GPE KIX EMAP HUB

KNOWLEDGE INNOVATION EXCHANGE

MANAGEMENT OF SECONDARY SCHOOL TEACHERS IN TUNISIA: BETWEEN WHAT EXISTS AND WHAT IS DESIRED

Salah Ahmadi
Ahlem Sellami
Mouna Ben Othman
Issam Boukthir

GPE Transforming Education

IDRC · CRDI
International Development Research Centre
Centre de recherches pour le développement international
Canada

In partnership with
unesco
International Institute for Educational Planning

Hosted by NORRAG
GENEVA GRADUATE INSTITUTE
NORRAG GLOBAL EDUCATION CENTRE
Network for international policies and cooperation in education and training

ABOUT NORRAG

NORRAG is the Global Education Centre of the Geneva Graduate Institute and a global network of more than 5,800 members for international policies and cooperation in education and training. NORRAG is an offshoot of the Research, Review, and Advisory Group (RRAG) established in 1977 and at the time funded by the International Development Research Centre (IDRC) and Swedish International Development Authority (Sida). It was charged with critically reviewing and disseminating education research related to the Global South. Since our move to Switzerland in 1992, NORRAG has been significantly supported by the Swiss Agency for Development and Cooperation (SDC), the Graduate Institute of International and Development Studies, Geneva, and, for a period, the Open Societies Foundation (OSF).

NORRAG's strength lies in addressing under-researched questions of quality and equity in key issues in education and development and in amplifying under-represented expertise, particularly from the South. NORRAG's core mandate is to co-produce, disseminate and broker critical knowledge and to strengthen capacity for and with the wide range of stakeholders who constitute our network. Our stakeholders from academia, governments, NGOs, international organisations, foundations and the private sector inform and shape education policies and practice at regional, national and international levels. Through our work, NORRAG contributes to creating the conditions for more participatory, evidence-informed decisions that improve equal access to and quality of education and training.

More information about NORRAG, including its scope of work and thematic priorities, is available at www.norrageducation.org.

Join the global NORRAG Network
www.norrageducation.org/norrag-network

Follow NORRAG on social media

ABOUT THE KIX EMAP HUB

The Global Partnership for Education Knowledge and Innovation Exchange (GPE KIX) is a joint endeavour with the International Development Research Centre (IDRC) to connect expertise, innovation, and knowledge to help GPE partner countries build stronger education systems and accelerate progress toward SDG 4. There are globally four KIX Hubs or Regional Learning Partners, overseen by IDRC. The Hub functions as a regional forum within KIX. NORRAG is the Regional Learning Partner for the KIX Europe, Middle East and North Africa, Asia and Pacific (EMAP) Hub (previously known as the KIX EAP Hub).

The KIX EMAP Hub facilitates cross-country knowledge and innovation exchange and mobilisation, learning, synthesis, and collaboration among national education stakeholders in 38 GPE partner countries in the EMAP region. The Hub also offers opportunities for peer learning and exchange by means of professional development and inter-country visits.

gpekix.org/regional-hub/kix-emap norrageducation.org/kix-emap

@KIXEMAP @KIXEMAP @KIXEMAP @KIXEMAP

ABOUT UNESCO INTERNATIONAL INSTITUTE FOR EDUCATIONAL PLANNING (IIEP)

Established in 1963 within UNESCO, the International Institute for Educational Planning (IIEP) develops and strengthens the capacities of educational planners and managers through professional development programmes, technical cooperation, policy research, and knowledge sharing. IIEP's vision is rooted in the understanding that education is a basic human right and thus, its mission consists of contributing to the expansion of quality education, to provide equitable and relevant learning opportunities to all.

iiep.unesco.org

ABOUT THE KIX EMAP LEARNING CYCLES

The KIX EMAP Learning Cycles are professional development courses offered to national education experts from 38 GPE partner countries in the Europe, Middle East and North Africa, Asia and Pacific (EMAP) region. Teams of national experts analyse, contextualise, and produce new knowledge on policy analysis and innovations. These professional development courses allow participants to share experiences, exchange knowledge, and contribute to the strengthening of their national education systems. The Learning Cycles are also an opportunity for national experts to publish their studies and findings internationally, and disseminate them on diverse online platforms, with support from the KIX EMAP Hub.

ABOUT THE LEARNING CYCLE ON SECONDARY TEACHER WORKFORCE MANAGEMENT

This case study is a result of the KIX EMAP Learning Cycle "Secondary Teacher Workforce Management". Facilitated by the UNESCO International Institute for Educational Planning (IIEP), this Learning Cycle ran from 24 September to 30 November 2024. Across 10 weeks, it equipped participants with the necessary theory and practical techniques to plan and analyse data on their secondary teacher workforce in relation to teacher requirements, deployment, and utilisation and to identify potential policy options. Thirteen national teams took part in this Learning Cycle, including Bhutan, Cambodia, Egypt, Lao PDR, Maldives, Moldova, Mongolia, Philippines, Sri Lanka, Sudan, Tajikistan, Tunisia and Ukraine.

KIX EMAP Learning Cycle Case Study, March 2026

The KIX EMAP Hub is supported by

Photo by
Arabic_Wikipedia

KIX EMAP Hub / NORRAG
20, Rue Rothschild
P.O. Box 1672 1211 Geneva 1
Switzerland
norrag.kix@graduateinstitute.ch

This case study is a product of the KIX EMAP Learning Cycle: Secondary Teacher Workforce Management with external contributions. This work was supported by the Global Partnership for Education Knowledge and Innovation Exchange (GPE KIX), a joint endeavour with the International Development Research Centre (IDRC), Canada. The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of the KIX EMAP Hub, NORRAG, GPE, IDRC, its Board of Governors, or the governments they represent. The KIX EMAP Hub / NORRAG does not guarantee the accuracy of the data included in this work.

BIOGRAPHICAL NOTES ON THE AUTHORS

Dr. Salah Ahmadi is a general advisor for school and university guidance in Tunisia and a trainer in communication, life skills and various educational fields. He has taught at the Higher Institute of Education and Continuing Training. His research interests include educational affairs and conflict management through mediation and arbitration. He has published books and participated in educational forums. He has also supervised a group of graduation research for students of educational sciences.

Ahlem Sellami holds a PhD in economics and is currently the Director of Studies and Planning at the Ministry of Education. With a 20-year career in the education sector, including six years as a secondary school teacher, she participates in the development and implementation monitoring of strategic and operational plans, back-to-school preparations and formulation of the education budget. She is also responsible for the school map, studies and technical monitoring of files in coordination with the education sector's technical and financial partners. For two years, she taught the school map to students pursuing a master's degree in education planning.

Mouna Ben Othman is an inspector, consultant and teacher educator. An education leader with nearly three decades of extensive experience in English Language Teaching, her current role bridges educational policy, quality assurance and teacher development. She specialises in monitoring adherence to teaching standards, implementing curricula and designing large-scale assessments. Her quality assurance work is aimed at ensuring education effectiveness, efficiency and equity, thereby contributing to the achievement of Sustainable Development Goal 4. A key focus of her career is teacher quality and continuing professional development. As a teacher trainer, she is passionate about empowering educators through innovative, hands-on training tailored to their needs in instructional design, materials development, assessment and inclusive education. A Chevening Scholar with an MA in Management of Language Learning from the University of Greenwich, her areas of research expertise are Technology-Enhanced Language Learning and Supporting Students with Additional Learning Needs.

