WHITE PAPER ON THE FUTURES OF TEACHERS AND THE TEACHING PROFESSION



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FOREWORD BY THE DIRECTOR GENERAL



Everything the Council of Europe sets out to achieve in education, from the right to quality education to education for democratic citizenship and human rights, is realised, or not, by teachers in classrooms. It is through teachers that our standards become practice. Our Education Strategy 2024-2030 is entitled "Learners First"; putting learners first means investing in those who teach them.

Much of our work in the past decades has addressed what teachers should know and do. This White Paper turns to what teachers need. Its central argument is that the quality of teaching cannot be secured by asking individual teachers to do more. It depends on the conditions in which they work, on strong schools and leadership, and on the collective voice and agency of the profession in the decisions that affect it. This view builds on the Committee of Ministers' recognition that teaching is a collective profession, shaped by the structures and institutions within which teachers work (Recommendation CM/Rec(2019)9) Responsibility for the state of the profession therefore lies with education systems and those who govern them, not with teachers alone.

This is a question of democratic resilience as much as of education policy. The New Democratic Pact for Europe reaffirms that democracy must be learned and practised, and schools are among the first places where this happens. Teachers do more than transmit knowledge. They help children and young people develop the critical thinking, mutual respect and sense of responsibility on which democratic societies depend. Yet we cannot expect teachers to fulfil this mission if they are overstretched, undervalued or excluded from decisions affecting their profession. It is also a question of equality: teacher shortages and attrition fall hardest on learners in disadvantaged communities, who most need stability and expertise.

The digital transformation of education makes this more urgent, not less. The Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law (CETS No. 225) provides a framework for ensuring that the development and use of artificial intelligence (AI) respect human rights, democracy and the rule of law. Our work on digital citizenship education and AI literacy reinforces the importance of equipping teachers with the knowledge, time and professional autonomy to make informed decisions about the use of AI in education. Technology alone does not improve education; teachers do.

The White Paper was commissioned by the Council of Europe and prepared by the UCL Institute of Education in close dialogue with the European Trade Union Committee for Education (ETUCE). It is presented to the 27th Session of the Standing Conference of Ministers of Education (Podgorica, December 2026), whose theme, "Empowering Educators for a Democratic Europe in the Digital Age", captures its argument. The White Paper's nine recommendations are addressed to member states; two also call for action by the Organisation: a dedicated intergovernmental programme on the teaching profession and a Committee of Ministers Recommendation on the futures of teachers and the teaching profession.

A White Paper sets out a direction; its value lies in what follows. Its real test will be whether, in the years ahead, teachers across Europe find their working conditions and professional standing improved. I therefore invite Ministers to translate these recommendations into a shared political commitment, backed by sustained investment, and to place the future of the teaching profession, and with it the quality of education for every learner, at the heart of their education agendas.

Marja Ruotanen
Director General of Democracy and Human Dignity
Council of Europe

FOREWORD BY ETUCE

Teaching is a wonderful and inspiring profession, when the conditions are right. When I started teaching, I was mainly focused on becoming a better teacher in the classroom. The first years can be unforgiving if there is no proper support. But after a few years you get better at it. You start building up routines which allow you to take a step back, take a breath and take stock of the wider educational system.

From the beginning of my teaching career, I was already struck by the lack of collective teacher voice, my voice. Reforms being pushed through from top-down, which you know from deep classroom experience won't work. And as the years progressed this didn't improve. And that lack of collective voice was felt by me, is being felt by teachers throughout Europe.

According to TALIS only 18% of European teachers (EU22) feel that they can influence education policy. That is a clear sign that teaching is not being treated as a profession. The OECD acknowledged these findings in the TALIS report: "unlike other professions, teachers frequently work under the direction of policymakers and administrators not involved in day-to-day classroom activities." Changing this is the key to making teaching an attractive profession: treat teaching like a profession.

A profession has a fair amount of collective professional autonomy at all levels, and a fundamental say in setting and implementing its own standards, which guide classroom practice, teacher education, research, induction and professional development. A profession has its own democratic representative organisations – teacher unions and associations – and its own policies and points of view, which are developed through careful consideration and processes. This is the collective voice of the profession, and it is markedly different from policy makers interacting with individual teachers, or engaging with teachers just through their schools and institutions, where there often is a hierarchical employment structure that doesn't represent and allow for an autonomous collective voice of teachers. ETUCE is that collective European voice of teachers, representing 5 million teachers and education personnel through 120 national teacher and education unions.

This extraordinary White Paper addresses the unprecedented challenges facing our schools and my profession. We are faced with huge societal changes, geopolitical rifts, the climate emergency, democracies under pressure and digital disruption. Those changes enter the classroom every day and public schools should be the place where we collectively prepare our students to take responsibility for the world it challenges. The White Paper also offers the solution by centring the teaching profession and involving the teaching profession in drafting the paper. The Council of Europe and University College London have profoundly engaged with teachers and modelled the way we should work together. This has resulted in an important document in which we recognise our concerns and hopes for the future. It is our profound hope that this document and dialogue will be a foundation for educational change and an empowered and attractive teaching profession so that all students in Europe get the quality education that they deserve.

Jelmer Evers
Director, European Trade Union
Committee for Education (ETUCE)

PREFACE BY THE UCL INSTITUTE OF EDUCATION

Shaping the future of education.



As Dean of a University College London faculty that supports the professional formation of thousands of teachers each year and that is recognised internationally for its research in education, I am proud to provide a preface for this White Paper. Its analysis and recommendations speak directly to one of the most urgent tasks before us: sustaining and strengthening the teaching profession so that every learner can flourish. This is of course a longstanding policy concern. Today and looking ahead, it faces new and pressing challenges born of far-reaching societal and technological change. It is vital that we meet those challenges, for the sake of our democratic as well as economic resilience. Teachers are among the most important contributors to each.

Our faculty's work across initial teacher education, ongoing professional development, and producing research that informs policy and practice, has a 125-year history. Throughout, it has championed many of the principles reflected in this White Paper: the central importance of high-quality teaching and school leadership to students' learning and, to those ends, the importance of teacher autonomy and professional agency. That autonomy and agency is enabled in part through teacher education, but it is also impacted by the contexts in which teachers work, from accountability frameworks to organisational cultures. All will influence education systems' ability to retain teachers and benefit from their experience.

In making the case for a "profession-centred" approach, the White Paper highlights the need for a holistic framing for policy – in its own words, "creating the right environments that sustain teachers' professional commitment, enthusiasm and capacity to make a difference throughout their careers." National policy but also school leadership must build teachers' professional capital, support evidence-informed judgment, and, now, ensure that technological innovation serves pedagogical aims rather than displacing them.

As we face rapid social and technological change, our collective task is to create the conditions in which teachers can remain, thrive and lead. This White Paper is both a timely diagnosis and a coherent, practical road map; it should be a touchstone for ministries, institutions and schools. My own faculty stands ready to collaborate with policy makers, school leaders and professional associations to translate these recommendations into sustained action.



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It is also grateful to the European Trade Union Committee for Education (ETUCE), which was associated with the White Paper from the outset and brought the collective voice of teachers and their representative organisations into its development, and to the participants and observers in the CDEDU for their contributions.

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EXECUTIVE SUMMARY

The future of education is inseparable from the future of the teaching profession.

As European societies confront rapid social and technological change, the importance of a highly qualified, committed and valued teaching profession has never been greater. Persistent and growing inequalities in access to quality education, increasingly diverse student populations, growing global uncertainty compounded by geopolitical conflicts and refugee crises, climate and sustainability challenges, shifting labour markets, threats to democratic institutions and emerging technologies such as artificial intelligence (AI) are reshaping societies and accelerating demands on education systems. Across many countries, this is compounded by an ageing teaching workforce, with four in ten teachers now aged over 50.

In line with the Council of Europe's mandate to safeguard human rights, democracy and the rule of law, this White Paper seeks to support decision makers, education leaders, teacher unions and professional associations in creating the conditions in which the teaching profession can thrive and flourish, both now and in the future – in support of the four enduring purposes of education recognised by the Council of Europe: preparation for democratic citizenship, personal development, the advancement of knowledge and preparation for working life.

There are many grounds for optimism. Teaching is fundamentally a knowledge-based profession, grounded in specialised disciplinary and pedagogical knowledge, research-informed practice and the exercise of professional judgment. Across Europe, growing opportunities for collaboration, professional learning and engagement with research are strengthening teachers' capacity to respond to emerging challenges. The teaching profession also retains a strong sense of purpose and a collective commitment to making a difference to the learning and lives of pupils and students. These are important foundations on which to build.

Yet teacher retention remains one of the most profound challenges facing education systems globally. At the same time, professional autonomy and involvement in decision making are increasingly under pressure, while emerging technologies, including AI, present both technological and professional challenges. Responding to these challenges requires more than relying on teachers' moral commitment or asking individual teachers to acquire additional competencies. It requires sustained and collective investment in the teaching profession, schools and education systems that support teachers' work, well-being and professional growth.

Accordingly, instead of asking how teachers should adapt to future changes, this White Paper asks a broader question: how can the teaching profession be sustained and strengthened in the years ahead? A profession-centred approach is therefore required.

This approach recognises that teachers are not individual actors working in isolation. Policy has often focused on developing individual teachers' knowledge, skills and competences, but this is insufficient. Teachers are members of professional communities whose capacity to respond to change depends on the strength of their collective identity and on the wider education systems that support and enable their work. Above all, teachers' ability to learn, collaborate, exercise professional agency and remain committed to the profession depends on the conditions in their schools. Schools are therefore not simply sites where education policy is implemented; they are environments in which professional capacity can either stagnate or grow. These are environments in which relationships are built and decisions about staying in the profession are shaped. This White Paper calls for a more integrated approach to teacher policy, including sustained investment in leadership development, that places schools at the centre of efforts to build a collaborative, sustainable and professionally capable teaching profession.



The profession-centred perspective is particularly important when considering emerging technologies, such as AI, including generative AI (GenAI). Technological change is not new and does not alter the fundamental purposes of education. The question is therefore not how teachers can use such technologies, but how skilled and committed teachers can thrive and flourish in a world increasingly impacted by emerging technologies – without eroding the human relationships, professional judgment and pedagogical autonomy on which quality education depends.

This means viewing change through the lens of the teaching profession and examining how emerging technologies intersect with the profession's enduring challenges, rather than treating technology as an independent, deterministic driver of educational improvement. It means recognising that the impact of emerging technologies will always be shaped by the values, professional knowledge and capabilities of the profession through which they are mediated. It also means strengthening teachers' capacity and agency to exercise evidence-informed professional judgment in complex social, geopolitical and technological environments through sustained investment in professional learning and development.

This White Paper identifies six interdependent enabling conditions for a profession-centred response to change:

01 developing effective teacher retention strategies;

02 upholding teacher professionalism;

03 strengthening teacher education;

04 enhancing school leadership and professional culture;

05 protecting teacher autonomy and professional agency;

06 shaping the use of emerging technologies, including AI, in teaching.

At the heart of these conditions is a simple proposition: quality education depends on the development and retention of high-quality teachers. Developing and retaining a skilled and

capable teaching workforce committed to student learning and the improvement of their schools is fundamental to educational quality, equity and continuity.

Quality retention is not simply about keeping teachers in the workforce; it is about creating environments that sustain teachers' professional commitment and enthusiasm and improve their capacity to make a difference throughout their careers. The six conditions work together to create these environments. Teacher professionalism provides the knowledge, values and ethical foundations of a strong profession; teacher education develops the expertise needed to enact these responsibilities; school leadership and professional culture build collective capacity and create supportive working environments; teacher autonomy and professional agency enable teachers to exercise informed professional judgment; effective retention strategies support continuity and commitment; and shaping the use of emerging technologies enables the profession to ensure technological changes serve educational purposes.

Taken together, these conditions shape the development of professional capital among teachers and within schools. Professional capital is the lifeblood of a resilient profession, combining human, social and decisional capital that enables teachers and schools to respond effectively to complexity. Investing in professional capital strengthens teachers' collective capacity to exercise professional judgment, collaborate effectively and adapt to social and technological change. This investment also fosters the organisational conditions that enable capable teachers to remain, thrive and flourish over time.

On this basis, the White Paper recommends that the Council of Europe and its member states adopt a profession-centred organising principle for policy, making the development and retention of high-quality teachers a core strategy for education quality, school improvement and equity.

Looking ahead, this White Paper also presents three possible futures for education across the Council of Europe member states. These futures demonstrate that technological developments alone will not determine educational outcomes. The future will be shaped by the choices made by decision makers, educators and societies about how the profession is valued, supported and developed. Sustained investment in professional capital enables teachers and school leaders to shape technological change in ways that advance educational quality, democratic participation and social inclusion for all learners.

The White Paper's **nine specific recommendations** (which are set out in full in Chapter 5) are:

1. Adopt a profession-centred approach, with teacher voice at its core, as the organising principle for policy.
2. Prioritise the retention of highly qualified teachers, recognising that recruitment is a consequence of a stronger profession.
3. Prioritise the strengthening of leadership capacity and shared governance across schools.
4. Strengthen teacher professionalism, professional autonomy and agency through collective accountability.
5. Make teacher well-being a collective and institutional priority.
6. Develop AI literacy centred on professional judgment and AI's human dimension.
7. Provide sustained and equitable investment to ensure highly qualified teachers for all.
8. Support coherent system-wide reform through a dedicated Council of Europe intergovernmental programme.
9. Prepare a Committee of Ministers Recommendation on the futures of teachers and the teaching profession.



Sustaining high-quality education for all requires sustained investment in teachers, schools, leadership and the professional cultures that enable educators to thrive. The most effective response to social and technological change is not to reduce the role of teachers, but to strengthen the profession on which the quality, equity and democratic purposes of education ultimately depend. For the future of educational quality and equity, this is a question of recruitment, development and retention: creating the conditions that enable skilled, knowledgeable and capable teachers to join and remain in the profession, to thrive and flourish in schools that support them to make a real difference. In turn, this helps ensure that every pupil and student experiences high-quality teaching and learning, enjoys a sense of belonging and is inspired and equipped to succeed both now and throughout their lives.

Ministers of Education are invited to endorse this White Paper, and in particular its recommendations (named above and examined in Chapter 5), as the framework guiding member states' policy on the teaching profession, supported by the Council of Europe's future work in this area, including through the 2028-2031 programming period.

INTRODUCTION

Education is no stranger to change. Throughout history, it has evolved in response to social, cultural, economic and technical transformations. However, today, the pace, scale and interconnectedness of change are intensifying, placing increasing demands on education systems. At the heart of these changes stands the teacher.

Teachers are expected to act as agents of change within their professional contexts – to develop new competencies that enable them to transform teaching and learning and harness emerging technologies, all in order to ensure that their students have equitable opportunities to realise their full potential and contribute to a sustainable and democratic future. Put simply, teachers are expected not only to excel amid rapid social and technological change but also to prepare their students to thrive and flourish within it.

This expectation is not unwarranted. Nor is the growing emphasis among international agencies on recasting and strengthening teaching as a collaborative profession through investment in teacher education, induction and mentoring, and continuing professional development (Council of Europe 2018, UNESCO and TTF 2025a, 2025b). However, ample evidence shows that investment in teachers' individual human capital across education systems does not, by itself, necessarily translate into improved student outcomes or higher teacher retention.

Indeed, teacher retention remains one of the most profound challenges facing education systems globally, compounded by an ageing teaching workforce (European Commission 2025). These challenges raise a fundamental question about how the future of the profession is being conceived. When successive reforms and technological developments do not produce the anticipated improvements in educational quality, teachers' working lives or retention, decision makers and education systems may understandably return to familiar approaches, often placing renewed emphasis on what individual teachers need to know and be able to do. Yet, it is precisely this recurring pattern that requires a different approach. The future of teaching and quality education cannot be secured simply by asking teachers to acquire additional competencies.

> *The future of teaching and quality education cannot be secured simply by asking teachers to acquire additional competencies.*

It also depends on the conditions in which teachers work, the organisation of schools, the status of the profession and the capacity of teachers to work collectively.

Commissioned by the Council of Europe, this White Paper offers an alternative way of envisaging the futures of teachers and the teaching profession. Rather than viewing teachers primarily as individual actors responsible for adapting to future challenges, it foregrounds teachers as a collective body of professionals working within the structural and organisational contexts in which they operate (Council of Europe 2019). Strengthening the teaching profession requires collective and coherent action from all those concerned with the quality and equity of education in European societies.

To support this proposition, this White Paper begins not by predicting the future but by examining the present. This is because new technologies do not arrive on empty ground but rather intersect with enduring challenges in education such as sustaining quality teacher retention and ensuring equitable access to a quality education (Council of Europe 2012) for all students. Understanding these enduring challenges, and how new technologies may interact with them, provides essential insight into the possible futures of the profession and the conditions teachers will need in order to support students to thrive and flourish.

This perspective requires a shift in policy thinking, from focusing only on individual teachers' human capital towards creating the professional and organisational conditions in

> *This White Paper therefore calls for policy strategies that recognise the pivotal role of schools and school leadership in developing a collaborative, sustainable and professionally capable teaching profession.*

which teachers can form meaningful collaborations and sustain their commitment to the profession. Schools are central to this shift. They are not simply settings in which education policy is implemented. The capacity and cultures of school organisations shape how the collective efforts of policy makers, teacher unions and professional associations influence teachers' working lives, professional learning and decisions to remain in the profession.

International research has long established that schools are the finders and keepers of teachers (Johnson 2004, 2019, Leithwood et al. 2026), and school leadership influences all other school conditions (Darling-Hammond et al. 2026). Thus, a fundamental reality of education is that effective professional learning and collaboration depend on the resources, support and positive social environments that schools provide. This White Paper therefore calls for policy strategies that recognise the pivotal role of schools and school leadership in developing a collaborative, sustainable and professionally capable teaching profession.

This perspective is particularly important in educational contexts mediated by AI (including, but not only, GenAI). This White Paper responds to the need to ensure that AI systems and tools do not replace, isolate or diminish teachers' professional judgment and pedagogical autonomy (Holmes et al. 2022a). AI therefore presents not only a technological challenge but also a professional one. At a time when digital technologies, rather than teachers themselves, are often placed at the centre of the debates about the quality of teaching and learning, it is important to remember that it is teachers who bring education to life through their daily interactions with learners.

Any discussion of the future of education must therefore be concerned not only with change and innovation, but also with protecting and sustaining the profession upon which the success of the system ultimately depends. Accordingly, this White Paper makes recommendations for co-ordinated action to protect and strengthen the profession in AI-mediated and AI-impacted environments.

It is tempting to hope that technological innovation will provide solutions to the complex challenges facing the teaching profession. Yet, it is essential not to overlook the enduring structural and organisational conditions that shape teachers' working lives and their decisions to enter, remain in or leave the profession, which in turn impacts the stability, quality and resilience of educational systems. While the future cannot be predicted with certainty, much can be learned from the realities of the past and the present. Understanding the forces that have shaped the profession makes it possible to anticipate change, respond to challenges that lie ahead and create the conditions in which teachers (and therefore their pupils and students) can thrive and flourish.

Enhancing the quality, well-being and professional status of teachers is therefore central to realising the Council of Europe's vision for quality education (Council of Europe 2012). All students, regardless of their backgrounds, are entitled to be taught by capable and committed teachers who, as well as feeling valued and supported, are committed to inspiring all their students to learn and achieve.

In line with the Council of Europe's mandate[1] to safeguard human rights, democracy and the rule of law, this White Paper aims to inform policy development and support decision makers, education leaders, teacher unions and professional associations in creating conditions in which all teachers can fulfil their professional and societal responsibilities and provide quality education for all students.

1 These include: the Statute of the Council of Europe (1949), which established the Council of Europe; Protocol No. 1 to the European Convention on Human Rights (1952) stating "No person shall be denied the right to education"; the European Cultural Convention (1954) setting out for the first time an understanding of education, but focusing only on the study of languages, history and civilisation, to help develop mutual understanding among the peoples of Europe; the European Social Charter (1961), which was framed as the economic and social counterpart of the Convention, is the first document to set out the right to education; the European Social Charter (revised) of 1996, which strengthens the Council of Europe's commitment to treating education as a means of advancing mutual understanding, democratic values, human rights and cultural heritage: Articles 9, 10, 15 and 17 covering the right to education and vocational training, re-emphasising social inclusion and participation, and Article E confirming the right to non-discrimination in relation to all Charter rights, including education.

THIS WHITE PAPER COMPRISES FIVE CHAPTERS

CHAPTER 1 · FOUNDATIONS

Chapter 1 establishes the conceptual, normative and methodological foundations of this White Paper. It locates the work within the Council of Europe's longstanding commitment to human rights, democracy, social inclusion and the **right to quality education**. Education is presented as serving multiple purposes: supporting democratic citizenship, personal development, knowledge creation and preparation for employment. Teachers are positioned as central to achieving these purposes. The chapter establishes a definition of teaching as both a profession and a public service, in the context of ensuring education is seen as a common good, and argues that the teaching profession should be understood as a collective institution operating within wider social, organisational and policy contexts. It reviews existing international policy frameworks and identifies the distinctive contribution of this White Paper – placing collective teacher professionalism and the organisational conditions of teaching at the centre of discussions about educational futures. The chapter concludes by explaining the evidence base underpinning this White Paper.



CHAPTER 2 · FEATURES, TRENDS AND DEVELOPMENTS IN THE TEACHING PROFESSION

This chapter explores the current state of the profession and the forces shaping its future. It highlights the complexity of assessing teaching across diverse national contexts while identifying common patterns across Europe. Teaching is characterised as a profession defined by expert knowledge, specialised skills, ethical responsibility, professional identity and a strong public-service mandate. The chapter argues that teaching quality is influenced not only by individual expertise but also by school cultures, leadership and system conditions.

The chapter identifies two broad categories of change. Non-technical forces (hereafter, social forces) shaping the future of teaching include a more complex and unstable social and geopolitical environment; expanding societal, civic and ethical responsibilities for teachers; and growing challenges to sustaining the status, attractiveness and capacity of the profession. Technological forces include digital transformation, AI, misinformation, evolving assessment challenges and growing demands for digital and AI literacy. Although technology might create opportunities, the chapter concludes that its impact is mediated by teachers' professional expertise, judgment and agency, and organisational capacity. The future of teaching is therefore shaped not by technology alone, but by the interaction between technological and non-technological forces and the capacity of the profession and education systems to respond to them.



