see the table that follows this section.

FIRST TWO YEARS (compulsory education)	HOURS PER WEEK		SPECIALIZATION: ART & DESIGN	HOURS PER WEEK			SPECIALIZATION: VISUAL ARTS	HOURS PER WEEK		
	1 st year	2 nd year		3 rd year	4 th year	5 th year		3 rd year	4 th year	5 th year
SUBJECTS			SUBJECTS				SUBJECTS			
Italian	4	4	Italian	4	4	4	Italian	4	4	4
History/Geography	3	3	History	2	2	2	History	2	2	2
English	3	3	English	3	3	3	English	3	3	3
German	3	3	Mathematics	2	2	2	Mathematics	2	2	2
Mathematics	3	3	PE	2	2	2	PE	2	2	2
Science	2	2	Religious education (or alternative activity)	1	1	1	Religious education (or alternative activity)	1	1	1
PE	2	2	Law or Ladin	1	1	1	Law or Ladin	1	1	1
Religious education (or alternative activity)	1	1	Philosophy	2	2	2	Philosophy	2	2	2
Law or Ladin	1	1	Physics	2	2	2	Physics	2	2	2

TOTAL ACADEMIC SUBJECTS	22	22	Chemistry	2	2		Chemistry	2	2	
History of art	3	3	TOTAL ACADEMIC SUBJECTS	21	21	19	TOTAL ACADEMIC SUBJECTS	21	21	19
Drawing	4	4	History of art	3	3	3	History of art	3	3	3
Plastic disciplines/ sculpture	3	3	Design & planning	8	8	8	Visual arts and sculpture	8	8	8
Design drawing	3	3	Design Lab*	6	6	8	Visual arts lab*	6	6	8
Lab training	3	3	TOTAL CORE SUBJECTS	17	17	19	TOTAL CORE SUBJECTS	17	17	19
TOTAL CORE SUBJECTS	16	16	TOTAL PER WEEK	38	38	38	TOTAL PER WEEK	38	38	38
TOTAL PER WEEK	38	38	*In 4 th and 5 th year CLIL in English			*In 4 th and 5 th year CLIL in English				

The available afternoon optional courses are listed here as follows:

- Glass staining and gilding (20 hrs)
- Wood modelling and turning (24 hrs)
- Sculpture (20 hrs)
- History Lab (20 hrs on contemporary history+ 20 hrs on World War I and II)
- Bioethics Lab (10 hrs)
- Maths Olympics (6 hrs)
- Physics Olympics (6 hrs)
- Organization of Science Festival (4hrs)
- **Lego League Robotics (20 hrs)**
- **Computer programming (15 hrs)**
- **Probability and online gaming/betting (12 hrs)**
- **Preparation for ECDL (21 hrs)**
- **AutoCAD (20 hrs)**
- **Photoshop (20 hrs)**

As far as connectivity is concerned, the school is entirely covered by Wi-Fi but students are not yet allowed to access it through their personal devices, as the signal is not powerful enough to connect many users at the same time. Wi-Fi is accessible only to teachers, school staff and students with special needs who use laptops supplied by the school. The other students use the desktop PCs in the computer room, which are connected to the internet through Ethernet LAN. The average speed of our ADSL line is 4.38 Mbps in downstream and 0.34 Mbps in upstream (92 ms ping) when several users are connected at the same time.²³

²³ Test carried out using both our internet provider's speed test and Ookla speedtest www.speedtest.net.

5.2 The current use of ICT in our school

ICT is mainly used from 3rd year on to develop specific digital skills and competences in core subjects. Students learn how to use popular software programmes required both in the job market and art and design universities. Here is a list of software products that are commonly run in our computer room:

- | | |
|-----------------------|--------------------------------------|
| ➤ Photoshop (Adobe) | Production, post-production, |
| ➤ InDesign (Adobe) | editing of images, creation of logos |
| ➤ Illustrator (Adobe) | |
| | |
| ➤ AutoCAD | |
| ➤ Autodesk | Design and planning |
| ➤ Sketchup | |
| ➤ Flash | → Creation of didactic games |
| ➤ Premiere (Adobe) | → Video editing |
| ➤ Wordpress | → Creation of blogs and websites |

The school has its own Youtube channel called “Spazioarte” where students upload the videos they shoot and edit, such as interviews, promos, clips from TV reports, documentation of didactic practices, projects and activities, participation in events, virtual tours, exchange experiences.