Issam Boukthir is the Director of Common Services of the International Center for Trainer Training and Pedagogical Innovation at the Ministry of Education of Tunisia. With over 15 years of experience in public sector reform and educational planning, his work focuses on performance-based budgeting, results-based management and digital transformation in education. He is currently pursuing two PhDs—in Human and Social Sciences at the University of Haute Alsace in France, and in Economics at the University of Tunis El Manar in Tunisia—and holds several postgraduate degrees and international certifications in project management, data analysis and education sector planning. He has led national initiatives such as the MARSAD AIN platform and collaborates with international partners, including UNICEF, the European Union and the World Bank. He is also an active member of AfECN, GREM and LISEC-UR 2310.

CONTENTS

LIST OF TABLES AND FIGURES

LIST OF ACRONYMS AND ABBREVIATIONS

ANT	Actual Number of Teachers
APTR	Adjusted Pupil–Teacher Ratio
AUR	Average Utilisation Rate
AY	Academic Year
EMAP	Europe, Middle East and North Africa, Asia and Pacific
GPE KIX	Global Partnership for Education Knowledge and Innovation Exchange
LCR	Learning Coverage Rate
OUUR	Operational Under-Utilisation Rate
PTR	Pupil–Teacher Ratio
RNTN	Real Number of Teachers Needed
SUUR	Structural Under-Utilisation Rate
TTLT	Total Theoretical Learning Time
TTTT	Total Theoretical Teaching Time
TUUR	Total Under-Utilisation Rate

ACKNOWLEDGMENTS

The seventh training course on workforce management for secondary school teachers, conducted by the UNESCO International Institute for Educational Planning for GPE KIX EMAP countries, was both highly enjoyable and beneficial. This was reflected in the depth of knowledge and information acquired throughout a diverse and rich training period, delivered by a select group of trainers, professors and facilitators who guided us until the completion and publication of this report. We extend our sincere thanks and appreciation to all of them, as well as to everyone who contributed, directly or indirectly, by providing the data and information that enabled us to prepare this report.

EXECUTIVE SUMMARY

The report addresses the management of secondary school teachers in Tunisia, highlighting challenges and proposing strategies, which has undergone continuous development since the 1958 education reform project. The report focuses on four main areas: determining teacher demand, diagnosing teacher distribution, examining their utilisation and exploring policies and strategies for their management.

1. Determining the Demand for Secondary School Teachers

The report identifies the need for more secondary school teachers due to the significant increase in student enrolment (by 107,683 students from the academic years 2019/2020 to 2023/2024) and the decrease in the number of teachers by 3,284, leading to a 2.1 rise in the pupil–teacher ratio.

These figures emphasise the necessity of hiring teachers for specific subjects based on enrolment trends and curriculum requirements, especially in the lower secondary (Grades 7 to 9) and upper secondary stages (for specialisations such as sciences, informatics and economics).

Projections for the period 2025–2028 indicate a further rise in teacher demand in 2025, particularly for languages (for example, 6,088 more Arabic language teachers are needed by 2028) and mathematics (5,237 more teachers by 2028), with a decline in demand for economics and management teachers.

2. Diagnosing the Distribution of Secondary School Teachers

The report evaluates teacher distribution across Tunisia's 26 educational regions, revealing disparities. In some regions, such as Tunis 1 and Sfax 1, the learning coverage rate exceeds 100% in most subjects, indicating an excess of teaching hours, while in other regions, such as Medenine and Kef, the rate is below 100% across all subjects. The pupil–teacher ratio varies slightly (13–19 students per teacher), but the adjusted pupil–teacher ratio shows significant variation—for example, 665 in Music in Bizerte and 9 in Islamic Education in Tataouine. These disparities affect academic outcomes, although social and economic factors also play a role.

3. Examining the Utilisation of Secondary School Teachers

The average utilisation rate exceeds 100% in 14 out of 15 subjects, with only English at 100%, indicating overwork (e.g., 619% in management and 244% in technology). Teachers often work more than 18 teaching hours, sometimes up to 22 hours, with temporary teachers employed to cover shortages.

4. Exploring Secondary School Teacher Management Policies and Strategies

- **Casual and Contractual Secondment:** Used to address teacher shortages, but may affect teacher motivation and student outcomes.
- **Remuneration Development:** Proposes salary adjustments to align with economic realities and address the growing phenomenon of private tutoring.
- **Periodic Work Organisation:** Facilitates teacher transfers to reduce regional disparities in teacher quality and student achievement.
- **Teacher Training and Qualification:** Emphasises the need for continuous training to align teachers with curriculum needs and promote equitable education.

5. Summary and Recommendations

The report highlights the necessity of data-driven strategies to address teacher shortages, unequal distribution and over-utilisation. Recommendations include:

- Establishing a clear strategy for teacher recruitment;
- Improving pre-service and continuous training;
- Adjusting teaching hours, class sizes and curriculum content to meet educational needs; and
- Enhancing teachers' economic conditions to boost motivation and reduce reliance on private tutoring.

This report aims to guide educational policy in Tunisia towards advancing secondary education—aligned with Tunisia's commitment to equitable education within the global *Education for All* movement—by comprehensively examining secondary school teacher management challenges and proposing practical solutions.

INTRODUCTION

Since the Education Reform Project in 1958, the Ministry of Education in Tunisia has been working to strengthen the teaching framework at all levels of education—especially primary and secondary education—by ensuring the training of teachers and professors in various specialisations aligned with the requirements of the Tunisian educational system. This system continues to develop in response to both local and global developments, as well as social, economic and political changes.

Within this context, a range of challenges have emerged across various educational dimensions, notably in workforce management for primary and secondary education. This is especially significant considering that the professional activities of teachers at these levels centre on shaping learners during the most formative periods of their lives—childhood and adolescence. The Tunisian educational system has prioritised the development of learners' capabilities by adopting advanced programmes and curricula, and has prepared educators to deliver them in line with international standards that keep pace with developments and can respond to local and global challenges. While the primary level plays a crucial role in nurturing learners, challenges are more evident at the secondary level, where they take different forms based on social, cultural and political factors. These challenges are organised around three axes.

The first axis concerns teachers' relationships with themselves across the psychological, cognitive and social dimensions—particularly their psychological balance and self-management abilities—which play a vital role in fostering the drive to succeed and in shaping professional identity.

The second axis concerns teachers' relationships with the school—its administration, curricula and learners—which involves engaging with knowledge to transfer it to the learners and interacting with the learners to support their acquisition of that knowledge, in accordance with the Tunisian Ministry of Education's set curricula, teacher and learning materials and prescribed number of teaching hours.

The third axis concerns teachers' relationships with society. Communities customarily hold teachers responsible for school outputs. As a result, society forms an image of teachers based on a range of social norms and both local and global variables, and draws around that image a set of expectations that represent key challenges within workforce management in secondary education. These challenges interact not only with the education system but also the larger social, economic, cultural and political realities of Tunisia.

