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Reinforcing and innovating teacher professionalism: Learning from other professions

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Abstract

Education systems are facing challenges in relation to attracting and retaining excellent teachers. Strengthening teacher professionalism by deriving insights from other sectors is a promising approach in confronting these issues. This paper maps the position of teaching in the changing landscape of professions using a cross-sectoral approach to identify areas for practitioners, researchers and policymakers to improve teaching status and practice, with repercussions on the public's respect for the work of teachers. Existing literature, alongside OECD findings, suggest that a focus on career progression and specialisation, autonomy, and status, are promising areas for implementing cross-sectoral insights. Simultaneously, teaching is well placed to explore the potential of collaboration, continuing professional learning and engagement with research, thus playing a role in renewing professionalism itself. This paper calls for increased discussion about teacher professionalism at the local level, with teachers themselves at the forefront of innovation supported by researchers and policymakers.

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1. Introduction

Teachers are widely recognised as the most important resource for education systems (OECD, 2021^[1]; Ulferts, 2021^[2]). The COVID-19 pandemic refocused discussion on professional concepts such as the altruistic motivation, commitment to public interest and wide-ranging impact of teachers' public service work. The importance of their ability to continue delivering school education in unprecedented times has become evident (Nilsberth et al., 2021^[3]). Nonetheless, teaching continues to face significant challenges. Literature generally based in the field of sociology has traditionally classified teaching as a "semi-profession" (Howsam, 1985^[4]). More recent research continues to report gaps between teaching and the "established" professions (Bolton and Muzio, 2008, p. 283^[5]), such as medicine and law (Ingersoll and Collins, 2018^[6]).

Exploring ways to strengthen and innovate teacher professionalism carries the potential for both increased recognition and respect for the work of teachers, and improved processes within education systems, with wide-ranging benefits for schools, students and societies (Suarez and McGrath, 2022^[7]). In particular, looking to other professions offers a valuable standpoint to identify opportunities for improvement (OECD, 2005^[8]). While formulating cross-sectoral comparisons may be challenging (Allegretto, Corcoran and Mishel, 2004^[9]), it can also point to existing good practice in education and ways in which teaching can contribute to innovating professionalism generally. This paper argues that teaching, historically centred around public service and social good, is well placed to meet evolving definitions of professionalism and contribute to furthering connective (Noordegraaf, 2020^[10]) and democratic (Hargreaves, 1999^[11]; Sachs, 2016^[12]) versions of professionalism.

It is essential to note that teachers hold a unique position in the professional landscape. The users on the receiving end of education are mostly children and young people, and in the classroom teachers are significantly outnumbered (Hoyle, 2001^[13]). Along with librarianship, nursing and social work, teaching is characterised by a gendered history that lives on in the present-day composition of the workforce (Guerriero and Deligiannidi, 2017^[14]), with the proportion of women among primary school teachers exceeding 80% on average in OECD countries and economies (OECD, 2022^[15]). Any cross-sectoral comparison must be conducted with an awareness of the opportunities and challenges specific to teaching.

This paper starts by providing an overview of professionalism, exploring the ways in which professionalism and professions are continuously changing and proposing a framework for conceptualising professionalism (Section 2). Section 3 investigates the concept of teacher professionalism, mapping its unique place in the landscape of professions and identifying key areas for thinking cross-sectorally. Section 4 identifies three areas in which teaching can draw from other sectors to reinforce professionalism: specialisation and career progression, autonomy, and status, while Section 5 explores the ways in which teaching can play a role in innovating professionalism, with a focus on collaboration, continuing professional learning and engagement with research. Overall, this paper seeks to provide input for strengthening teacher professionalism in future-looking ways and to open up the discussion, with teachers themselves at the forefront of innovation. With this view, the conclusions comprise insights for practitioners, researchers and policymakers (Section 6).

OECD data from the 2018 iteration of TALIS, the Teaching and Learning International Survey, support the present analysis. Carried out every five years, the survey focuses primarily on lower secondary school teachers and school leaders, and offers valuable data on relevant aspects of professionalism as well as contextual information. The focus on lower secondary school contexts when referring to TALIS data in the paper is due to data

availability; further research comparing and contrasting aspects of professionalism among levels of education is encouraged. TALIS includes data from six sub-national entities, referred to in this paper as follows:

- The province of Alberta, in Canada, is referred to as Alberta (Canada).
- The Flemish Community of Belgium is referred to as Flemish Comm. (Belgium) in tables and figures.
- The French Community of Belgium is referred to as French Comm. (Belgium) in tables and figures.
- Ciudad Autónoma de Buenos Aires is referred to as CABA (Argentina).
- The nation of England is referred to as England (UK).
- The municipality of Shanghai, in China, is referred to as Shanghai (China).

Throughout the paper, five experts offer their original contributions. Tracey L. Adams (University of Western Ontario) and Marta Choroszewicz (University of Eastern Finland) contribute three boxes drawing on their expertise in sociology of work (Box 2.1, Box 3.2, Box 4.1). From an education standpoint, Rien Rouw and Tim Schokker (Dutch Ministry of Education, Culture and Science) provide their expert view on public service professions (Box 3.1). A. Lin Goodwin (University of Hong Kong) offers valuable insights from her expert teacher education standpoint (Box 5.1). These insights represent further lenses for conceptualising and reimagining teacher professionalism.