CHAPTER 3 · SIX ENABLING CONDITIONS FOR A RESILIENT TEACHING PROFESSION

This chapter identifies six interdependent conditions through which a profession-centred response to social and technological change can be achieved. Together, these conditions strengthen the professional capital of the teaching profession by developing the expertise, collaboration, leadership, autonomy and organisational capacity required for teachers and schools to thrive and flourish in increasingly complex environments. Rather than representing separate policy agendas, they are mutually reinforcing conditions for a resilient, sustainable and high-quality teaching profession.

The chapter begins with the condition of teacher retention, recognising that sustaining a sufficient supply of capable and experienced teachers is fundamental to educational quality, equity and democratic resilience. Teachers make a unique contribution through their professional judgment, relationships with learners and capacity to support pupils' and students' intellectual, social and emotional development. While recruitment remains important, retaining high-quality teachers is presented as a strategic priority. Evidence suggests that retention is shaped less by individual factors than by the conditions in which teachers work, including leadership quality, organisational culture, professional autonomy, opportunities for development and teachers' sense of efficacy. Schools are therefore understood as critical sites for strengthening teacher commitment and sustaining professional expertise over time.

The chapter then explores teacher professionalism as the foundation of quality education and democratic schooling. Professionalism is presented not as a collection of competencies, but as the integration of professional knowledge, ethical responsibility, professional judgment and democratic values. Drawing on the Council of Europe's acquis, the chapter advances the concept of democratic professionalism, positioning teachers as educators who support inclusion, critical thinking, human rights and democratic participation. In a context characterised by climate change, misinformation, socio-economic and geopolitical challenges, well-being concerns and rapid technological change, strengthening professionalism requires more than the continual addition of new competencies. Instead, it depends upon ethical reflection, collaborative inquiry and lifelong professional formation that enables teachers to respond to emerging challenges while remaining grounded in enduring professional purposes and values.

The discussion then turns to teacher education, which is presented as a lifelong process extending from initial preparation through induction, mentoring and continuing professional learning. The chapter argues that increasingly complex educational environments require teachers to develop adaptive expertise rather than routine competencies. High-quality teacher education therefore depends on the integration of theory, practice, inquiry and mentoring, alongside deliberate attention to professional identity, self-efficacy and professional judgment. Teacher education is consequently framed as a process of professional formation rather than technical training, equipping teachers with the capacities required to navigate uncertainty, exercise sound judgment and continually refine their practice throughout their careers.

Recognising that teachers do not work in isolation, the chapter then highlights the crucial role of school leadership and professional culture. Leadership is identified as one of the most significant influences on educational quality, equity, teacher retention and school improvement. Effective leaders create the conditions in which teachers can collaborate, learn and exercise professional agency. In periods of social and technological uncertainty, schools require the capacity to adapt, learn and improve collectively. Sustainable improvement therefore depends upon cultures characterised by trust, inquiry, collaboration and shared responsibility. Developing leadership at all levels of the system is presented as a high-leverage strategy for strengthening the organisational capacity of schools and ensuring that teachers are supported to flourish professionally.

The chapter also emphasises the importance of teacher autonomy and professional agency. Teachers' capacity to respond effectively to complex and changing circumstances depends upon opportunities to exercise professional judgment and influence educational decision making. Autonomy is understood not as freedom from accountability, but as the professional discretion required to act responsibly and ethically in the interests of learners. The chapter argues that educational improvement is most successful when teachers are active participants in shaping change rather than passive implementers of policy. However, growing standardisation, accountability pressures and increasing workload are constraining opportunities for professional discretion. Strengthening teacher agency therefore requires investment in the wider conditions that support professional judgment, including effective leadership, strong professional cultures, high-quality teacher education and the development of professional capital.

The final condition considers emerging technologies, including AI, adopting a profession-centred perspective that evaluates technology in relation to educational purposes rather than technological capability. The chapter recognises that while emerging technologies might offer some opportunities to support teaching, learning and administration (although the evidence for such support is weak and contested), they also raise significant questions about curriculum, professional judgment, knowledge, democratic participation and educational equity. While technology might assist teachers in some tasks, it cannot replace the contextual understanding, ethical reasoning, pedagogical expertise and relational capacities that characterise professional teaching. Concerns relating to deskilling, misinformation, algorithmic authority and unequal access to high-quality human teaching highlight the importance of maintaining strong professional expertise. Ultimately, the educational impact of emerging technologies such as AI will depend on the strength of the teaching profession through which it is mediated. Investment in professional knowledge, professional judgment, teacher agency and AI literacy is therefore presented as the most effective means of ensuring that technology serves educational rather than technological or economic goals.

Taken together, these six conditions highlight that preparing the profession for future change cannot be achieved simply by asking teachers to do more. A profession-centred response requires sustained investment in the conditions that enable teachers, school leaders and schools to develop collective capacity, exercise informed professional judgment and respond confidently to the challenges and opportunities of an uncertain future. The chapter therefore positions professional capital, comprising human, social and decisional capital, as the foundation of a strong teaching profession and the key mechanism through which education systems can secure quality, equity and democratic resilience in the decades ahead.

CHAPTER 4 · POSSIBLE FUTURES

This chapter introduces three scenarios centred on the possible futures of European education in 2040. The first scenario, Democratic erosion through educational automation, describes a possible future in which weak investment in the profession leads to growing dependence on automated systems, widening inequalities and weakened democratic resilience.

The second scenario, Managed adoption, fragile professionalism, depicts a possible future in which technological safeguards exist but insufficient attention has been paid to strengthening professional expertise and judgment.

The third scenario, Democratic renewal through professional capital, sets out what sustained investment in professional capital makes achievable. In this future, technology is governed by educational purposes, teachers actively shape technological change, and strong professional capital enables education systems to combine innovation with democratic values, equity and educational quality.

CHAPTER 5 · CONCLUSIONS AND RECOMMENDATIONS

The conclusion draws together the central message of this White Paper: the future of education is inseparable from the future of the teaching profession. Social and technological change will continue to impact schools, but educational quality, equity and democratic resilience ultimately depend on the strength of the profession. The chapter reinforces the need for a profession-centred approach to change, sustained investment in professional capital and co-ordinated action across policy, leadership, teacher education and professional organisations. This depends on teachers remaining at the centre of educational innovation, and on technology strengthening, rather than replacing, the professional knowledge, judgment and relationships upon which quality education depends. The chapter finishes with a set of recommendations focused on retention, professionalism, teacher education, school leadership, teacher agency and technology governance.



FOUNDATIONS

This chapter establishes the foundations of this White Paper and sets out the basis and scope within which it has been developed. The chapter begins by outlining the Council of Europe's mandate in this field of education and the normative framework underpinning its work. It then explains the rationale for developing this White Paper and sets out a working definition of the profession, situating it within the broader policy landscape. The chapter also describes the methodology underpinning the development of this White Paper. Taken together, these elements provide the necessary context for the analysis that follows. The chapter is therefore primarily descriptive, establishing the mandate, concepts, policy context and methodological approach that frame this White Paper as a whole.

THE COUNCIL OF EUROPE'S MANDATE IN EDUCATION

The Council of Europe has long approached education as a means of advancing as a means of advancing mutual understanding, democratic values, human rights and cultural heritage. As several publications demonstrate, the Council of Europe's interest in education has developed from a concern with cultural understanding towards a broader conception of education as a fundamental right and an essential foundation for democratic participation, social inclusion and human dignity.

The Statute of the Council of Europe (1949), which established the Organisation, refers to "common action in cultural matters". Although education is not explicitly mentioned, this provision has generally been understood as providing a basis for the Council of Europe's engagement in education. A more explicit recognition of education emerged with Protocol No. 1 to the European Convention on Human Rights (1952), which states that "No person shall be denied the right to education". It is important to note, however, that the Convention did not impose a general obligation on member states to provide education. Nor did it define what education should entail. Rather, it established a right of access to education that states must respect.

The European Cultural Convention (1954) subsequently provided the first explicit articulation of education within the Council of Europe's cultural framework. Its focus was principally on the study of languages, history and civilisation, with the objective of promoting mutual understanding among the peoples of Europe. The European Social Charter (1961), conceived as the economic and social counterpart to the Convention, marked a further development by explicitly recognising a range of rights relating to education and training. Article 17 requires member states to provide children and young persons with free primary and secondary education and to encourage regular school attendance. Article 7, concerning child labour, specifies that persons still subject to compulsory education should not be employed, as this would deprive them of the full benefit of their education. Article 10 establishes the right to vocational training, Article 11 establishes the right to freedom of association with others, including the right to form and to join trade unions, while Article 15 recognises the right of persons with disabilities to vocational guidance, education and training.

The European Social Charter (revised) of 1996 further strengthened the Council of Europe's mandate in education. Articles 9, 10, 15 and 17 address rights relating to education and vocational training, reinforcing their importance for social inclusion and participation. Additionally, Article E establishes a general prohibition of discrimination in the enjoyment of the rights set out in the Charter, including those relating to education. The Charter also sets out legal obligations for states parties to ensure fundamental social rights for all workers, which includes teachers, regarding just working conditions and reasonable working hours (Article 2), safe and healthy working conditions (Article 3), fair remuneration (Article 4), the right to organise and bargain collectively (Articles 5 and 6), information and consultation (Articles 21 and 22) and dignity at work (Article 26).

Taken together, this historical development shows the Council of Europe's engagement with education has a clear legal foundation, deriving from its broader mission to safeguard human rights, democracy and the rule of law. Within this framework, education is not understood solely as a means of developing individual knowledge and skills or enhancing economic competitiveness. It is also a means of enabling individuals to participate fully in democratic society, understand and exercise their rights, engage constructively with others and contribute to social cohesion.

THE PURPOSE OF EDUCATION AND THE RIGHT TO QUALITY EDUCATION FOR ALL

This White Paper builds on the Council of Europe's commitment to ensuring quality education for all members of society, and for pupils and students in formal education in particular.

It endorses the Council of Europe's position that "while access to education is in itself an important right, the true value of this right can only be realised if education is of adequate quality and if learning opportunities and arrangements enable pupils and students to complete their education in reasonable time and under conditions conducive to quality education" (Council of Europe 2012).

The purpose of education reaffirmed by this White Paper reflects the Council of Europe's longstanding commitment to ensuring that all pupils and students benefit from quality education, commensurate with their aspirations and abilities. This is a matter of individual justice, and at the same time, of making the best possible use of the resources of our societies. Quality education is not an end in itself, but a means of enabling an inclusive, democratic and prosperous society in which everyone can participate and thrive and flourish. It therefore serves a variety of interconnected purposes, including preparation for life as active citizens in democratic societies; personal development; preparation for employment; and the development and maintenance of a broad and advanced knowledge base.

Together, these purposes express the Council of Europe's vision of education and underpin this White Paper's understanding of the contribution of teachers and the teaching profession. Education must prepare children and young people for democratic citizenship as well as economic activity; further their personal development and growth as active members of society; and develop and secure the linguistic, numerical and cognitive abilities that provide the foundations for successful learning across subjects.

Realising this vision of quality education requires close attention to the profound social roots of educational inequality. Education systems, education authorities, schools and professional associations concerned with improving educational quality must fully recognise the potentially enduring consequences of educational disadvantage for young people's opportunities and life trajectories, including limited access to further and higher education, reduced access to employment and career prospects, and adverse effects on physical and mental health and overall quality of life (Marmot 2010, Sutton Trust 2026).

This White Paper also reaffirms the Council of Europe's position that social inclusion is an integral part of quality education (Council of Europe 2012). This means going beyond securing every child and young person's right to access education

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>
> **COUNCIL OF EUROPE 2012**



to ensuring that the quality of the learning opportunities that young people experience enables them to acquire the knowledge, skills and personal dispositions necessary to achieve their potential and thrive and flourish.

The provision of quality education is thus fundamentally concerned with creating and sustaining safe, secure and fair learning environments in which all pupils and students, particularly those from vulnerable, marginalised or disadvantaged groups, or those who have special needs, can develop appropriate competencies, talents, and mental and physical abilities to their fullest potential and become responsible citizens.

The quality of education must therefore be understood as extending beyond measures of academic excellence alone. In high-performing and equitable education systems, educational quality is not achieved by creating a small number of elite schools, but by creating and sustaining positive and productive professional environments across all schools. Such environments should enable all students, including those disadvantaged because of their social or personal backgrounds, to enjoy high-quality academic and social learning and to develop the knowledge, skills and dispositions they need to succeed in later life.

Realising the true value and purpose of education in our primary and secondary schools ultimately depends on the people who make quality education possible: the committed, capable and professionally supported teachers who work with children and young people every school day.

RATIONALE FOR THIS WHITE PAPER

This White Paper reflects the Council of Europe's longstanding commitment to ensuring quality education for all pupils and students (Council of Europe 2012). With this goal in mind, the quality, status, working conditions, professional agency and development of teachers must be treated as a central concern of education policy, rather than as matters of individual teacher responsibility. The following four key points outline why this White Paper is needed now.

1 The social and professional status of teaching is at risk of being undermined across Europe and beyond.

Importantly, teacher recruitment and retention challenges have an equity dimension. High-quality teachers account for the largest proportion of variation in pupil achievement among all malleable school factors (OECD 2005b), and the effect sizes are especially high for disadvantaged pupils and students (Sutton Trust 2011). The children and young people who can least afford disruption to their learning and development are often those most severely affected by teacher shortages, high levels of teacher turnover and insufficient access to qualified and high-quality teachers, particularly in schools serving disadvantaged communities.





2 Improving the quality of education requires improving the conditions in which teachers teach.

Over the past decade, the teaching profession across Europe and beyond has faced mounting pressures rooted in the structural, political and humanitarian conditions of the work itself. In many national systems, insufficient investment and pressures on public finances have contributed to declining real-terms pay, widening disparities between teaching and comparable graduate professions, and exacerbating recruitment and retention challenges.

At the same time, classrooms have become increasingly diverse and complex. Growing numbers of pupils with additional learning and support needs, the consequences of pandemic-related educational disruption and its impact on the mental health of teachers and their students, and the effects of poverty, displacement and trauma have increased the demands placed on teachers and schools. Armed conflicts, including the war in Ukraine and conflicts in other regions, have generated successive movements of refugee and displaced children into host-country education systems. Many arrive with interrupted educational histories, significant psychosocial needs and limited proficiency in the language of instruction, requiring schools and teachers to respond to needs that extend well beyond conventional pedagogical responsibilities. In some jurisdictions, weakening professional voice and reduced access to specialist support services have further increased the responsibilities carried by teachers, including responsibilities related to social care, mental health and wider community welfare. Taken together, these developments place the teaching profession at a critical juncture.

3 Technological developments have become an increasingly important influence on the conditions, practice and well-being of teachers.

Emerging technologies might have created opportunities for teaching and learning, but they have also generated new pressures rather than reducing existing ones. Consumer technologies, including smartphones and social media platforms, have changed the ways in which young people communicate, interact and (sometimes) learn, while also introducing challenges such as cyberbullying, online conflict and concerns about digital well-being into school environments. Similarly, educational technologies might have created opportunities for teaching and learning, but their implementation has also, in some contexts, added layers of digital administration, platform management and data-related responsibilities to existing workloads. Where technology is introduced without sufficient attention to pedagogical purpose, evidence, interoperability, workload or professional autonomy, it can increase rather than reduce the demands placed on teachers.

The rapid development and adoption of GenAI have added a further layer of complexity. Teachers are having to respond to emerging questions concerning academic integrity, assessment, authorship, data protection, bias and the appropriate use of AI in learning, often while the evidence base concerning the effectiveness and longer-term implications remains under development and is contested.

These developments raise a fundamental question about professional agency: whether technological change will be something that happens to teachers or something developed with teachers, informed by their professional knowledge and experience. The central concern is not technology itself, although it is essential that we have good positive evidence before emerging technologies are integrated into education, but whether technological change is designed and implemented with teachers or imposed upon them, potentially increasing workload, reducing professional autonomy and leading to deskilling.

> *These developments raise a fundamental question about professional agency: whether technological change will be something that happens to teachers or something developed with teachers, informed by their professional knowledge and experience.*

4 Technological developments do not improve educational quality by themselves – teachers do.

Innovation (whether technological, pedagogical, organisational or otherwise) rarely translates into sustained improvements in classroom practice through its intrinsic merits alone. Quality education depends on teachers and school leaders who are able to interpret, adapt and apply new approaches in ways that are meaningful within their particular contexts. Experience from educational change over recent decades demonstrates that successful and sustainable implementation across classrooms and schools requires strong professional expertise – yet educators are rarely fully involved in decisions about implementing technologies in classrooms. Teachers and school leaders need to understand not only what works (and need to be empowered to reject technologies for which there is insufficient evidence of positive effect), but also how to make what works elsewhere work in their own contexts, and why it has worked here, with their particular pupils and students. Professional expertise is therefore not an obstacle to innovation. It is one of the principal conditions through which innovation can become effective and sustainable.

These four conditions and developments do not operate independently. The non-technological pressures facing education, including conflict and displacement, demographic and social change, economic pressures and growing inequalities, and the technological pressures associated with consumer technologies, educational technologies and AI-mediated technologies increasingly intersect and shape the environments in which teachers work. At a time of rapid social and technological change, teachers are negotiating their professional identities and responsibilities within education systems that are undergoing profound disruption.

This White Paper places teachers at the centre of the debate regarding the future of the profession and quality education. Achieving quality education depends on high-quality teachers – teachers who are not only qualified in the sense of having the status of a teacher recognised under national legislation and practice, but who are also committed to their continuing professional development and equipped with the knowledge, capabilities and values required to make a sustained difference to the learning, development and life chances of all pupils and students.

This White Paper establishes that improving teacher quality cannot be treated as an individual responsibility. Teachers need supportive schools, strong professional communities and well-co-ordinated education systems that provide the social and intellectual conditions, resources and opportunities necessary to develop and sustain their professional expertise over the course of their professional lives. It takes a school and, ultimately, an education system to support, develop and retain committed and capable teachers.



DEFINING THE TEACHING PROFESSION

For the purposes of this White Paper, and in alignment with the 1966 ILO/UNESCO Recommendation, "teachers" refer to those who provide education and/or training to children, pupils and students across early childhood education and care (ECEC), primary, and general and vocational secondary education (VET). The definition of the term "teacher" extends to all qualified staff members with pedagogical and teaching responsibilities, including school leaders. Higher education is outside the scope of this White Paper. The critical roles of support personnel, teaching assistants and specialist multiprofessional staff are noted but are not the primary subject of this White Paper.

The White Paper takes two research-informed positions on the nature of teaching and the teaching profession. The first concerns the status and nature of teaching: teaching is and should be recognised as a profession and as a form of public service (International Labour Organization and UNESCO 1966). As a profession, teaching is characterised by expert knowledge and specialised skills that are acquired and maintained through continuing professional development and moral and ethical responsibility for the education and welfare of the pupils and students. The quality, status and conditions of the profession have wider implications for the long-term resilience, sustainability and prosperity of societies.

Teachers, however, do not operate independently. The second position regards the teaching profession as a collective and systemic institution whose quality and future depend on the interaction between teachers, professional organisations and the wider educational, social and institutional contexts in which they work. The Council of Europe's definition adds this systemic dimension, defining the teaching profession as "the collective body of professional teachers within the structural and organisational context in which teachers operate" (Council of Europe 2019, 2c). This perspective recognises that the profession is a collective institution in which teachers and their representative organisations contribute to defining professional standards, values, responsibilities, identity and conditions of practice.

The collective nature of the profession also raises questions about who has legitimate authority to define its boundaries, standards and responsibilities. Teachers' unions play complementary roles in articulating teachers' professional voice, contributing to professional standards and ethical frameworks, supporting professional learning and participating in social dialogue and the development of education policy. Their role extends beyond the representation of employment interests. Rather, they play an important role in the collective development, recognition and stewardship of the profession.

Professional boundaries are therefore not determined by teachers alone, nor solely by public authorities or employers. They are shaped through interaction and negotiation among teachers, their representative and professional organisations, governments, employers, teacher education institutions, researchers, wider society and, increasingly, technology companies. Professional autonomy is not understood as independence from public accountability, but as the capacity of teachers and their profession to exercise informed



professional judgment responsibly and to participate meaningfully in shaping the conditions, standards and purposes of their work.

This systemic perspective acknowledges that the teaching profession is socially and institutionally constructed. However, the extent to which, and the ways in which, teachers can exercise their professional autonomy and agency to influence student learning, development and well-being is socially and contextually contested. National, regional and local education systems shape the intellectual, social and organisational conditions in which teachers work. These conditions can, in turn, enable or constrain teachers' professional agency and their capacity to remain committed and effective.

The "good life" of teaching entails both an intellectual act and a moral enterprise (Goodlad, Soder and Sirotnik 1990, Hansen 2021). Recognising how teachers' ethical values, principles and sense of purpose motivate them to pursue better teaching over the course of their professional lives is integral to understanding the inner meaning of the profession. For many, teaching is inherently larger than a job (Day and Gu 2010, Hansen 2021, Palmer 2007). However, the meaningfulness of this profession can only be realised, sustained and strengthened in environments that are intellectually stimulating, professionally supportive and collaborative. In such environments, teachers experience enhanced motivation and commitment to teaching and their schools, a stronger sense of belonging and greater opportunities to exercise agency in pursuit of shared educational purpose with their colleagues. School environments are particularly important in determining whether and how teachers are able to sustain their commitment, time, energy and passion for the profession (Johnson 2004, Nieto 2015, OECD 2025a).

The teaching profession cannot be strengthened simply by improving individual teachers. Strengthening the profession requires attention not only to teachers' professional knowledge, ethical purpose, collective voice, autonomy and agency, but also to the institutional conditions and education systems that enable or constrain their capacity to exercise them. Taken together, they describe the professional, institutional and moral nature of the teaching profession. In reimagining the futures of the profession, it is important to recognise that many teachers continue to express hope, commitment and enthusiasm in making a difference to the learning and lives of their pupils and students. This White Paper begins from this position: that the futures of the teaching profession should build on, sustain and strengthen this professional commitment and sense of purpose.

