



European  
Commission



# Education and Training Monitor 2014

## Italy

## 1. Key indicators and benchmarks

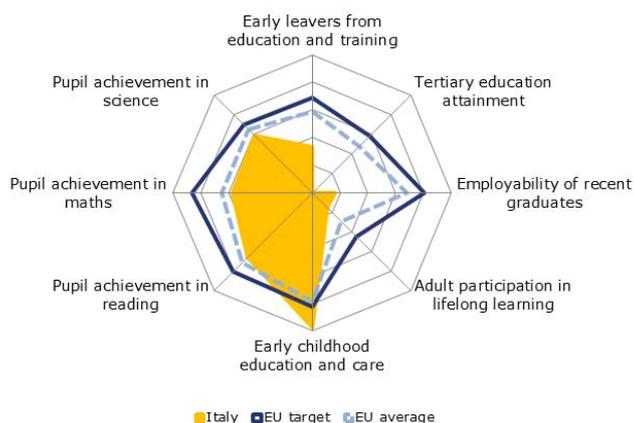
			Italy		Trend	EU28 average		Europe 2020 target / Benchmark
			2010	2013		2010	2013	
<i>Europe 2020 headline target</i>								
<b>1. Early leavers from education and training</b> (age 18-24)			18.8%	17.0%	▼	13.9%	12.0%	<b>EU target: 10%</b> National target: 16%
<b>2. Tertiary educational attainment</b> (age 30-34)			19.8%	22.4%	▲	33.6%	36.9%	<b>EU target: 40%</b> National target: 26-27%
<i>ET 2020 Benchmarks</i>								
<b>3. Early childhood education and care</b> (4-years-old until the starting age of compulsory education)			99.8% <sup>09</sup>	99.2% <sup>12</sup>	▼	92.1% <sup>09</sup>	93.9% <sup>12</sup>	<b>95%</b>
<b>4. Basic skills</b>								
Reading			21.0% <sup>09</sup>	19.5% <sup>12</sup>	▼	19.7% <sup>09</sup>	17.8% <sup>12</sup>	<b>15%</b>
Low achievers (15 year-olds; Level 1 or lower in PISA study)								
Mathematics			24.9% <sup>09</sup>	24.7% <sup>12</sup>	▼	22.3% <sup>09</sup>	22.1% <sup>12</sup>	<b>15%</b>
Science			20.6% <sup>09</sup>	18.7% <sup>12</sup>	▼	17.8% <sup>09</sup>	16.6% <sup>12</sup>	<b>15%</b>
<b>5. Learning mobility</b>								
Initial vocational training (IVET)			0.3%	0.4% <sup>12</sup>	=	0.6%	0.7% <sup>12</sup>	
Higher Education								
a. Students participating in Leonardo da Vinci programmes as a share of vocational students at ISCED 3								
b. Erasmus inbound students as % of student population in host country			-	1.0% <sup>12</sup>	:	-	1.2% <sup>12</sup>	
c. Inbound international degree mobile students as % of student population in the host country			:	: <sup>12</sup>	:	6.0%	6.9% <sup>12</sup>	
<b>6. Employment rate of recent graduates</b> (age 20-34) having left education 1-3 years before reference year								
ISCED 3-6			57.7%	48.3%	▼	77.4%	75.5%	<b>82%</b>
ISCED 3-4			52.3%	40.8%	▼	72.1%	69.5%	
ISCED 5-6			64.6%	56.9%	▼	82.7%	80.9%	
<b>7. Adult participation in lifelong learning</b> (age 25-64)			6.2%	6.2%	=	9.1%	10.5% <sup>b</sup>	<b>15%</b>
<i>Other ET 2020 Indicators</i>								
<b>8. Investment in education and training</b>								
a. General government expenditure on education (% of GDP)			4.5%	4.2% <sup>12</sup>	▼	5.5%	5.3% <sup>12</sup>	
b. Annual expenditure on public and private educational institutions per pupil/student in € PPS								
ISCED 1-2			€ 6,266 <sup>x</sup>	€ 6,149 <sup>11,x</sup>	▼	€6,063.74 <sup>e</sup>	€6,297.16 <sup>11,e</sup>	
ISCED 3-4			€ 6,276 <sup>x</sup>	€ 6,044 <sup>11,x</sup>	▼	€7,022.35 <sup>e</sup>	€6,650.87 <sup>11,e</sup>	
ISCED 5-6			€ 7,379 <sup>x</sup>	€ 7,515 <sup>11,x</sup>	▲	€9,764.30 <sup>e</sup>	€9,474.80 <sup>11,e</sup>	
<b>9. Transversal competences</b>								
Digital competences								
a. Pupils in grade 4 (ISCED 1) using computers at school			63.2% <sup>07</sup>	60.0% <sup>11</sup>	▼	60.7% <sup>07</sup>	64.7% <sup>11</sup>	
b. Individuals aged 16-74 with high computer skills <sup>1</sup>			23.0% <sup>09</sup>	24.0% <sup>12</sup>	▲	25.0% <sup>09</sup>	26.0% <sup>12</sup>	
Problem solving in technology rich environments								
c. Low achievers (no or insuff. computer experience) <sup>2</sup>			:	26.9% <sup>12</sup>	:	:	16.9% <sup>12, EU17</sup>	
d. High achievers (PIAAC level 2 and above)			:	: <sup>12</sup>	:	:	33.2% <sup>12, EU13</sup>	
Entrepreneurial competences								
e. Individuals aged 18-64 who believe to have the required skills and knowledge to start a business			:	29.0%	:	:	42.3% <sup>a, EU18</sup>	
Foreign language skills								
f. ISCED 2 students at proficiency level B1 or higher in first foreign language <sup>3</sup>			:	: <sup>11</sup>	:	:	43.5% <sup>11, EU13</sup>	
g. ISCED 2 students learning two or more foreign languages			99.5%	98.8% <sup>12</sup>	▼	60.6%	63.0% <sup>11</sup>	
<b>10. Basic skills of adults</b>								
Literacy								
Low achievers (< PIAAC proficiency level 2)			:	27.7% <sup>12</sup>	:	:	19.9% <sup>12, EU17</sup>	
High achievers (PIAAC proficiency level 3 and >)			:	29.7% <sup>12</sup>	:	:	43.3% <sup>12, EU17</sup>	
Numeracy								
Low achievers (< PIAAC proficiency level 2)			:	31.7% <sup>12</sup>	:	:	23.6% <sup>12, EU17</sup>	
High achievers (PIAAC proficiency level 3 and >)			:	28.9% <sup>12</sup>	:	:	40.9% <sup>12, EU17</sup>	
<b>11. Skills for future labour market</b> Projected change in employment 2010-2020 in %								
High qualification			:	+17.1%	:	:	+12.4%	
Medium qualification			:	+8.6%	:	:	+2.1%	
Low qualification			:	-10.7%	:	:	-13.2%	
<b>12. Teachers</b>								
a. Teachers aged >50 teaching in public and private at ISCED 2-3 - as % of total teachers teaching in ISCED 2-3 <sup>4</sup>			59.3%	61.9% <sup>12</sup>	▲	:	: <sup>12</sup>	
b. Percentage of teachers who undertook some professional development activities in the previous 12 months			:	75.4%	:	:	84.6% <sup>EU19</sup>	
<b>13. Vocational education and training</b>								
Percentage of vocational students at ISCED 3			60.0%	59.2% <sup>12</sup>	▼	50.1%	50.4% <sup>12</sup>	

