

POLICY BRIEF

Instruction Time: How Does the United Arab Emirates (UAE) Compare to Others? *



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Instruction time is one of the most critical aspects of education systems for policy and decision makers due to its significant social, economic, and financial implications. The relationship between instruction time, measured by days per annum or number of instructional hours, and the quality of education, measured by students' performance in national-level and international standardized tests, is one of the most debated issues in the field of education. To contribute to the current literature, this paper explores the following questions through available evidence and benchmarks:

- Is instruction time in the UAE schools more, less, or equal to that of selected countries, particularly those belonging to the Organization for Economic Co-operation and Development (OECD)?
- How is instruction time distributed across subjects/topics in government schools and how does this distribution compare to other OECD countries?
- Is there correlation between instruction time and quality of education?
- What conclusions can be drawn from comparing instruction time with quality of education?

* The conclusions in this policy brief should be treated with caution because of the different definitions of time spent on teaching found in the educational literature reviewed. The concept of teaching time distinguishes between school days, time allotted for teaching, and the distribution of time according to the educational stage and school subjects in different countries. This makes the comparison between countries a debatable issue that must be treated with caution, especially because some data available in the literature might not be accurate or up-to-date.

How much time is allocated to instruction in the UAE in comparison to countries worldwide?

Annual instruction time in the UAE

In accordance with Ministerial Decree No. 2016/548 regarding the implementation of the annual school instructional plan for 2017/2016, the following facts can be ascertained about the time students spend in Emirati schools.

Grades	Classes per week	Hours per year
3 ,2 ,1	35	971.25
5 ,4	35	971.25
9 ,8 ,7 ,6	39	1082.25
10,11,12 General	39	1082.25
12 ,11 Advanced	39	1082.25

- Students in grades 1-5 have the equivalent of 35 classes per week; the duration of each class is 45 minutes, amounting to 971.25 hours annually.
- Students in grades 6-12, in general or advanced streams, have 39 classes per week; the duration of each class is 45 minutes, amounting to 1082.25 hours per year.

Instruction days and hours in other countries

According to the OECD report, education systems vary in terms of the time students spend in schools, expressed in annual instruction hours. In turn, the number of instruction hours varies by educational stage. The average number of instruction hours in primary education hours per year. In secondary education, that number increases by 799 in OECD countries is hours per year. When compared to the OECD average, the UAE 915 hours, reaching 116 ranks among the highest in terms of number of intended instruction hours. However, in terms of the number of teaching weeks, the UAE is closer to the OECD average

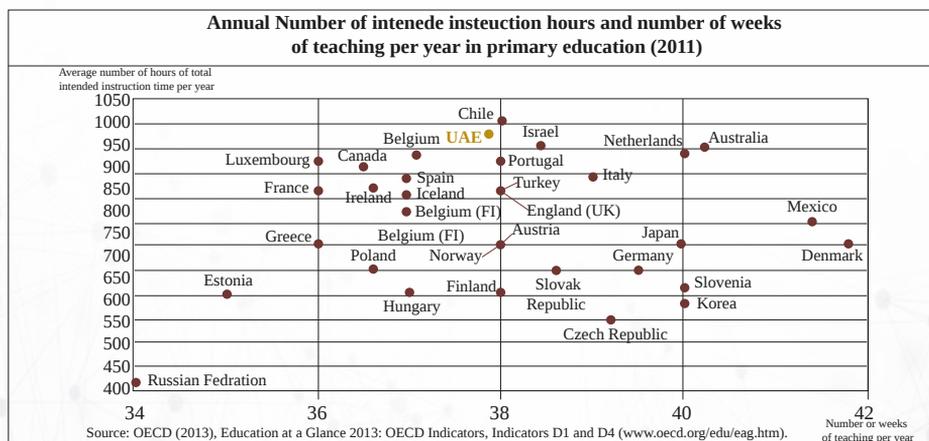


Figure 1: Instruction hours and weeks of teaching per year in primary education in selected countries

What can we learn from Figure 1?

- Countries vary in the number of teaching weeks and, accordingly, instructional days and hours.
- Countries vary in the length of the school year, ranging from 34 to 42 weeks.
- Although some countries have the same number of teaching weeks, they differ in the number of instruction hours. For example, while Denmark has nearly 42 teaching weeks per year, instruction time does not exceed 750 hours per year. Countries such as Canada, French Belgium, and Luxembourg, have fewer than 37 teaching weeks but close to 925 instruction hours per year. In contrast, the Czech Republic has 39 teaching weeks per year, but the number of instruction hours does not exceed 600.
- Comparing the number of teaching weeks and days among countries might be misleading. School day lengths vary across countries and so does the number of school days per week, which can vary between four and five days.