EXISTING INTERNATIONAL INSTRUMENTS AND POLICY LANDSCAPE

The following mapping of existing international and regional instruments and policies is not intended to catalogue what the Council of Europe, along with UNESCO, the OECD, the International Labour Organization (ILO) and others have envisaged for the teaching profession.

Rather, it examines the extent to which the existing international and European policy architecture adequately recognises the professional, institutional and moral nature of teaching established in this White Paper. In doing so, the mapping provides an evidence base for identifying areas of convergence and omission, and for articulating the distinctive conception of the teaching profession that this White Paper seeks to influence and advance in European policy.

Existing instruments and policies reflect, in part, the different mandates, policy orientations and forms of authority of the organisations that have developed them. The ILO/UNESCO Recommendation concerning the Status of Teachers (1966), together with subsequent publications (Education International and UNESCO 2019), established an important international framework for the professional status, rights and responsibilities of teachers, as well as their professional preparation and development, recruitment, employment and working conditions. These instruments position teaching as a profession requiring specialised knowledge and skills, professional responsibility and appropriate working conditions for the exercise of professional practice. The principles are reinforced by binding ILO instruments (notably the fundamental Conventions Nos. 87 and 98 and Conventions Nos. 151 and 154) as well as the policy recommendations of the 2024 United Nations Secretary-General's High-Level Panel on the Teaching Profession.

More recently, UNESCO and the International Task Force on Teachers for Education 2030 (TTF) have placed increasing emphasis on teaching as a collaborative profession, highlighting the importance of inclusive learning communities in supporting teachers' professional agency and competencies in the context of rapid technological and AI developments (UNESCO and TTF 2025a, 2025b, 2026). This represents an important shift towards recognising the collective and relational dimensions of teachers' work and the need for professional learning and collaboration in responding to technological change.

The OECD has contributed a substantial comparative evidence base on teachers and teaching, particularly through the Teaching and Learning International Survey (TALIS)[2]. Its work has examined teachers' professionalism, working conditions, job demands, professional learning, well-being and teaching practices, including within education systems characterised by increasing expectations for accountability, quality and innovation (OECD 2025a). This body of work provides important evidence on the conditions associated with effective teaching and on the ways in which system-level policies shape teachers' work. However, while TALIS 2024 covers 55 education systems worldwide, only about 30 of the 46 Council of Europe member states took part. The relevance of the results to all Council of Europe member states therefore needs to be considered accordingly.

The Council of Europe brings a distinctive normative perspective grounded in human rights, democracy, ethics and social cohesion. Its work on the teaching profession has emphasised professional responsibility, ethical practice, teachers' rights and participation, professional autonomy and the constructive role of the profession and its representative organisations in shaping education quality and democratic

life (Council of Europe 2012, 2026). This perspective places teaching within a broader understanding of education as a public good and as an important contributor to democratic societies.

Taken together, these instruments and policy developments establish a substantial international and European policy architecture concerning the teaching profession. While they differ in mandate, emphasis and form of authority, this White Paper broadly shares many of their principles, commitments and policy expectations. At the same time, it seeks to develop the discourse further by placing the collective professionalism of teachers at the centre of policy thinking about the future of quality education.

This perspective is particularly important in considering the implications of AI and other emerging technologies. Current international discourse is increasingly exploring teacher–AI "complementarity", in which technologies are understood as potentially augmenting teachers' capabilities and transforming aspects of professional practice, despite there being little robust evidence that this is either happening or is beneficial for education, teachers or learners. This White Paper takes a more explicitly profession-centred starting point: technological innovation should be understood in relation to the purposes, values and responsibilities of the teaching profession, rather than as an independent driver of educational change. The central question is therefore not simply what AI can do for or with teachers, but if and how technological development might support teachers' professional judgment and agency in pursuit of quality education in their contexts.

This distinction is important because technological change does not alter the fundamental purposes of education. Despite the increasing complexity of teachers' work and the emergence of new technological possibilities, quality education remains concerned with creating learning environments in which every pupil and student can develop their knowledge, capabilities and well-being and have the opportunity to participate and thrive and flourish in school and beyond. Teachers remain central to achieving these purposes because education is not simply the transmission of information or the delivery of skills. It involves professional judgment, relationships, ethical responsibility and the creation of conditions in which pupils and students can develop as knowledgeable, capable, fully self-actualised and responsible members of society.



This White Paper therefore seeks to refocus policy attention on the professional environments and school organisations that enable teachers to respond confidently and critically to technological change. Its central proposition is that the teaching profession is itself a site of professional agency. Emerging technologies should strengthen, rather than displace or diminish, the professional knowledge, judgment, agency, collaboration and moral purpose of teachers. The future of quality education depends not simply on the availability of new technologies, not even on the availability of quality technologies for which there is good evidence, but on the intellectual, social and technical capacity of teachers and education systems to make informed decisions about whether to use them and, if so, how to use them purposefully, critically, responsibly, safely and ethically in ways that serve the educational and democratic purposes of schooling; as well as on the extent to which teachers are given the autonomy and agency to make decisions.

The appendix sets out, condition by condition, where this White Paper's analysis and recommendations converge with recent instruments of UNESCO and the International Task Force on Teachers for Education 2030, the OECD and the European Union, and identifies the Council of Europe's distinctive contribution.

2 TALIS – the Teaching and Learning International Survey – is the world's largest international survey about teachers and school leaders.

DEVELOPMENT PROCESS AND METHODOLOGY

For the development of this White Paper a scoping review of the literature was undertaken to map emerging evidence, policy discourse and practice relating to the futures of teachers and the teaching profession across Europe and globally.

The evidence base includes relevant academic studies published since 2020, as well as policy documents and grey literature from international organisations, governments and professional bodies. The breadth of sources enables the review to consider not only research evidence concerning teachers and teaching, but also current issues at the centre of policy and professional debates about the challenges, opportunities and possibilities facing the teaching profession in an increasingly digitalised educational environment.

Consistent with the exploratory purpose of the review, the evidence was synthesised descriptively to identify prevailing themes, policy directions, areas of emerging consensus and significant questions or gaps in the evidence. The review is therefore intended to provide an informed map of the current evidence and policy landscape rather than a systematic assessment of the strength or causal effects of individual interventions.

The scoping review situates current developments within the wider research, policy and professional literature, to provide a sufficiently broad, grounded and robust basis for identifying the key challenges and opportunities facing teachers and teaching, and for developing and substantiating the White Paper's propositions and forward-looking arguments about the possible futures of teachers and the teaching profession in the context of rapid technological and wider societal change.

FEATURES, TRENDS AND DEVELOPMENTS IN THE TEACHING PROFESSION

DIFFICULTIES IN ASSESSING THE STATE OF THE PROFESSION

The teaching profession is a collective and systemic institution. Across Europe, its quality depends on the interaction between teachers, their representative organisations and professional associations, and the wider educational, social and institutional contexts in which they work.

The professional standards, values and identities of teachers are shaped by tangible factors such as policies, qualifications, career structures and employment conditions, as well as less tangible factors such as professional status, autonomy and the level of trust placed in the profession by society. Furthermore, as a profession, it is essential to recognise the role of teachers in the definition and establishment of appropriate standards, as happens for other professions.

There are important common patterns in the experiences of the teaching profession across the Council of Europe member states. Teachers' work is becoming increasingly complex and demanding, while many education systems face challenges relating to recruitment, retention, an ageing workforce and the attractiveness of the profession. At the same time, there are important similarities in what motivates teachers to teach well and in how successful leaders create and sustain the culturally and educationally meaningful environments for the learning and development of both children and adults. However, these common patterns are experienced and expressed differently across national, regional and local contexts.

Assessing the state of the teaching profession is therefore inherently complex. The difficulty of making simplistic or instrumental comparisons across countries reflects the diverse sociocultural, economic and political contexts in which teaching takes place. The context of education is multidimensional and fluid. Understanding the profession requires attention not only to measurable outcomes, resources and efficiency, but also to the normative, cultural and ethical forces that shape educational purposes and professional practice over time (Luke 2011). It requires consideration of the relationship between teachers' capacity to fulfil their professional roles and the conditions under which they work, recognising that these conditions are themselves shaped by wider social, cultural, economic, technological and institutional contexts.

The school organisation is particularly important within this system. Teachers do not exercise their professional knowledge, judgment and agency in isolation. School organisation and leadership provide teachers with the intellectual and technical resources that they need to learn and develop, as well as the social and cultural environments that enable many teachers to apply new learning in their classrooms (Bryk et al. 2010, Day and Gu 2018, Gu et al. 2023, Johnson 2019). School leaders themselves play a critical role in shaping the organisational conditions for teaching and are among the strongest influences on the quality of teachers' professional lives and their decisions to remain in the profession.

The context of the profession also reflects the cultural values, traditions and purposes of education, as well as the socio-economic, political and cultural environment in which it is situated and teachers' diverse disciplinary and professional backgrounds. Consequently, the notion of a "good teacher" is socially and culturally embedded. Some qualities, however, have broad relevance across contexts: being skilled and effective in the classroom, committed to student learning,

and willing and able to contribute to the improvement of their schools (Johnson et al. 2005). These qualities encompass ethical and vocational commitments, passion and resilience, alongside the cognitive, social and psychological resources and dispositions of the person in the teacher.

Yet personal qualities alone are insufficient. The extent to which teachers can translate their knowledge, values and commitments into effective practice depends on the technical, organisational and relational conditions of their schools, as well as on wider societal, technological, accountability and policy changes that they are expected to accommodate. The quality of the teaching profession must therefore be understood as a relationship between individual professional capacity and the conditions that enable that capacity to be exercised.

This has an important implication for this White Paper: strengthening the teaching profession requires more than developing individual teachers or prescribing a universal model of effective teaching that demands fidelity across contexts. It requires enabling teachers to address the diverse learning needs of their students through culturally informed and educationally meaningful professional expertise and judgment.



KEY FEATURES OF THE TEACHING PROFESSION

The Council of Europe recognises that teachers are mediators of change (Council of Europe 2007). Recognising this fundamental role requires education systems to provide consistent and effective strategic policy support that enables teachers to respond to increasingly diverse and multicultural schools and to changing social, cultural and technological contexts. Teachers cannot fulfil this role through individual effort alone. Their capacity to mediate change depends on the professional knowledge and skills they possess, the composition and sustainability of the teaching workforce, and the organisational and systemic conditions in which they work. The following characteristics of the teaching profession provide an important basis for understanding these conditions and for identifying where policy intervention can strengthen the profession.

1 DEFINED BY EXPERT KNOWLEDGE AND SPECIALISED SKILLS

The ILO/UNESCO Recommendation concerning the Status of Teachers (1966) provides an early international normative foundation for understanding teaching as a profession requiring expert knowledge, specialised skills and professional judgment. Building on this conception, the Council of Europe (2019) refers to the teaching profession as the "collective body of professional teachers within the structural and organisational context in which they operate". Teaching is therefore not simply an occupation involving the delivery of a prescribed curriculum. It is a form of professional practice requiring specialised knowledge, judgment and responsibility.

As in other knowledge-intensive professions, the quality and equity of education depend on teachers having appropriate preparation and qualifications and opportunities to develop their professional practice throughout their careers. While national legislation, qualification requirements and professional standards vary, teacher professionalism can broadly be understood through three interrelated domains: professional knowledge and understanding, pedagogical practice, and the quality of teaching and learning relationships. These domains require specialised preparation, practical experience and continuing professional learning (Education International and UNESCO 2019).

Across European education systems, entry into teaching is generally supported or regulated through structured pathways of initial teacher education (ITE), combining academic study, pedagogical preparation and practical experience. In many systems, induction or probationary periods precede full certification or registration. National competence frameworks, qualification requirements and professional standards further shape expectations concerning teachers' knowledge and practice.

These arrangements establish an important institutional basis for the profession. However, professionalisation should not be understood solely in terms of entry qualifications, certification or compliance with externally defined standards. It must also encompass the development and exercise of professionalism: an ongoing process through which teachers develop, enact and renew their professional knowledge, judgment and responsibilities. The capacity of teachers to respond to changing educational circumstances therefore depends not only on initial preparation, but also on continuing professional learning, professional autonomy and meaningful opportunities for teachers to participate in the collective development of the profession.

2 UNDERPINNED BY A CHANGING TEACHING WORKFORCE

The future of the profession depends not simply on how many teachers education systems have, but also on whether the conditions and capacities of those systems can sustain a sufficiently qualified, experienced and professionally committed collective body of teachers. This connects directly to this White Paper's position that the teaching profession is a collective institution: its sustainability depends on the capacity of education systems to attract, prepare, support, develop and retain teachers as members of a professional community.

The teaching profession is shaped by significant demographic and structural changes in the workforce. Eurydice data (European Commission/EACEA/Eurydice 2021) identify substantial variation across EU education systems, with many countries experiencing teacher shortages and imbalances in the distribution of teachers across subjects, geographical areas and schools. Similarly, in its "Skills for Jobs Database", the OECD (n.d.) identifies the teaching profession as being the occupation with the greatest shortages. Shortages are particularly evident in some STEM subjects, rural and remote areas, and schools serving socio-economically disadvantaged communities. Other challenges include an ageing workforce, teacher attrition and relatively low enrolment in ITE. These developments are interconnected with wider concerns about working conditions, career prospects, workload and professional well-being. It is likely but not confirmed that all these challenges extend to the Council of Europe's 19 member states that are not part of the European Union.

Empirical data from Eurydice also highlight substantial variation in teachers' remuneration across EU education systems. Statutory starting salaries differ considerably between countries, while changes in nominal salaries do not necessarily translate into improvements in real purchasing power. In some systems, inflation has offset salary increases, contributing to stagnation or reductions in real earnings. Remuneration is an important component of the attractiveness of teaching, but its effects on recruitment and retention need to be understood in relation to other working conditions and career prospects.

Recruitment and retention of teachers are influenced by a diverse range of factors, including the perceived status and attractiveness of teaching, remuneration and career opportunities, economic, health and other crises, as well as teachers' experiences of workload, autonomy, understaffing and precarity, leadership recognition and support, professional learning and the conditions in which they work (for example, overcrowded classrooms). These factors do not operate independently. Even when research identifies statistically significant relationships between particular working conditions and teachers' decisions to remain in, move within or leave the profession, the mechanisms underlying those decisions are complex and mediated by teachers' broader experiences of their work and professional lives. A teacher who experiences a demanding workload, for example, may nevertheless remain in a school because of strong collegial relationships, supportive leadership, professional fulfilment or satisfaction with other aspects of the job. Conversely, favourable conditions in one dimension may not compensate for persistent difficulties in others (Leithwood et al. 2026).

This complexity also has important implications for policy. There is no single workforce lever that can secure the future of the teaching profession. Effective workforce policy needs to consider the combination of material, professional, organisational and relational conditions that shape teachers' career decisions and their capacity to remain committed to teaching over time.

Workforce trends therefore have implications beyond labour supply. A changing and potentially ageing teaching workforce affects the collective capacity of the profession itself. Where recruitment becomes increasingly difficult, systems may respond by expanding alternative routes into teaching, increasing reliance on less-qualified staff or intensifying existing teachers' workloads. Such responses may address immediate staffing pressures, but they can also raise longer-term questions about professional status, expertise, working conditions and the quality and sustainability of the profession.

The alternative is to treat workforce policy as an investment in professional and organisational capacity and in quality education. Policies that capitalise on the collective nature of the profession and strengthen the organisational and professional capabilities of schools offer a more hopeful and sustainable basis for enabling teachers to achieve ambitious, socially valued goals for all pupils and students. Such an approach recognises that the sustainability of the workforce is inseparable from the quality and sustainability of the profession itself.



3 DRIVEN BY A STRONG PUBLIC AND SOCIAL SERVICE MANDATE

Teaching is fundamentally grounded in a strong public and social service mandate, reflecting the recognition that education is essential not only to individual development and well-being, but also to the vitality, cohesion and resilience of democratic societies: democracy should be put "at the heart of education systems by enhancing citizenship education, fostering democratic and intercultural competences, and encouraging dialogue and cooperation based on shared democratic values across Europe… safeguarding students' rights, including equitable access to education, privacy, and freedom of expression, thereby fostering active citizenship" (Council of Europe 2024a). Similarly, a Eurydice report (European Commission/EACEA/Eurydice 2021) observes: "teachers and trainers have the responsibility to facilitate learners' acquisition of key competences and professional skills, to foster their social responsibility and civic engagement, to convey human values, and to support their personal growth and wellbeing".

This public-service mandate gives teaching a distinctive ethical and democratic purpose. Teachers play a pivotal role in upholding and renewing democracy by fostering critical thinking, promoting respect for diversity and cultivating the knowledge, skills and dispositions needed for active and responsible citizenship. Through their daily practice, they create inclusive learning environments where dialogue, participation and mutual respect are modelled and experienced, enabling young people to engage constructively with complex social and political realities. The profession is therefore underpinned by a clear ethical commitment that extends beyond the delivery of curriculum to the active promotion of equity, human rights and democratic values. In this sense, teaching is not simply a technological occupation, but a profession characterised by a profound responsibility to sustain and strengthen democratic life in European societies.

The public and social service mandate of teaching also has implications for how the profession is understood and supported. It places responsibilities on teachers, but it also places responsibilities on education systems and society to provide the conditions in which teacher responsibilities can be fulfilled. Professional autonomy, adequate resources, supportive working environments and meaningful participation in educational decision making are therefore not simply conditions of employment; they are part of the institutional and organisational conditions required for teachers to fulfil the public purposes of education.



Teaching is consequently not reducible to an instrumental or technical activity. It is a profession in which expert knowledge, professional judgment, ethical responsibility and relationships with learners intersect in the pursuit of individual and collective educational purposes. Its contribution to democratic life is therefore integral to its professional identity and to the status that society accords to the profession.

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4 STRENGTHENED THROUGH PROFESSIONAL IDENTITY AND STATUS

A strong professional identity in teaching is characterised by a clear sense of professional purpose, confidence in professional knowledge and skills, commitment to ethical practice and a willingness to engage in continuing professional learning and development. Professional identity is closely connected to the status and recognition accorded to the profession. When teaching is recognised as skilled, knowledge-intensive and socially important work, teachers are more likely to experience a strong sense of professional value and belonging. Conversely, where the profession is accorded low status, limited autonomy or insufficient recognition, teachers' capacity to develop and sustain a positive professional identity may be weakened.

Professional identity is shaped through teachers' relationships with colleagues, schools, professional organisations and wider society, and through the extent to which their knowledge and professional judgment are recognised and trusted. Teachers with strong professional identities see themselves as more than individuals who teach in often isolated classrooms; they see themselves as members of the school communities in which they work and of a wider profession with shared values, standards, knowledge and responsibilities.

This collective dimension is reflected in teachers' sense of professional agency, their capacity to make informed judgments about teaching and learning, their engagement in reflective practice and their participation in professional communities. It also involves negotiating the relationship between personal beliefs and commitments, professional values and standards, and the expectations established through education policy and institutional contexts.

The recognition of teachers' knowledge, skills and capacity to contribute to educational improvement is therefore important to strengthening both professional identity and the status of teaching in society (Council of Europe 2024a, UNESCO 2024). A well-developed sense of professional identity enables teachers to see themselves not simply as implementers of policy, but as knowledgeable and reflective professionals who draw on their expertise, professional judgment, values and commitments to take responsibility for their practice, engage in continuing learning and contribute to the collective development of the profession.

Put simply, professional identity is not something that decision makers can simply "build" inside individual teachers. It is produced and sustained through the relationship between teachers and the professional, organisational and societal environments in which they work.

5 INFORMED BY RESEARCH

A research-informed teaching profession is grounded in the principle that decisions about teaching and learning should be guided by the best available evidence. Over the past two decades, advances in the learning sciences have substantially expanded our understanding of how students learn and develop. Alongside this, evidence on high-quality teaching, the core practices that support it, and the knowledge and capabilities expected of teachers has also grown considerably.

Research on teaching effectiveness, cognitive science and theories of effective learning has, for example, provided useful insights into practices that have been found to have a causal impact on students' cognitive, social and emotional outcomes. Drawn from this evidence, the OECD (2025b) identifies 20 practices that, together, support five key dimensions of high-quality teaching:

- **Ensuring cognitive engagement;**
- **Crafting quality subject content;**
- **Providing social-emotional support;**
- **Fostering classroom interaction;**
- **Using formative assessment and feedback.**

In many education systems, teachers are increasingly encouraged and supported to adopt practices and innovations that have been shown to improve students' cognitive and/or non-cognitive outcomes, and to implement them faithfully in their classrooms. This emphasis on using high-quality evidence to inform teaching decisions reinforces the characterisation of teaching as a research-informed profession.

However, evidence about how research-informed practices and innovations can be effectively integrated into teachers' daily work to improve student learning across different classroom contexts remains limited. Given the diverse, complex and dynamic nature of classroom environments, treating strict fidelity to prescribed practices as a means of achieving better learning outcomes is both conceptually flawed and practically unrealistic. The challenge is to understand how evidence-supported practices can be enacted effectively in different classroom and school contexts. As evidence accumulates on the effectiveness of particular practices, teachers need support not only to understand the knowledge and theories underpinning these practices, but also to learn how to activate and apply them to achieve valued outcomes in their own educational settings (Joyce and Cartwright 2020).

By extension, in a research-informed profession, learning to apply and scale up evidence-based practices across classrooms, schools and systems is fundamentally about developing professional expertise within schools. This enables teachers not only to understand more about what works, but also to determine how practices found to be effective elsewhere might work in their own contexts and how to gather evidence of their impact to understand why they have worked "here" (Bryk 2015, Gu et al. 2020).

Efforts to build a research-informed teaching profession must therefore place the strengthening of teacher professionalism at their centre. This opens up the possibility of recognising research use as a process of learning to enact rather than simply implementing evidence-supported practices. This process both requires and enhances teachers' knowledge, skills and professional judgment as they interpret innovations in their day-to-day work and adapt and apply them in ways that are educationally and culturally meaningful to their students' learning experiences and needs.