In school year 2014/2015, during CLIL classes, 4th and 5th year students learnt how to create their class website containing each students’ portfolio. Due to the success of this activity and the high level of appreciation shown by students, the teachers involved in the project suggested continuing to exploit the great opportunities offered by Web 2.0 tools and will have each CLIL student create their own individual blogs/website in school year 2015/2016.

The school also has a Moodle e-learning platform which, however, in the same way as frequently happens with interactive white boards, is not used to its full potential by students and teachers yet, probably due to a lack of proper technical and above all, practical training.

Unfortunately, due to poor connectivity in the geographical area where we live, we still haven’t been able to develop any BYOD policy, though we estimate that almost all of our students possess a laptop computer or a tablet in addition to a smartphone. This is definitely one of our priorities for the years to come, as well as one of the major commitments taken by the Government and PAT.

5. 3 New spaces for new didactics

The construction of the new school is scheduled to start in Spring 2016 and should be finished by the beginning

of the school year 2017/2018 (fig. 20). In the new school, each class of students will have their own classroom and stop moving from classroom to classroom. Classrooms will be more spacious (around 60 m²) and each equipped with an interactive whiteboard. Spaces for students with disabilities and special needs will be significantly improved in terms of quality and accessibility. A faster, content-filtered Wi-Fi connection will be available in the entire building and accessible to different profiles (by visitors, students, teachers, staff and administrators). As there are still two years to go before the inauguration of the new edifice, it is wise to wait and see the future developments in technology, teaching and learning before making definitive decisions concerning furniture and ICT equipment.

6. Policies and initiatives to implement the use of ICT in schools

6.1 On a national basis

The Italian Government made a law²⁴ known as “La Buona Scuola” in July 2015 which aims at implementing the digitization of didactics in Italy, among others. In conformity with this law, the Ministry of Education (MIUR) issued an important document called PNSD (Piano Nazionale Scuola Digitale – National Plan for a Digital School) stating the available resources and the measures to follow in order to achieve the goals listed in “La Buona Scuola”. PNSD attempts at seizing the opportunities offered by the digital age with the purpose of renewing teaching methods by giving teachers the necessary equipment and training to face the challenge of radically changing their habits and attitudes in regard of the use of ICT in class. More resources are being invested in the modernization of the Italian schooling system, including European Structural Funds 2014-2020 and internal ones. The idea at the basis of this national project is that of school as an interactive open space for learning and developing new skills thanks to the use of new technologies in a perspective of lifelong and life-wide learning. The approach is learner-centered and inclusive due to a greater variety of tasks and methods than in traditional didactics. In this sense, PNSD represents a further step towards a movement of innovation that started in 2008 with the massive introduction of interactive white boards in Italian schools²⁵. In addition, in the years from 2008 and 2012 other important initiatives were promoted such as “Azioni Classi 2.0”(for the creation of Web 2.0 classes) whose motto was “no more classes in the lab, but the classroom as a lab”, which aimed at creating innovative learning environments.²⁶ An extra funding of 4,500,000 euros for the same project in 2011 allowed 14 Italian institutions to undergo a complete process of digitization which combined innovation in teaching and planning with new models of organization of human and architectural resources. In 2010 the Italian Government also funded a project for digital publishing in 20 schools with a grant of 4,400,000 euros. Thanks to special agreements signed between MIUR and the regions in 2012, further investments in digital education were made for 33,000,000 euros, which led to the allotment of another 1,931 interactive white boards and the creation of 905 2.0 classes and 23 2.0 schools. Moreover, in the same period,

²⁴ Legge 107/2015 – La Buona Scuola.

²⁵ From 2008 to 2012 35,114 interactive white boards were bought and introduced into Italian schools thanks to a special allocation of 93,354,571 euros (of which 80,937,600 euros were used to buy the necessary equipment and another 12,416,971 euros to finance specific training courses for 72,357 teachers).