Source: Cedefop: 11 / EAC: 5ab / European Survey on Language Competences (ESLC): 9f / Eurostat (COFOG): 8a / Eurostat (ISS): 9b / Eurostat (LFS): 1, 2, 6, 7 / Eurostat (UOE): 3, 5, 8b, 9g, 12a, 13 / Global Entrepreneurship Monitor: 9e / IEA TIMSS: 9a / OECD (PIAAC): 9cd, 10 / OECD (PISA): 4 / OECD (TALIS): 12b

Notes: <sup>07</sup> =2007, <sup>08</sup> =2008, <sup>09</sup> =2009, <sup>10</sup> =2010, <sup>11</sup> =2011, <sup>12</sup> =2012, a= unweighted average, b= break, e= estimate, p= provisional, x= for Italy, public institutions only, except in tertiary education; post-secondary non-tertiary education excluded.

<sup>1</sup>= having carried out 5-6 specific computer related activities. Caution is advised when interpreting comparability over time, due to developments in the implementation of questions related to computer skills, <sup>2</sup>= results cover people who have no computer experience or failed the ICT test, <sup>3</sup>= average of skills tested in reading, listening, writing, <sup>4</sup>= in some Member States, ISCED 3 includes level 4 (CZ, EE, ES, IE, NL, FI, UK), while in others (IT, LU, NL) only public institutions figures are reported.