Such practice requires professional autonomy, judgment and reflective inquiry, enabling teachers to make informed decisions about how best to represent subject content, engage learners, respond to evidence of students' understanding and maintain purposeful learning environments. They also need opportunities to evaluate the effects of their practice and refine their approaches in response to students' learning needs. A research-informed teaching profession therefore depends not only on the availability of high-quality evidence, but also on teachers' professional capacity to interpret, adapt, enact and evaluate it in context. Professional autonomy and continuing professional learning are therefore not peripheral features of teaching: they are intrinsic to the exercise and development of teachers' individual and collective professionalism.

> *A research-informed teaching profession therefore depends not only on the availability of high-quality evidence, but also on teachers' professional capacity to interpret, adapt, enact and evaluate it in context.*



6 DYNAMIC AND INTERCONNECTED

The teaching profession cannot be understood or evaluated independently of its context. Teachers' practice is shaped by the individual students they teach, their needs and behaviours, and the wider cultures and societies to which they belong. The teaching profession is also shaped by the material and organisational conditions of their work, including the availability of non-technological and technological resources, and the professional and cultural environment of their workplace. In this sense, the teaching profession does not simply respond to wider system influences; teachers also mediate and contribute to shaping those contexts through their everyday practices.

These contextual influences are not static. The nature and scope of teachers' work change as the needs of learners and societies evolve. For example, evidence from TALIS 2024 (OECD 2025a) indicates growing concerns about students' mental health and well-being across education systems. This has contributed to increasing expectations that teachers support not only students' academic learning, but also aspects of their social and emotional development and well-being. Such responsibilities should not, however, be understood as separate additions to the teacher's core role. They are deeply interconnected with the fundamental processes of teaching and learning.

Classrooms are, at their heart, spaces of human interaction and connection. Learning is inherently social: from early childhood, social relationships and interactions contribute to the development of cognitive, emotional and social capabilities. Increasing evidence also points to the importance of supportive human relationships for well-being and learning (Council of Europe 2025a, UNESCO 2024). The relational dimensions of teaching are therefore not peripheral to educational practice; they are integral to fostering students' motivation and engagement and creating the conditions in which meaningful learning can occur.

As such, the practices of teaching must be considered as a "dynamic whole" rather than "singular practices" (OECD 2025b). Teachers need to draw on and integrate different practices in response to the needs of different learners and the circumstances in which learning takes place. Professional judgment is central to this process, enabling teachers to interpret these circumstances, make informed decisions and adapt their practice as teaching and learning unfold.



TRENDS AND DEVELOPMENTS SHAPING THE PROFESSION

The teaching profession is being influenced by two intertwined but distinctive sets of forces.

The first comprises non-technological forces arising from social, cultural and political developments in society, including changing expectations of teachers, the expanding scope of their responsibilities, workforce pressures and the conditions that shape their professional status and working lives. The second comprises technological developments that are changing the environments in which teaching takes place and reshaping the demands of teaching and learning. These include the need to sustain student engagement amid distractions from the digital world, develop critical digital literacy and navigate AI-mediated environments.

Although analytically distinct, these forces interact: societal developments shape expectations of education, policy responses translate these expectations into new demands on schools, and organisational and workforce conditions influence teachers' capacity to respond. Recognising how these forces interact is essential for policy makers and education stakeholders seeking to shape the future of the teaching profession and create the necessary conditions to support teachers in responding to evolving demands while sustaining the quality and equity of education in their classrooms and schools.

NON-TECHNOLOGICAL FORCES

The teaching profession has evolved over decades and will continue to be shaped by a range of non-technological forces that support, challenge and, at times, redefine what is expected of teachers, the knowledge and expertise they need, the responsibilities they assume and the extent to which they can exercise professional judgment.

These forces include wider socio-economic, cultural and political developments, as well as the social and organisational conditions in which teachers work. They also influence how teachers and education systems respond to technological change, including AI. Their significance lies not only in the individual pressures they create, but also in how they combine to shape the conditions under which teachers can work, learn and exercise their professional agency.

Non-technological forces include the impact of displaced populations and refugees needing to be integrated into local communities, which frequently strains public infrastructure, requiring educational institutions to absorb diverse linguistic barriers, complex cultural adjustments and intensive trauma-informed support needs without proportional funding or specialist personnel. Educators are also having to navigate widening socio-emotional and mental health disparities among youth, marked by escalating rates of chronic student anxiety, depression and behavioural distress that demand continuous pastoral intervention and transform classrooms into frontline social support hubs. Many education systems are also having to address chronic public underfunding and stark resource disparities between affluent and low-income socio-economic districts, which are leaving marginalised schools ill-equipped to meet rising baseline operational needs. This is compounded by escalating structural poverty, housing instability and food insecurity among families, which translate directly into chronic absenteeism and student fatigue, shifting the burden of basic welfare provision onto school grounds. In addition, rigid bureaucratic mandates and top-down policy directives often misalign with localised classroom realities, generating administrative friction that drains time away from core instruction.

Accordingly, the central question for decision makers is not simply how the profession must adapt, but what conditions are needed to enable teachers to respond effectively to change. Of particular concern is how these growing and often cumulative pressures affect teachers' well-being and professional capacity. It is vital to consider the organisational support teachers require to ensure all students thrive in increasingly challenging conditions.

THE DRIVE TO SCALE UP EVIDENCE-INFORMED INTERVENTIONS FOR EFFECTIVE TEACHING

The last decade has seen growing awareness of, and appetite for, evidence-informed interventions to improve teaching practice and student learning outcomes in schools across Europe and globally. Advocates argue that experimental and quasi-experimental studies, including randomised controlled trials (RCTs), assessing the efficacy of pedagogy-oriented interventions have produced promising evidence of their impact on teaching quality. Critics, however, caution that although efficacy trials can establish whether particular, often tightly specified, packages of intervention strategies can work under controlled conditions, they tell us less about how and why these approaches work with different students in different settings. Decisions about their application in real classrooms and schools require a deeper understanding of the mechanisms through which interventions work, the conditions that enable or constrain their effectiveness, and the ways in which they interact with local contexts.

Indeed, access to research and evidence does not automatically translate into improved practice. Evidence from implementation science, improvement science and other studies of scaling up points to two interrelated factors that profoundly influence the processes and outcomes of efforts to implement evidence-based interventions across diverse educational settings. The first concerns the relevance, suitability and applicability of an intervention to its local context. The second encompasses educators' knowledge of local contexts and population characteristics, their understanding of the theories underpinning interventions, and the skills and professional capabilities needed to adapt,

implement and monitor interventions in ways that promote meaningful improvement within their settings. Crucially, this requires more than the faithful adoption of externally developed programmes. It requires educators to develop an informed understanding of the rationale and underlying theories of an intervention, and the professional judgment to determine how it should be enacted in practice. Only when an externally understood and supported innovation, together with its underlying theories, becomes "an internally understood and supported theory-based practice" (Stokes et al. 1997: 21) can teachers and schools use and adapt it in ways that effect deep and lasting change in practice.

Scaling-up efforts often fail in education because even a "good" research-informed innovation rarely travels into the day-to-day realities of classrooms on its own merits. Its successful implementation depends on school leaders who can support teachers to engage critically with the evidence, understand the rationale for an intervention, and apply and adapt it to their own classroom contexts. Given the diversity of educational contexts and the complexity of learning processes, system-wide school improvement campaigns need to recognise and understand how tasks, organisational factors and diverse contextual conditions interact to produce variability in outcomes (Bryk 2015, Gutiérrez and Penuel 2014).

The key to success, therefore, lies in how effectively schools and education systems support and cultivate the knowledge, skills and professional capabilities of school leaders and teachers to refine and enact intervention programmes in ways that interact with, rather than simply add to, the complex systems in which they work and students learn (Bryk 2015, Gu et al. 2020). This places new demands on the teaching profession: teachers need to be equipped not simply to implement evidence-informed approaches, but to interpret, evaluate and adapt them through the exercise of professional expertise and judgment. The capacity to work intelligently with evidence, rather than merely comply with prescribed interventions, is therefore becoming an increasingly important dimension of professional practice.

EXPANDING SOCIETAL EXPECTATIONS AND TEACHERS' RESPONSIBILITIES

At the same time, the scope of teachers' professional responsibilities is widening. The Council of Europe's Education Strategy 2024-2030 emphasises the need for inclusive learning environments that can actively sustain democracy, human rights and social cohesion across Europe. This emphasis must be understood in the context of the broader geopolitical and societal circumstances in which European education systems currently operate. Rising socio-economic disparities, the war in Ukraine and conflicts elsewhere, and the resulting movements of refugees and displaced populations have placed unprecedented demands on schools as sites of integration and social stability. These pressures are compounded by signs of political instability and democratic backsliding in parts of Europe, alongside rising levels of discrimination, radicalisation and intolerance within and beyond the classroom. Teachers are increasingly positioned at the frontline of efforts to sustain societal cohesion, mediating the effects of these wider tensions while supporting young people in developing the critical thinking skills and civic dispositions needed to uphold democratic values. These expectations add a further, often underacknowledged, layer of complexity to the profession, extending well beyond pedagogical competence into the realm of social and political resilience. The underlying shift is that schools are increasingly expected to respond to challenges whose origins lie beyond education itself. Teachers must address their implications for learning, relationships and participation while continuing to meet curricular and pedagogical responsibilities. This broadening of expectations makes the boundaries of teachers' roles less clearly defined and increases the importance of institutional support, professional collaboration and clear priorities.

The impact of these demands on teachers' emotional well-being is profound, adding another significant dimension to the contemporary professional burden. Evidence from TALIS 2024 (OECD 2025a) points to a worrying finding that many teachers experience intense emotional labour in their work, often associated with managing classroom behaviour, navigating social dynamics and responding to the wider psychosocial needs of learners. These experiences may be further intensified by heightened parental scrutiny, complex community expectations and rising socio-economic inequalities that disrupt learners' experiences at school. Such pressures are not simply additional tasks: they require sustained emotional investment and professional judgment, often in situations where teachers have limited control over the wider circumstances affecting learners. Where adequate time, support and opportunities for collaboration are lacking, the cumulative demands may place teachers' well-being and their capacity to sustain effective practice under further strain.



ACCELERATING POLICY CHANGE AND INCREASING DEMANDS ON PROFESSIONAL CAPACITY

A further challenge is the pace and scope of change itself. Teachers' working environments are typically characterised by continuous and, at times, fragmented and disjointed policy and organisational change. As schools navigate rapidly changing societies, policy shifts and new initiatives are constant features of teachers' working lives. From widening participation for disadvantaged, migrant and refugee learners to introducing curriculum reforms focused on citizenship, values and sustainability, teachers are compelled to operate in constantly evolving environments. These shifts introduce additional training demands on teachers. The European Preparedness Union Strategy (European Commission and High Representative 2025), for example, calls for preparedness to be included in school curricula and in the training of education staff, so that teachers can help learners anticipate, prevent and respond to crises such as natural disasters, cyberattacks and health crises. Although these priorities may be justified individually, the pace and scope at which they arrive, together with the complexity of their cumulative effects, create powerful tensions for teachers who often have limited time and space to consolidate their practice and develop the necessary professional capacity to adapt changes to their specific contexts. The challenge is therefore not change itself, but how change is designed, sequenced and supported. When new expectations are introduced without sufficient co-ordination, preparation or opportunities for professional input, teachers may have limited scope to integrate them meaningfully into their practice. The result can be a gap between the ambitions of reform and the capacity of schools to enact it effectively.

The challenge is intensified when teachers' ability to shape change is limited. TALIS 2024 (OECD 2025a) finds that, on average, only around four in ten teachers work in schools where they are involved in defining school improvement priorities. This is particularly concerning when teachers feel overwhelmed by frequent initiatives or are asked to implement reforms without adequate support. At the same time, the perceived effectiveness of professional learning remains mixed, with only around half of teachers reporting a meaningful impact on their practice. This represents a profound non-technological challenge because it erodes professional agency and undermines teachers' ability to participate meaningfully in shaping educational change.



Without systemic recognition and intervention, teachers face increasing pressure to comply with reforms on which they have little influence.

A strategic issue for education policy is therefore how to address the persistent gap between policy aspirations and teachers' professional capacity. While EU institutions emphasise high-quality, inclusive and future-ready education systems, teachers' lived experiences on the ground often paint a picture of frustration and hopelessness, characterised by limited recognition of their expertise, insufficient support for professional well-being and career advancement, and inadequate opportunities to participate in decisions affecting their work (European Commission/EACEA/Eurydice 2021). This raises the question of how policy expectations, governance and support mechanisms can be better grounded in the everyday work of improving teaching and learning, so that they foster the experiences, know-how and mindsets that enable teachers and schools to make a real difference. This gap is not simply a matter of individual teachers needing to acquire additional skills. It also reflects the relationship between what education systems expect teachers to achieve and the professional conditions they provide. Addressing it requires policy to consider not only the content of reforms, but also their cumulative demands, their fit with the realities of classroom practice, and the support available for sustained implementation.

TEACHER SHORTAGES, UNEQUAL WORKFORCE DISTRIBUTION AND PROFESSIONAL SUSTAINABILITY

It is no surprise that teacher recruitment and retention remain longstanding challenges in many education systems globally. Evidence from Eurydice (European Commission/EACEA/Eurydice 2021, De Witte et al. 2023) points to widespread teacher shortages across European education systems, placing additional pressure on those who remain in the profession (please note the limitations of Eurydice data in covering all Council of Europe member states mentioned earlier). However, the most alarming issue is the unequal distribution of teacher shortages: schools serving socio-economically disadvantaged and marginalised communities, as well as schools characterised by ineffective organisational cultures and management practices, are more likely to experience higher levels of teacher attrition, particularly among experienced teachers (De Witte et al. 2023).

Such patterns of teacher sorting are neither new nor unique to Europe, but they pose a profound challenge to social justice in schools and society. Children in these communities, who may already have limited access to cultural and social capital in their early years, may be further disadvantaged by unequal access to quality education when they enter the formal school system. These patterns also reveal how workforce pressures and educational inequality can reinforce one another. Where schools serving disadvantaged communities struggle to recruit and retain experienced teachers, learners may face further barriers to accessing stable, high-quality teaching. At the same time, the working conditions and organisational support available in these schools influence whether teachers can sustain their work there. Recruitment and retention are therefore not only workforce issues; they are also questions of equity, professional sustainability and the capacity of education systems to provide high-quality learning opportunities for all.

THE CUMULATIVE AND INTERCONNECTED EFFECTS OF THESE FORCES

Taken together, these contexts of teaching reveal an important paradox. The demands placed on teachers are expanding, while some essential conditions that enable them to respond to those demands are under pressure. Teachers' roles are evolving in ways that reflect broader expectations about education's contribution to inclusive, democratic and cohesive societies, with professional practice extending into

> *The central question for decision makers is not simply how the profession must adapt, but what conditions are needed to enable teachers to respond effectively to change.*

areas of well-being, participation and social responsibility. These developments illustrate how contemporary teaching involves managing a multiplicity of expectations that are often interdependent and fluid, rather than clearly bounded. They point to the inherent complexity of teachers' roles and the need for professional judgment to be consistently exercised alongside the use of research evidence. They also highlight how professional experience is shaped by continual adaptation to changing priorities, while also being strongly mediated by the professional voice, autonomy and support afforded to teachers to navigate these shifts successfully. Above all, they reveal a simple truth about enabling sustainable educational change: professional learning needs to be connected to the challenges teachers face in practice, embedded in their context of work, supported by time and resources for collaboration and follow-up, and evaluated in terms of its contribution to high-quality teaching and learning.

Nevertheless, there are important grounds for optimism. In many member states, teachers have opportunities to participate in professional learning communities, coaching and mentoring, collaborative professional development and wider professional networks. These collaborative opportunities help teachers develop their practice, share expertise and reduce professional isolation. Findings from the OECD's international surveys provide consistently encouraging evidence, with the latest report indicating again that nearly 90% of participating teachers were satisfied with their teaching job (OECD 2025a). This positive picture is important, but job satisfaction alone does not capture the conditions that enable teachers to sustain effective practice over time. The availability of meaningful professional learning, collegial support and opportunities to influence decisions about teaching and learning also matters, particularly as professional demands become more complex in the context of emerging technologies.

TECHNOLOGICAL FORCES

The rapid speed of technological development is reshaping both the context in which teachers work and the expectations placed on their competency levels regarding new technology (OECD 2026).

While the use of emerging technologies such as AI to support teaching and learning varies significantly across member states, for the first time TALIS data (2024 – please note the limitations of TALIS data for all Council of Europe member states mentioned earlier) show AI as a very visible presence in teachers' working lives, with teachers using the technology with the aim of supporting lesson planning, organising course selection and performing administrative tasks. At the same time, students' use of AI is raising fundamental questions about assessment, academic integrity, cognitive development and, more broadly, the purposes and practices of education.

The Council of Europe identifies digital transformation as a key feature of contemporary education. Digital technologies might enhance learning, widen access and support digital literacy (although there is almost no empirical evidence base supporting such claims), but their adoption must remain grounded in human rights, democracy and the rule of law. This perspective is important because digital transformation is not simply a technological upgrade to existing educational practices. This is a societal shift that must protect democratic values and ensure that educational environments remain inclusive, equitable and participatory.

For the teaching profession, this means that technological change cannot be understood as a matter of acquiring new technical competencies. Digital expansion introduces significant professional and ethical questions, including academic integrity, algorithmic bias, fairness, privacy, equity, cognitive off-loading, de-professionalisation and access. These challenges are compounded by the relative immaturity of the evidence base concerning the efficacy, safety and longer-term consequences of emerging technologies, particularly AI-mediated tools. For example, while speculation and claims are ubiquitous, there are currently no robust, independent, longitudinal studies to support the effectiveness or safety of AI-mediated tools in education settings (Holmes et al. 2022a, 2025), while many of the studies that do exist are increasingly negative (Bastani et al. 2024, Lodge and Loble 2026, Strömberg et al. 2026, Turano et al. 2026). It is against this backdrop that the profession navigates its response to digital expansion.

The European Commission's 2026 guidelines acknowledge that teachers increasingly need to manage AI-related risks such as algorithmic bias, academic integrity challenges and the spread of AI-driven disinformation, significantly expanding their ethical and supervisory responsibilities (European Commission 2026), while the Council of the European Union concludes that teachers need an expanded and evolving set of competencies to work effectively with AI (Council of the European Union 2026). Leaders, meanwhile, also face the strategic burden of overseeing AI procurement, compliance with regulatory frameworks and the governance of data ethics within schools.

However, while Council of Europe publications agree with the challenges identified in the European Union's work (and in similar policy from other countries), they prioritise instead the impact of AI and emerging technologies on human rights and democracy (Holmes et al. 2022a). For example, the Council of Europe's Digital Citizenship Education programme[3] agrees that teachers must foster critical thinking and ethical digital behaviour. However, it does not just mention but emphasises the importance of resilience against phenomena such as disinformation and online manipulation. In particular, unlike the European Commission and OECD AI Literacy Framework[4], Recommendation CM/Rec(2026)12 of the Committee of Ministers on AI literacy (which introduces the three-dimension model of AI: the human dimension, technological dimension and practical dimension) emphasises the critical importance of teachers and their students having a robust understanding of the human dimension of AI (its sociotechnical composition, its historical origins, its controversial involvement of global south workers, its impact on human rights and democracy, its impact on the environment, and so on).

In other words, an awareness of how tools function (the technological dimension) and an awareness of how tools might be used (the practical dimension) are both necessary but insufficient. Instead, AI literacy is about being able to make informed choices in the context of the human dimension of AI. Having identified the professional and pedagogical need, the first question is whether to reject AI – rather than assuming that it will be used. Then, if the informed decision is to use it, the follow-up questions are how to use it safely, responsibly and ethically. AI literacy for teachers also includes how to critically evaluate the outputs of the AI-mediated tool, and how to explain its limitations to students. This also emphasises the importance of pedagogical judgment and adaptability, with teachers only integrating AI or other digital/emerging technologies into their teaching in ways that genuinely add educational value – rather than using it for its own sake. This includes only using learning, teaching and assessment approaches that make purposeful use of AI in which the teacher maintains overall control (not abdicating decisions to the AI systems or, more accurately, to the developers of the AI systems). However, it should be noted that alongside supporting the AI literacy of teachers, responsibility for the evaluation of the appropriateness of AI tools should also be supported by robust systematic mechanisms.

3 Digital Citizenship Education programme

4 AILit Framework



Academic scholarship also situates teaching within broader struggles over democracy, misinformation and human agency in digitally mediated societies (Parker 2023). As students gain access to multiple competing sources of information, including AI-generated and often confabulated responses, teachers are finding their expertise more frequently questioned, requiring them to justify and explain knowledge even more transparently. At the same time, misinformation can affect classroom relationships and discussions. Teachers increasingly need to address incorrect or polarised views, often generated by a GenAI tool, that students bring into the classroom, sometimes linked to sensitive or controversial topics, which requires careful handling to maintain respectful dialogue and a safe learning environment. This can increase emotional and cognitive demands on teachers, particularly when issues intersect with wider societal debates.

Many reports, such as that from the International Labour Organization and UNESCO (ILO and UNESCO 2024), note that digital technologies are significantly reshaping teachers' work, and claim that this is by streamlining many administrative and communication tasks. The suggestion is that AI and emerging technologies might support grading, attendance tracking, feedback and communication with families, helping to improve efficiency, transparency and the overall management of learning processes; that they might contribute to more effective assessment practices and stronger connections between teachers, students, and wider school communities. However, as noted earlier, the evidence base for such claims is very thin, and mostly the claims are either aspirational or speculative.[5]

In any case, the purported benefits are accompanied by new challenges. Technological issues and unequal access to reliable internet can increase teachers' workload (how does a teacher, teaching a class of more than 20 students, easily pivot when the technology stops working or the internet connection fails, which is an all-too-common occurrence in many classrooms?), requiring them to maintain both digital and paper systems and communicate across multiple channels. At the same time, increased monitoring through digital systems can raise concerns about professional autonomy, while some platforms that dictate content and sequencing risk reducing teachers' control over their practice. This may contribute to the deskilling and de-professionalisation of teaching, potentially limiting teachers' ability to foster critical thinking and exercise professional judgment.

