European Commission

Education and Training Monitor 2013

Cyprus

Education and Training

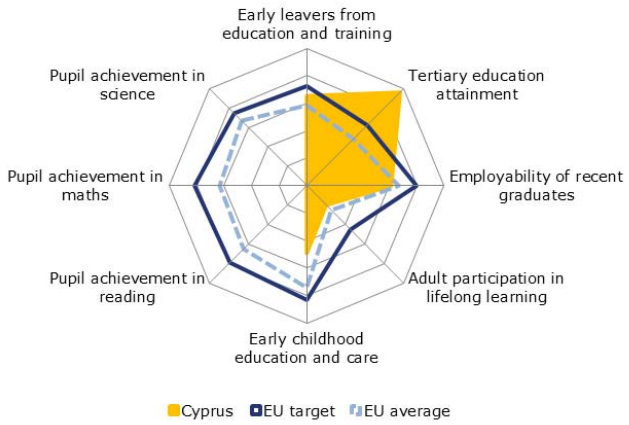
1. Key indicators and benchmarks

Europe 2020 headline targets			Cyprus 2009	Cyprus 2012	EU average 2009	EU average 2012	Europe 2020 target / Benchmark
1. Early leavers from education and training (age 18-24)			11.7%	11.4%	14.2% EU28	12.7% EU28	**EU target: 10%** National target: 10%
2. Tertiary educational attainment (age 30-34)			45.0%	49.9%	32.1% EU28	35.7% EU28	**EU target: 40%** National target: 46%
ET 2020 Benchmarks							
3. Early childhood education and care (4 years old - year before start of compulsory primary)			86.4%	85.0% 11	91.7%	93.2% 11	**95%**
4. Basic skills Low achievers (15 year-olds; Level 1 or lower in PISA study)	Reading		:	:	19.6%	:	**15%**
	Mathematics		:	:	22.2%	:	**15%**
	Science		:	:	17.7%	:	**15%**
5. Learning mobility	Initial vocational training (IVET)	**a.** Students participating in Leonardo da Vinci programs as a share of vocational students at ISCED 3	6.3%	7.1% 11	0.6%	0.7% 11	
	Higher Education	**b.** Erasmus inbound students as % of student population in host country		1.9% 11		1.1% 11	
		c. Inbound degree mobile students as % of student population in the host country		28.0% 11		7.0% 11	
6. Employment rate of graduates (age 20-34) having left education 1-3 years before reference year			81.1%	73.0%	78.3%	75.7%	**82%**
7. Adult participation in lifelong learning (age 25-64)			7.8%	7.4%	9.3%	9.0%	**15%**
Proposed ET 2020 benchmark							
8. Foreign languages skills	**a.** ISCED 2 students at proficiency level B1 or higher in first foreign language[1]		:	:	:	43.5% 11	
	b. ISCED 2 students learning two or more foreign languages		94.8%	92.4% 11	58.6%	60.8% 10	
Other ET 2020 Indicators							
9. Investment in education and training	**a.** General government expenditure on education (% of GDP)		7.2%	7.2% 11	5.5%	5.3% 11	
	b. Annual expenditure on public and private educational institutions per pupil/student in € PPS	ISCED 1-2	€ 8,491 08	€ 9,260 10	€ 5,732 08	€ 6,021 10	
		ISCED 3-4	€ 10,891 08	€ 10,849 10	€ 6,964 08	€ 7,123 10	
		ISCED 5-6	€ 10,343 08	€ 9,933 10	€ 9,309 08	€ 9,168 10	
10. Digital competences	**a.** Pupils in grade 4 (ISCED 1) using computers at school		:	:	60.7% 07	64.7% 11	
	b. Individuals aged 16-74 with high computer skills[2]		29.0%	23.0%	25.0%	26.0%	
11. Entrepreneurial competences	Individuals aged 18-64 who believe to have the required skills and knowledge to start a business		:	:	42.3% a	42.0% a	
12. Vocational education and training	Share of vocational students at ISCED 3		12.8%	12.7% 11	49.6%	50.3% 11	
13. Skills for future labour markets Projected change in employment 2010-2020 in %	High qualification		:	27.9%	:	19.1% EU28	
	Medium qualification		:	6.6%	:	4.6% EU28	
	Low qualification		:	-22.4%	:	-20.2% EU28	
14. Low-skilled adults	Literacy		:	11.8%	:	19.9% EU17	
	Numeracy		:	15.5%	:	23.6% EU17	
	Problem solving in technology rich environments[3]		:	20.2%	:	13.0% EU17	