Figure: Position in relation to highest (outer ring) and lowest performers (centre)



Source: DG Education and Culture calculations, based on data from Eurostat (LFS 2013 and UOE 2012) and OECD (PISA 2012). Note: all scores are set between a maximum (the highest performers visualised by the outer ring) and a minimum (the lowest performers visualised by the centre of the chart).

## 2. Main challenges

In recent years Italy has made some progress in improving the outcomes of its education system. However, it continues to lag behind most EU countries in terms of human capital formation. Early school leaving remains high, although it has fallen slightly. Pupil performance with regard to basic skills is in line with or above the EU average in the northern regions and significantly worse in the South. Monitoring school quality is still at an early stage and there is currently only one career pathway into the teaching profession. The tertiary attainment rate for the 30-34 year-old age group is the lowest in the EU. Adult literacy and numeracy skills are very poor, when compared with other countries. There is also evidence of a difficult transition from education to the labour market, including for the high-skilled. General government expenditure on education as a share of GDP is among the lowest in the EU, especially at tertiary level.

The 2014 European Semester country-specific recommendation (CSR) on education and training focused on: (i) implementing the National System for Evaluation of Schools to improve school outcomes and reduce the early school leaving rate; (ii) increasing the use of work-based learning in upper secondary vocational education and training and strengthening vocationally-oriented tertiary education; (iii) creating a national register of qualifications to ensure wide recognition of skills; (iv) ensuring that public funding better rewards the quality of higher education and research. Moreover, the 2014 CSR on public finances asked for preserving, inter alia, growth-enhancing expenditure on education.

## 3. Improving resource efficiency and effectiveness

### 3.1 Investment in education

General government expenditure on education as a share of GDP (4.2% in 2012) is among the lowest in the EU.<sup>1</sup> Public expenditure per student<sup>2</sup> is still broadly in line with the EU average at primary and secondary level (although this has declined since the onset of the economic crisis), but it is markedly lower at tertiary level.<sup>3</sup> With regard to the university system, between 2009 and 2013, overall funding provided by the Ministry of Education and Research was cut by approximately EUR 1 billion (-13% in nominal terms, -20% in real terms). This is linked to staff cuts, especially in the number of Chairs (which had increased rapidly in the past), and a freeze on salary rises.<sup>4</sup> The 2014 Stability Law foresaw an increase of EUR 150 million in public funding to universities in 2014, compared with 2013.

<sup>1</sup> The government estimates general government expenditure on education will decrease from 4.0% of GDP in 2010 to 3.6% in 2015. See Italian Ministry of Economy and Finance (2013), *Italy's Draft Budgetary Plan 2014*, p.11.

<sup>2</sup> Measured in purchasing power standards.

<sup>3</sup> See additional contextual indicators at: <http://ec.europa.eu/education/monitor>.

<sup>4</sup> ANVUR (2014), *Rapporto sullo stato del sistema universitario e della ricerca 2013*, [http://www.anvur.org/attachments/article/644/Rapporto%20ANVUR%202013\\_UNIVERSITA%20e%20RICERCA\\_integrale.pdf](http://www.anvur.org/attachments/article/644/Rapporto%20ANVUR%202013_UNIVERSITA%20e%20RICERCA_integrale.pdf).

### 3.2 A focus on teachers

The 2013 OECD Teaching and Learning International Survey (TALIS)<sup>5</sup> provided the following main findings for Italy:

- A high proportion of teachers feel they can motivate students who show low interest in school work (87% compared to a 71% EU average). Nevertheless, Italian teachers perceive their status as very low: only 12% think the teaching profession is valued in society (compared to an EU average of 19%).
- The share of teachers taking part in a formal induction programme during their first regular employment (49%) and of teachers working in schools whose school leaders report a shortage of qualified staff (38%) are around the EU average.
- The proportion of teachers using information and communication technologies (ICT) for student projects or class work (31%) is also around the EU average, but the proportion of teachers undertaking some professional development activities in the last 12 months is below the EU average (75% compared to 85%).
- Appraisal and feedback are not common practice: Italy has the highest share in the EU of teachers who are never formally appraised (70%, according to their school leaders) and of teachers who have never received feedback in their current school (43%).