Recent academic literature also converges on the claim that the future of teaching in the digital age depends on safeguarding human judgment, cognition and relational expertise rather than pursuing automation as an intrinsic good. Across the literature, AI is framed as a force that exposes the irreducibly contextual, ethical and interpretive nature of teaching. For example, Selwyn, Ljungqvist and Sonesson's empirical work (Selwyn et al. 2025) demonstrates that GenAI does not (despite the claims) meaningfully reduce teachers' workload. Instead, it redistributes (displaces) and intensifies professional labour through practices of review, repair, rejection and ethical adjustment of AI outputs. These moments "when the prompting stops" reveal that teaching relies on tacit knowledge, moral accountability and affective awareness that cannot be formalised or automated, positioning teacher expertise as the invisible infrastructure on which educational AI depends.

A second core theme across academic studies concerns the epistemic and cognitive risks of substituting human reasoning with algorithmic systems. Research grounded in cognitive science and psychology demonstrates that frequent reliance on AI tools is associated with increased cognitive offloading, diminished critical thinking and de-professionalisation. For example, Gerlich (2025) shows that AI does not merely coexist with reduced engagement but actively reshapes how individuals distribute cognitive effort, with younger and less educationally advantaged users especially vulnerable. Shaw and Nave (2026) extend this concern by identifying "cognitive surrender" as a condition in which AI outputs replace, rather than support, both intuitive and deliberative reasoning. These findings collectively frame teaching as a critical counterweight to educational practices that risk eroding analytical, evaluative and reflective capacities.

In addition, academic studies also emphasise that AI systems remain fundamentally divergent from human pedagogy despite surface-level similarity. Turvey and Pachler's conceptual analysis (2026) argues that algorithmic systems simulate pedagogical functions through datafication but lack the contextual judgment, ethical reasoning and relational

5 Many meta-analyses, summaries of research, which are thought to be the "gold standard" of research, have been published which claim that AI tools enhance student outcomes along with many other purported benefits. However, while these meta-analyses and their claims are picked up by the media, most of those that have been checked by other researchers have been shown to radically and incorrectly overstate their claims (O'Neill 2026). The reality remains – there is no independent evidence at scale for the effectiveness or safety of AI technologies being used in education.



intent that characterise human-mediated teaching. They warn that productivity-driven policy narratives risk conflating simulation with equivalence, encouraging substitution where augmentation is needed. This substitution, the authors argue, leads to pedagogical atrophy, deskilling and erosion of teachers' professional provenance, particularly in practices such as curriculum interpretation, feedback and lesson design (Turvey and Pachler 2026).

Overall, technological expansion might in some limited circumstances be enabling but it is without question constraining teachers and teaching in important ways. Digital technologies including AI might create some opportunities for greater efficiency, new forms of pedagogy and broader access to knowledge and resources (although the evidence for that remains very limited). However, they do introduce new demands on teachers' knowledge, judgment and ethical responsibilities and raise persistent questions concerning workload, equity, autonomy and the quality of the evidence on which technological adoption is based. Digital technologies are consequently not simply changing how teachers teach; they are beginning to influence the conditions, expectations, boundaries and meaning of the profession itself.

The implications of technological forces for this White Paper are significant, but the future of teaching cannot be understood as a technological question alone. AI and other emerging technologies are entering a profession already undergoing profound changes in its responsibilities, workforce, knowledge base and working conditions. The central policy challenge is not simply to equip teachers with new technologies, but to strengthen the professional and organisational conditions that enable them to exercise judgment, learn collectively and use both non-technological and technological resources purposefully to improve student learning. In this sense, strengthening the profession's capacity to navigate change is itself a central condition for achieving high-quality education in the future.

SIX ENABLING CONDITIONS FOR A RESILIENT TEACHING PROFESSION

Building and sustaining a resilient teaching profession requires more than skilled, committed and knowledgeable individual teachers. The future of the profession also depends on the wider conditions in which teaching takes place: how teachers' professional expertise is developed and recognised, how schools are led and organised, and how the profession is connected and positioned to respond to social and technological change.

A resilient teaching profession is a collective and institutional achievement, anchored in teachers' knowledge, commitment and capabilities, and sustained by the policies, structures, relationships and organisational conditions that enable them to develop and thrive throughout their careers. At the heart of a resilient teaching profession is the capacity of teachers to find deep satisfaction and fulfilment in their work as they inspire their students and improve their learning and achievement, today and in the future.

This chapter identifies six enabling conditions for a resilient teaching profession. Together, they provide a framework for considering the co-ordinated action needed to strengthen the profession and enable it to thrive in changing social and technological contexts across the Council of Europe's member states:

01 Developing quality teacher retention strategies

02 Upholding teacher professionalism

03 Strengthening teacher education

04 Enhancing school leadership and professional culture

05 Protecting teacher autonomy and professional agency

06 Shaping the use of emerging technologies, including AI, in teaching

Developing and retaining high-quality teachers provides the starting point because the quality and sustainability of the teaching workforce are fundamental to the future of the profession. Recruitment strategies alone cannot solve teacher shortages. Transforming the status of teaching and creating working environments in which those already in the profession feel valued and effective are central to making teaching an attractive and worthwhile career and addressing workforce challenges.

The next four conditions provide the professional and organisational foundations that shape teachers' experience of the profession and its capacity to thrive. Teacher professionalism encompasses the shared knowledge, values and ethical responsibilities that define teaching as a profession. Teacher education develops and renews the expertise required to enact these responsibilities over the course of teachers' careers. School leadership and professional culture shape teachers' day-to-day working environments and the opportunities available for collaboration, professional learning and development. Teacher autonomy and professional agency determine the extent to which teachers can draw on their expertise and exercise informed professional judgment to shape student learning.

Together, these conditions are mutually reinforcing and contribute to the development of professional capital in schools (Hargreaves and Fullan 2012). This concept brings together human capital (that is, the knowledge and capabilities of individual teachers), decisional capital (that is, the wisdom and expertise developed through experience to make sound judgments about teaching and learning) and social capital (that is, professional relationships and the collaborative power of groups). It highlights the importance of combined individual expertise and professional relationships to build a resilient and capable teaching profession.

Professional capital is the lifeblood of a resilient teaching profession. It offers a useful way of understanding why individual expertise matters, alongside the relationships through which knowledge and expertise are shared, the organisational cultures that support professional learning and the trust within schools and across society that enables teachers to make informed decisions about teaching and learning. Developing and sustaining professional capital is therefore fundamental to the profession's capacity to respond to complex social and technological change.



Each of the first five conditions is considered with the future in mind, exploring how emerging social and technological pressures intersect with enduring challenges facing the profession and what it means for its contribution to democratic resilience across Europe.

The sixth condition, shaping the use of emerging technologies (including AI), receives dedicated attention because of the growing influence of these technologies on education systems, schools and teachers' work, and their potential to reshape them further in the coming decades. It is deliberately positioned after the preceding five conditions because the impact of emerging technologies will depend, to a considerable extent, on the strength of the profession through which they are mediated. Teachers' professional capital – that is, their individual and collective expertise, professional agency and capacity for informed judgment – will be essential in determining how emerging technologies are understood, adopted or rejected, and used in ways that support educational purposes and democratic values.

For each condition, the chapter establishes why it matters for the future of the teaching profession, examines the opportunities and challenges, and sets out recommendations. Together, these discussions provide a framework for understanding the conditions needed to sustain a resilient profession and strengthen its contribution to high-quality, equitable education across Europe.

1 DEVELOPING QUALITY TEACHER RETENTION STRATEGIES

Teachers are among the most important contributors to democratic resilience. Ensuring that all students benefit from committed and capable teachers is not only an educational priority but also an essential safeguard for equity and social cohesion (UNESCO 2024). However, retaining skilled, committed and enthusiastic teachers in schools and in the profession remains a longstanding challenge across many education systems. Addressing this challenge requires a different way of thinking about retention: one that places student learning at the heart of policy and prioritises providing meaningful opportunities for teachers' learning, development and career progression. Quality retention, therefore, is not simply about keeping teachers in post, but about enabling committed and capable teachers to remain effective, develop professionally and sustain high-quality teaching throughout their careers.

WHAT TEACHERS CONTRIBUTE

Teacher quality is one of the most important school-level influences on student performance, particularly for disadvantaged pupils who can gain an additional year's worth of learning when taught by highly effective teachers (Sutton Trust 2011, Leithwood 2019). The importance of a high-quality teaching profession in raising educational standards and improving learning outcomes for all students cannot be overstated. Through their daily interactions with learners, teachers help shape the knowledge, values and behaviours that underpin democratic societies. For example, they make professional judgments every day about which texts, perspectives and examples should be included in the curriculum, how important issues should be taught, and how learning should be adapted to meet the needs of different learners. In doing so, they model and guide critical thinking and mediate the boundaries of knowledge in ways that reflect democratic priorities (Biesta 2015).

The Council of Europe (2012) recognises the essential role that qualified teachers play in enabling education to fulfil four major, interlinked and equally important purposes:

- preparation for life as active citizens in democratic societies;
- personal development;
- the development and maintenance of a broad, advanced knowledge base; and
- preparation for the labour market.

This holistic and inspirational understanding of the purposes of education reinforces the importance of the social and relational dimensions of learning. Whether the aim is to support personal development, develop active citizenship, advance knowledge or prepare students for the labour market, sustaining students' motivation and fostering their emotional and intellectual engagement in learning are central to achieving these purposes. Teachers are uniquely placed to contribute through the strong relationships they can build with students.

Recent social and technological developments further highlight the distinctive contribution teachers make to learners and society. The centrality of social learning in child development, and the essential role teachers play in fostering it, came into sharp focus during the Covid-19 pandemic. Prolonged periods of remote education revealed the significance of teacher–student relationships, peer interaction and a sense of belonging in sustaining learner engagement, well-being and academic progress (UNESCO 2023).

Furthermore, recent studies examining the distinctions between human and algorithmic pedagogies (Turvey and Pachler 2026) reinforce the distinctive contribution teachers make through their expertise and capacity to personalise education in response to students' individual circumstances, emotions, motivations, interests and social contexts. While technology can support teaching and learning, it cannot replicate or replace the professional expertise and judgment that teachers bring to this process.

> *Through their daily interactions with learners, teachers help shape the knowledge, values and behaviours that underpin democratic societies.*



OPPORTUNITIES AND CHALLENGES

Improving the status and attractiveness of the profession is a vital first response in addressing teacher shortages (UNESCO 2024). However, when considering the role that teachers play in shaping student learning and strengthening democratic resilience, the issue becomes not simply one of how to recruit more teachers, but also how to ensure that the profession continues to attract, develop and retain high-quality teachers (Gu 2023). Retaining capable and committed teachers is about nurturing and strengthening the professional capital of the teaching workforce, enabling teachers to respond effectively to complex challenges and sustain high-quality learning. Recent retention studies (Leithwood et al. 2026) highlight the importance of examining teachers' retention decisions over time and advocate for improving the organisational conditions in which teachers work alongside improving the status and attractiveness of the profession. For the White Paper, this suggests the need to consider teacher retention not simply as a workforce planning issue, but as a strategic investment in the professional capacity of education systems.

Increasing the provision of high-quality professional development opportunities for teachers has been heralded by many governments as a cost-effective solution to teacher retention. Such a solution is primarily driven by the human capital approach, which assumes that investment in teachers' learning and development signals recognition of the profession's societal value and encourages teachers to stay by making them feel respected and valued. However, investment in individual teachers' knowledge and skills does not automatically translate into improved student outcomes or stronger retention, because an exclusively individual-oriented approach to teacher development overlooks the school organisation as a critical source of improvement and retention (Johnson 2019). Teachers who excel, and whose students excel with them, do not do so in isolation (Gu 2014). Schools provide the intellectual and technical resources teachers need to learn and develop, as well as the social and cultural conditions that enable them to apply new learning in their classrooms, both individually and collectively (Bryk et al. 2010, Gu et al. 2018, 2026, Johnson 2019). Consistent with this argument, research evidence shows that teachers in more supportive professional environments continue to improve after three years, while their effectiveness declines in the least supportive schools (Sutton Trust 2011). Schools are therefore "finders and keepers" of committed, enthusiastic and capable teachers (Johnson 2004, 2019).

Teacher retention varies significantly across Council of Europe member states, reflecting diverse national economic conditions, governance models and working environments. While retention challenges are universal, their drivers differ. In some regions, uncompetitive remuneration relative to comparable tertiary-educated professions drives attrition; in others, administrative overload, lack of professional recognition and challenging classroom dynamics predominate (OECD 2025a). Despite variation in the drivers of attrition across national contexts, a consistent finding from TALIS 2024 is the strong association between job satisfaction and teachers' intentions to remain in the profession (although TALIS does not cover all Council of Europe member states, as mentioned earlier). Retention studies also show that the challenging nature of teachers' work is strongly mediated by the organisational climates in which teachers work. For example, recent evidence on teacher retention shows that teacher leavers are not necessarily "escaping" from pupils' poor behaviour or unrealistic working conditions. Rather, they are escaping from unsupportive leadership and dysfunctional school cultures (Gu 2023).

Therefore, rather than focusing on what makes teachers want to leave, a significant opportunity for decision makers lies in focusing on what makes teachers want to stay. Evidence consistently links teachers' job satisfaction to working conditions and the professional environment, with effective leadership and organisational culture playing important roles in shaping these conditions (Leithwood et al. 2026). For example, in schools where high-quality teachers decide to stay, leaders are instrumental in influencing the conditions that make teachers' working lives more rewarding. In schools with high attrition rates, the organisational culture is more likely to be characterised by competing priorities, poor leadership, lack of autonomy and an absence of meaningful feedback to help teachers improve their practice.

External contexts also influence teachers' retention decisions. For example, lower salaries are associated with higher rates of attrition (Palma-Vasquez et al. 2022). However, while it is vital to ensure competitive salaries as a common baseline for teachers, monetary reward alone is not enough to retain



high-quality teachers, particularly in schools serving socially and economically vulnerable communities; these schools typically experience exceptionally high teacher turnover rates. Examples of other promising strategies consistently associated with retaining teachers include ensuring access to high-quality professional learning, a culture of mentoring, manageable workloads and a high degree of autonomy.

Another particularly promising but underexplored retention strategy concerns the development of teacher self-efficacy. Self-efficacy refers to teachers' belief in their capacity to overcome challenges in their professional practice and advance their students' learning (Bandura 1997). Over several decades, research has consistently shown that teachers with stronger self-efficacy are more resilient, report greater job satisfaction and demonstrate higher levels of professional commitment and well-being (Leithwood et al. 2026). Importantly, self-efficacy is not simply an individual characteristic. It can be actively developed through supportive leadership, mentoring, coaching, constructive feedback and opportunities for professional learning. When teachers experience success, receive support from colleagues and feel trusted as professionals, their confidence and commitment to the profession are strengthened. This offers a potentially important direction for retention policy: rather than treating teachers' resilience and confidence as individual responsibilities, education systems can help develop them through supportive leadership, collaborative professional cultures and sustained opportunities for learning. Policy to support self-efficacy should also include structural employment guarantees, including permanent contracts, reasonable student–teacher ratios, systematic reduction of excessive administrative burdens, paid contractual non-teaching time, accessible professional support, psychosocial risk and "burnout" prevention, protection from violence and the right to disconnect.

These findings suggest that decision makers have a wider range of levers available to strengthen teacher retention than is often assumed. Alongside ensuring competitive pay, strategies such as investing in leadership development and strengthening self-efficacy through professional culture all show promise in encouraging teachers to remain in the profession. Approaching retention more holistically in this manner would not only help sustain the teaching workforce, but also ensure that teachers continue to grow, remain motivated and contribute high-quality teaching throughout their careers (Gu 2023). For the Council of Europe, the opportunity is to articulate a shared policy perspective in which quality teacher retention is understood not simply as keeping teachers in the profession, but as creating environments and conditions in which they can develop, remain effective, sustain the quality of education and support the learning and achievement of all students.

2 UPHOLDING TEACHER PROFESSIONALISM

Teaching is not a craft but a highly specialised profession which requires sustained structural support for rigorous preparation and continuous learning. Upholding teacher professionalism safeguards the quality and equity of educational provision for all learners (Sachs 2016) and offers hope and promise for contemporary and future education systems. Professionalism is not a fixed concept. Rather, it must be continually refined and renewed in response to changing social, cultural and technological conditions that influence the context of teachers' work and their professional responsibilities (Hargreaves 2000). Upholding teacher professionalism requires an ongoing commitment from individuals, schools and the wider system to professional learning, ethical practice, collective responsibility and the exercise of informed professional judgment.

THE ROLE OF TEACHER PROFESSIONALISM

Teacher professionalism encapsulates what teachers are expected to know, do and value as members of a profession. It rests on the foundation of specialised professional knowledge, shared standards of practice and the capacity to apply subject knowledge ("what" to teach) and procedural knowledge ("how" to teach) through informed judgment in diverse educational contexts (Darling-Hammond 1990). Professionalism also encompasses the ethical principles, professional responsibilities and commitment to learners, schools and society that underpin teachers' work.

In periods of rapid social and technological change, cultivating teacher professionalism is particularly important. It enables teachers to respond critically and constructively to emerging challenges while sustaining the quality, equity and integrity of teaching (Suarez and McGrath 2022). Teacher professionalism also strengthens teachers' professional identity, providing them with a stronger sense of "who we are" and taking strength from collective purpose and belonging. This, in turn, supports their capacity to exercise professional autonomy, reflect on their practice and make context-sensitive decisions. At the collective level, professionalism helps establish and sustain public trust by demonstrating the profession's commitment to high standards, accountability for student learning and the common good.

Within the Council of Europe's framework, teacher professionalism also has a distinctive democratic and ethical dimension. The Charter on Education for Democratic Citizenship and Human Rights Education (Council of Europe 2010) sets out an educational purpose that is central to this dimension of professionalism: "equipping learners with knowledge, skills and understanding and developing their attitudes and behaviour, to empower them to exercise and defend their democratic rights and responsibilities in society". Teachers contribute to this purpose not only through what they teach, but also through how they teach, how they relate to learners and how they shape the cultures and practices of educational institutions.

Teachers therefore have a central role in fostering democratic citizenship through the promotion of inclusion and intercultural understanding in their everyday professional practice. This requires them to act as reflective practitioners who continually examine how their values and beliefs, behaviours, relationships and pedagogical decisions influence learners' experiences, participation and opportunities to develop democratic citizenship. It also requires the profession to uphold a shared and sustained commitment to ethical responsibility, respect for diversity and the democratic values that underpin the Council of Europe.

OPPORTUNITIES AND CHALLENGES

Despite growing recognition of competences for democratic culture (CDC), evaluations of their implementation and impact in educational settings (Council of Europe 2024b) highlight opportunities to strengthen how teacher professionalism is understood and developed in relation to these competences. For instance, while a teacher can be trained to use discussion protocols that encourage student participation, their effective use depends on more than procedural knowledge. It requires teachers to recognise that the promotion of inclusion and democratic dialogue is a fundamental professional responsibility rather than an additional set of skills to be applied intermittently. Research continues to show that teacher professionalism cannot be developed through training alone (Sachs 2016); rather, it must be embedded in teachers' understanding of their professional role and responsibilities. This highlights the importance of creating career-wide learning opportunities that support teachers' ongoing development as democratic and professionally capable educators.

Democratic professionalism must also be understood as a dynamic and evolving resource (Hargreaves 2000). As the social, cultural, political and technological contexts of schooling change, so too do the conditions in which teachers work. Teachers' underlying democratic responsibilities endure, but how these responsibilities are interpreted and enacted in practice must evolve. For example, teachers have long held a responsibility to support students to become environmentally responsible. However, the growing urgency of climate change has transformed what this responsibility requires in practice. It requires teachers, as well as schools, more than ever, to recognise and respond to growing concerns about climate anxiety among young people and foster a deep appreciation of environmental sustainability and the interconnectedness of human and planetary well-being. Teachers must balance the need to engage students with urgent global challenges and the need to nurture hope, agency and a sense of efficacy. In this context, democratic professionalism requires teachers to move beyond helping students understand climate change towards supporting them to see themselves as capable of contributing to possible solutions through their participation in informed democratic processes.

A further consideration is that many prevailing conceptions of teacher professionalism were developed for an analogue rather than a digital world (Parker 2023). Traditional understandings of professionalism assumed relatively stable knowledge environments in which teachers acted as authoritative sources of knowledge. Today, however, information is abundant, instantaneous and often inaccurate and difficult to verify. Students encounter a continuous flow of content through search engines, social media platforms and, increasingly, GenAI, blurring traditional distinctions between information, opinion and evidence. Here, too, teachers' responsibility to support informed citizenship remains fundamental, but its enactment has evolved considerably. Democratic professionalism now requires teachers to cultivate critical digital literacy, enabling students to evaluate the credibility of sources, recognise misinformation and understand how algorithms shape what they see and believe. At the same time, teachers must navigate tensions between encouraging open inquiry and firmly challenging false or misleading claims that threaten the conditions for informed democratic dialogue.



A key challenge for contemporary teacher professionalism, therefore, is how to respond to an expanding range of societal expectations without reducing professional practice to an ever-growing set of discrete competencies, standards and training requirements. Such an approach would not only risk increasing teachers' workloads, but also encourage quick-fix, short-sighted and superficial responses to change, driven by external demands rather than a deep sense of internal accountability for student learning and collective ethical responsibility for equitable education.

In essence, democratic professionalism supports the continuous renewal of professional practice in response to changing contexts by providing an overarching orientation grounded in democratic values. It equips teachers to respond to new challenges not because they have been trained for every eventuality, but because they recognise that it is their professional and ethical responsibility to consider what responsible action requires in their own contexts. Inquiry-based approaches to professional learning can offer significant opportunities in this regard by enabling teachers to investigate emerging issues collaboratively and develop shared responses (Stoll 2015). For example, growing concerns about mental health have led many teachers to reconsider how they can create learning environments in schools that support students' well-being while maintaining high expectations for learning. In schools where collaborative inquiry is structurally promoted and supported, teachers are more likely to identify conditions that support students' engagement in learning, examine how assessment practices affect student well-being and investigate strategies to foster students' resilience for sustained learning and achievement. Realising these opportunities requires schools to provide the organisational conditions for sustained collaboration, including time for professional dialogue, supportive leadership and a culture in which teachers can critically examine their practice and learn collectively. In doing so, they are not simply applying predetermined approaches but collectively interpreting and defining what their professional responsibility to care for and educate young people requires in contemporary contexts. Collaborative professional inquiry thus provides a constructive means of translating democratic values into context-sensitive professional judgment and collective action, enabling the profession to renew its practice in response to emerging challenges.