Source: Cedefop: 13 / EAC: 10a,b / European Survey on Language Competences (ESLC): 8a / Eurostat (Government finance statistics): 9a / Eurostat (LFS): 1, 2, 6, 7 / Eurostat (ISS): 10b / Eurostat (UOE): 3, 8b, 9b, 10c, 12 / IEA TIMSS: 10a / Global Entrepreneurship Monitor: 11 / OECD (PIAAC): 14 / OECD (PISA): 4

Notes: 07 =2007, 08 =2008, 09 =2009, 10 =2010, 11 =2011, e= estimate, a= unweighted average b= break, p= provisional
Number of countries included in EU average: PISA=25, Entrepreneurship=18, Language skills=13, ICT/Computers at school=13, others: EU27
[1]= average of skills tested in reading, listening, writing, [2]= having carried out 5-6 specific computer related activities, [3]= Results refer to people without ICT experience and people who failed the ICT test

Figure 1. Position in relation to highest (outer ring) and lowest performers (centre)



Source: DG EAC calculations on the basis of data from Eurostat (LFS 2012 and UOE 2011) and OECD (PISA 2009). *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

Confronted with a difficult labour market, Cyprus faces a skills mismatch, which represents an obstacle to tackling unemployment and to supporting growth and innovation. With a threefold increase of the youth unemployment rate (15-24 years old) between 2008 and 2012 (from 9% to 27.8%), Cyprus had one of the highest year-on-year increases in the EU in 2011 and 2012. Cyprus has one of the highest shares in the EU of well-educated youngsters at tertiary level. However, the employment rate of tertiary graduates having graduated in the previous three years is one of the lowest in the EU (74.7% versus 81.5% in 2012).

Links between the labour market needs and the educational outcomes are still weak. In the EU, Cyprus has the lowest participation rate in upper secondary vocational education and training and one of the lowest share of young graduates in mathematics, science and technology[1]. Adult participation in lifelong learning remains below the EU average whilst there is a need to increase the low occupational mobility and to prepare people for the profound changes in the economic sectors[2]. The continuous increase in immigration rate, with a large proportion of low-skilled adults, will continue to require particular attention from education policies with the support of teachers and trainers well trained to address this issue.

The country has undergone a process of fiscal consolidation and is implementing the measures set out in the Economic Adjustment Programme (2013-2016) agreed in April 2013.

3. Investing in skills and qualifications

<u>Investing in education and training in a context of economic crisis</u>

Cyprus has the second highest general government expenditure in education and training as a share of GDP in the EU[3]. It has also a large private expenditure in education and training accounting in 2008 for 1.6% of GDP compared to less than 1% in most other EU Member State. Those last 4 years, investment in higher education increased much more than the EU average. Whilst there were no direct budget cuts for education in 2013, Cyprus anticipates by 2015 cutting current education expenditure by at least 3% including reducing human resource costs[4] through decrease of salaries and in the number of teachers. The Economic Adjustment Programme encompasses structural reforms related to the public service restructuring namely a scaled decrease of emoluments, limited measures specific to the educational system as of 2013 (e.g. a reduction of the number of teachers seconded to the Ministry of Education, elimination of the mentoring component for in-service training, reduction of the cost of afternoon and evening programmes) as well as adjustment of educational allowances from 2014. Important reforms in the field of education and training are currently co-financed by the European Social Fund. However, the absorption rate is lower than expected.

1 The 2011 share of MST graduates among 20 -29 years old in CY is 5.1% versus an EU average of 14.4%.
2 The Economic Adjustment Programme is aiming among others to support the downsizing of the banking sector and the shift towards growth enhancing sector namely the natural gas one
3 CY is one of the 4 EU countries with a more than 50% increase in the level of public spending during the last decade. See: Funding of Education in Europe. The Impact of the Economic Crisis. Eurydice Report March 2013
4 Funding of Education in Europe. The Impact of the Economic Crisis. Eurydice Report March 2013

Skills

As regards basic skills, according to a national survey[5] on 'Functional Illiteracy', the estimated percentages of pupils (6ths graders) with a high likelihood of remaining illiterate or with inadequate numeracy skills after completion of compulsory education decreased significantly (from 12.7% to 6.9% for the former, and from 8.3% to 5.5% for the latter) between 2007-8 and 2012-2013. Underperformance concerns mainly boys that do not speak Greek at home. On average students at ISCED 2 level learn 2 foreign languages.