The UAE offers 37 instructional weeks and a total of 971 instruction hours in primary education per year. Although the UAE ranks in the middle in terms of number of weeks, as presented in Figure 1, it has one of the highest number of intended instruction hours.

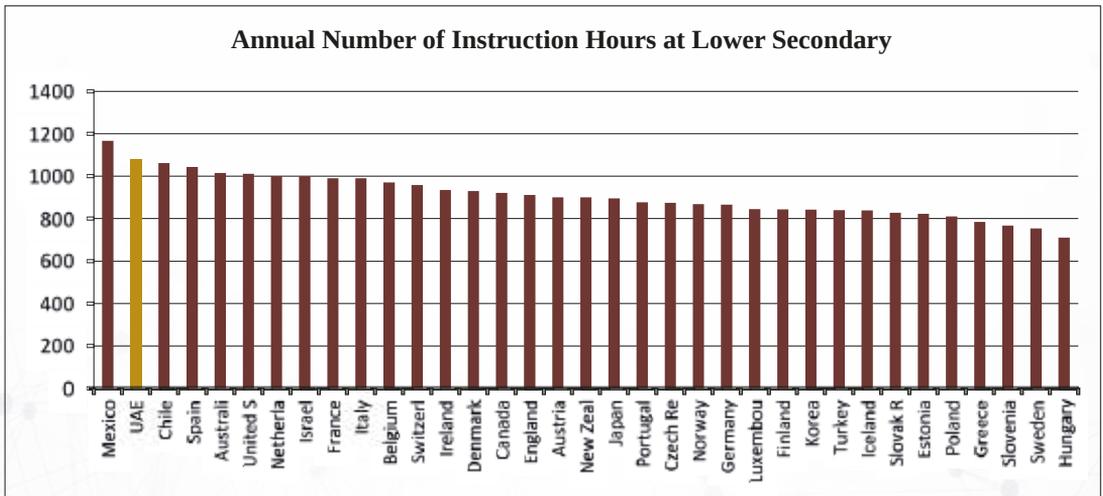


Figure 2: Annual number of instruction hours in lower secondary in selected group of countries

What can we learn from Figure 2?

- Figure 2 shows the distribution of the number of instruction hours at the lower secondary school level in a selected group of OECD countries and the UAE.
- Annual instruction hours vary by country, ranging from 710 hours per year in Hungary to 1160 hours in Mexico.
- The UAE comes second in terms of annual number of instruction hours at the lower secondary level (1082 hours per year) compared to other OECD countries presented in Figure 2.

Despite insufficient instruction time data, which can be attributed to students joining the labor force as well as the diversity of educational pathways they choose at that level, Figure 3 depicts the annual number of instruction hours at the upper secondary level in a select group of OECD countries, including the UAE.

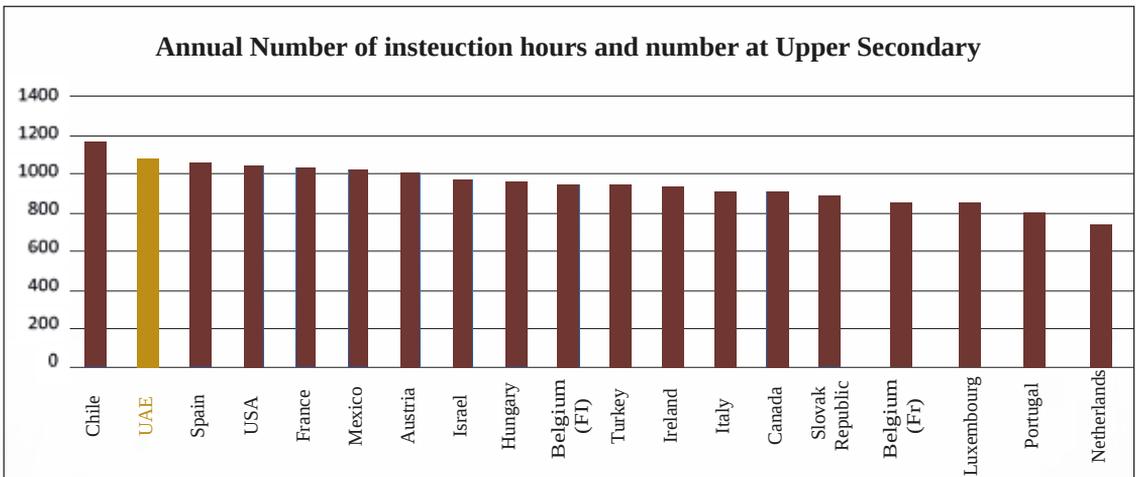


Figure 3: Annual number of instruction hours in upper secondary education in a selected group of countries

What can we learn from Figure 3?