3 STRENGTHENING TEACHER EDUCATION

High-quality teacher education is foundational to strengthening democratic societies because it enables teachers to develop the knowledge and professional judgment required for teaching in complex and uncertain environments (Kennedy 2019). Reviews of the world's most improved school systems by McKinsey & Company have emphasised that the quality of an education system cannot exceed the quality of its teachers, identifying the quality of teacher education as one means through which policy makers can influence the quality of education in schools (Barber and Mourshed 2007, Mourshed, Chijioke and Barber 2010).

To help teachers navigate these conditions, teacher education must foster adaptive expertise rather than routine skills (Le Fevre et al. 2019). Education systems must also recognise that teacher education extends beyond initial preparation, ensuring that coherent and sustained opportunities are available for teachers to develop, apply and renew their expertise throughout their careers as educational contexts, professional responsibilities and learners' needs evolve.

THE ROLE OF HIGH-QUALITY TEACHER EDUCATION

While teacher professionalism encompasses the knowledge, values, ethical responsibilities and professional judgment that underpin teachers' work, teacher education plays a central role in developing and enhancing these aspects of professionalism throughout teachers' careers. Teacher education encompasses the formal and informal structures and processes through which teachers are prepared for, inducted into and supported in their professional roles from initial teacher education (ITE) through induction, early career development and continuing professional learning and development. It includes not only formal qualifications and courses, but also mentoring and coaching, collaborative inquiry and peer learning embedded in teachers' everyday work. These different forms of learning should be understood as interconnected elements of a career-long continuum of professional growth.

Ensuring that all learners have access to teachers who hold strong professional expertise and democratic responsibility is a critical prerequisite for strengthening the resilience of democratic societies (as set out in the Reference Framework of Competences for Democratic Culture teacher reflection tool, Council of Europe 2021). Across the 46 member states, structural models for initial teacher education differ substantially, ranging from highly research-led, master's-level university models to concurrent and consecutive hybrid models combining higher education institutions with school-based clinical practice. Although teaching is established as a graduate profession, considerable variation exists across European education systems in how teachers are prepared. For example, Finland's initial teacher education system requires all teachers to complete a master's degree and places a strong emphasis on research-informed practice, while other systems continue to offer shorter or more flexible routes into teaching following the completion of a disciplinary degree.

The transition from initial preparation to school-based professional practice is an important part of teacher education, but the need for support does not end once teachers become fully qualified. There is also considerable variation in how systems organise and support teachers' learning after qualification, including induction, mentoring, access to professional development and opportunities for collaborative learning throughout their careers. Countries such as Estonia and England provide structured induction programmes and formal mentoring arrangements for newly qualified teachers, while in other systems support depends more heavily on local school provision and may be less consistent in approaches and quality of provision. These differences, however, highlight the importance of ensuring that all teachers have access to sustained professional learning, regardless of where they work or their stage of career.

Despite these structural differences, international research identifies a number of characteristics consistently associated with high-quality teacher education (Darling-Hammond et al. 2017, Zeichner et al. 2024), which provide a useful framework for assessing the quality of teacher preparation and continuing professional learning throughout teachers' careers. Effective programmes and approaches are underpinned by a clear vision of quality teaching which permeates teachers' experience of the whole curriculum, linking theory, practical experiences and professional standards. They create spaces and opportunities for collaborative, contextualised and inquiry-led learning, engaging teachers in designing, applying and evaluating teaching strategies in their own classrooms.



Teacher education therefore has a continuing role in enabling teachers to reflect on their professional values, develop confidence in their judgment and sustain a sense of agency and belonging.

They also provide time for reflection and access to coaching and mentoring, helping teachers thoughtfully move towards the expert vision of practice (Darling-Hammond et al. 2017). Ultimately, effective teacher education supports teachers to develop a robust understanding of learners and learning, subject knowledge, curriculum and pedagogy, supported by skilled and committed mentors who enable teachers to connect theoretical knowledge with practice (Ingersoll and Strong 2011).

There is also a significant body of research that highlights the importance of professional identity and self-efficacy in preparing and developing capable and resilient teachers (Tschannen-Moran and Woolfolk Hoy 2001). Teachers who possess a strong sense of professional identity are more likely to maintain a sense of purpose and commitment, and to persevere when faced with professional challenges, while high levels of self-efficacy are associated with greater confidence in responding to complex classroom situations and supporting pupil learning (Day and Gu 2010). These qualities matter throughout teachers' careers, as they navigate changing expectations and demands.

However, professional identity and self-efficacy are not fixed attributes established during initial teacher education. They can be strengthened or undermined by subsequent experiences in the profession, opportunities for learning and development, and the social and organisational conditions in which teachers work. Importantly, teachers' professional learning needs also vary according to their experience and career stage, whether they relate to classroom management, subject knowledge, pedagogical practice or leadership insights and skills (Day and Gu 2010). Teacher education therefore has a continuing role in enabling teachers to reflect on their professional values, develop confidence in their judgment and sustain a sense of agency and belonging. When professional learning is coherent, contextualised, relevant and supported over time, it can reinforce teachers' commitment, professional capability and sense of purpose while demonstrating that their expertise and contribution are recognised.

Ultimately, high-quality teacher education, understood as a career-long process, should enable teachers not only to enter the profession well prepared, but also to continue learning, exercising professional judgment and contributing to the development of their profession throughout their careers. A teacher who feels professionally capable, valued and supported is better placed to sustain a sense of belonging and purpose and to make a positive difference to learners, even in challenging circumstances. By supporting this ongoing development, teacher education strengthens teacher professionalism and contributes to the resilience of the profession as a whole.



OPPORTUNITIES AND CHALLENGES

A growing body of research suggests that increasingly complex contexts, characterised by greater learner diversity, rising concerns about mental health and rapid technological change, are widening the gap between what teachers are prepared for through initial teacher education and their lived experiences of working in schools. For example, a teacher may be well prepared to plan lessons, assess learning and manage classroom behaviour, but less equipped to respond to growing numbers of pupils experiencing anxiety, trauma or other mental health challenges, or with special educational needs. Supporting these learners often requires teachers to balance academic, pastoral and safeguarding responsibilities, work collaboratively with families and external agencies, and exercise professional judgment in situations that extend beyond their formal preparation and existing knowledge and experience. As a result, there is growing recognition that addressing this complexity requires teachers to draw on capacities that extend beyond procedural skills, such as the ability to use specific teaching strategies or digital tools. Rather, effective practice depends upon teachers' ability to develop and apply adaptive expertise (Le Fevre et al. 2019).

Adaptive expertise can be defined as a teacher's ability to adapt and transform knowledge to meet unique and unpredictable challenges (Hatano and Inagaki 1986) and is increasingly regarded as fundamental to the formation of inclusive and future-oriented education systems. It contrasts with routine expertise, which involves the "efficient" application of established approaches to familiar situations. While routine expertise remains important, contemporary teaching increasingly requires teachers to exercise professional judgment in circumstances where there may be no established response. In these situations, where the challenge is not one of implementing a known solution, adaptive expertise is essential. Developing such expertise is not confined to initial teacher education: it requires ongoing opportunities for teachers to question established approaches, learn from experience and adapt their practice as professional demands and contexts change.

Teacher education, therefore, has a central role in developing teachers with adaptive expertise throughout their careers. Promising strategies to achieve this include designing teacher education programmes that focus on cultivating mindset and habits of collaborative professional inquiry and evidence-

While routine expertise remains important, contemporary teaching increasingly requires teachers to exercise professional judgment in circumstances where there may be no established response.

informed decision making. For instance, while pre-service or early-career teachers may have already established the know-how to best support multilingual learners, they still need to consider whether these approaches are effective for particular learners and in different contexts. Through initial teacher education, induction and continuing professional learning, teachers must then be encouraged and supported to gather evidence, test different approaches, evaluate their impact on learner outcomes and refine their practice accordingly. Through such processes, teachers learn to think evaluatively about the impact of their actions, seek deeper professional knowledge, engage in collaborative inquiry and adapt their practice in response to context. Such experiences help teachers to develop the professional judgment and self-efficacy needed to navigate complex educational challenges and make informed decisions in situations where there may be no single correct solution (Kennedy 2019).

Mentoring, a structured relationship in which an experienced teacher supports a less experienced colleague, provides an important means of supporting professional learning, identity formation and self-efficacy across different phases of teachers' professional lives in education (Day and Gu 2010, Hobson et al. 2009, Hobson 2016). However, while there is considerable evidence to suggest that mentoring can have a transformational impact on beginning teachers, numerous studies have pointed to the complex skillset required of mentors if mentoring is to realise its full potential. This includes taking a non-judgmental approach and building trust. Such findings suggest that effective mentoring cannot be assumed simply because experienced teachers are assigned mentoring roles. Rather, mentors themselves also require high-quality preparation, ongoing professional learning and organisational support if they are to effectively support their colleagues' professional growth. They also need dedicated time and resources to undertake their role, appropriate recognition of their contribution and access to professional development that responds to their needs and those of their c olleagues and schools.



The importance of mentoring also highlights a broader challenge: many of the capabilities required for effective teaching continue to develop long after teachers enter the profession. High rates of early-career attrition suggest that teachers require sustained support beyond initial teacher education if they are to successfully navigate the transition into professional practice and remain in the profession. At the same time, professional learning needs do not end with the early years; experienced teachers also need opportunities to deepen their expertise, respond to changing responsibilities and develop new areas of practice. This points to the need for teacher education to be understood as a career-long continuum encompassing preparation, induction, mentoring and ongoing professional learning that is aligned with teachers' evolving professional needs. For example, the introduction of England's Early Career Framework reflects growing recognition that teacher preparation alone is insufficient, and that beginning teachers require sustained developmental support during the critical early years of their careers (Department for Education 2019).

Ultimately, there are no single-policy solutions to building a capable and resilient teaching profession. While some systems place a strong emphasis on university-based preparation combined with structured school placements and others rely more heavily on school-based routes into teaching, research increasingly suggests that effectiveness lies not in the location of learning but in the quality of, and integration between, theory, practice, inquiry and mentoring. This integration needs to continue beyond initial preparation, with professional learning embedded in teachers' working lives and supported by appropriate structures and resources. Realising this vision requires the combination of coherent policy frameworks, sustained funding and organisational cultures that value continuous improvement (Gu et al. 2023). It also requires education systems and schools to provide the conditions that make sustained professional learning possible, including time for collaboration, high-quality mentoring, relevant development opportunities and recognition of teachers' and mentors' contributions. Without attention to this wider ecosystem, improvements in individual areas are unlikely to translate into lasting gains for the profession as a whole.

4 ENHANCING SCHOOL LEADERSHIP AND PROFESSIONAL CULTURE

School leadership is central to building future education systems that are both inclusive and democratically grounded (Leithwood 2021). Principals, in particular, are the single most influential factor shaping student learning, teacher retention and school climate, making leadership investment one of the highest-leverage strategies available to policy makers seeking to improve the quality of education (Darling-Hammond et al. 2026). In successful schools a key defining aspect of principal leadership is an unrelenting focus on fostering consistent values, expectations and standards, thereby protecting teacher well-being and strengthening teachers' capacity, as well as the organisational conditions needed, to embrace change and sustained improvement.

THE ROLE OF LEADERSHIP

While the role that teachers play in enabling democratic resilience is well established in Council of Europe discourse (Council of Europe 2010, 2012, 2018), teachers are not individual actors operating in isolation (Gu 2014). Rather, their capacity to foster democratic values and practices is shaped by the leadership and organisational culture of the schools in which they work. By creating a shared vision, supporting professional learning and enabling meaningful participation in decision making, leaders create the conditions in which high-quality teaching and equitable student outcomes are more likely to emerge. They also influence whether teachers feel trusted, valued and able to exercise professional judgment, and whether democratic values are reflected in the everyday life of the school. In addition, in line with Council of Europe Recommendation CM/Rec(2010)7, effective school leadership must be embedded within collegial structures of democratic school governance (such as teachers' councils and school boards), ensuring that shared leadership is matched by genuine decision-making authority, administrative support and dedicated time.

School leadership is particularly important when navigating social and technological change because school improvement is rarely achieved through policy mandates and human capital alone (Hargreaves and Fullan 2012). Instead, school improvement depends on the ongoing integration of multiple strategies and practices, with leaders exercising professional judgment to determine which approaches are most effective in responding to the unique needs of their context (Day et al. 2024). For example, growing concerns about young people's mental health cannot be addressed through the adoption of a single well-being programme. School leaders must make judgments about how well-being can be supported alongside academic learning, how staff can respond to emerging needs

and how partnerships with families and external agencies can be developed. The central issue is not simply whether a particular initiative is implemented, but how schools can create environments in which students feel happy and healthy and are inspired to learn. This requires leaders to exercise significant professional judgment about how educational purposes can be enacted in ways that respond to changing social conditions.

Educational research consistently reinforces the significance of successful leadership in enacting policy reform for sustained improvement in their schools (Bryk 2015, Gu 2023, Day et al. 2024). Policy enactment is, in essence, about leading change. External policy initiatives rarely tell schools how they should be implemented locally to achieve their intended outcomes. How leaders make sense of a policy in relation to their school context, and decide "whether and how to ignore, adapt, or adopt" it locally (Spillane et al. 2002: 733), influences how the policy is interpreted by their teachers and the extent to which its enactment disrupts, constrains or advances school improvement. In this sense, successful policy enactment depends on building and consolidating the school's capacity for continued growth and development. Key in this regard are strong leaders who know how to design the social and intellectual conditions that engage the hearts and minds of individuals across the school and, in doing so, harness their ideas, experiences, knowledge and relationships to uphold shared values and achieve shared goals.

Thus, reform efforts can fail when education systems seek quick "solutions" and introduce new initiatives without sufficient understanding of the local problems they are intended to address or the conditions required for successful enactment. The challenge is that educational problems are complex and can rarely be solved through isolated policy initiatives. Instead, a more systems-thinking approach is needed, grounded in collective inquiry, iterative "test and learn" processes and continuous learning. From this perspective, sustainable change depends on the ability of schools to understand the complexity of their own contexts, learn from variation in outcomes and adapt innovations in response to evidence. This inquiry-centred approach to school leadership will become increasingly important in contemporary and future contexts where established evidence may be limited, or where emerging challenges require existing knowledge to be tested and adapted. There will be no "magic bullet" or panacea to solve the complex challenges schools will face; instead, they must learn their way into the future (Stoll 2020).



Addressing complex social and technological challenges also depends heavily on teachers' willingness to collaborate and reflect on their practice (Robinson 2008). By fostering trust and providing opportunities for teachers to engage with, question and refine new approaches, leaders can support professional agency, build shared ownership of change and strengthen commitment to improvement. This is particularly important in diverse school communities, where inclusive practice depends upon teachers' ability to adapt their teaching in response to the differing needs, experiences and identities of learners, rather than simply applying standardised practices. Such adaptive expertise does not emerge by chance; it is cultivated through professional cultures that value inquiry, collaboration and continuous learning (Stoll 2020). School leadership is therefore central to creating the conditions in which teachers can develop the confidence and capability to make nuanced professional judgments that support success for all students. A strong professional culture is not simply one in which teachers are encouraged to collaborate, but one in which they have the trust, time, resources and meaningful opportunities to learn together and influence decisions that affect their work. In such cultures, teachers are more likely to enjoy a strong sense of well-being and commitment to their schools and to teaching.

OPPORTUNITIES AND CHALLENGES

Investing in the professional learning and development of school leaders represents a powerful lever for strengthening democratic resilience in a period of accelerating social and technological change. Through building capacity for learning in their settings, leaders can ensure that schools are better able to adapt to new challenges, improve outcomes for diverse learners and remain resilient in the face of uncertainty. For example, consider schools seeking to improve outcomes for newly arrived migrant and refugee students. In a school with a strong learning culture, leaders create opportunities for staff to examine evidence, collaborate across departments, engage with families and reflect on the effectiveness of their teaching approaches. Over time, teachers develop greater confidence and adaptive expertise in responding to linguistic, cultural and educational diversity, leading to more inclusive classroom practices and stronger student participation and attainment. In contrast, where leadership is limited and improvement is approached primarily through compliance and standardised interventions, teachers may be left to address these challenges individually, often relying on generic approaches that fail to respond to learners' specific needs. The result is that barriers to participation remain unaddressed and existing inequalities are more likely to persist.

However, despite the wide consensus about the importance of school leadership, there has been significant variance in the outcomes of leadership development programmes (Robinson 2022) and a "knowing–doing gap" is commonly reported, whereby the content of training sessions does not necessarily transfer from the workshop to the workplace. As with teacher education, research suggests that effective leadership development is not built through isolated workshops or fragmented training activities (Darling-Hammond et al. 2026). Rather, the strongest programmes are characterised by a coherent model of leadership development that integrates theory and practice and supports leaders to develop expertise over time. These programmes focus on the core dimensions of leadership, including improving teaching and learning, developing people, leading organisational improvement and managing change. Participants are provided with meaningful opportunities to apply learning in authentic settings, engage in structured reflection on their experiences and refine their practice through ongoing cycles of inquiry and feedback. Leadership development is therefore conceived as a sustained process of professional growth rather than a series of disconnected training events.

This requires development opportunities to be connected to leaders' day-to-day responsibilities and supported by ongoing feedback, professional networks and opportunities to learn collaboratively from practice.

Fundamentally, many of the challenges facing school leaders, both now and in the future, are characterised by uncertainty, ambiguity and limited precedent. These include responding to emerging technologies such as AI and addressing persistent inequalities in education. They cannot be addressed through already codified procedural knowledge alone (Le Fevre et al. 2019). Leaders need opportunities to strengthen their professional judgment, ethical reasoning and adaptive expertise through ongoing professional learning, collaboration and engagement with complex problems of practice. The challenge for education systems is therefore both to recognise the importance of leadership and to establish the structures, networks and developmental opportunities that enable leaders to continually learn, adapt and exercise sound judgment in rapidly changing contexts.



5 PROTECTING TEACHER AUTONOMY AND PROFESSIONAL AGENCY

Teacher autonomy and professional agency are essential for education systems committed to democracy and inclusion (Hargreaves and Fullan 2012). However, teacher autonomy should not be understood as freedom from accountability, but as the professional discretion required to act responsibly and ethically in the interests of learners (Biesta et al. 2015).

THE IMPORTANCE OF TEACHER AGENCY

Across Europe, education systems face significant challenges relating to teacher retention, workload and professional morale. In this context, strengthening teacher agency has emerged as an important strategy for supporting both teacher well-being and educational improvement (Suarez and McGrath 2022). While definitions vary, teacher agency can broadly be defined as the ways in which teachers act purposefully within the conditions of their role. It is influenced by the individual attributes and beliefs teachers bring to the role, their working conditions and professional environment. Closely linked is the concept of autonomy, a structural condition that constrains or enables teacher agency through the freedom teachers are afforded to make decisions about their practice.

Teacher agency encompasses teachers' capacity to shape learning within their classrooms and also the ways in which they can influence school improvement and system-level change. While research consistently shows that teacher agency is positively associated with improved job satisfaction and more positive attitudes towards change (OECD 2025a; note the limitations of TALIS data for all Council of Europe member states mentioned earlier), the relationship between teacher agency and student outcomes is less straightforward



(Robinson 2008). This is because teacher agency is most effective when exercised by professionals who possess strong pedagogical expertise, a clear ethical commitment to learners and the support of leadership and organisational cultures that enable sound professional judgment.

The Council of Europe positions teachers as central actors in shaping democratic societies (Council of Europe 2010, 2012, 2018); supporting teacher agency is therefore central to enabling teachers to fulfil their role. This is particularly



important in times of increased uncertainty where no one source of leadership is likely to possess all the expertise required to address the full range of educational challenges (Hulpia and Devos 2010). Instead, mobilising teachers to contribute to decision making within and beyond their own classrooms can strengthen the collective capacity of a school (Hargreaves and Fullan 2012). Empowering teachers to be leaders is a powerful way of supporting them to express their agency and creating capacity for change (Harris 2003).

Enabling teacher leadership is also essential in helping teachers to manage competing priorities (Higham et al. 2025). For example, many education systems advocate simultaneously for the development of students' climate literacy, the attainment of high-stakes examination outcomes and increased attention to student well-being (United Nations 2015). Yet these aspirations can generate practical tensions between short-term policy pressures and longer-term educational and societal goals. Teacher leadership enables educators to balance these competing requirements by engaging in sense-making that is responsive to their learners and local contexts, helping to ensure that educational change is both coherent and purposeful (Weick et al. 2005). Without the autonomy to exercise agency in this manner, contemporary educational ambitions may remain abstract aspirations rather than becoming meaningful features of classroom practice.

Ultimately, when teachers are positioned as leaders, rather than simply implementers of policy, it is much more likely that they will be able to embrace change positively and navigate the wide-ranging expectations placed on them. It is therefore crucial that decision makers understand the factors that enable and constrain teacher agency so that policy initiatives strengthen, rather than inadvertently diminish, teachers' capacity to respond to emerging challenges.

OPPORTUNITIES AND CHALLENGES

While teacher autonomy is widely recognised as a powerful lever in supporting teacher efficacy and satisfaction, the relationship between autonomy and responsibility is not straightforward. As noted above, autonomy is professional discretion exercised in the interests of learners, not freedom from accountability. For example, a teacher may recognise that a standard assessment arrangement would disadvantage a learner with additional learning needs. Professional autonomy enables the teacher to exercise agency in making appropriate adaptations to ensure that the learner can demonstrate their understanding. However, this discretion is guided by professional responsibilities relating to educational equity. By contrast, autonomy exercised without a strong ethical and professional foundation may lead teachers to make decisions based primarily on misconceptions or personal preference rather than the needs of learners. In such cases, autonomy can reinforce barriers to participation and undermine educational equity.