Overcoming these complex challenges requires adopting approaches suited to the Tunisian context. One of these approaches is the secondary education workforce management approach, which involves the following tasks:

- **Identifying the need for secondary school teachers.** This task entails, on the one hand, determining the number of teachers required over a specific period to meet projected needs and achieve the objectives of educational policy within the Tunisian context; and on the other hand, specifying the number of secondary school teachers needed in each subject over a defined timeframe to accommodate expected enrolment levels in secondary schools.
- **Diagnosing the distribution of secondary school teachers.** This task entails, on the one hand, identifying disparities in teacher distribution at the national level and between regions—including increases or decreases in teacher numbers and the particularly affected subject areas—and on the other hand, assessing the consistency, fairness and effectiveness of this distribution.
- **Examining the utilisation of secondary school teachers.** This task involves, on the one hand, examining less efficient utilisation rates, understanding the underlying causes of such inefficiency, and determining the extent to which these weak teacher utilisation rates are exacerbated by factors beyond the control of educational authorities or school and institute principals.

- **Exploring policies and strategies for managing secondary school teachers.** This task entails, on the one hand, identifying different policy options that can be used to promote learning equity and/or improve learning outcomes across the country, and on the other hand, the types of strategies and policies that can help improve the overall management of secondary school teachers within the Tunisian context.

This report presents and analyses data related to this four-pronged approach to managing secondary school teachers within the Tunisian educational context. It aims to construct a comprehensive picture of this topic for better understanding by stakeholders and to ultimately contribute to the improvement of secondary education in Tunisia—and, potentially, in other countries.

DETERMINING THE DEMAND FOR SECONDARY SCHOOL TEACHERS

The task of determining the demand for secondary school teachers in Tunisia necessitates the discussion of the current diverse education challenges in the country. The most important of them: the increase in student enrolment in lower and upper secondary schools; the recruitment and qualification of teachers; and the provision of suitable schools and institutes in terms of the quality of educational spaces and the alignment of programmes and curricula with the evolving demands of the labour market.

Presenting these challenges in the Tunisian context necessitates considering the need for secondary school teachers from two perspectives: first, the number of teachers required over a specific period to meet projected demands and achieve the objectives of national educational policy; and second, the number of secondary school teachers needed in each subject area within a specific timeframe to match enrolment trends. This assessment is based on available official data pertaining to learning and education in the lower and upper secondary schools over the past five academic years (AYs), as detailed in Table 1.

Table 1. Official Education Data for the Lower and Upper Secondary Schools in Tunisia Over the Past Five Academic Years

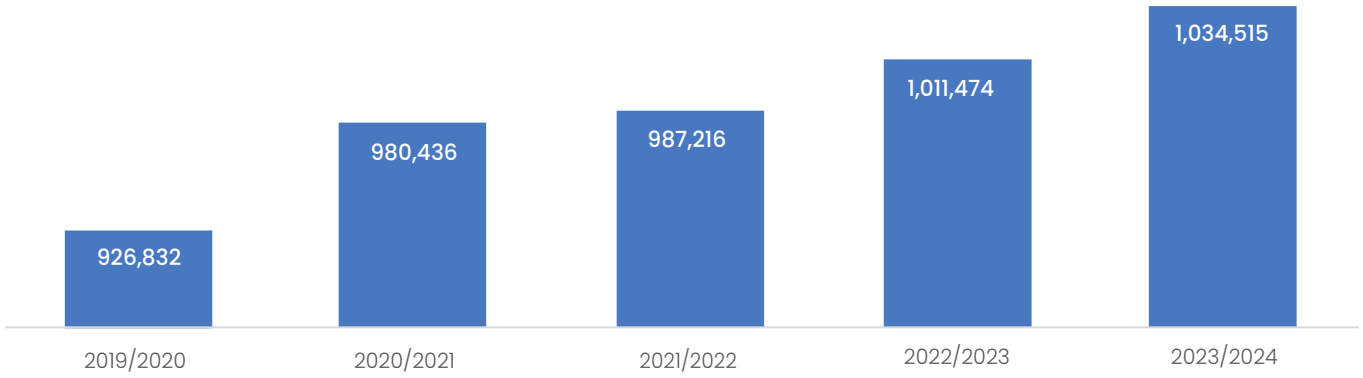
Data field	Academic year				
	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024
Number of establishments	1,437	1,448	1,455	1,467	1,470
Number of chapters	34,683	35,356	36,345	36,616	36,849
Number of students	926,832	980,436	987,216	1,011,474	1,034,515
Number of teachers	73,979	73,474	73,795	73,567	70,695
Average number of students per institution	645	677	678	689	704
Average class density	26.7	27.7	27.2	27.6	28.0
Average number of students per teacher	12.5	13.3	13.4	13.4	14.6

Source: Ministry of Education, 2024b.

To determine the need for secondary school teachers, three key indicators are essential: the number of students, the number of teachers and the average pupil–teacher ratio (PTR).

Figure 1 illustrates the trend in student enrolment in lower and upper secondary schools across Tunisia over the past five AYs.

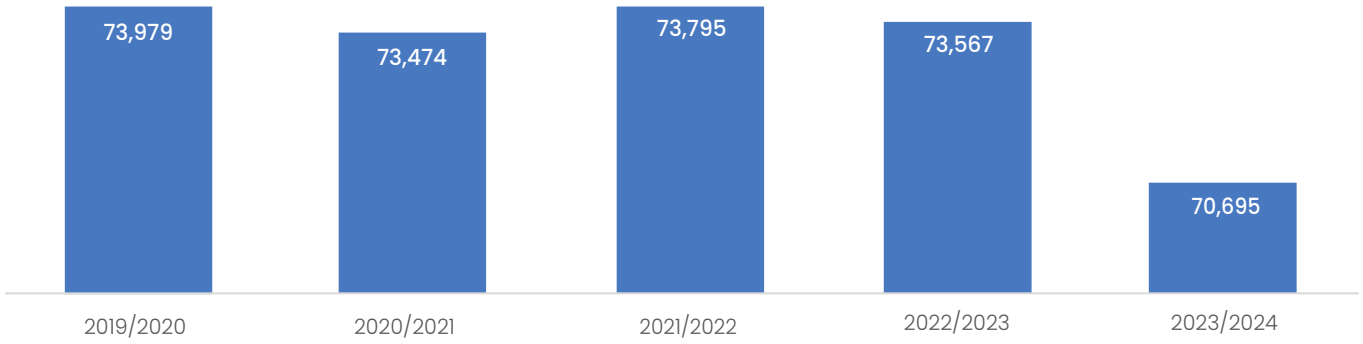
Figure 1. **Students Enrolled in Lower and Upper Secondary Schools in Tunisia Over the Past Five Academic Years**



Source: Ministry of Education, 2024b.

Official statistics on the number of lower and upper secondary school students in Tunisia over the past five AYs (2019/2020–2023/2024) reveal a substantial increase of 107,683 students. Ordinarily, this growth would require a proportional increase in the number of teachers to meet the increased demand. However, the data for the same period indicate that the number of lower and upper secondary school teachers in Tunisia between AYs 2019–2020 and 2023–2024 did not grow proportionally, but actually fell by 3,284, as shown in Figure 2.

Figure 2. **Lower and Upper Secondary School Teachers in Tunisia Over the Past Five Academic Years**



Source: Ministry of Education, 2024b.

This decrease in the number of teachers is also reflected in the 2.1 increase in the average number of students per teacher (or average PTR) over the past five AYs, as shown in Table 1, underscoring the need to recruit additional teachers to meet growing enrolment demands.