- Annual instruction hours at the upper secondary level vary from country to country, ranging from 737 hours per annum in the Netherlands to 1169 hours in Chile, showing a slight difference between upper and lower secondary education.
- Among the selected group of OECD countries above, the UAE comes second in number of instructional hours, reaching 1082 hours per year.

How is instruction time allocated to school subjects locally and globally?

As indicated above, OECD countries differ in total numbers of instruction hours and weeks. Moreover, they differ in instruction time allocated to each school subject. Figure 4 demonstrates the breakdown of instruction hours in each country by subject and education stage, showing the characteristics and priorities of each education system.

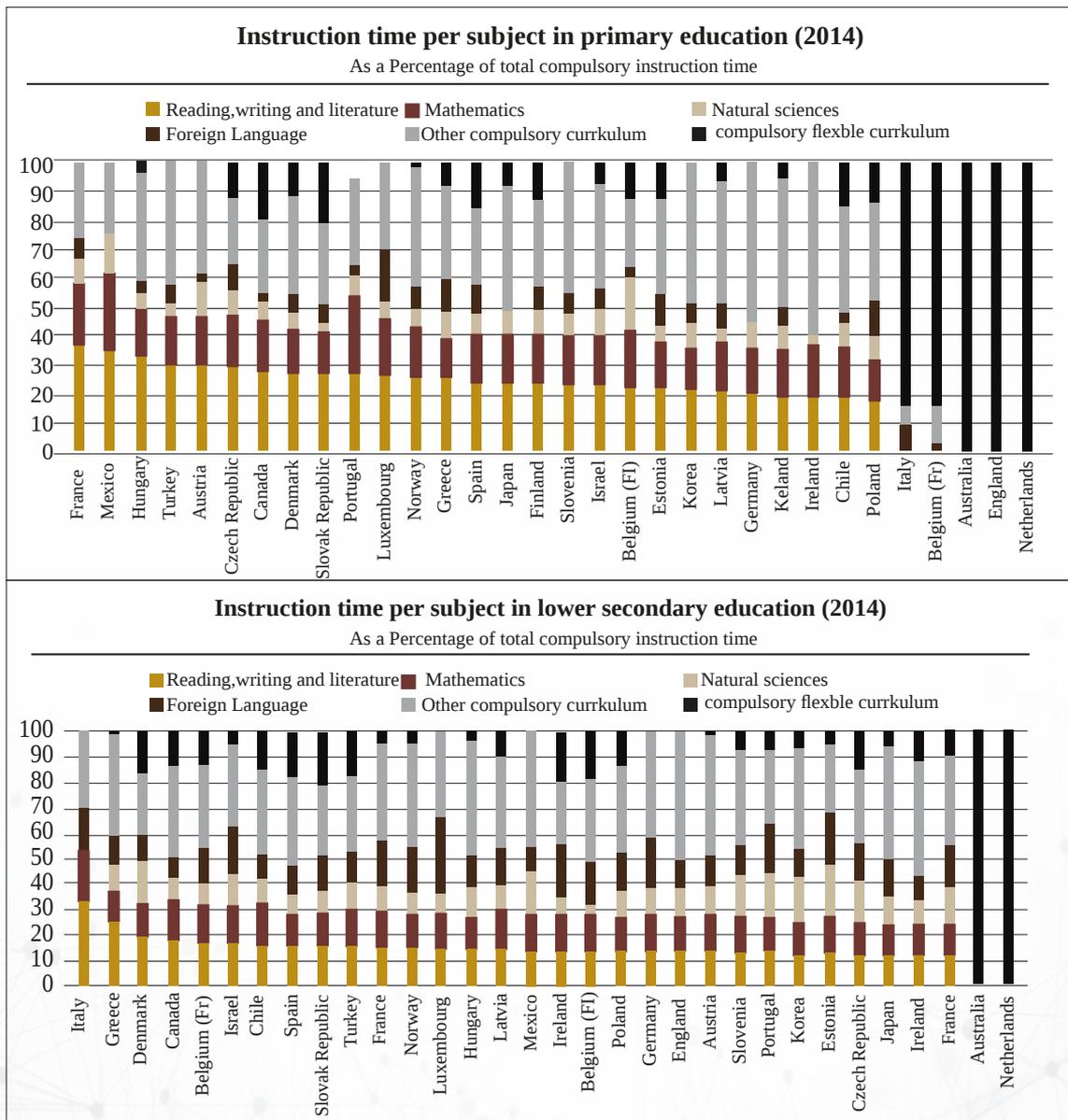


Figure 4: Number of instruction hours per subject in primary and lower secondary education in a selected group of countries

What can we learn from Figure 4?