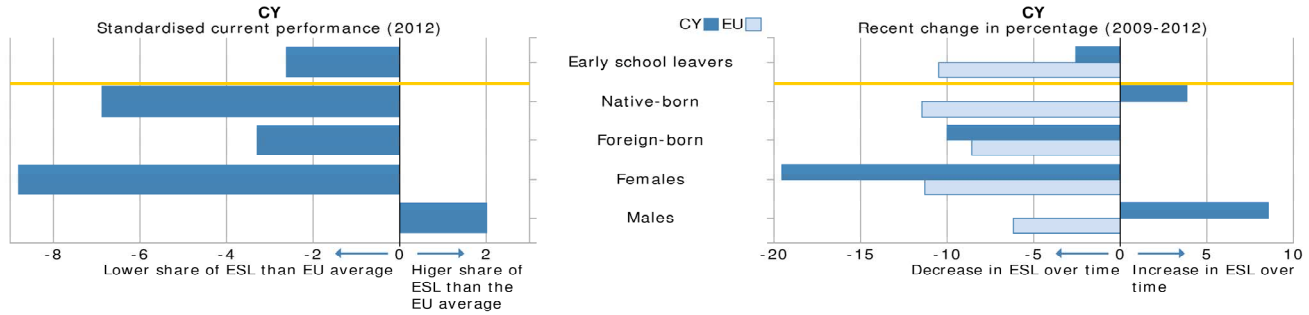
Progress is being made in the implementation of the 8 levels NQF (agreed in 2011) and in its referencing to EQF although there have been delays (planned by end 2013, initially expected by end 2012). This affects the integration of the system of vocational qualifications (SVQ) developed separately. Modest progress has been made in the implementation of the European Credit Transfer System for Vocational Education.

eEducation is one objective of the Digital Strategy (2012-2020). For this purpose the Ministry has initiated two strategic projects in 2012: the eContent and educational software acquisition and the creation of the Schoolnet DIA.S.(Educational Portal and LMS). Specific attention is given to the training of teachers ensuring their competence in using ICT tools and on pedagogical innovation and progress. An Action Plan covers the 2013-2015 period.

4. Tackling early school leaving and raising the bar in school education

With a significant decrease from 14.9% to 11.4% of the early school leaving rate between 2006 and 2012, Cyprus performs better than the EU average (12.8% in 2012) and is now at 1.4 percentage point from its 10% national target. With a rate of 20.7% in 2012, foreign born people are much more at risk to be early school leavers than nationals. Boys with low socio-economic background are at the highest risk of dropping out of school. Moreover, this trend increased these last years opposed to the EU one. Many initiatives have been taken since 2007 with a strong focus on migrant pupils. However, comprehensive support for migrant pupils seems to be limited to ZEP schools (Educational Priority Zones)[6]. The evaluation of the Action Plan (2010-12) for the integration of migrants[7] is foreseen in 2013 in view of its renewal for the 2013-14 period[8].

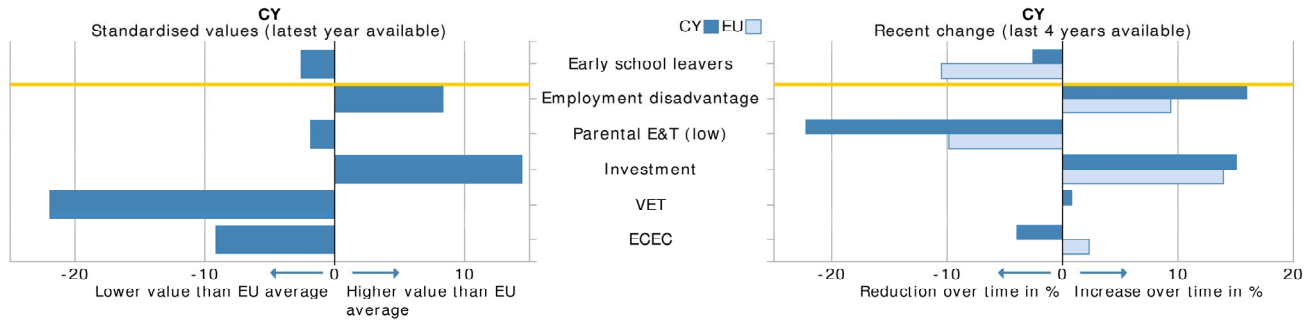
Figure 2. Early leavers from education and training: sub-groups