This report presents the number of teachers required to meet the projected enrolment in secondary schools in Tunisia over a defined period by subject, as the number of hours of learning and teaching at different educational levels varies according to the subject and the school's guidance tracks (specialisation branches). This report focuses on the lower secondary school (comprising Years 7–9) and the upper secondary school, which mark the onset of specialisation in Tunisian secondary education, when students are distributed to different specialisation tracks, including the science, informatics and economics tracks. These tracks partially differ in the subjects offered.

Table 2 details the number of students enrolled in AY 2023/2024 in the lower secondary education level (also known as the preparatory stage, junior secondary level, or basic levels 7-9) and the upper secondary education level (also known as the second secondary or senior secondary level).

Table 2. **Lower and Upper Secondary Students Enrolled by Specialisation Tracks in Tunisia AY 2023/2024**

Enrolment	**Junior secondary**		**545,324**
	Senior secondary	Informatics	**20,117**
		Sciences	**44,411**
		Economics	**37,573**
Number of pedagogical groups (PGs)	**Junior secondary**	Target size of PG	**35**
		Number of PGs	**15,581**
	Senior secondary	Target size of PG	**30**
		Number of Informatics PGs	**671**
		Number of Sciences PGs	**1,480**
		Number of Economics PGs	**1,252**

Source: Ministry of Education, 2024b.

In 2023, the number of students enrolled in lower secondary school reached 545,324, while enrolment in upper second secondary level totalled 102,101 students. These students were distributed across different specialisation tracks: 20,117 in the informatics track, 44,411 in the science track and 37,573 in the economics track. Based on the target size of a pedagogical group (PG)[1]—for lower secondary school, 35 students, and for the upper second secondary level, 30 students—the number of PGs in lower secondary school was 15,581, and in upper second secondary school: 671 in the informatics track, 1,480 in the science track and 1,252 in the economics track.

The number of student learning hours varies according to the subject and the specialisation track. At the lower secondary level, the total number of learning hours exceeds 30, distributed across 15 subjects, including languages, social, scientific and artistic subjects; and at the upper secondary level, it reaches 37 hours in the science and informatics tracks, and 30 hours in the economics track. However, certain subjects in the informatics track offer only 10 hours, and other subjects—such as fine arts at the secondary level in all sections—have no learning hours.[2] These figures were used to calculate the total number of required learning hours, as Table 3 shows.

Table 3. **Total Learning Hours Needed by Subject and Educational Level/Track**

Subject	**Educational Level/Track**				
	Lower Secondary	**Informatics**	**Science**	**Economics**	**Total**
Arabic	90,846	106,667	107,739	108,569	109,576
French	75,265	88,196	89,268	90,098	91,105
English	42,623	49,695	50,738	51,568	52,575
Maths	76,835	90,101	91,535	92,757	94,252
Physics	22,034	25,728	26,439	27,093	27,900
History & Geography	39,220	45,902	46,625	47,193	47,881

1 In the Tunisian educational context, a pedagogical group refers to a single class comprising of a number of students who share specific characteristics—such as academic level and specialisation track.

2 The learning hours distribution table in shown in Annex 1.

Subject	Educational Level/Track				
	Lower Secondary	Informatics	Science	Economics	Total
Civic Education	18,984	22,264	22,584	22,846	23,165
Islamic Education	18,984	22,264	22,584	22,846	23,165
Science	40,042	46,296	46,470	46,470	46,470
Technology	39,766	46,618	47,566	48,438	49,514
Informatics	43,336	51,408	53,712	55,980	58,770
Economics	3,756	4,122	4,371	4,503	4,653
Management	3,756	4,122	4,371	4,503	4,653
Music	15,581	18,471	18,471	18,471	18,471
Fine Arts	15,581	18,471	18,471	18,471	18,471

Source: Ministry of Education, 2024b.

In general, the total number of required learning hours increased in the fields of scientific subjects and languages, and decreased in social and artistic disciplines. This subject-based distribution formed the basis for calculating the total number of secondary school teachers needed for AY 2023/2024.

Based on the calculation results, staffing needs by subject specialisation can be projected for AYs 2025/2026 to 2029/2030. These projections draw on current enrolment figures, annual enrolment growth rates, the number of PGs and the total number of learning hours per subject to estimate teacher requirements for each AY between 2024 and 2028. The 2028 distribution model highlights projected teacher requirements across subject areas. In the field of languages, the number of required Arabic language teachers is expected to reach 6,088. In scientific subjects, the demand for mathematics teachers is forecasted at 5,237. In the economics and management subjects—taught across three grades (second, third and fourth) and within a single specialisation track—the number of required teachers is expected to decrease to 259. Table 4 and Figure 3 explain and visualise these trends over five AYs.

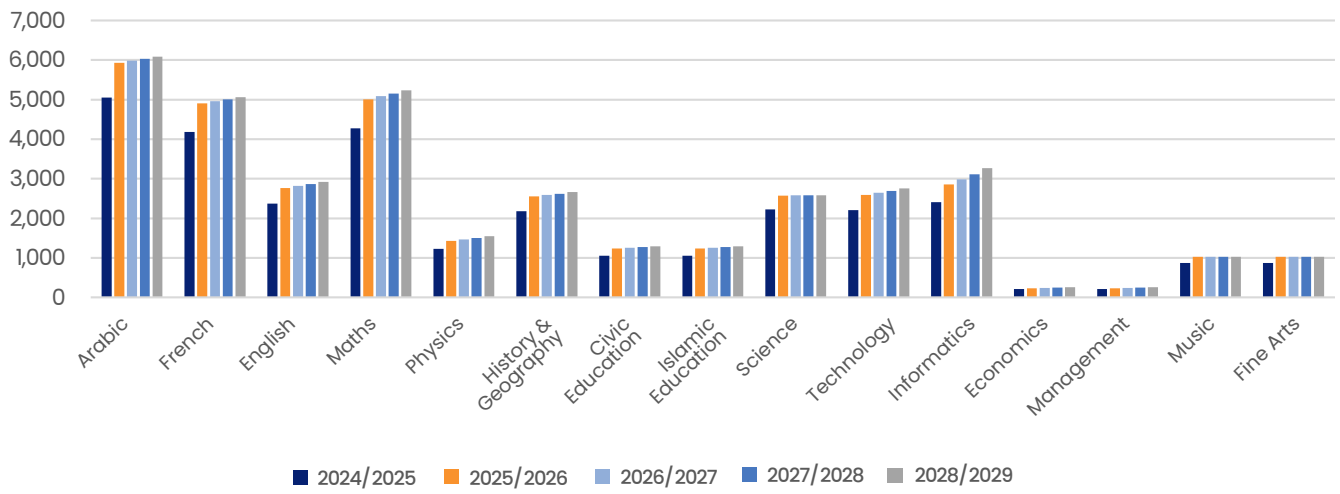
Table 4. Total Required Teachers by Subject and Academic Year

Subject	Academic year				
	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029
Arabic	5,047	5,926	5,986	6,032	6,088
French	4,182	4,900	4,960	5,006	5,062
English	2,368	2,761	2,819	2,865	2,921
Maths	4,269	5,006	5,086	5,154	5,237
Physics	1,225	1,430	1,469	1,506	1,550
History & Geography	2,179	2,551	2,591	2,622	2,661
Civic Education	1,055	1,237	1,255	1,270	1,287

Subject	Academic year				
	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029
Islamic Education	1,055	1,237	1,255	1,270	1,287
Science	2,225	2,572	2,582	2,582	2,582
Technology	2,210	2,590	2,643	2,691	2,751
Informatics	2,408	2,856	2,984	3,110	3,265
Economics	209	229	243	251	259
Management	209	229	243	251	259
Music	866	1,027	1,027	1,027	1,027
Fine Arts	866	1,027	1,027	1,027	1,027

Source: Ministry of Education, 2024b.