- In OECD countries, students in primary education spend %46 of the compulsory instruction time studying three main subjects: reading and writing (%22), mathematics (%15), and arts (%9), compared to (%7) for natural sciences, %6 for social sciences, and %8 for physical and health education. Their remaining time is allocated to studying other languages and computer science.
- In lower secondary education, instruction time spent on reading and writing and mathematics decreases to(%14) and (%12), respectively, while increasing in natural sciences, other languages, and social sciences to(13) , (%11) , and(%10) , respectively.

For comparison purposes, Table 2 shows instruction hours per subject in the UAE, in accordance with Ministerial Decree No. 548 of 2016 on the annual instruction plan for 2017/2016.

Grades	Percentage of time allocated to school subjects					
	Arabic	English	Mathematics	Science	National and Islamic Education	Technology & Design
3 ,2 ,1	% 14	% 14	% 20	%14	% 20	---
5 ,4	% 14	% 14	% 20	%14	%20	% 6
9 ,8 ,7 ,6	% 13	% 15	% 21	% 15	%18	% 8
10,11,12 General	% 13	% 15	% 15	% 15	%15	% 10
12 ,11 Advanced	% 13	% 15	% 21	% 26	%15	% 10

The table shows that students in primary education in the UAE spend(%20)of their time learning mathematics and national and Islamic education. Fourteen percent of the instruction time is allocated each to Arabic, English, and science, and (%6) is allocated to technology and design in grades 4-5.

- In lower secondary education (grades 6-9), students spend (%13)of their time learning Arabic,(%15) learning English,(%21) learning mathematics,(%8)learning science, and (%8) learning technology and design.
- In upper secondary education (grades 12-10), instruction time is similar to that in lower secondary, with only two additional classes per week (%5)—health sciences for girls and life skills for boys.
- All students have two physical and health education classes (%5) across all school levels (grades 12-1).

Is there a correlation between instruction time and quality of education?

According to the data presented above, education systems differ in annual instruction hours allocated to each subject without clear justification for the differences. We are led to ask whether increased instructional time is reflected in students' performance in those education systems.

In an attempt to answer this question from an international perspective, student results in Program for International Student Assessment (PISA 2015) and Trends in International Mathematics and Science Study (TIMSS 2015) were used to ascertain the relationship between instruction time (measured in number of annual instruction days) in participating countries and their average performance in mathematics, science and reading. Pearson correlation coefficients were weak and negative. What can we conclude? There is no correlation between instruction time and student achievement.

- The trend shows that countries with low PISA performance have more instructional hours. Japan, Estonia, and Finland, which are the top-performing countries in all PISA subjects (mathematics, science, and reading), have a lower-than-OECD-average total of instructional hours (900 hours per year). Conversely, students in Mexico study 1167 hours per year and their performance is 50 points below the OECD average. Students in the UAE spend about 1082 hours in the classroom annually, which is above the world average of 167 hours per year, and still score 50 points below the OECD average.

Conclusions

Several benchmark indicators from different countries with diverse education systems, including the UAE, indicate that the number of instructional days is not necessarily an input for effective development of education systems. More specifically, we conclude the following:

1. There is no direct correlation between the number of school days or instructional hours and quality of education. Teachers' optimization of instructional time and students' meaningful interactions during learning activities may play a much larger role in students' performance than the number of days/hours alone.
2. Some important issues must be considered in education policies before setting up any school calendar, namely:

2.1 Allocation of instruction hours per subject must be based on a careful analysis of curriculum requirements in combination with time dedicated to planning, choosing methodologies, selecting resources, implementing, and assessing learning.

2.2 Number of subjects taught must be aligned with the time available for teaching them.

2.3 There must be a close link between teaching, learning, and assessment methods.

3. Other school factors and variables might interact with instructional time in terms of affecting quality of education, such as classroom size (number of students in classroom), classroom density, the ratio of students to teachers, and others.



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