The 2013 CSR on education asked Italy to enhance teachers' professional development and diversifying their career development. The September 2013 decree-law on education included a three-year plan for recruiting teachers and provided limited resources for teachers' professional development,<sup>6</sup> but to date, the government has taken no concrete action on teachers' career development. However, in September 2014 the government announced a set of guidelines for a school reform ('*La buona scuola*')<sup>7</sup> including important proposed measures on the teaching profession. In particular, the government plans to: (i) replace the current purely seniority-based teachers' career system with a merit-based system; (ii) recruit on a permanent basis from September 2015 almost 150,000 teachers now working with temporary contracts (with an estimated cost of around EUR 3 billion in 2015-2016), while from 2016 access to the profession would be possible only via open competitions. Introducing merit-based teachers' career would be a major innovation in the Italian education system.

## 4. Increasing employability

### 4.1 Work-based learning, apprenticeships and adult learning

Participation of upper secondary students in vocational education and training remains above the EU average (59.2% compared to 50.4% in 2012). However, Italy has a very low share of young people in work-based learning, as well as a very high and increasing share of young people not in education, employment or training (26% of 15-29 year-olds in 2013). The employment rate of recent upper secondary graduates<sup>8</sup> is far below the EU average.

Adults in Italy score below the EU average in literacy and numeracy tests from the OECD Programme for the International Assessment of Adult Competencies (PIAAC),<sup>9</sup> at all ages. The youngest generation (aged 16-24) scores better than the overall population in literacy (by 10 points, i.e. equivalent to skills usually acquired with an additional one to two years of education). However, recent tertiary graduates (aged up to 29) do not score better than upper secondary graduates in the best performing European countries. Italy has also a large proportion of inactive people among its high-skilled population (about 24%). Close to 30% of adults have low literacy and numeracy skills (at PIAAC level 1 or below) compared to an EU average of 19% for literacy and 24% for numeracy. These low-skilled people are six times less likely to participate in job-related learning compared to high-skilled people.<sup>10</sup> This is linked to low adult participation in lifelong learning, which remains low compared to the EU average (6.2% compared to 10.5%, in 2013) and has broadly stagnated over the last few years.

<sup>5</sup> <http://www.oecd.org/edu/school/talis.htm>.

<sup>6</sup> EUR 20 million in 2014 in total, but only EUR 10 million is for real professional development; the other EUR 10 million is to give teachers free access to State-run museums and archaeological sites.

<sup>7</sup> After submitting these guidelines to public consultation between 15 September and 15 November 2014, the government plans to adopt the proposed measures through a decree-law by January 2015.

<sup>8</sup> People aged 20-34 who left education between one and three years before the reference year.

<sup>9</sup> <http://www.oecd.org/site/piaac/>.

<sup>10</sup> At EU level, low-skilled adults are five times less likely to participate in job-related learning than highly skilled adults.

In the area of vocational education and training (VET), the September 2013 decree-law on education introduced: (i) a pilot project for 2014-2016 allowing students in the last two years of upper secondary education to participate in on-the-job training periods in companies, using apprenticeship contracts<sup>11</sup>; (ii) the possibility of using apprenticeships in the study programmes of universities and Higher Technical Institutes (tertiary-level VET institutions). These recent initiatives to strengthen the VET system are welcome, but still of limited scope and impact. Issues with promoting effective work-based learning (i.e. traineeships and apprenticeships) at upper secondary level and promoting Higher Technical Institutes as an alternative to academic studies at tertiary level have not yet been properly addressed, as recommended by the 2014 CSR. So far, Higher Technical Institutes have only enrolled about 7 000 students since their creation in 2011/12. However, initial data about the employability of those who have finished the first two-year cycle are encouraging: 64.7% have already found a job.<sup>12</sup> According to the September 2014 guidelines for school reform, the government plans to make traineeships (of at least 200 hours per year) compulsory for pupils in the last three years of upper secondary vocational education and to strengthen the Higher Technical Institutes.<sup>13</sup>

Italy presented a Youth Guarantee Implementation Plan, "*Piano di attuazione italiano della Garanzia per i Giovani*" in December 2013. Although the level of government commitment is high, there are significant concerns that the Youth Guarantee's sustainability is compromised by the lack of a long-term plan for implementation. The largest education and training challenge to delivering a Youth Guarantee in Italy is the need to increase the private sector's commitment to the programme and to step up cooperation with education institutions on delivering quality apprenticeships and traineeships.<sup>14</sup> Effective and continuous coordination between national and regional levels will be key to successfully implementing the plan.