Figure 3. Total Required Teachers by Subject and Academic Year



Source: Ministry of Education, 2024b.

The projected distribution of total teachers over this period has enabled us to anticipate the number of new teachers needed each year. Notably, the estimated demand appears high in 2025 and significantly drops from 2026 to 2028, as shown in Table 5.

Table 5. **New Teachers Needed by Subject and Academic Year**

	Academic Year			
	2025/2026	**2026/2027**	**2027/2028**	**2028/2029**
Classrooms	16,226	280	229	–
Arabic	880	60	46	56
French	718	60	46	56
English	394	58	47	56
Maths	737	80	69	83
Physics	205	39	37	44
History & Geography	372	40	31	39
Civic Education	182	18	15	17
Islamic Education	182	18	15	17
Science	347	10	–	–
Technology	380	53	48	60
Informatics	448	128	126	155
Economics	20	14	9	8
Management	20	15	8	8
Music	161	–	–	–
Fine Arts	161	–	–	–

Source: Ministry of Education, 2024b.

DIAGNOSING THE DISTRIBUTION OF SECONDARY SCHOOL TEACHERS

This section focuses on diagnosing the distribution of secondary school teachers within the Tunisian educational system, using analytical tools to assess disparities in teacher distribution at both the national and regional levels. The aim is to identify areas with teacher shortages or surpluses, evaluate the overall consistency of the distribution and determine the level of equity and effectiveness in assigning qualified teachers according to their specialisation across regions.

Allocation consistency refers to the uniformity of the distribution of secondary school teachers based on the number of students, according to three main indicators: the learning coverage rate (LCR), PTR, and the adjusted PTR (APTR).

To assess allocation consistency, we first considered the LCR—the number of teaching hours of teachers that should cover the curriculum for students—of each subject by calculating both the teaching time and learning hours. The Ministry of Education has mandated 18 teaching hours per subject. However, learning hours differ according to the subject and the educational level.

The number of learning hours for each subject are distributed across two educational levels: the lower secondary level (Years 7–9) and the upper secondary level (which includes a common first year and four tracks in the second and third years: informatics, science, economics and literature).[3]

Table 6 presents the results of the examination of the allocation consistency of secondary school teachers across subjects based on the total theoretical learning time (TTLT)[4] and total theoretical teaching time (TTTT). As seen in Table 6 teacher allocation varied by subject.[5]

Table 6. Average Learning Coverage Rate of Secondary School based on the Total Theoretical Learning Time (TTLT) and Total Theoretical Teaching Time (TTTT) by Subject

Subject	TTLT	TTTT	Average learning coverage rate (%)	R2	Degree of randomness (%)
Arabic	149,251	146,340	98	0.082	92
French	131,313	143,964	110	0.975	2
English	104,205	126,270	121	0.003	100
Maths	132,045	132,048	100	0.001	100
Physics	77,332	101,790	132	0.253	75
History & Geography	77,892	77,346	99	0.161	84
Civic Education	27,307	40,824	150	0.108	89

3 Other tracks that were not included in the distribution are mathematics, technology and sports.

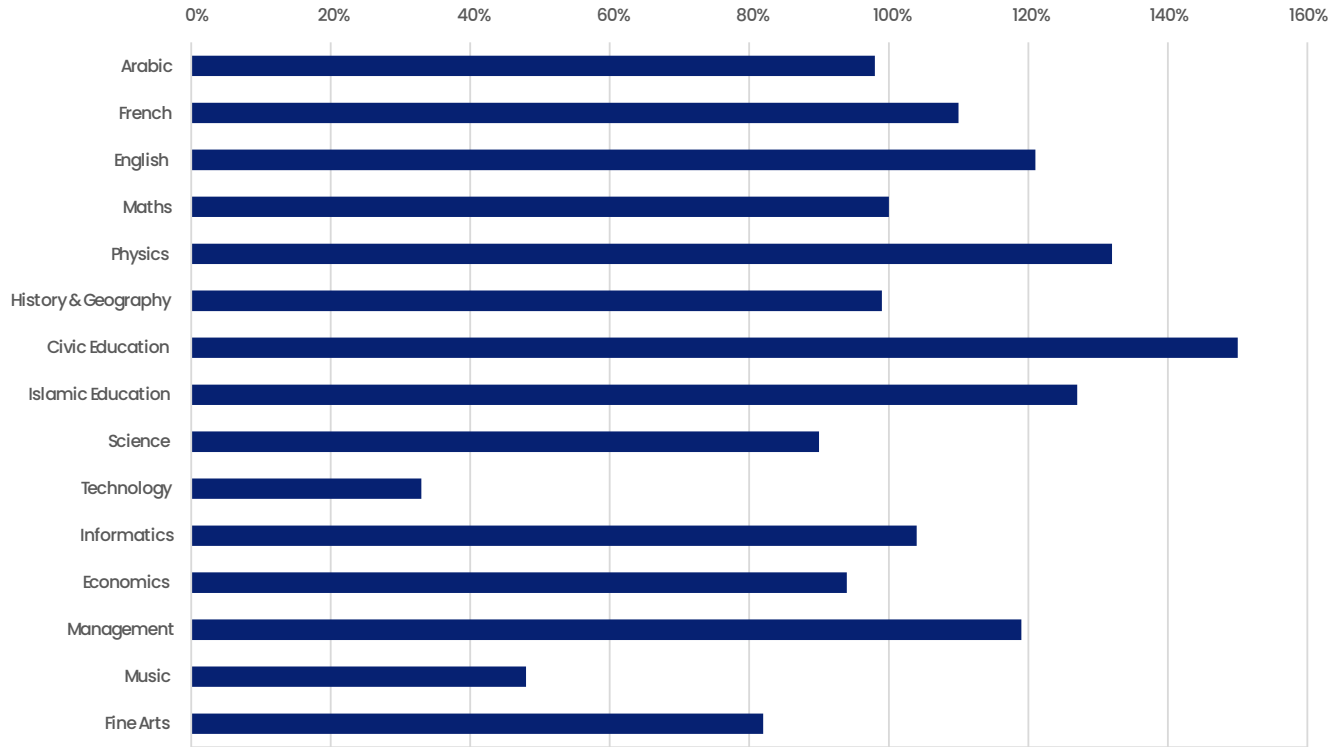
4 The total number of weekly learning hours theoretically due.

5 The total number of weekly teaching hours theoretically available.

Subject	TTLT	TTTT	Average learning coverage rate (%)	R2	Degree of randomness (%)
Islamic Education	29,899	37,962	127	0.114	89
Science	89,482	80,154	90	0.187	81
Technology	74,489	24,498	33	0.328	67
Informatics	86,513	90,144	104	0.230	77
Economics	19,060	17,946	94	0.278	72
Management	14,809	17,622	119	0.075	93
Music	30,895	14,976	48	0.031	97
Fine Arts	30,895	25,452	82	0.003	100

Figure 4 shows that in several subjects—French, English, physics, civic education, Islamic education, informatics and management—the LCR exceeded 100%, suggesting that the total teaching hours allocated to teachers of these subjects exceeded the instructional time set in the curriculum. In contrast, mathematics maintained an LCR of 100%, while the LCRs of Arabic, history and geography, science, technology, economics, music and fine arts fell below 100%.