²⁶ This project involved 416 classes at all levels and obtained a government grant of 8,580,000 euros to buy the necessary equipment and a grant of 1,944,857 to offer teachers support and specific training.

several initiatives in support of schools located in geographically disadvantaged areas in the mountains and islands were carried out²⁷. In 2013, as stated in art. 11 of law n. 104/2013, the State allocated 5 million euros – and earmarked another 10 million for 2014 – to install Wi-Fi in schools. The Government also selected some institutions to organize training courses for teachers in the use of digital technology.²⁸ Starting from 2015 other important actions listed in PNSD have taken place in order to improve digital didactics in Italian schools and allocate more resources. These measures will continue throughout 2016 and in the immediate years to come. PNSD takes into account several aspects and issues regarding:

Accessibility and connectivity

- By 2020 all schools will be reached by ultra-broadband fiber connection;
- Inner cabling (LAN/W-LAN) of all schools (88.5 million euros);
- The right for internet availability in all schools (10 million euros per year starting from 2016);
- Development of Integrated Digital Learning Environments (augmented reality classes, alternative spaces for learning, mobile labs for a total investment of 140 million euros);
- Challenge prizes²⁹ for schools (action research for finding and sharing effective solutions and methods, 2.2 million of euros);
- Policies for BYOD (Bring Your Own Device);
- Plans for innovative school building and the creation of themed labs (80 million euros for creative labs for the enhancement of digital skills and key competences; 140 million euros for the digital characterization of vocational education, 45 million euros for local employability labs);
- Introduction of a single-sign-on authentication system (SSO);
- Creation of a digital profile for each student (right to learn and digital curriculum);
- Creation of a digital profile for each teacher (professional profile and digital curriculum);
- Dematerialization and digitization of services and administration;
- E-register in all school levels(40 million euros);
- Management of school data (1 million Euro + 100,000 euros per year for the open data portal).

Competencies and contents

- A common framework for the digital competencies of students and media approach;
- Innovative scenarios for the development of applied digital skills (1.5 million euros);
- The establishment of a research unit for 21st century competencies;
- Bringing computational thinking into schools;
- Updating the national curriculum in regards of the use of ICT in lower secondary education (SSPG);

²⁷ This action, known as CSD (Centri Scolastici Digitali – Digital School Centres), is meant to connect schools in different areas through the use of technology.

²⁸ These schools, named “Poli Formativi” (training centres), were selected on a provincial and regional basis. The training offered was a peer-to-peer one, so networks of schools were formed and collaborated together. The Government invested 1,600,000 euros in this project.

²⁹ Inducement prizes.

- A national curriculum for digital entrepreneurship development (competitions, H-SCHOOL Acceleration Camps, Contamination Labs for a total allocation of 3 million euros);
- Girls in Tech and Science;
- A plan for digital careers (proper orientation, school-work alternation and special programmes such as P-Tech – Pathways in Technology, Early College High School);
- Minimum standards and technical requisites for online learning environments (LMS, LCMS, social networks and publishing platforms);
- Promotion of open educational resources and guidelines for self-produced digital learning materials;
- School libraries as support centres for ICT literacy and diffusion (1,5 million euros);

Training and support of teachers and other staff

- In-service training for teaching and organizational innovation (10 million euros + ESF funds – this action involves: need analysis, support, ICT training, diffusion of effective practices and case studies, creation of local networks and centres, training abroad for 1000 worthy teachers and principals);
- Technical assistance for primary and lower secondary schools (5.7 million euros);
- Training teachers who are new to the job in the proper use of ICT in class;
- A digital animator for each school who organizes training courses employing in-service human resources as well as hired experts, offers less experienced colleagues the technical support they need, finds and shares innovative solutions, gets the entire school communities to take part in the different initiatives in support of digital learning and teaching (8.5 million euros per year);
- Improving cooperation locally between schools and businesses/service providers on the territory (creation of a Stakeholders' Club for digital school and the use of online network protocols);
- A gallery for collecting good practices and innovative approaches;
- Creation of a network for school innovation which will gather all the different local networks and allow them to get and keep in touch and co-operate;
- The Technological Observatory will turn into the Observatory for Digital Schooling and, besides collecting and managing statistical data, it will also collaborate with the Observatory for School Building in order to guarantee transparency of information and efficiency in the management of resources;
- The constant monitoring of PNSD and the establishment of a scientific committee of experts to be summoned at least twice a year to discuss issues, developments and achievements regarding PNSD itself;
- Educational offer plans to be issued locally and reviewed every three years (PTOF – Piano Triennale dell'Offerta Formativa);

Among the most relevant initiatives carried out to promote the digitization of Italian schools, it is worth mentioning EDU DAY, an important event addressed to principals, teachers and students which took place on