Source: JRC-CRELL. *Note:* ESL = early school leaving. See Annex 2 for further information.

The share of female and male early school leavers in Cyprus is significantly different from the EU average: girls are much less represented contrary to the boys. Moreover this trend increased those last years and the share of native born boys is on the rise. As regard unemployment, early school leavers are comparatively more disadvantaged in Cyprus than on average in the EU. This trend increased these last years since the crisis.

Figure 3. Early leavers from education and training: sub-indicators



Source: JRC-CRELL. *Note:* see Annex 2 for an explanation of the sub-indicators.

5 Results of the longitudinal national 'Literacy project' (for 6ths graders from the 2007-2008 and for 3rd grade from 2011-2012)
6 Study on educational support for newly arrived migrant children, European Commission, January 2013
7 National action Plan 2010-2012 for the integration of Third Country Nationals legally residing in Cyprus
8 Cyprus National Reform Programme 2013

Against the EU general trend, the participation in early childhood education, which is relevant for prevention of early school leaving, is stagnated since 2006 and remains below the EU average (85% vs. 93.2% in 2011) and 10 percentage points below the EU benchmark for 2020.

In a medium- to long-term perspective, improving school quality and outcomes may help reduce early school leaving. The new National Curriculum reform, which upgrades the curriculum for all public schools (from pre-primary to upper secondary education), has been gradually implemented in primary education and lower secondary education cycle (3 years Gymnasium) from the school year 2011-12. Complete implementation is planned by 2014-2015.

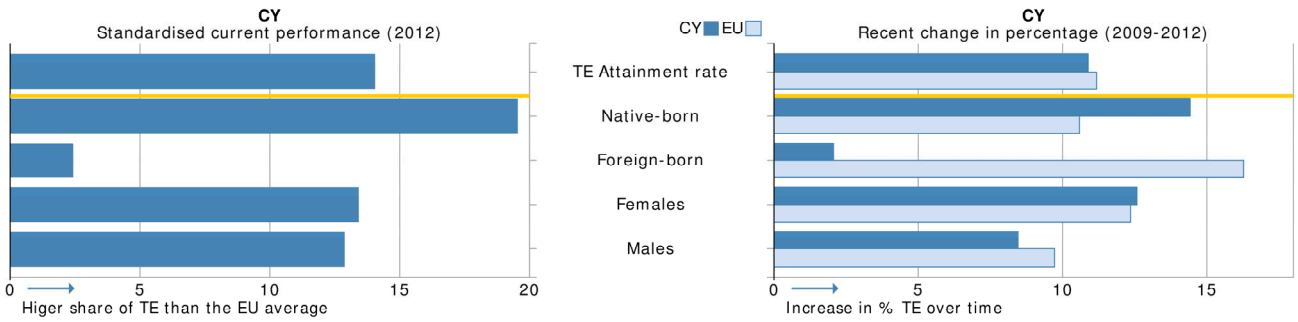
Multiplying work-based learning and apprenticeships opportunities may also contribute to combat ESL, in particular considering the extremely low participation rate in VET. The first level of the New Apprenticeship System, started in October 2012-13, addresses youngsters (14- 16 years olds) who dropped out. A revised organisation model might be implemented for 2013-2014 on the basis of the lessons learned. Moreover, a reform restructuring upper secondary and upgrading secondary technical/vocational education to technological Lyceums is planned. The development of a new curriculum, which is part of the reform, seems postponed to 2015.