Figure 4. National Average Learning Coverage Rates of Secondary School by Subject



Source: Ministry of Education, 2024b.

To compare the distribution of secondary school teachers across regions and subjects, we calculated the LCR based on the number of students enrolled in each of the country's 26 educational regions. Student enrolment for AY 2023/2024 was included across all levels of lower secondary (Years 7–9) and upper secondary education—including the common first year and the second to fourth years, segmented into the following specialisation tracks: informatics, economics and management, sciences and literature. In addition to the number of PGs at each level, the calculation of the distribution of teachers for each educational subject by region included the TTLT required by students and the TTTT available from teachers, both at the regional level. The resulting LCRs varied across educational regions, as illustrated in Table 7.

Table 7. Learning Coverage Rates by Subject and Region (%)

Region name	Arabic	French	English	Maths	Physics	History & Geography	Civic Eduction	Islamic Education	Science	Technology	Informatics	Economics	Management	Music	Fine Arts
Tunis 1	116	128	153	123	157	114	184	125	115	42	112	142	165	101	116
Tunis 2	86	98	124	97	110	86	138	96	78	31	83	96	118	79	86
Ariana	109	129	150	120	153	115	182	152	106	41	121	121	144	102	109
Manouba	63	66	82	66	80	61	100	77	58	22	53	63	75	53	63
Ben Arous	295	329	383	318	420	282	450	392	256	118	385	280	352	257	295
Zaghoun	29	35	49	33	41	31	52	51	31	10	28	31	41	29	29
Bizerte	172	185	219	190	245	172	251	194	167	46	182	175	217	161	172
Beja	79	78	94	75	108	79	114	103	69	24	73	70	86	48	79
Jandouba	146	159	172	169	226	167	287	192	135	47	155	161	144	89	146
Seliana	87	89	116	103	110	90	157	115	78	30	83	66	89	60	87
Elkef	56	57	72	60	78	54	95	64	51	18	53	54	70	33	56
Elgassrine	105	110	105	99	125	100	151	147	90	34	100	75	88	61	105
Sidi Bouzid	122	139	130	111	144	129	197	170	104	45	136	125	204	110	122
Gafsa	345	382	403	329	453	341	490	486	332	127	391	242	285	275	345
Tozeur	77	74	82	82	99	81	113	113	70	32	67	65	124	54	77
Guebilli	136	118	103	124	157	130	205	217	124	35	164	106	117	97	136
Tataouin	31	30	35	28	37	33	50	53	28	18	25	29	39	26	31
Mednin	126	132	153	120	158	124	190	173	105	44	146	105	152	108	126
Gabes	83	88	97	86	119	80	139	131	65	27	102	76	91	95	83
Sfax1	122	145	148	132	173	127	167	149	122	44	154	118	155	118	122
Sfax2	99	120	126	108	131	104	133	125	96	25	108	95	134	94	99
Elmehdia	75	97	98	72	110	86	109	102	74	28	106	74	99	77	75
Elkairouan	93	108	112	91	122	91	118	114	76	27	94	83	109	76	93
Elmonastir	90	110	117	90	136	93	117	102	80	28	111	89	117	80	90
Soussa	97	118	124	86	126	94	152	104	88	29	90	96	125	71	97
Nabeul	116	128	153	123	157	114	184	125	115	42	112	142	165	101	116

In reading of Table 7 we can identify three main categories across the 26 educational regions: (1) regions where the LCR exceeds 100%, (2) regions in which subjects LCR is exactly 100% and (3) regions where the LCR rate is below 100%. According to Table 7, Tunis 1, Ariana, Bizerte, Sidi Bouzid, Medenine, Sfax 1 and Nabeul, the LCRs exceeded 100% in 14 of the 15 educational subjects, with technology as the one subject falling below 100%. In Gafsa and Ben Arous, the LCR exceeded 100% across all 15 curriculum subjects. Conversely, in Medenine and El Kef, the LCR was below 100% in all subjects, suggesting a widespread shortfall in teaching coverage. These geographical disparities in LCR likely have various reasons, which are expected to influence both the distribution of teachers and academic outcomes.

As part of the examination of allocation consistency for secondary school teachers, the APTR was employed to assess the overall distribution patterns across Tunisia's educational districts. As shown below in Table 8, the APTR was generally below 100. For instance, in the Tataouine region, Islamic education registered a notably low APTR of 9. Conversely, exceptions were observed in Bizerte, where music reached an exceptionally high APTR of 665, and in Sfax 2, where technology recorded an APTR of 102.

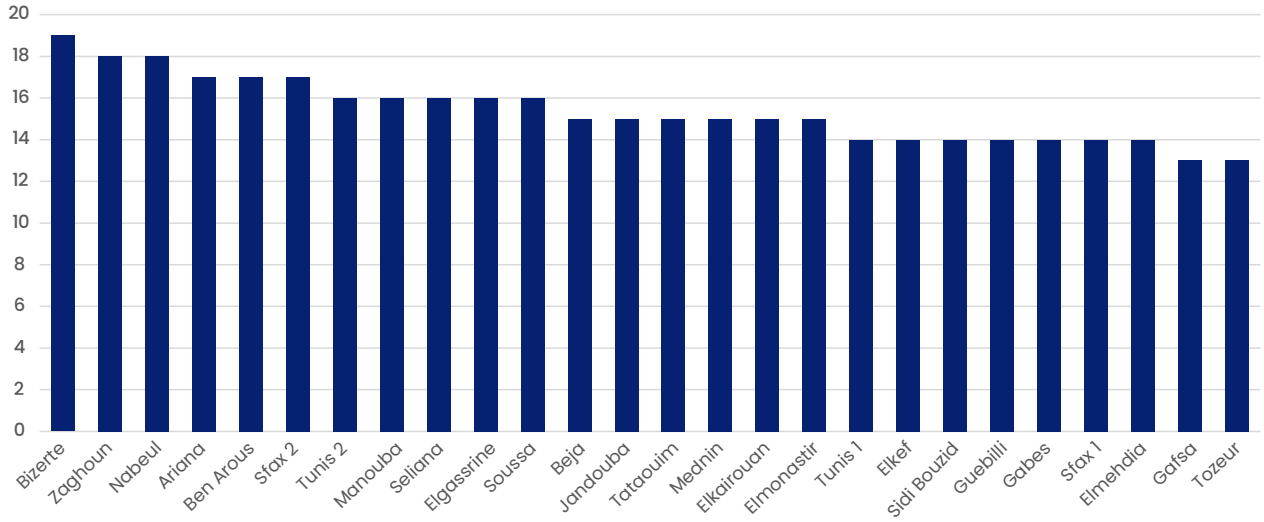
Table 8. Adjusted Pupil–Teacher Ratios by Subject and Region