Distributed leadership provides a useful lens when thinking about teacher agency at an organisational level. It can be defined as the distribution of leadership practices across multiple actors (Spillane 2005). When exercised effectively, distributed leadership can increase capacity for change and improve teacher motivation and efficacy. However, for distributed leadership to be truly effective it is important to pay attention to the conditions that make it successful. For example, if distributed leadership is merely reduced to the distribution of "tasks", without investing in professionally developing teachers as decision makers, it is not likely to lead to increased efficacy in teachers and may reduce student outcomes. Instead, distributed leadership requires a careful and deliberate leadership, with significant attention to professional learning, to ensure that it both provides increased opportunities for decision making and improves organisational outcomes (Robinson 2008, Harris 2013). For example, strengthening professional autonomy and shared leadership should be accompanied by corresponding decision-making authority, professional and administrative support and adequate time, while maintaining accountability for the quality of education and the protection of students' rights.

Despite growing recognition of the importance of teacher agency, evidence suggests that opportunities for teachers to influence decisions affecting their practice may be declining in parts of Europe. This decline appears to be linked to a number of wider developments within education systems, including increasingly performative accountability frameworks, a growing emphasis on standardised assessment and measurable outcomes, and greater curriculum prescription, which have narrowed the space available for professional discretion. At the same time, rising administrative demands and workload pressures can limit teachers' capacity to engage in collaborative decision making, professional learning and school improvement activities beyond their immediate classroom responsibilities. This trend is significant given the increasing complexity of teaching across Europe and the demands this places on teachers. In this context, limiting teachers' involvement in decision making risks reducing the profession's capacity to respond effectively to local needs and emerging challenges. It may also weaken professional responsibility, diminish motivation and exacerbate retention challenges. Reversing this trend requires legally safeguarding teachers' pedagogical freedom to choose appropriate teaching methods and means, while shifting school inspection and appraisal from performative compliance towards formative professional support.

Fundamentally, strengthening teacher agency is an important priority for European education systems, but it requires investment in the foundations that enable professional judgment to flourish effectively and ethically. This means supporting high-quality teacher education that develops the adaptive expertise necessary to respond to complexity; fostering a strong sense of democratic professionalism grounded in a commitment to equity; and creating school cultures shaped by effective leadership. It also requires attention to the working conditions that sustain teacher motivation and retention, including access to professional learning, manageable workloads and meaningful opportunities to contribute to decision making. Considered together, these foundations create the professional capital that enables teachers to exercise sound judgment in the interests of learners. Teacher agency is therefore best understood as the product of a well-supported profession rather than a policy lever that can be strengthened in isolation.

6 SHAPING THE USE OF EMERGING TECHNOLOGIES IN TEACHING

THE IMPACT OF EMERGING TECHNOLOGIES

When weighing up the impact of emerging technologies, this chapter resists deterministic or essentialist arguments that position technology as an inherently beneficial or sinister force to be widely adopted or fiercely rejected. Instead, this White Paper adopts an approach that views emerging technologies in education as a socio-technical force that is already significantly altering the conditions in which teachers work.

From questions of whether AI technologies should be used to assist lesson planning or school–parent communication, to questions of at what age students should be permitted to engage with AI technologies, the emergence of AI presents profound ethical and epistemological dilemmas for education (Holmes et al. 2022b, 2025). However, less is known about the specifics of how these dilemmas take shape in teachers' lives; the challenges and putative opportunities AI brings as part of teachers' day-to-day practice and how it intertwines with non-AI technologies such as web browsers and interactive whiteboards. Therefore, a predominant concern of this chapter is to explore this theme further, drawing on tentative empirical evidence.

The history of educational technology illustrates why such inquiry is particularly important. Past technological developments (from motion pictures to MOOCs) have repeatedly been presented as catalysts for educational transformation, yet their implementation and impact have often been shaped as much by social and institutional factors as by their technical capabilities (Cuban 1986, 2001). In practice, teachers are frequently held responsible when emerging technologies fail to deliver expected, positive educational outcomes. Explanations often focus on teachers' attitudes, capabilities or preparedness – for example, suggesting that they distrust technology, fail to recognise its potential to address attainment gaps among students from different backgrounds, or exhibit "professional inertia", "lack of competence", "resistance", "failure of discipline", "lack of effort", "subject-knowledge deficits", "insufficient pedagogical knowledge" or "unpreparedness" (OECD 2005a, 2015, 2020, 2023, World Bank 2003, 2009, 2020). Such accounts are contentious for many reasons. In particular, they risk locating responsibility primarily with individual teachers while overlooking the organisational, professional and systemic conditions that shape whether and how technologies can be used effectively. They also assume that the technologies are themselves trustworthy and effective – claims for which there is insufficient evidence. With this framing, teachers are often portrayed as actors who "negate technology's advantages" (World Bank, UNESCO and UNICEF 2022), rather than as professionals whose knowledge, judgment and working conditions mediate how technologies are understood, adapted and used to support meaningful learning in practice.

All this suggests that understanding AI and other emerging technologies requires more than an assessment of their functionality or "effectiveness". It also requires attention to how they impact teachers' existing routines, professional identities and workplace practices. Exploring teachers' lived experiences of AI and other emerging technologies may help avoid repeating historical patterns in which technological hype outstrips the realities of educational change.

A further concern is how emerging technologies should be evaluated in relation to the social and civic purposes of education. While discussions of AI frequently focus on questions of efficiency, performance and innovation, such measures provide only a partial basis for evaluating its educational significance (Holmes et al. 2022a). Technology must also be considered in terms of its implications for human relationships, professional agency, democratic participation and the capacity of education systems to cultivate socially and politically engaged citizens (that is, the human dimension of AI as applied in education). In this context, the central issue is less technological change itself, but more how educational purpose can be preserved, interpreted and enacted within environments mediated by AI and other emerging technologies.

OPPORTUNITIES AND CHALLENGES

One of the most significant opportunities presented by emerging technologies is that they encourage renewed reflection on education itself. For example, as AI becomes increasingly capable of simulating many of the outputs upon which educational achievements have traditionally been assessed, including written responses, knowledge recall and routine problem-solving, it becomes harder to justify defining educational achievement solely through what can be measured through standardised assessment. This creates an opportunity to reassert the broader purposes of education. For students, this might result in richer learning experiences that place greater value on dialogue, inquiry, collaboration and the application of knowledge to authentic problems. For teachers, it might create opportunities to focus more explicitly on supporting intellectual growth, fostering critical thinking and cultivating the dispositions required for democratic participation and lifelong learning. However, as noted earlier, it is important to be wary of the claims that AI and other emerging technologies "save teacher time", thus enabling such a refocus, when all the indications are that they only tend to displace efforts (from one set of administrative tasks to another) not save them; and, thus, do not in practice open up any more time for focusing on the students.

In any case, discussions about the role emerging technologies might play in education also require careful definition of what is meant by a quality education. At the heart of this question lies how curriculum is understood, since curriculum provides the principal means through which educational purposes are translated into learning experiences (Young and Muller 2014). For example, if curriculum is viewed holistically as the integration of educational purposes, knowledge and teaching, then pedagogy and curriculum are inextricably bound; teachers assume the role of "curriculum makers", translating subject content into educative experiences that shape the way that learners are introduced to ways of thinking about the world (Deng 2022). However, if curriculum is considered more narrowly as the transmission of content, and distinct from pedagogy, then teachers assume the role of "curriculum deliverers", reducing their role to something technical, rather than educational, and obscuring the normative purposes of education.

This distinction becomes increasingly important given growing claims that AI technologies may "free" teachers from curriculum planning, enabling them to devote greater attention to mentoring, well-being and facilitating learners (as suggested by publications such as UNESCO and TTF 2025b). While such ambitions may appear attractive, they require careful scrutiny. In seeking to create more space for the relational and developmental dimensions of teaching, there is a risk of creating an artificial separation between curriculum, pedagogy and personal development. Decisions about what knowledge matters, how ideas are sequenced and how content is connected to learners' experiences are simultaneously curricular, pedagogical and pastoral decisions. Moreover, they are not technical questions of optimisation, but moral and democratic choices concerning what is worth knowing and how we position children's relationship with that knowledge in order to support their holistic development. Outsourcing such decisions to algorithmic authority risks transferring authority over pedagogy and educational content to systems whose underlying assumptions, values and decision-making processes may be difficult to scrutinise. It also risks removing the creative challenges that make the role of teaching most meaningful.

Understanding how algorithmic and human-mediated pedagogies diverge is also crucial when making ethical decisions about AI's role in education (Holmes 2026). For example, human teachers participate in social processes of communication, interpretation and meaning making, drawing on rich contextual information about learners. In contrast, algorithmic systems operate through patterns in data, producing outputs through statistical probabilities rather than human understanding. While these systems might adapt content to learners' answers and behaviours, this adaptation is based on the identification of patterns in data rather than an understanding of learners as social and developing human beings. Consequently, there remains an important distinction between personalisation through optimisation and personalisation as a relational process grounded in professional judgment, care and human understanding (Holmes et al. 2022a). Furthermore, in human-mediated pedagogies, students learn not only from what teachers know, but also from how that knowledge has



been developed through experience, inquiry, uncertainty, failure, revision and reflection. Teachers draw upon these experiences when modelling intellectual curiosity, resilience, judgment and ethical reasoning for their students. By contrast, AI systems do not experience the process of coming to know; they do not struggle with uncertainty, wrestle with competing interpretations, or develop understanding through participation in social and cultural life.

From an equity perspective, these distinctions are particularly important because students facing disadvantage often benefit most from the relational, motivational and adaptive dimensions of teaching. For example, while AI tutoring may be thought of as an equity intervention, providing disadvantaged students with one-to-one support currently disproportionately available to more affluent learners, there is no evidence to suggest that it might replicate the ways in which experienced teachers identify barriers to learning, build trust and respond to the unique social and emotional circumstances of individual learners (Holmes et al. 2022a). Accordingly, if an overreliance on algorithmic systems, such as AI tutoring, occurs, there is also a risk of creating a "flipped" digital divide: historically, educational disadvantage has often been characterised by unequal access to technology; in AI-mediated contexts, however, the divide is becoming inverted. While advantaged learners continue to benefit from rich human interaction, expert teaching and personalised guidance, disadvantaged learners are increasingly directed towards automated forms of provision on the grounds of efficiency, scalability or cost. This risks creating a two-tier education system in which those learners who stand to benefit most from high-quality human teaching have the least access to it (Holmes and Zhgenti 2024).

The Council of Europe's position on teachers in the era of GenAI emphatically promotes the importance of ensuring that AI supports rather than replaces professional judgment. This, however, raises a further question: what forms of expertise underpin professional judgment and how can they be sustained in increasingly AI-mediated educational environments? According to Shulman's (1987) concept of pedagogical content knowledge (PCK, later extended to TPACK, to incorporate the role of technology, and multiple other variants almost none of which address any ethical questions), effective teaching depends upon more than disciplinary expertise or generic pedagogical skill in isolation. Rather, it requires a specialised form of professional knowledge that enables teachers to transform subject matter into representations, explanations, examples and learning experiences that are accessible to particular learners. Central to this process is an understanding of what makes specific topics difficult or easy to learn, common misconceptions learners may hold, and the pedagogical approaches most likely to support understanding. Professional judgment therefore rests not simply on knowing a subject, but on knowing how to make that subject learnable for others.

The importance of pedagogical content knowledge becomes particularly apparent when considering the capabilities of GenAI to support lesson planning. For example, a tool such as ChatGPT might be capable of generating an explanation of photosynthesis within seconds. However, only a biology teacher with high levels of pedagogical knowledge will possess the professional expertise required to determine whether that explanation is scientifically accurate, developmentally appropriate, ethically sound, aligned with curriculum goals, responsive to common misconceptions and suitable for a particular group of learners. Paradoxically, the more capable AI becomes at simulating educational content, the more important pedagogical content knowledge for teachers becomes so that they remain in control of the professional judgments that determine what is educationally worthwhile for particular learners and contexts.

The ubiquity of large language models such as ChatGPT in society also places renewed emphasis on how we conceptualise teachers' professional knowledge. As access to AI-generated information becomes more widespread, learners will increasingly require support in distinguishing between information, knowledge and evidence-based understanding. Teachers will therefore need a sophisticated understanding of how knowledge is constructed, scrutinised and justified within different fields of inquiry (Jose et al. 2025). They will need to help learners understand how claims are evaluated, evidence is weighed and conclusions are reached. Such capacities are particularly important within democratic societies, where citizens must be able to engage critically with information, evaluate competing claims and participate in informed public deliberation.

Therefore, if disciplinary and pedagogical knowledge form the foundations of teacher judgment in AI-mediated societies, a further question relates to how this professional knowledge is developed over time. Professional knowledge is not acquired



as a static body of information but is continually refined through practice, application, reflection and participation in professional communities. Much of this expertise becomes tacit, embodied in professional judgment and action rather than existing as a set of explicit rules that can easily be codified. Experienced teachers often know when to challenge a learner, when to provide support, or how to adapt an explanation for a particular student, yet such decisions depend on being human: they are rooted in accumulated experience and practical wisdom that resist automation.

The tacit nature of professional expertise has important implications for the use of AI in teacher education. While AI might support activities such as lesson planning, assessment and resource generation (although, again the evidence for this is very limited), excessive reliance on such tools is likely to reduce opportunities for teachers to develop their own disciplinary understanding, pedagogical reasoning and professional judgment. From a democratic perspective, the concern is therefore not simply the deskilling of individual teachers but the potential erosion of the profession's collective expertise. If professional knowledge is developed through practice, mentoring, reflection and collaboration, and opportunities for these activities diminish, education systems risk weakening the professional capital that underpins high-quality, inclusive and democratic education.

Preserving opportunities for teachers to think, judge, create and continually develop their craft therefore becomes even more important in an AI-mediated future. However, because individual teachers cannot be expected to conduct

Preserving opportunities for teachers to think, judge, create and continually develop their craft therefore becomes even more important in an AI-mediated future.

comprehensive technical, legal or ethical assessments of emerging technologies such as AI, public authorities must establish systemic mechanisms to regulate procurement of educational technologies through independent pre-deployment assessments of pedagogical efficacy, safety, workload impact, and human rights and data protection (in line with the Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law (CETS No. 225) and Convention 108+). Governance frameworks must also prohibit the algorithmic surveillance and management of teachers, protect teachers' intellectual property over their educational materials, and guarantee their professional right to refuse unvalidated technologies.

Fundamentally, therefore, the impact of emerging technologies will be shaped by the strength of the teaching profession within which they are mediated. In this sense, the most important democratic safeguard, and the strongest means of realising technologies' potential benefits, lies not in new technologies themselves but in strengthening the professional capital on which the profession depends and, in particular, in becoming literate especially in the human dimension of AI, as set out in Recommendation CM/Rec(2026)12 on AI literacy.

POSSIBLE FUTURES

The future relationship between AI and education is not predetermined. Technological developments will undoubtedly influence schools, but their impact will be shaped by governance arrangements and the extent to which education systems invest in professional capital. The three scenarios (or "speculative fictions") that follow illustrate possible alternative futures for European education in 2040. They are not predictions. Rather, they represent plausible trajectories through which educational technologies might amplify, displace or strengthen the structural, relational and professional conditions that enable teachers to fulfil their democratic role. Together, they provide a lens through which to consider the recommendations made in this White Paper.

1 DEMOCRATIC EROSION THROUGH EDUCATIONAL AUTOMATION

Many European education systems have responded to persistent teacher shortages and financial pressures by expanding the use of AI and automated educational systems. Although these technologies were initially introduced to support teachers, limited investment in teacher and leadership development has allowed technology to assume an increasingly influential role in educational decision making.

Teachers remain present in schools, but their role has gradually shifted. Rather than designing curriculum, they spend much of their time overseeing automated systems that generate learning materials, recommend interventions, monitor progress and shape assessment processes. Curriculum content and learning pathways are increasingly influenced by algorithms designed to maximise measurable outcomes, resulting in a narrowing of educational priorities around what can be easily quantified.

In the short term, these changes improve efficiency and help education systems cope with workforce shortages. Over time, however, unintended consequences emerge. Students spend less time engaging in discussion, debating controversial issues and encountering diverse perspectives through human interaction. Opportunities to develop empathy and democratic participation become less frequent within everyday educational experiences.

The consequences become particularly significant as misinformation, synthetic media and AI-generated content become increasingly difficult to distinguish from reliable information. Teachers have traditionally acted as trusted mediators of knowledge, helping learners evaluate evidence, challenge assumptions and develop shared understandings of social reality. However, as professional expertise is increasingly displaced by algorithmic authority, schools become less capable of performing this function.

As a result, young people increasingly inhabit fragmented informational worlds shaped by personalised digital ecosystems. Shared reference points become harder to establish, public debate becomes more polarised, and trust in institutions continues to decline. Although students have access to unprecedented volumes of information, many struggle to evaluate its credibility or navigate competing truth claims. Democracy becomes more vulnerable because democratic participation depends upon citizens being able to engage with one another around a sufficiently shared understanding of reality, even when they disagree on values, priorities or political solutions.

Educational inequality also deepens. Affluent communities increasingly secure access to human-rich educational experiences led by highly qualified professionals, while disadvantaged communities experience greater reliance on technology-mediated provision. A new educational divide emerges between those who benefit from a live, social experience of teaching and those whose learning is shaped primarily by automated systems.

As professional autonomy declines, teaching becomes a less attractive career. Recruitment and retention challenges intensify, creating further incentives to expand technological provision. A self-reinforcing cycle develops in which weakening professional capital increases reliance on automation, while greater automation further diminishes the status, autonomy and attractiveness of the profession.

By 2040, education systems remain functional and technologically sophisticated. However, their capacity to foster democratic resilience, social cohesion and educational equity has been significantly weakened. The challenge is no longer access to information. It is the absence of trusted professional communities capable of helping young people make sense of it together.

2 MANAGED ADOPTION, FRAGILE PROFESSIONALISM

Concerns about the societal and democratic implications of AI have led governments across Europe to introduce regulatory safeguards and professional standards designed to protect human rights, equity and democratic participation. Human oversight remains a formal requirement, transparency obligations are well established, and schools operate within clear expectations intended to prevent the most harmful forms of educational automation. Decision makers have recognised that teachers matter and have successfully resisted calls to replace them with technology.

Yet, while democratic safeguards are in place, the foundations of professional capital have not been strengthened to the same extent. Investment in teacher education and leadership development has been uneven. As teacher and leader education programmes expanded to accommodate AI and data literacy, within already crowded curricula, there was insufficient time given to strengthening disciplinary knowledge, professional judgment and critical inquiry. Put simply, there was limited space to do everything well, and the foundational elements of professional expertise have been gradually squeezed out.

Teacher shortages and workload pressures continue to place strain on schools. At the same time, conceptions of professional competence have become increasingly associated with technological proficiency. Teachers and school leaders are expected to know how to use AI "effectively", interpret data dashboards, "personalise" learning through digital platforms and integrate AI tools into their daily practice. However, far less attention has been given to developing the forms of disciplinary expertise, pedagogical knowledge and professional judgment required to critically evaluate these systems. Consequently, the ability to critically challenge technological solutions has not become a widely understood part of professional identity.

This challenge is compounded by continuing uncertainty about the purpose of education itself. Although democratic citizenship, personal development, knowledge creation and preparation for employment remain official educational aims, accountability systems continue to place considerable emphasis on measurable outcomes. Schools face persistent pressure to demonstrate performance through indicators that are visible and easily quantified. In this environment, AI appears attractive because it offers powerful tools for monitoring achievement, predicting performance and optimising outcomes. Gradually, educational priorities become shaped less by broader democratic purposes and more by what technological systems are capable of measuring efficiently.

AI therefore becomes increasingly influential in curriculum design, assessment, learner support and school improvement. Human oversight remains in place, but it is often procedural rather than substantive. Teachers and leaders formally approve decisions yet frequently lack the professional capital needed to critically interrogate the assumptions, values and priorities embedded within the technologies they use. Professional judgment is exercised largely within technological systems rather than over them.

The consequences become visible in classroom practice. Learning becomes increasingly data-informed and performance-oriented. While these developments generate some benefits for some learners, they also encourage pedagogical approaches that prioritise optimisation and efficiency. Activities that are difficult to measure, such as dialogue, discussion, deliberation, collaborative inquiry and ethical reflection, gradually occupy less space within everyday educational experiences. They remain valued in principle but are increasingly difficult to prioritise amidst c ompeting pressures.

As synthetic media, misinformation and algorithmically curated information environments become more pervasive, these trends begin to affect the democratic role of education. Students require support not only to identify unreliable information but also to understand how knowledge is constructed, evaluate competing truth claims and participate constructively in disagreements about public issues. However, many teachers have not been adequately prepared for this role. In some cases, weakened disciplinary and epistemic knowledge makes it more difficult to challenge inaccurate, biased or misleading AI-generated content. Educators are often able to use GenAI systems "effectively" but feel less confident questioning the validity of the information those systems produce. As a result, schools become less effective as places where young people learn how to establish shared understandings of reality in an increasingly fragmented information landscape.

The effects extend beyond classrooms. Public trust in teachers weakens. Teachers are increasingly perceived as facilitators of systems ("guides") rather than as expert professionals exercising independent judgment. Relationships between schools and communities also erode. To reduce workload, teachers are increasingly encouraged to use AI systems to generate reports and communication with parents. This becomes an increasing source of frustration for families who often do not feel their child is being treated as an individual. Furthermore, as educational decision making is increasingly mediated through platforms and external technological infrastructures, families complain that they can often see the outputs of educational systems, but they are less certain who is responsible for the decisions that shape them.

Educational outcomes, as measured by standardised assessments, remain broadly stable and, in some areas, improve. However, inequalities persist and, in some regions, widen. Schools with strong leadership cultures, experienced staff and traditions of professional inquiry are better able to adapt technological systems to local needs and democratic values. Other schools become increasingly dependent on externally designed technologies that shape educational priorities in subtle but powerful ways. Consequently,



learners experience different forms of education depending upon the professional capital available within their schools and communities.