#### 4.2 Modernising and internationalising higher education

Italy's tertiary education attainment rate is the lowest in the EU (22.4% in 2013 for 30-34 year-olds, with women clearly outperforming men) and it only increased by 2.6 percentage points between 2010 and 2013, remaining well below the 2020 national target of 26-27%. Entry into the labour market is also difficult for the high-skilled. Although a tertiary degree clearly boosts employment prospects over a working life, the employment rate for young tertiary education graduates is well below the EU average and only marginally higher than that of young people who have only completed lower secondary education.<sup>15</sup> While the school-to-university transition rate is close to the EU average, the drop-out rate is very high: nine years after enrolment, only 55 per cent of students have graduated (2012).<sup>16</sup>

Starting from 2013/14, career and counselling activities for prospective tertiary students became compulsory during the penultimate year of upper secondary education,<sup>17</sup> with some additional resources allocated (EUR 7 million in 2013-14). This is a step in the right direction to help students make a more informed choice. It should help reduce tertiary drop-out rates and increase attainment rates. To increase participation and promote regional mobility, the endowment from the government supplementary fund for granting scholarships to university students has been increased by €100 million per year, starting from 2014.

Adequate quality-based funding is key to improving the performance of Italy's tertiary education sector in the medium to long term, as recommended by the 2014 CSR. The self-evaluation, evaluation and accreditation system of universities is being gradually introduced, to fully implement the 2010 university reforms. In July 2013, the university and research evaluation agency published its report evaluating universities' and public research institutes' research quality (VQR) in 2004-10. This is linked to another key principle of the 2010 university reform: an increasing proportion of public funding for universities should be allocated on the basis of research and teaching performance. So far the proportion of public funding to be distributed in line with this principle rose from 7% in 2009 to 13.5% in 2013. However, this has been very difficult to implement in practice due to cuts in higher education funding and restrictive rules that limit the annual changes in the amount of funds each university can receive. The share of performance-related public funding to universities will increase to 18%

<sup>11</sup> The implementing decree was adopted in June 2014 and the pilot project has started in the 2014-15 school year.

<sup>12</sup> See Ministero dell'Istruzione, dell'Università e della Ricerca (2014), *Presentazione del sistema di Monitoraggio e valutazione degli Istituti Tecnici superiori*, <http://hubmiur.pubblica.istruzione.it/web/ministero/cs190914bis>.

<sup>13</sup> As of 2015 there will be a new financing model for the Higher Technical Institutes, with 10% of funding allocated according to performance indicators.

<sup>14</sup> This is also recommended by the 2014 CSR on the labour market.

<sup>15</sup> For the 25-29 age group, the employment rate of tertiary graduates is 50.1% compared to an EU average of 78.5%, while the employment rate for people with at most lower secondary education is 48.2% (2013 Eurostat LFS data).

<sup>16</sup> ANVUR (2014), *Rapporto sullo stato del sistema universitario e della ricerca 2013*, [http://www.anvur.org/attachments/article/644/Rapporto%20ANVUR%202013\\_UNIVERSITA%20e%20RICERCA\\_integrale.pdf](http://www.anvur.org/attachments/article/644/Rapporto%20ANVUR%202013_UNIVERSITA%20e%20RICERCA_integrale.pdf).

<sup>17</sup> Previously, they were only compulsory in the last year of upper secondary education.

in 2014 (with less restrictive implementing rules) and standard costs will be defined and gradually introduced over 2014-18 as criteria for allocating the remaining share of public funding.

The government also intends to increase the innovative potential of research, by encouraging the employment of highly qualified people in the private sector. This will be helped through industrial PhDs, now supported by EUR 600 million, which the government intends to make available through a specific tax credit.

### **4.3 Transversal competences, skills relevance and learning mobility, new ways of teaching and new technologies**

ICT skills levels are close to the EU average, but Italian citizens appear less confident than the EU average about their entrepreneurship skills. According to CEDEFOP, employment in medium and high qualification jobs in Italy between now and 2020 is forecast to increase faster than the EU average, also because now it represents a lower share of total employment (66% as against 79% in 2013). Learning mobility of incoming students is lower than the EU average.