Region	Adjusted Pupil–Teacher Ratio															
	All subjectst	Arabic	French	English	Maths	Physics	History & Geography	Civic Education	Islamic Education	Science	Technology	Informatics	Economics	Management	Music	Fine Arts
Tunis 1	14	27	26	21	28	19	26	21	17	27	60	28	20	18	35	30
Tunis 2	16	30	27	21	31	25	31	22	18	32	81	33	22	22	42	31
Ariana	17	33	30	25	33	25	30	23	18	32	74	31	26	24	56	35
Manouba	16	31	29	24	29	23	28	22	17	35	64	31	25	19	38	33
Ben Arous	17	29	29	25	34	24	30	23	17	35	67	32	24	23	43	36
Zaghoun	18	40	32	22	33	19	28	25	18	30	83	30	31	17	62	31
Bizerte	19	29	28	23	30	21	28	24	20	30	98	31	26	21	665	29
Beja	15	28	29	24	30	14	24	23	16	20	76	27	24	16	83	39
Jandouba	15	30	27	25	27	16	24	18	20	23	73	30	27	24	133	41
Seliana	16	32	31	23	26	16	22	19	18	19	66	28	37	24	76	37
Elkef	14	27	26	20	24	11	23	19	19	17	56	25	29	16	84	39
Elgassrine	16	30	29	29	29	19	25	19	18	22	68	25	30	22	85	39
Sidi Bouzid	14	26	24	24	28	13	22	19	15	22	56	19	33	16	42	24
Gafsa	13	24	22	21	25	16	21	19	14	20	48	19	20	13	74	26
Tozeur	13	25	24	22	22	14	19	17	13	20	44	27	24	11	55	30
Guebilli	14	23	28	30	25	20	32	18	12	21	75	16	20	16	34	30
Tataouin	15	29	30	24	30	18	20	19	9	22	49	25	24	15	55	24
Mednin	15	29	28	24	30	19	23	18	13	26	60	22	22	16	71	27
Gabes	14	31	19	25	29	17	28	20	13	28	69	21	23	18	50	22
Sfax1	14	29	24	23	26	17	26	21	17	22	66	22	23	14	33	26
Sfax2	17	32	27	26	31	17	28	25	16	19	102	25	26	13	36	28

Region	Adjusted Pupil–Teacher Ratio															
	All subjectst	Arabic	French	English	Maths	Physics	History & Geography	Civic Education	Islamic Education	Science	Technology	Informatics	Economics	Management	Music	Fine Arts
Elmehdia	14	30	24	22	32	17	24	22	17	21	58	19	21	12	37	25
Elkairouan	15	29	24	23	27	15	24	24	18	24	78	23	26	16	41	33
Elmonastir	15	28	24	22	30	18	25	23	15	26	73	25	20	18	41	30
Soussa	16	29	24	23	33	18	28	20	20	29	77	25	26	19	51	34
Nabeul	18	33	30	25	33	24	31	25	20	30	87	32	28	24	48	35

According to Figure 5, the APTRs for all the subjects across the 26 educational regions appear to be close, ranging from 13 in both the Tozeur and Gafsa regions to 19 in the Bizerte region.

Figure 5. Adjusted Pupil–Teacher Ratios for All Subjects by Educational Regions



Source: Ministry of Education, 2024b.

After examining the consistency of secondary teacher allocation, it is important to investigate the allocation effectiveness by measuring how teacher deployment affects pupils' learning outcomes. Therefore, we analysed the 2023 baccalaureate results at the regional level and compared it with the regional teacher distribution data presented in Table 9.

Table 9. **2023 Baccalaureate Results and Teacher Distribution by Region**

Region name	Total number of teachers	% success in baccalaureate
Tunis 1	2,982	52.4
Tunis 2	2,495	46.1
Ariana	5,477	58.2
Manouba	2,242	45.3
Ben Arous	3,627	52.3
Zaghoun	5,869	45.7
Bizerte	3,189	51.4
Beja	1,754	44.9
Jandouba	4,943	36.4
Seliana	1,314	43.8
Elkef	1,505	40.9
Elgassrine	2,819	42.1
Sidi Bouzid	2,810	52.2
Gafsa	2,610	33.5
Tozeur	5,420	42.8
Guebilli	1,147	45.2
Tataouin	866	47.1
Mednin	2,013	57.6
Gabes	2,382	51.0
Sfax1	3,107	61.8
Sfax2	5,489	64.0
Elmehdia	2,507	59.5
Elkairouan	3,104	43.6
Elmonastir	5,611	58.2
Soussa	3,849	58.8
Nabeul	4,112	55.4

Source: Ministry of Education, 2024b.

While the correlation between teacher distribution across educational regions and baccalaureate success rates is undoubtedly significant, other variables must also be considered when assessing the overall effectiveness of teacher distribution in influencing student learning outcomes. For example, socio-economic data on each educational region can either confirm or challenge the stability of this relationship.

EXAMINING THE UTILISATION OF SECONDARY SCHOOL TEACHERS

This section of the report aims to evaluate the utilisation of secondary school teachers in Tunisia through comparative analysis, based on average utilisation rates (AUR). At the national level, we conducted a comparative analysis of the AUR, the proportion of the total available teaching hours that are needed to teach students, to measure the Tunisian education system's level of efficiency in fulfilling students' needs. The evaluation draws on data from AY 2023/2024 related to 15 educational subjects, each assigned a specific number of student learning hours. The number of legal teaching hours is standardised at 18 hours for each teacher. Utilisation was examined by comparing the national total number of teachers assigned to each subject. The results are shown in Table 10.

Table 10. Analysis of Secondary School Teacher Utilisation by Subject in AY 2023/2024

Subjects	Statutory teaching hours	Number of hours in curriculum	AUR[6] (%)	RNTN[7]	ANT[8]	SUUR[9]	OUUR[10]	TUUR[11]
Arabic	18	5	143	12.4	-3,787	0.00	-0.44	-0.43
French	18	4	117	12.1	-1,456	0.00	-0.17	-0.17
English	18	3	100	11.8	19	0.00	0.00	0.00
Maths	18	5	159	12.4	-4,618	0.00	-0.59	-0.59
Physics	18	3	124	11.8	-1,457	0.00	-0.24	-0.24
History & Geography	18	2	109	13.6	-428	0.00	-0.09	-0.09
Civic Education	18	1	103	0.01	-84	0.01	-0.03	-0.03
Islamic Education	18	1	111	12.3	-256	0.01	-0.11	-0.11
Science	18	2	105	13.6	-240	0.00	-0.05	-0.05
Technology	18	2	344	13.6	-3,551	0.01	-2.45	-2.44

6 AUR: average utilisation rate
7 RNTN: real number of teachers needed
8 ANT: actual number of teachers
9 SUUR: structural under-utilisation rate
10 OUUR: operational under-utilisation rate
11 TUUR: total under-utilisation rate

Subjects	Statutory teaching hours	Number of hours in curriculum	AUR[6] (%)	RNTN[7]	ANT[8]	SUUR[9]	OUUR[10]	TUUR[11]
Informatics	18	3	140	11.8	-2,142	0.00	-0.40	-0.40
Economics	18	3	704	11.8	-6,431	0.01	-6.06	-6.04
Management	18	3	719	11.8	-6,453	0.01	-6.20	-6.19
Music	18	1	277	12.3	-1,605	0.01	-1.78	-1.77
Fine Arts	18	1	164	12.3	-988	0.0	-0.65	-0.64

This distribution reveals that in AY 2023/2024 the AUR exceeded 100% across 14 educational subjects and remained stable at 100% only for the English language subject. A low AUR (less than 100%) suggests a surplus of teachers and an under-utilisation of those teachers. A high AUR (over 100%) reveals teacher shortages and implies overworked teachers. These results indicate that additional efforts are required to adequately deliver the curriculum in most subjects.