Evidence shows that school quality and outcomes strongly depend on the quality of the teaching force[9]. In response to austerity measures, the number of teachers will decrease after many years of increase. Despite the recent cut in public sector salary the teaching profession remains attractive and the demand for accessing the profession exceeds massively the offer. However, many consider that the capacity to attract and reward the best teachers is limited by the current selection (mainly based on a waiting list) and career path system. Reforms to modernise the selection and evaluation of the teaching profession have been under discussion with the teachers unions for many years now, without reaching agreement. Reorganisation will be needed in order to maintain the welcomed in-service training for teachers for which ad hoc support measures were stopped in 2013[10].

5. Encouraging participation in tertiary education and modernising higher education

With one of the highest tertiary attainment rates in the EU (49.9% compared to the European average of 35.8% in 2012), Cyprus has already reached its national target (46%). In recent years, increase in higher education investment has been largely above the EU average. At the same time, the employment advantage of higher education graduates is lower than in the EU average (see sub-indicators below). To complete the recent development of public universities, the set-up of a quality agency is progressing but slower than expected (planned by 2013). With the crisis and the higher-than-EU-average unemployment rate of recent tertiary graduates, one of the challenges for higher education is its relevance to labour market needs. Avenues for action remain to be explored in view of better guidance to youngsters on career opportunities, general introduction of a learning outcome approach, reform curricula allowing for recognised traineeships into higher education curricula and flexible modes of learning as well as measures to reinforce the link between higher educational outcomes and skills forecast.

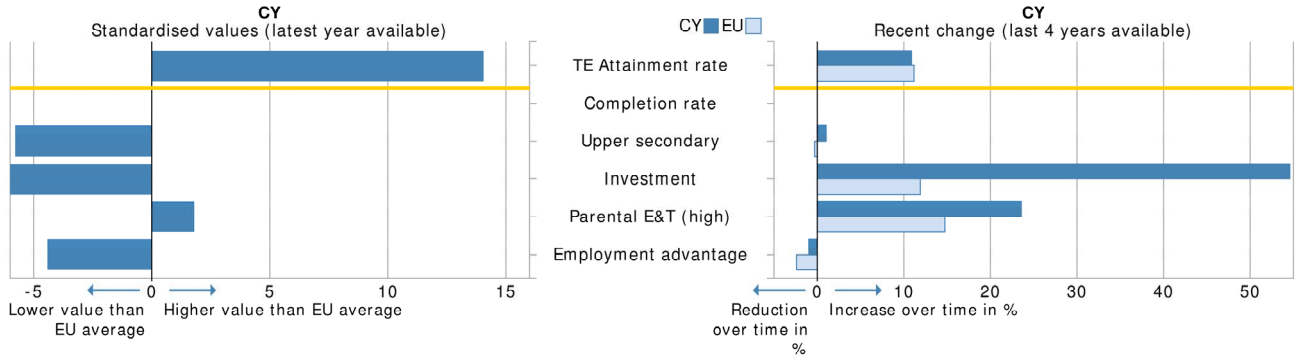
Figure 4. Tertiary education attainment: sub-groups



Source: JRC-CRELL. *Note:* TE = tertiary education. See Annex 2 for further information.

9 See European Commission (2012), Supporting the Teaching Professions for Better Learning Outcomes, SWD(2012) 374.
10 In the Economic Adjustment Programme

Figure 5. Tertiary education attainment: sub-indicators



Source: JRC-CRELL. *Note:* see Annex 2 for an explanation of the sub-indicators.

With Greece and the UK being the most chosen destinations, student mobility is one of the highest in Europe. As a response to the crisis and to the lowering of educational grants, additional places are foreseen in the public universities[11] to compensate for an expected decrease in international mobility. Incoming mobility is traditionally lower, the language being considered as one of the main barriers.

6. Facilitating the transition from education to work and reshaping vocational training

In 2012, the employment rates of recent graduates stagnated at 73.0% below the 75.7 % EU average. The 2013 National Reform Programme refers to plans to monitor the transition of VET graduates to the labour market and further education and training by using national monitoring systems.