1st December 2015 and is the result of the collaboration between MIUR and Microsoft Italy. The cooperation between the two parties involves not only the provision of technological supplies and solutions to Italian schools but it also offers support and appropriate training to teachers in using innovative devices and software programmes.³⁰ Another significant initiative organized by MIUR was the PNSD week (“Settimana del Piano Nazionale della Scuola Digitale”) from 7th to 15th December 2015, which was scheduled concurrently with the Hour of Code Week. MIUR and Microsoft are trying to sensitize children and teenagers on the importance of knowing the language of coding by promoting programming laboratories and the use of Visual C++. With this project, called “Programma il futuro” (Planning and Programming the Future), MIUR also launched a challenge #ilmioPNSD (#myPNSD) to invite students from all Italian schools to post their video documentaries of exemplar digital practices and activities in their institutions. Each of the winning 5 schools received a € 6,000 prize to spend on new ICT products.³¹

6.2 Training offered on a regional and local basis

As already mentioned, PAT (the Autonomous Province of Trento), which our school depends on, has a high level of independence from the State in matter of education and management of local resources.³² Although provincial schools are free to participate in national events and contests, PAT finances the provincial school system directly from its balance sheet, without any contribution from the State, and promotes its own events and initiatives. The Province of Trento invests an average of €683,800,000 in the school estate every year (484,000,000 for salaries; 163,000,000 to non-state commissioned institutions; 17,400,000 to run PAT facilities; 19,400,000 in investments).³³ In the last few years, major investments have been made in the development of new curricula based on competencies³⁴ and training of teachers for CLIL, being the latter one of the landmarks of the “Progetto Trentino Trilingue”, a project of trilingualism (Italian, German, English)³⁵ which started at the beginning of school year 2015/2016 and mainly targets children in primary school, although CLIL programmes are being carried out also in middle and high schools (in our institution too). The development of competencies and CLIL methodology are PAT’s priorities at the moment, and a wide range of training courses aimed at improving teachers’ planning and didactic skills are offered yearly by IPRASE (Istituto Provinciale per la Ricerca, l’Aggiornamento e la Sperimentazione Educativi – Provincial Institute for Educational Research, Updating and Experimentation). IPRASE offers a wide range of training options to choose from in different fields: special needs, trilingualism/CLIL, interculturalism and gender relations, assessment and self-assessment, leadership and school management, school-work alternation, use of ICT and digital teaching, orientation-entrepreneurship-creativity, specializing single-discipline courses.³⁶

³⁰ <https://news.microsoft.com>.

³¹ School ranked 1st won a € 7,170 prize.

³² Provincial law n.5 of 7th August 2006.

³³ *Apri la scuola, apri la scuola. Studenti e personale in Trentino, numeri e statistiche di oggi e ieri*. Anno scolastico 2015/2016.

³⁴ Piani di Studio Provinciali.

³⁵ In the case of Val di Fassa the term “quadrilingualism” would be more appropriate, as we also speak and learn a 4th language in school, Ladin.

³⁶ www.iprase.tn.it.

Regarding ICT training in particular, some training in the use of white interactive boards was offered consequently to the introduction of Smart Boards in the schools of Trentino from school year 2006/2007 on.³⁷

It is worth mentioning that this year IPRASE is running blended e-learning classes in preparation for EPICT (European Pedagogical ICT Licence).

Another institution that offers training and services not only to teachers but to the entire community of the province is “FSE in Trentino” which promotes initiatives financed by the European Social Fund (ESF). In support of the Trilingual Plan of PAT, students and teachers can apply for vouchers for summer intensive language courses in German- and English-speaking European countries every year. Thanks to ESF 2014-2020, also German and English courses for teachers are being organized this year and will be supplied in blended mode.³⁸

Scuola Ladina di Fassa is part of “Rete dell’Avisio”, a network of schools quite close to each other which organizes in-service training courses for teachers of all school levels. The training courses proposed are mainly centered on the objectives pursued by PAT (CLIL teaching and language learning) and the flipped classroom. Other popular options are teaching special needs, inclusiveness, local history, assessment methods. It is worth mentioning that, following a bottom-up approach, a group of our primary school teachers organize a peer-to-peer course on the use of white interactive boards every year. Instead, the Art Department of Liceo Artistico “G. Soraperra” has organized, for teachers of art and design subjects in our school, a specialized course in the use of a bundle of software including Photoshop, Illustrator, InDesign, Premiere and ZBrush. The course will take about 50-60 hours and will be run by an external expert.