By 2040, democratic safeguards have prevented the most serious risks associated with educational automation, and educational outcomes as demonstrated by standardised assessments even show slight improvement. Yet the promise of a genuinely human-centred and democratically grounded education system remains unrealised. The central challenge is not a lack of regulation, but a failure to sufficiently strengthen the profession itself. Teachers remain responsible for education but have not been empowered to shape its future. Emerging technologies have not completely displaced educators, yet they increasingly influence the purposes, practices and priorities of schooling because too few professionals possess the authority, expertise and confidence to challenge them when necessary.

3 DEMOCRATIC RENEWAL THROUGH PROFESSIONAL CAPITAL



European education systems have rejected the assumption that technological innovation should determine the future of education. Instead, decision makers have recognised that technology must serve the normative purposes of education rather than redefine them.

The four educational purposes identified by the Council of Europe – supporting democratic citizenship, personal development, the development and maintenance of knowledge, and preparation for working life – provide the framework against which all significant technological innovations are evaluated. Questions about why education exists and what it is for are therefore considered before questions about what technology can do.

Teachers, school leaders, researchers, learners and communities play a central role in shaping how technologies are developed, adopted and governed. Rather than being passive recipients of technological change, the profession actively influences which technologies are introduced into schools, how they are used and the conditions under which they operate. Educational technology companies are expected to engage in meaningful co-design with educators and demonstrate not only the effectiveness of new products, but also their safety, reliability, inclusivity and alignment with democratic values before they can be adopted at scale. As a result, technological development is increasingly shaped by educational priorities rather than commercial interests.

This approach has been supported by the development of a strong empirical evidence base about the impacts of AI on learning, well-being, professional practice, educational equity and democratic participation. Independent research, longitudinal studies and international collaboration have generated a much deeper understanding of where AI adds value, where its limitations lie and where it may create unintended consequences. Teachers, school leaders and decision makers are therefore able to make informed decisions based on evidence and professional judgment rather than marketing claims, technological enthusiasm or fear of being left behind.

At the same time, decision makers have invested systematically in the foundations of professional capital. Strengthening teacher professionalism has been treated as a strategic priority. Teaching is widely recognised as a democratic profession with responsibilities that extend beyond the transmission of knowledge; and lifelong teacher education programmes integrate research, clinical practice, inquiry and high-quality mentoring, enabling teachers to develop adaptive expertise and the confidence to critically evaluate emerging technologies throughout their careers.

Strong leadership cultures promote trust, participation and organisational learning. School leaders are expected to evaluate technological innovations against their school's

> *Teachers, school leaders, researchers, learners and communities play a central role in shaping how technologies are developed, adopted and governed.*

values and educational mission before introducing them into practice. Decisions about technology are informed by professional dialogue, evidence and local priorities rather than assumptions that newer technologies are necessarily "better". In many schools, leaders consciously choose to reject technologies that conflict with their educational aims, even when such technologies promise – but do not robustly evidence – gains in efficiency or performance.

Teacher education and ongoing professional learning have also strengthened disciplinary and epistemic expertise. Teachers possess deep subject knowledge and a sophisticated understanding of how knowledge is generated, tested and validated within different disciplines. This enables them to critically evaluate AI-generated outputs, identify inaccuracies, challenge misleading claims and recognise oversimplifications. Rather than becoming dependent on algorithmic authority, teachers help students understand the strengths, limitations and biases of both human and machine-generated knowledge. They see shaping learners' relationships with knowledge as a central part of their professional responsibility.

Within this environment, AI is used but remains under the control of humans and human judgment. Technology, for which there is robust evidence of effectiveness and safety, is being used to support some aspects of planning, accessibility, translation and administrative tasks. However, professional judgment remains central to all significant educational decisions. Teachers understand that technological literacy includes the ability to challenge, adapt or reject technological recommendations when they conflict with educational purposes or the needs of learners.

Educational equity improves because access to highly qualified teachers remains a central policy priority. Technology is never viewed as a substitute for meaningful human relationships. Decision makers remain alert to the risks of a "flipped digital divide" and ensure that all learners, regardless of their social or economic background, continue to benefit from rich educational experiences led by expert professionals.

The relationship between schools and their communities is also strengthened. Public trust in teachers grows because educators are recognised as knowledgeable professionals capable of exercising informed judgment in the public interest. Schools act as important democratic institutions where communities engage with questions relating to technology, citizenship, sustainability and social change. Rather than consuming technological innovation, educators, families and learners participate actively in shaping how it is developed and used.

By 2040, democratic resilience is stronger than it was two decades earlier. Students leave school with the capacity to critically evaluate information, understand how algorithms influence what they see and believe, challenge misinformation, engage constructively with differing viewpoints – and not abdicate their agency to black-box machines. They possess literacy in the technological and practical dimensions of AI and emerging technologies, together with a deep understanding of the human dimension and, in particular, how to enact informed citizenship. Furthermore, by embedding quality retention and institutional learning across the system, educational quality and equity are sustained through ongoing technological change and future crises.



CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

As shown in this White Paper, teachers are among the most important contributors to democratic resilience. The argument rests on a single, central claim: the future of education will not be determined by technology, but by the strength of the profession through which technology, and every other social and educational pressure, is mediated.

This is why a profession-centred approach has been proposed as the organising principle for policy in this field, in place of approaches that treat technological change as an independent driver of educational improvement or that ask teachers to meet growing societal expectations through individual competence and moral commitment alone.

The six conditions set out in Chapter 3 are not a checklist of discrete reforms. They are interdependent expressions of the same underlying resource: the professional capital of teachers, comprising human, social and decisional capital, that allows teachers to exercise sound judgment in increasingly complex circumstances. Teacher retention sets the outer limit of what a system can achieve, since no reform can succeed without enough capable teachers to enact it. Teacher education, school leadership, professional culture, and teacher autonomy and agency together determine whether teachers are able to exercise professional judgment and thrive and flourish throughout their careers. The consequences of emerging technologies, including AI and GenAI, for teachers and learners, for equity and for democratic life will be shaped by the professional capital of the teachers and school leaders who mediate them, not by the capabilities of the technologies themselves.

The three possible futures set out in Chapter 4 illustrate what is at stake in this choice. Where investment in professional capital is neglected, whether through the unchecked expansion of automation or through regulation that safeguards process while leaving the foundations of expertise unattended, the outcome is a narrowing of educational purpose, a widening of inequality and a weakening of the trusted professional communities on which democratic societies depend.



Where professional capital is strengthened deliberately and systematically, technology can instead be governed on education's own terms, in service of the four enduring purposes of education recognised by the Council of Europe: preparation for democratic citizenship, personal development, the advancement of knowledge and preparation for working life.

However, realising this more positive future will not be achieved through fragmented reform, through isolated training requirements bolted onto an already crowded profession or through relying on teachers' moral capital and goodwill to absorb the pressures of technological and social change. It requires sustained, coherent and collective investment by member states, by the Council of Europe and by the profession itself, working together and treating teacher voice as central to decisions that will shape the conditions of teaching and learning for decades to come.

RECOMMENDATIONS

The following recommendations are addressed to member states. They also inform the Council of Europe's own future work in this area, which is designed to support member states in implementing them. The recommendations are not presented as a set of independent interventions, but as mutually reinforcing commitments to the profession on which the democratic resilience of European education ultimately depends.

1

Adopt a profession-centred approach, with teacher voice at its core, as the organising principle for policy.

Decision makers should evaluate educational and technological reforms through the lens of the teaching profession, recognising that teachers' knowledge, values and professional judgment are central to quality education. Teachers' capability to fulfil their professional commitment depends not only on individual expertise, but also on the collective capacity of the profession and supportive working conditions. Consequently, teaching must be recognised as a collective profession whose future is shaped through meaningful social dialogue and collaboration. Policy should be developed with the profession – prioritising teacher voice – to strengthen collective agency, ownership and capacity to shape change.

2

Prioritise the retention of highly qualified teachers, recognising that recruitment is a consequence of a stronger profession.

Making teaching a more attractive, rewarding and sustainable profession is essential for both retention and recruitment. Policies should prioritise structural employment rights and organisational conditions that enable skilled and committed teachers to remain, develop and thrive throughout their careers. Developing and retaining high-quality teachers is vital for sustaining educational quality, strengthening school improvement and reducing inequalities, especially in disadvantaged communities. Achieving this requires effective leadership, collaborative cultures, competitive remuneration, clear career structures, high-quality induction and opportunities for tailored career-long development.

3

Prioritise the strengthening of leadership capacity and shared governance across schools.

There should be sustained investment in high-quality professional learning to strengthen leadership capacity across schools, paying particular attention to the support of school principals. Professional learning must be integrated into leaders' work rather than treated as an additional burden, with decision makers prioritising principal preparation, improving working conditions and providing regular feedback and sustained support. Use structured collaborative inquiry to help school leaders apply evidence-informed knowledge and practices in their own contexts, connected through professional networks and tailored support mechanisms responsive to local needs. Create the systemic and organisational conditions in which school principals are trusted and supported to lead improvement, build capacity in others and enable communities to thrive. At the same time, member states should embed leadership within institutionalised structures of democratic school governance (such as teachers' councils and participatory school boards), ensuring shared leadership roles confer corresponding pedagogical decision-making authority backed by administrative support, dedicated time remission and appropriate remuneration.



4

Strengthen teacher professionalism, professional autonomy and agency through collective accountability.

Acknowledge that teacher professionalism centres on a shared responsibility for the learning, development and achievement of all students – driving teachers to continually improve practice and address barriers to learning. Strengthen the conditions for this form of profession-driven accountability by recognising teaching as a research-informed profession, providing coherent pathways of lifelong professional formation and ensuring meaningful teacher participation in collaborative planning, curriculum development and school improvement. Align professional standards with the enduring responsibilities of teaching, including fostering informed citizenship, inclusion and critical thinking within changing local contexts. Ensure that accountability, curriculum and assessment arrangements support teachers' professional judgment, keeping their expertise and agency central to the purposeful use of AI and other decision-support tools.

5

Make teacher well-being a collective and institutional priority.

Protect and promote teacher well-being by fostering a culture of respect for the profession and ensuring teachers are protected from violence, harassment and intimidation through effective safeguarding measures. Invest in organisational conditions and professional environments that enable teachers to find satisfaction, purpose and alignment with their values, fostering cognitive, affective and social well-being. Improve working conditions, build trusting professional relationships and give teachers meaningful opportunities to participate in decisions affecting their work. Provide sustained opportunities for professional learning and collaboration that develop teachers' capabilities individually and collectively, strengthening their self-efficacy and sense of professional competence. Make these conditions central to strategies for sustaining teacher well-being, strengthening commitment and improving the quality and sustainability of teacher retention.

6

Develop AI literacy centred on professional judgment and AI's human dimension.

Teacher education, professional judgment and professional standards should enable teachers to be fully aware of and understand the human dimension of emerging technologies including AI (the socio-technical nature of digital technologies such as AI and their impacts on humans, human rights, the environment and so on), rather than focusing narrowly on technical knowledge (the technological dimension) or proficiency (the practical dimension). In particular, teachers need to be able to question the assumptions embedded in emerging technologies, including AI, and their implications, evaluate risks and benefits, make informed decisions about whether and how such tools might be used, and shape any use to meaningfully support teaching and learning while strengthening teachers' professional agency.

7

Provide sustained and equitable investment to ensure highly qualified teachers for all.

Member states should reaffirm public responsibility for education by securing sustainable, equitable public financing (including targeted investment directed towards disadvantaged communities) that protects education systems from commercialisation and underinvestment. Decision makers should monitor and address disparities in access to qualified and experienced teachers across schools and regions through professional networks, school partnerships, mentoring, collaborative professional learning and targeted workforce incentives. Furthermore, decision makers must ensure that emerging technologies reduce rather than reinforce educational inequalities, actively countering a "flipped digital divide" where disadvantaged learners receive automated provision rather than support from qualified professionals. This approach protects the central role of teachers and the teaching profession, recognising that human relationships and social interaction are fundamental to equitable learning opportunities.



8

Support coherent system-wide reform through a dedicated Council of Europe intergovernmental programme.

Retention, professionalism, teacher education, school leadership and professional agency should be addressed as interdependent elements of a coherent strategy rather than isolated levers. To this end, the Council of Europe should launch a dedicated intergovernmental programme to provide a standing forum for member states, commission targeted research and development, strengthen the exchange of evidence and promising practices, monitor progress and co-ordinate implementation.

9

Prepare a Committee of Ministers Recommendation on the futures of teachers and the teaching profession.

The Council of Europe should prepare a Committee of Ministers Recommendation on the futures of teachers and the teaching profession that brings together the interdependent priorities and recommendations identified in this White Paper and should leverage the intergovernmental programme to support and monitor their implementation and impact across member states.

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APPENDIX – POSITIONING WITHIN THE INTERNATIONAL POLICY LANDSCAPE

This White Paper is not a standalone contribution to a crowded field. Its central thesis, that the future of education depends on sustained investment in the teaching profession and not on technology treated as an independent driver of change, is consistent with, and in several respects corroborated by, positions reached by UNESCO and the International Task Force on Teachers for Education 2030, the OECD and the European Union over the past two years. The tables below set out this convergence condition by condition and identifies where this White Paper extends the shared position through its grounding in human rights, democracy and the rule of law.

Of the six conditions, four (retention, teacher education, autonomy and emerging technologies) show strong international convergence, and two (professionalism and leadership) show the Council of Europe's most original contribution, together indicating a White Paper that is simultaneously anchored in an emerging international consensus and distinctive in its normative grounding.

Cross-cutting: the profession-centred thesis itself

COUNCIL OF EUROPE'S POSITION	UNESCO/TTF	OECD	EU	CONVERGENCE	COUNCIL OF EUROPE'S ADDED VALUE
Technology's impact on education is mediated by the strength of the teaching profession, not determined by technological capability alone; policy should be organised around the profession, not the technology.	TTF position paper, Promoting and Protecting Teacher Agency in the Age of Artificial Intelligence (2025): AI should complement, not replace, teachers' pedagogical expertise and ethical judgment; teacher agency must remain central to AI integration.	Digital Education Outlook 2026: distinguishes replacement, complementarity and augmentation; argues augmentative use preserves and can enhance professional expertise, contingent on pedagogical guidance.	2026 Guidelines on the ethical use of AI and data in teaching and learning: AI use must respect professional autonomy and remain subject to human agency and accountability principles. Council of the European Union conclusions on teachers in the era of AI (May 2026): teachers remain at the centre of a human-centred, pedagogically driven integration of AI.	UNESCO and the TTF, the OECD and the EU have converged, within the last 18 months, on a "teachers must lead, not be led by technology" position.	This White Paper grounds the same position explicitly in human rights, democracy and the rule of law, and integrates it with five further conditions into a single "professional capital" framework; the comparator instruments address these themes separately rather than as one framework.

Teacher retention

COUNCIL OF EUROPE'S POSITION	UNESCO/TTF	OECD	EU	CONVERGENCE	COUNCIL OF EUROPE'S ADDED VALUE
Retention should be treated as a professional-culture and school-improvement strategy, not a recruitment problem; equitable distribution of qualified teachers is a democratic as well as an educational priority.	Global Report on Teachers (2024): global shortage of 44 million teachers by 2030; primary-teacher attrition roughly doubled 2015-2022. Santiago Consensus (2025): sustainable financing and social dialogue as priority actions.	Results from TALIS 2024: supportive working conditions strongly associated with satisfaction, well-being and retention; fairer deployment of teachers to disadvantaged schools identified as a policy priority.	The teaching profession in the EU (2026), a comparative analysis of TALIS 2024: supportive working conditions correlated with retention. Investing in Education 2026: competitive salaries have limited effect unless accompanied by adequate working conditions and well-being. The EU Teachers and Trainers Agenda, expected by the end of 2026, addresses shortages and career prospects directly.	Shared diagnosis across all sources: working conditions and professional culture, not recruitment campaigns alone, are the primary lever for retention.	The Council of Europe frames equitable teacher distribution explicitly as a matter of democratic resilience and educational rights, and anchors teachers' working conditions in the European Social Charter (fair remuneration, safe and healthy working conditions, collective bargaining, dignity at work), rather than treating retention as a labour-market question.

Teacher professionalism

COUNCIL OF EUROPE'S POSITION	UNESCO/TTF	OECD	EU	CONVERGENCE	COUNCIL OF EUROPE'S ADDED VALUE
Professionalism should be understood as "democratic professionalism": ethical responsibility, professional judgment and democratic values, sustained through collective accountability, not an expanding checklist of competencies.	UN Secretary-General's High-Level Panel on the Teaching Profession (2024): dignity, humanity, equity, inclusion and leadership as organising themes. UNESCO and TTF (2025, 2026): teaching recast as a collaborative profession.	OECD Teaching Compass (2025) and the New Professionalism and the Future of Teaching project: teacher agency, competencies and well-being, and a "connective" professionalism built on collaboration. TALIS-based work engages professionalism mainly through workload, appraisal and status indicators.	Limited direct treatment.	Broad alignment on professionalism as encompassing more than technical competence, with growing emphasis on its collaborative and collective dimension.	The Council of Europe gives this shared view an explicit normative grounding (democratic professionalism) tied to a specific rights architecture: the Charter on Education for Democratic Citizenship and Human Rights Education, the Reference Framework of Competences for Democratic Culture and Recommendation CM/Rec(2019)9 on fostering a culture of ethics in the teaching profession.

Teacher education

COUNCIL OF EUROPE'S POSITION	UNESCO/TTF	OECD	EU	CONVERGENCE	COUNCIL OF EUROPE'S ADDED VALUE
Teacher education should be a career-long continuum (initial preparation, induction, mentoring, continuing professional development) developing adaptive rather than routine expertise.	Global Report on Teachers 2026, Advancing Teacher Professional Development through Lifelong Learning (to be launched at the Teacher Policy Dialogue Forum on 23-25 November 2026): treats teacher learning as continuous across the career, from initial education and induction to continuing professional development. Santiago Consensus (2025): teacher education and professional development from a lifelong learning perspective.	TALIS 2024: novice teachers with assigned mentors report greater job satisfaction and well-being; the 2026 TALIS report on the Western Balkans prioritises instructional support during initial teacher education and for novice teachers.	The forthcoming EU Teachers and Trainers Agenda (expected by the end of 2026) addresses career prospects and professional development.	Strong convergence with the announced framing of UNESCO's 2026 Global Report: the same career-long view of teacher learning and the same emphasis on induction and mentoring.	Alignment is close; the White Paper's distinctive contribution is to connect teacher education explicitly to professional judgment in AI-mediated environments, rather than treating AI literacy as a separate competency track.

School leadership and professional culture

COUNCIL OF EUROPE'S POSITION	UNESCO/TTF	OECD	EU	CONVERGENCE	COUNCIL OF EUROPE'S ADDED VALUE
Leadership development is a high-leverage strategy for retention, equity and school improvement; leadership should be distributed and embedded in democratic school governance, with shared leadership roles carrying genuine decision-making authority.	Global Education Monitoring Report 2024/5, Leadership in education: Lead for learning: leaders are more than managers and need time, trust and support; leadership works best when it is shared.	Reimagining Teaching in an Accelerating World (ISTP 2026, with Education International): strengthening autonomy, trust and collaboration as foundations for innovation.	Limited direct treatment at EU level; addressed mainly through national Eurydice reporting.	Convergence with UNESCO's 2024/5 GEM Report and the OECD/ISTP position on trust, collaboration and shared leadership as foundations for professional culture.	Ties shared leadership to a Council of Europe standard on democratic school governance (Recommendation CM/Rec(2010)7): teachers' councils and participatory school boards, with shared roles backed by decision-making authority, time and support.

Teacher autonomy and professional agency

COUNCIL OF EUROPE'S POSITION	UNESCO/TTF	OECD	EU	CONVERGENCE	COUNCIL OF EUROPE'S ADDED VALUE
Autonomy is professional discretion exercised responsibly, not freedom from accountability; opportunities to influence decisions may be declining in parts of Europe, and teachers' pedagogical freedom needs active protection, including in law.	TTF position paper (2025): teacher agency, dignity and professional autonomy must remain central to AI governance in education. Santiago Consensus (2025): participation of teachers in policy making as a priority action.	TALIS 2024: on average, only around four in ten teachers work in schools where they are involved in defining school improvement priorities. Reimagining Teaching in an Accelerating World names autonomy and trust as foundational themes.	The 2026 AI guidelines name professional autonomy as a core principle for AI adoption in schools. Council of the European Union conclusions on teachers in the era of AI (2026): AI should support, not replace, pedagogical autonomy, and teachers should contribute to the design and evaluation of AI tools.	Strong convergence; TALIS 2024 data on teachers' limited involvement in school decisions give this condition its main evidence anchor.	Connects autonomy explicitly to democratic participation and to the European Social Charter's rights to information and consultation, and calls for legal safeguards for pedagogical freedom and for inspection and appraisal that offer formative support rather than performative compliance.



Emerging technologies and AI

COUNCIL OF EUROPE'S POSITION	UNESCO/TTF	OECD
AI's educational value depends on preserving teachers' professional judgment, including the judgment whether to use AI at all; the "human dimension" of AI literacy matters more than technical proficiency.	AI Competency Framework for Teachers (2024): five dimensions including human-centred mindset and ethics of AI, three progression levels; the Santiago Consensus (2025) calls for its adoption. TTF position paper (2025): teacher–AI complementarity.	Digital Education Outlook 2026: replacement, complementarity and augmentation distinction; performance gains do not equal learning gains without pedagogical guidance. OECD and European Commission AI Literacy Framework for Primary and Secondary Education (2026).

EU	CONVERGENCE	COUNCIL OF EUROPE'S ADDED VALUE
EU AI Act (2024) and 2026 Guidelines provide the legal/regulatory framework (risk classification, GDPR); the updated 2026 guidelines on tackling disinformation and promoting digital literacy, revised under the European Democracy Shield, address GenAI's role in disinformation; the 2026 conclusions of the Council of the European Union include critical thinking and media literacy in teachers' AI literacy.	Near-universal convergence on "augment, don't replace"; now the mainstream international position, not a Council of Europe outlier.	Recommendation CM/Rec(2026)12 on AI literacy sets out a three-dimension model (human, technological, practical) grounded in human rights, democracy and the rule of law, giving priority to the human dimension and extending UNESCO's human-centred approach. The White Paper adds the equity risk of a "flipped digital divide", in which disadvantaged learners receive automated provision instead of qualified teachers.



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