Participation of upper secondary students in vocational education and training is the lowest in the EU (12.7% as against 50.3%, 2012) and below 5% for girls. Two reforms have been started to develop work-based learning and alternative pathways. Firstly, to decrease the drop-out rate and improve basic skills, Cyprus started in 2012-13 the implementation of the New Modern Apprenticeship (NMA) system, a two level system directed to youngsters between 14-25 years old. The NMA is expected to be fully operational in 2014-15. On the offer side, enterprises receive financial support to train apprentices. Secondly, in September 2012, Cyprus set up four post-secondary institutions for technical and vocational education and training, one in each district. Demand exceeded largely supply for both schemes (with the exception of NMA level2) for which a reinforcement is planned. It is a positive step forward despite the lack of quantified objectives for the number of apprenticeships and students. Close monitoring is called for to ensure that objectives are met in terms of addressing current skills shortages and in terms of flexibility to adapt to the changing skills needs.

A major reform related to upper secondary and upgrading of secondary technical/vocational education to technological Lyceums is under discussion. With modest progress in the discussion, the proposal is expected to be finalised by 2016[12]. Ways to develop a quality vocational education and training (VET[13]) could include reform curricula allowing for more work-based learning at an earlier stage, better guidance to youngsters on career opportunities, actions to promote the attractiveness of VET, and measures to reinforce the link with future oriented-jobs. This is important because employment in medium and high qualification jobs is forecast to increase faster than the EU average up to 2020.

In addition to the NMA and the set-up of post-secondary institutions, focused initiatives have been taken to facilitate transition between education and work, like 'The job placement and training of unemployed tertiary education graduates scheme' (whose first results seem positive), accelerated initial training of newcomers, and a scheme for the enhancement of youth entrepreneurship.

7. Upgrading skills through lifelong learning

The Adult Skills Survey (PIAAC[14]) shows that adults (aged 16-65) in Cyprus score slightly below the EU average in the literacy and numeracy proficiency tests. Contrary to the results of most countries, the youngest generation (aged 16-24) scores worse than older generations. The performance of young people (aged 16-29) with upper secondary education is not significantly better than that of people with at most lower secondary education.

11 Cyprus national Reform Programme 2013

12 Cyprus 2013 National Reform Programme

13 With less than 15% of pupils, Cyprus is characterised by the lowest participation rate in upper secondary vocational education and training in EU and a very low participation of girls.

14 Volume I of the Education and Training Monitor (chapter 6) provides an overview of the results of the survey. Skills levels are presented either in terms of average score points or proportion of adults at a given proficiency level in literacy or numeracy (level 1 to 5) or problem solving in technology-rich (ICT) environments (level 1 to 3 or no ICT experience).

Recent tertiary graduates (aged up to 29) have lower literacy and numeracy skills than recent upper secondary graduates in the best performing EU countries.

The Adult Skills Survey also reveals that the percentage of all adults with low skills is below the EU average (11% for literacy and 15% for numeracy, compared with 20% and 24% respectively). The difference in adult participation rates between lowest- and highest-skilled people is relatively small in Cyprus: low-skilled people in Cyprus are 3 times less likely to participate in job-related learning compared to high skilled people[15].

Cyprus is one of the few countries to have a national target for adult participation in lifelong learning set at 12% by 2020. Despite a Lifelong Learning Strategy (2007-2013), the adult participation in lifelong learning remains below the EU average (7.5% compared to 8.9% in 2011). Reaching the ambitious national target claims for reinforced efforts and a more ambitious policy.

The set-up of a consultative national forum for lifelong guidance was approved in March 2012 with the mandate of promoting a shared national policy in this area. This is a first step in view of an effective integrated delivery of guidance services cutting across the education and employment areas. Preparing people to the skills needed for the energy sector is key. As shown by a recent survey[16], this will require a cross sectoral approach and an appropriate organisation.

In 2010, 72% of enterprises provided vocational training to their staff in Cyprus, a rate slightly above the EU average[17]. Different measures have been taken or planned to secure the quality of the provision of trainings. The introduction of a system for the assessment and certification of training providers and trainers is considered a good practice[18].

[15] At EU level, low skilled adults are 5 times less likely to participate in job-related learning than high skilled adults.

[16] Survey on 'Early Identification of Employment and Training Needs for the effective utilisation of Natural Gas in Cyprus', Human Resource Development Authority, 2012

[17] Continuing vocational training, Eurostat report, June 2013

[18] Survey on 'Trainers in continuing VET : emerging competence profile, Cedefop, 2013