Scuola Ladina di Fassa also has its own training centre which is called OLFED (Ofize Ladin Formazion e Enrescida Didatica – Office for Training, Research and Didactics in Ladin). OLFED’s main task is to train teachers in promoting and valorizing the Ladin language and culture in school. CLIL projects are also carried out in our minority language, especially in primary and middle school.

7. The world of teachers

7.1 Meeting teachers’ training needs

In Italy, to become a teacher, one has to get a Master’s degree and after that take a specializing training course which lasts an academic year. Once a teacher signs their employment contract and starts to work for the state, they have to take a refresher course for at least 10 hours every school year. Of course it is possible for a teacher to attend more hours, but in that case they won’t receive any payment for extra training. Moreover, better training does not necessarily involve better career opportunities, as teachers are enrolled by public selection and according to rankings based on score³⁹. Although a lot of progress is being made to improve the digital skills of Italian teachers, courses are usually rather theoretical having no hands-on approach and give very few examples of practical accomplishments of teaching practices. They show what and

³⁷ Martellato Martina, *Le TIC nelle nuove scuole: dall’ardesia alla lavagna digitale*, Università degli Studi di Trento, Facoltà di Sociologia, Trento, A.A. 2006/2007.

³⁸ www.fse.provincia.tn.it/opportunita/trentinotrilingue.

³⁹ The final score is the sum of the titles possessed by the candidate, years of service and further training/education (this last item gives only 6 points at most, not a lot if we consider that working for a school year gives 12 points).

how can be used in education, without showcasing any final products or results. This frequently happens also with ICT training: one learns how to use the options offered by a certain software product or device but is given no idea of which projects can be done at a practical level by means of technology. The real paradox consists in the fact that teachers realize they have all the necessary equipment and the ideal environment to carry out a digital lesson but lack the proper training to create a truly effective one. Teachers who are not geeks or have not received specific training in the field of ICT find it difficult to cope with the digital era and might experience frustration and a lack of motivation. networking with other teachers for advice and support still remains a necessity for many and the best path to follow to spread and share digital competences.

7.1 Being an Italian teacher in Europe

It's no secret that Italian teachers are among the least paid in all Europe. The annual gross salary that a upper secondary teacher earns goes from min 24,846 to max 38 902 euros a year⁴⁰ in a country where taxation can reach 70% of an individual's income. Teachers who haven't yet signed a permanent contract, but who have been working in state schools for years, are still waiting for a permanent position (more than 250,000 teachers sign a temporary contract every year according to Anief, one of the main teachers' unions in Italy)⁴¹ and have no right to pay increases and adjustments. The situation is not much better for permanent teachers, as the frequency of salary increase has been dramatically reduced for them in the last few years and no allowances based on merit are provided by contract. Thanks to law "La Buona Scuola" permanent teachers will receive a yearly bonus of € 500 to spend on training, but what about temporary teachers? And above all, will that be enough to guarantee good quality teaching to Italian students in such a demanding society as ours is nowadays?

Annual gross salaries of full time fully qualified school heads in public schools			
	Basic statutory salary		Average actual salary
	Minimum EUR	Maximum EUR	
Pre-primary	Not applicable	Not applicable	Not applicable
Primary	47 167	47 167	62 086
Lower secondary	47 167	47 167	62 086
Upper secondary	47 167	47 167	62 086

Data on statutory salaries are from the National Collective Contract and are referred only at the fixed part.

Fig. 21: From EURYDICE, *Teachers' and School Heads' Salaries and Allowances in Europe 2014/2015*.

⁴⁰ Eurydice, *Teachers' and School Heads' Salaries and Allowances in Europe 2013/2014 and 2014/2015*.

⁴¹ Telara, Andrea, *Precari della scuola: ecco chi aspetta il posto fisso da Renzi*, Panorama, 4th March 2015, <http://www.panorama.it/economia/lavoro/precari-scuola-renzi/>.

Fig. 22: From ISTAT, Italy in Figures 2015.