A working group was created by the Agency for the Italian Digital Agenda (*Agenzia per l'Italia Digitale*). This included major stakeholders from public administrations, business and workers' associations, and the media, and was tasked with drafting a national plan for digital skills. This work was complemented by the Digital School programme and other initiatives at local level, but effort is overall insufficient to substantially improve digital literacy and skills. As of the 2014/15 school year, textbooks selected in grades one, four, six, nine and eleven<sup>18</sup> will only be in digital or mixed (i.e. partly digital, partly hard-copy) formats. The government also intends to provide broadband and wi-fi connections in all educational institutions. This is linked to more general plans to improve school infrastructure: EUR 1 billion has been earmarked in 2014-15 for actions concerning safety measures, energy efficiency and anti-seismic regulations, as well as to renovate schools.

From January 2014, all certifications of qualifications obtained in Italy have to make reference to the corresponding European qualifications framework level. In line with the 2012 labour market reforms, in January 2013 legislative decree 13/2013 set up a national system to certify skills, including identifying and recognising non-formal and informal learning. Implementing this new system will require nationwide recognition of current regional qualifications. Although legislative decree 13/2013 provided a legal framework for a national register of regional qualifications, the register still needs to be put in place, as recommended in the 2014 CSR.

## **5. Tackling inequalities**

### **5.1 Starting strong: improving early childhood education and care and tackling early school leaving**

The early school leaving rate remains well above the EU average (17% compared to 12% in 2013), especially among foreign-born people (34.4% compared to 22.6% in 2013) and in southern regions. It is however approaching the 2020 national target of 16%. The analysis of sub-indicators shows that the family educational background is particularly unfavourable.<sup>19</sup> Participation in early childhood education is almost universal, which can help prevent early school leaving.<sup>20</sup>

While there is not yet evidence of a comprehensive strategy against early school leaving<sup>21</sup>, the September 2013 decree-law on education introduced an integrated programme to tackle early school leaving in problematic areas. This extends school opening hours and provides for initiatives to better integrate pupils with a migrant background. In the medium term, the European Structural and Investment Funds are expected to continue to significantly contribute to the fight against early school leaving in southern regions throughout the 2014-20 programming cycle.

### **5.2 Basic skills of students**

School education in Italy produces rather mixed outcomes in terms of basic skills attainment. The country again recorded patchy results in the 2012 OECD Programme for International Student Assessment (PISA).<sup>22</sup> Overall, the proportion of low achievers in Italy is somewhat higher than the EU average in reading, maths and science;

<sup>18</sup> These textbooks are not necessarily used in these grades only, since they may also cover topics for successive grades and their use may be carried over.

<sup>19</sup> See additional contextual indicators at: <http://ec.europa.eu/education/monitor>.

<sup>20</sup> See additional contextual indicators at: <http://ec.europa.eu/education/monitor>.

<sup>21</sup> In line with Council recommendation of 28 June 2011 on policies to reduce early school leaving (2011/C 191/01).

<sup>22</sup> <http://www.oecd.org/pisa/keyfindings/pisa-2012-results.htm>.

however, performance is in line with or above the EU average in the northern regions and significantly worse in the South. Since 2006, there has been an overall positive trend in the results for reading and science. Performance in maths has stagnated compared to 2009, but is better than in 2003 and 2006. Although the performance gap between natives and first-generation immigrants is large, second-generation immigrants partially catch up. The influence of socioeconomic status on pupils' performance is weaker than the EU average.

The proportion of students who reported that they had skipped days of school is among the highest of all countries and economies taking part in PISA. In Italy, 35% of students reported having skipped at least one class and 48% reported having skipped a day of school or more in the two weeks before the PISA test. Truancy is negatively associated with student performance.

Regional differences can be seen also in the 2011 Progress in International Reading Literacy Study (PIRLS) and Trends in International Mathematics and Science Study (TIMSS) on 10 year-olds, conducted by the International Association for the Evaluation of Educational Achievement (IEA).<sup>23</sup> In these, however, Italy shows fairly good results when compared to other countries, especially in reading.

In recent years Italy introduced compulsory nationally-standardised annual tests<sup>24</sup> run by the schools evaluation agency (INVALSI) and created the National System for the Evaluation of Schools ('*Sistema Nazionale di Valutazione*') in 2013. As recommended in the 2014 CSR, the government has started to implement it as of the 2014/15 school year.

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<sup>23</sup> <http://timssandpirls.bc.edu/>.

<sup>24</sup> In Italian and mathematics in grades two, five, eight, and ten.