Specifically, in AY 2023/2024, teacher usage exceeded legal working hours as follows: Arabic: 43%; French: 17%; math: 59%; physics: 24%; history and geography: 9%; civic education: 3%; Islamic education: 11%; science: 5%; technology: 244%; informatics: 40%; economics: 604%; management: 619%; music: 177%; and fine arts: 64%.

To address these shortfalls, additional teaching hours are scheduled for many full-time teachers — approximately 22 hours or more, surpassing the legal limit. Moreover, temporary teachers have been mobilised to cover the curriculum.

EXPLORING SECONDARY SCHOOL TEACHER MANAGEMENT POLICIES AND STRATEGIES

This section explores the four most important policies and strategies currently adopted to address key challenges in the management of secondary school teachers in Tunisia.

Casual and Contractual Secondment Policy

To address the marked shortage of secondary school teachers, the policy of secondment[12] has been adopted both on a casual basis and through formal contracting. This policy has filled some instructional gaps in educational materials and in various areas, but it has potential impacts on student achievement and teacher motivation.

Remuneration Development Policy

In response to evolving economic and social realities, both local and global, efforts have been made to review and adjust the salaries of secondary school teachers. However, teacher recruitment remains one of the most important areas significantly affecting the professional practice of teaching due to its socio-economic repercussions. A notable concern is the increasing prevalence of private tutoring in both primary and secondary education, although the Ministry of Education has attempted to regulate this practice based on certain standards.

Periodic Work Organisation Policy

The Ministry of Education organises transfer programmes for secondary school teachers between educational authorities and between institutions within the same authority. This policy may help reduce disparities between authorities in teacher quality, which can reduce disparities in student outcomes.

Teacher Training and Qualification Policy

The recruitment process targets teaching candidates with bachelor's degrees in scientific disciplines that are included in the Tunisian educational curriculum and recognised within university training. They undergo continuous training in issues related to their teaching speciality at both the regional and national levels. Each AY, the Ministry of Education organises a national training and skills development programme guided by a set of objectives—the most important of which are ensuring equitable access to quality education and promoting equal learning opportunities for all. To achieve these goals, the Ministry has organised training courses for all educational personnel. Table 11 presents data on secondary school teacher training activities undertaken in AY 2023/2024.

Table 11. Programme of Training for Secondary School Teachers

Number	Beneficiaries (teachers)	Training duration (days per teacher)	Number of trainees
01	Lower & upper secondary school	6	1,000
02	Lower & upper secondary school	3	5,000 delegates since 2018
03	Maths	2	500
04	Physics	2	500
05	Science	2	500
06	Behaviour	2	500
07	Economics	2	500

12 For years, the Ministry of Education in Tunisia has been implementing the policy of filling vacancies in secondary education either through contractual hiring or temporary replacement. These teachers have been integrated into the education system in accordance with Law No. 21 of 2025.

Number	Beneficiaries (teachers)	Training duration (days per teacher)	Number of trainees
08	IT	2	500
09	Arabic	2	500
10	French	2	500
11	Technology	2	500
12	History & Geography	2	500
13	English	2	500
14	Civic Education	2	500
15	Islamic Education	2	500
16	Fine Arts	2	500
17	Music	2	500
18	New teachers for lower & upper secondary school	6	5,000

Source: Ministry of Education, 2024a.

CONCLUSION AND RECOMMENDATIONS

This final section of this report summarises the findings and offers recommendations regarding policies and strategies pertaining to the management of secondary school teachers in Tunisia. Thus, this report can contribute to monitoring the development and evolution of educational policies and their impact on educational planning requirements in general, and shedding light on the challenges of secondary school teachers in Tunisia in particular.

To provide good guidance on educational policy and to support informed decision-making, there is an urgent need to collect relevant data, evaluate the effectiveness of existing programmes, conduct a wide range of pertinent studies and explore the future. In this context, the first section of this report focused on determining the demand for secondary school teachers using data on student enrolments at the lower and upper secondary levels in AY 2023–2024. Drawing on the number of learning hours for 15 subjects, the number of teachers, the number of legal teaching hours and the number of pedagogical groups, we projected a varying need for secondary education teachers in the next five AYs. The forecast seems high in AY 2025/2026 but appears to significantly decrease in the remaining three AYs, from 2026/2027 to 2028/2029.

The second section diagnosed the distribution of secondary school teachers across subjects and regions, identifying shortages and surpluses. It aimed to assess the consistency of teacher distribution in general and measure equity and effectiveness in deploying qualified specialists across Tunisia's 26 educational regions. The third section examined the utilisation of secondary school teachers in Tunisia through comparison of their average utilisation indices.

The fourth section outlined the most important policies adopted for managing secondary school teachers in Tunisia: casual and contractual delegation, remuneration development, periodic work organisation, and training and qualification.

Through this report, we advocate for clearer training objectives in managing the secondary education workforce. Tunisia's engagement in the Global Education for All movement underscores the universal right to quality education and reaffirms the role of education as a catalyst for sustainable human development.

Essential Recommendations for the Management of Secondary School Teachers in Tunisia

- Formulate an integrated strategy for teacher assignment informed by clear references.
- Comprehensively articulate teacher qualifications prior to teacher assignment within specialised institutions.
- Control the allocation of secondary education teachers based on educational subjects, population density, and the economic and social environment of each educational region.
- Review some educational subjects in terms of content and number of hours in line with educational objectives, and teacher and pupil variables.
- Modify school time according to the needs of teachers and pupils.
- Modify the number of legal teaching hours according to controls that take into account the number of learning hours and the number of permanent teachers.
- Modify class size based on the ability of secondary school teachers.
- Develop programmes for secondary school teachers' continuous training and life skills enhancement.
- Improve the economic and financial situation of secondary school teachers.

These are only a few recommendations for the enhanced management of secondary school teachers in Tunisia. While they do not address all current challenges in the country's education sector, they nevertheless strive to advance the existing structures toward what is desired for Tunisia's secondary school teacher workforce.

REFERENCES

Ministry of Education. (2024a). *National program for training and skills development.* Ministry of Education, Tunisia.

Ministry of Education. (2024b). *Statistics of the General Administration of Studies and Planning at the Ministry of Education in Tunisia: 2023–2024*. General Administration of Studies and Planning, Ministry of Education, Tunisia.

Tournier, B., Rooke, B., Gacougnolle, L., & Childress, D. (2024). *Secondary teacher management: Requirements, allocation, and utilization – Guidelines*. UNESCO IIEP.

UNESCO International Institute for Educational Planning. (2024). Lectures from KIX *EMAP Learning Cycle 7: Secondary Teacher Workforce Management.*

KIX EMAP Rapid Customised Country Support Case Study, March 2026

20, Rue Rothschild I P.O. Box 1672
1211 Geneva 1, Switzerland
+41 (0) 22 908 45 47
norrag.kix@graduatenstitute.ch

@KIXEMAP

@KIXEMAP

@KIXEMAP

@KIXEMAP

norrageducation.org/kix-emap

gpekix.org/regional-hub/kix-emap