SOME INDICATORS IN EUROPEAN COUNTRIES

2014, percentage values

	Government deficit/Gdp	Government debt/Gdp	Inflation rate	Employment rate
Austria	-2.4	84.5	1.5	71.1
Belgium	-3.2	106.5	0.5	61.9
Cyprus	-8.8	107.5	-0.3	62.1
Finland	-3.2	59.3	1.2	68.7
France	-4.0	95.0	0.6	64.2
Germany	0.7	74.7	0.8	73.8
Greece	-3.5	177.1	-1.4	49.4
Ireland	-4.1	109.7	0.3	61.7
Italy	-3.0	132.1	0.2	55.7
Luxembourg	0.6	23.6	0.7	66.6
Malta	-2.1	68.0	0.8	62.3
Netherlands	-2.3	68.8	0.3	73.9
Portugal	-4.5	130.2	-0.2	62.6
Slovakia	-2.9	53.6	-0.1	61.0
Slovenia	-4.9	80.9	0.4	63.9
Spain	-5.8	97.7	-0.2	56.0
Bulgaria	-2.8	27.6	-1.6	61.0
Croatia	-5.7	85.0	0.2	54.6
Denmark	1.2	45.2	0.3	72.8
Estonia	0.6	10.6	0.5	69.6
Latvia	-1.4	40.0	0.7	66.3
Lithuania	-0.7	40.9	0.2	65.7
Poland	-3.2	50.1	0.1	61.7
United Kingdom	-5.7	89.4	1.5	71.9

7.2 Gender considerations

Another important issue with teaching in Italy is related to gender: most of Italian teachers in all levels are women (77,7 %). The percentage reaches 94.5% in primary education, while “only” 73.4% in lower secondary education and 60.8% in upper secondary education. Levels drop when it comes to head positions: in that case only in primary education women are more than men (19.7% against 17.3%), while in lower secondary education only 11.7% of women become headmistresses (against 23.1% of men) and even fewer in upper secondary education where only 5.9% of principals are women (against 22,2% of men). The average age of Italian teachers is 44.5 for women and 47.5 for men. This data come from a governmental gender-focused report dating back to 1999⁴² The situation hasn’t changed significantly since then as confirmed by a more recent report published online by Italian newspaper “La Stampa”: most of today’s teachers in Italy are still women. Moreover, our teachers are the oldest in Europe: 61.9% of teachers are over 50.⁴³ No significant difference in the overall situation can be noticed by reading Eurydice’s report on European teachers and school heads in 2013.⁴⁴

⁴² Ministero della Pubblica Istruzione, *Aspetti della femminilizzazione nel sistema scolastico. Una panoramica sul personale della scuola statale*, 1999.

⁴³ *Il profilo del docente italiano? Donna e over 50, I dati del rapporto Eurostat diffuso in Occasione della Giornata mondiale dell’insegnante*, La Stampa, 4th October 2015, www.lastampa.it.

⁴⁴ *Cifre chiave sugli insegnanti e i capi di istituto in Europa*, Eurydice, 2013.

8. Key Conclusions

- ❖ Italy is undergoing a profound change involving its school system and educational institutions which should be seen positively and embraced by everyone.
- ❖ Italy is a unique - though extremely complex - kaleidoscope of cultures, languages and people: innovation must go hand in hand with the respect of diversity and tradition.
- ❖ “Rome wasn’t built in a day”: the digitization of didactics represents a big challenge for students, teachers and principals but it will take time, patience, collaboration and hard work by all the parties involved. Even though students were born digital natives, they too need time to get used to new ways of teaching and learning.
- ❖ If proper connectivity cannot be guaranteed for BYOD policies in the near future, in the meantime, we should come up with valid alternatives that could make the transition to a digital future easier and smoother.
- ❖ Innovation starts from using what we already have to – or close to – its full potential. Without proper knowledge of the devices we already possess and the training we need to effectively use them, no teacher/student can be truly active and significantly contribute to a epoch-making change.
- ❖ ICT giants like Microsoft recognize the importance of cooperation between schools and businesses in unleashing the immense potential of learning to code. Also a 40-year old Steve Jobs says in *The Lost Interview*: “We should all learn how to code. It teaches you how to think”.⁴⁵
- ❖ The future of Europe in cultural terms depends on the valorization of differences and on a constant commitment: visiting other countries, sharing teaching (and learning) practices, keeping in touch despite the hustle and bustle of everyday life, taking time for rethinking old methods and practising new solutions. Isn’t that lifelong learning too, after all?
- ❖ A bottom-up approach and a peer-to-peer approach seems to be the one that works best among teachers.
- ❖ If any practice works for students, it should work for teachers too. Teaching means importing, exporting and adapting contents, contexts and ideas.
- ❖ Gender considerations and implications should always be taken into account when planning any kind of intervention involving teachers or students.

⁴⁵ *The Lost Interview* is a 2012 documentary by Paul Sen based on an interview released by Steve Jobs in 1995.

Bibliography

- Comitato Provinciale del Sistema Educativo, *Mettere a sistema la qualità delle scuole del Trentino. Rapporto 2012*, April 2013.
- Eurydice, *Cifre chiave sugli insegnanti e i capi di istituto in Europa*, 2013.
- Eurydice, *Teachers' and School Heads' Salaries and Allowances in Europe 2013/2014 and 2014/2015*.
- ISTAT, *Annuario Statistico 2014*.
- ISTAT, *Bilancio demografico nazionale 2014/2015*, June 2015.
- ISTAT, *Cittadini e nuove tecnologie*, 2014.
- ISTAT, *L'Italia in cifre 2015/Italy in Figures 2015*.
- ISTAT, *Censimento della popolazione 2011*.
- ISTAT, *Gli stranieri al 15° censimento della popolazione*, December 2013.
- Martellato Martina, *Le TIC nelle nuove scuole: dall'ardesia alla lavagna digitale*, Università degli Studi di Trento, Facoltà di Sociologia, Trento, A.A. 2006/2007.
- Ministero della Pubblica Istruzione, *Aspetti della femminilizzazione nel sistema scolastico. Una panoramica sul personale della scuola statale*, 1999.
- MIUR, Servizio Statistico, *Focus "Le dotazioni multimediali per la didattica nelle scuole" A.S. 2014/15*, October 2015.
- MIUR, *Piano Nazionale Scuola Digitale*, 2015..
- MIUR, *Guida alla nuova scuola superiore*, 2010.
- MIUR, Servizio Statistico, *Anticipazione sui principali dati della scuola statale A.S. 2015/2016*, Settembre 2015.
- PAT, *Apri la scuola, apri la scuola. Studenti e personale in Trentino, numeri e statistiche di oggi e ieri. Anno scolastico 2015/2016*.
- PAT, *Dati complessivi inizio A.S. 2014-2015*.
- PAT, *Gli insegnanti e le TIC nella scuola trentina. Indagine sull'utilizzo e la conoscenza delle tecnologie dell'informazione e della comunicazione*, September 2009.
- Legge 107/2015 – La Buona Scuola.
- L.P. n.4, 13 febbraio 1997
- L.P. n.6, 7 agosto 2005
- Decreto del Presidente della Giunta Provinciale, 18 Ottobre 1999 no.13-12/Leg.

Webography

- Biondi, Andrea, *L'Italia che rincorre i paesi UE su banda ultralarga e competenze digitali*, 24th May 2014, source: www.ilsole24ore.it
- Rusconi, Gianni, *L'ADSL in Italia è la più cara in Europa. Altroconsumo: "concorrenza ingessata"*, www.ilsole24ore.it

- *Il profilo del docente italiano? Donna e over 50, I dati del rapporto Eurostat diffuso in Occasione della Giornata mondiale dell'insegnante*, La Stampa, 4th October 2015, www.lastampa.it.
- Telara, Andrea, *Precari della scuola: ecco chi aspetta il posto fisso da Renzi*, Panorama, 4th March 2015, <http://www.panorama.it/economia/lavoro/precari-scuola-renzi/>.
- Toso, Fiorenzo, *Quante e quali minoranze in Italia*, Enciclopedia Treccani La lingua, http://www.treccani.it/lingua_italiana/speciali/minoranze/Toso_quali_quante.html
- www.fse.provincia.tn.it/opportunita/trentinotrilingue.
- www.iprase.tn.it.
- <https://news.microsoft.com>.
- www.speedtest.net
- www.vivoscuola.it
- <http://www.consiglio.regione.vda.it/>
- <http://www.provincia.bz.it/>
- <http://www.trilinguismo.provincia.tn.it/>

Web Tools

- Some of the infographics in this report have been created using Piktochart: <https://piktochart.com/>

Filmography

- Sen, Paul, *The Lost Interview*, 2012.