2. What does “professionalism” mean?

2.1. Key terms in the language of professions

2.1.1. Professions

Professions constitute a subset within the world of occupations, though the essence that distinguishes professions from other occupations is contested (Adams, 2020^[16]; Brante, 2011^[17]; Evetts, 2013^[18]). Traditionally, professions have been known for altruism and commitment to public good (Schultze, 2007^[19]), but have also been associated with job security and self-regulating professional associations responsible for disciplinary regimes (Abadi, Ayentimi and Coetzer, 2020^[20]; Ramsey, 2000^[21])

Some clues into the meaning of the term “profession” can be sought in its etymology, which relates to the verb “to profess”, characterised by religious connotations (Saks, 2021^[22]). Originally associated with the clergy in the context of European Christianity, the term is linked to the taking of vows and a sense of belonging to a restricted circle (Brundage, 2008^[23]). Etymological links, then, associate professions with ideas such as ethical conduct and restricted entry, both of which still play a significant role in contemporary understandings of professionalism. This is exemplified in the Hippocratic Oath, a vow that has characterised Western medicine for over 2 400 years (Miles, 2005^[24]) and emphasises the ethical dimension of medicine.

Over the past century, the term “profession” has expanded to cover a broader range of occupations. According to the *Blackwell Encyclopedia of Sociology* definition by Adams (2020^[16]), professions can be distinguished from other occupations based on extensive training, market privileges in their sector and a high degree of control, although context-dependent variation exists. Some researchers suggest that there may be fewer features distinguishing professions from other occupations in the present day, due to the emergence

of new types of highly educated, expert careers (Adams, 2020_[16]). This paper provides an outline of different approaches employed to distinguish professions over the past century (Section 2.2) and proposes a framework for understanding professions that may offer insights for conceptualising the future of teaching and work (Section 2.3).

2.1.2. Professional conduct

The idea of “being a professional” is not limited to membership in one of the professions as understood above. A notion of “professional conduct” or “behaving professionally” is often the first connotation associated to the term “professional”. Conducting oneself in a respectable manner and with a commitment to high standards, as opposed to displaying unethical or negligent behaviours in the workplace, plays a role in understandings of professions (Hargreaves, 2000_[25]).

2.1.3. Professionalisation

The differences between occupations and professions have on occasion been conceptualised as a matter of degree, introducing the idea of a spectrum between the two (Evetts, 2013_[18]). The notion of “professionalisation” is used to describe the journey undertaken by an occupation towards becoming increasingly “professionalised” or achieving the status of a fully-fledged profession (Hargreaves, 2000_[25]). In light of this process, professions have on occasion been described as an unreachable ideal (Pratte and Rury, 1991_[26]; Shon, 2006_[27]). For instance, Vollmer and Mills (1966_[28]) offer the following insight:

A profession is an ideal type of occupational organization which does not exist in reality, but which provides a model for the formation of an occupation that would result if any occupational group became completely professionalized. That dynamic process whereby many occupations can be observed to change crucial characteristics in the direction of a profession is called professionalization. (pp. vii-viii, emphasis in original_[28])

The process of professionalisation may have different or even opposing outcomes based on how it is enacted. On the one hand, professionalisation can be sought by professionals themselves to enhance their standing within the community and improve working conditions (Hargreaves, 2000_[25]; Sachs, 2016_[12]). On the other hand, research points to examples in which the process of professionalisation has been used in a management or organisational sense, to influence the profession in ways professionals themselves may not align with (Mulcahy, 2011_[29]). In its most ideal form, professionalisation can support development towards “open, inclusive and democratic” professionalism (Hargreaves, 1999, p. 14_[11]).

2.2. Evolving definitions and understandings of professionalism

As seen above, professions are not static configurations. A further layer of complexity is added by the changing nature of professionalism (Alvehus, Avnoon and Oliver, 2021_[30]; Evetts, 2013_[18]; Schott, van Kleef and Noordegraaf, 2016_[31]). Literature in the sociology of professions has been defining and re-defining the concept over the past century. As seen above, the concept of professionalism is inherently concerned with distinguishing professions from other occupations, but authors draw this distinction according to different criteria and employing diverse methodologies.

A common approach to setting the boundary between professions and other occupations has been to list the set of criteria that an occupation should meet to be classified as a

profession, also known as the “taxonomic” or “trait approach” (Abadi, Ayentimi and Coetzer, 2020_[20]; Guerriero and Deligiannidi, 2017_[14]). While this approach was most prominently used in the 1950s and 60s (Adams, 2010_[32]; Saks, 2012_[33]), it can be traced back to an early 20th Century definition by Flexner (1915_[34]), who set out to determine whether social work in the United States could be considered a profession at the time (Burnham, 1998_[35]). To do so, Flexner listed six criteria that he argued differentiate professions from other occupations:

Professions involve essentially intellectual operations with large individual responsibility; they derive their raw material from science and learning; this material they work up to a practical and definite end; they possess an educationally communicable technique; they tend to self-organization; they are becoming increasingly altruistic in motivation. (p. 156_[34])

This definition was widely cited over the following decades (Burnham, 1998_[35]), for instance by Brown (1936_[36]) in her book *Nursing as a Profession*. In addition, alternative taxonomic attempts at drawing the boundary between professions and other occupations began to emerge (Carr-Saunders and Wilson, 1933_[37]; Goode, 1969_[38]; Greenwood, 1957_[39]; Wilensky, 1964_[40]).

In the 1970s, attention shifted from the traits of professions and professionals to the importance of power dynamics (Adams, 2010_[32]). More recent definitions of professionalism have attempted to look beyond traditional approaches and recognise the importance of social relationships in shaping the place of professions in society, seeking to understand how professionalism operates in specific contexts (Abadi, Ayentimi and Coetzer, 2020_[20]; Adams, 2010_[32]; Ramsey, 2000_[21]). As a result, greater focus is currently placed on the network of relationships that enable professionals to work, on the constant renegotiation of these relationships, and on the trust, or lack thereof, which characterises them.

2.3. A conceptual framework for professionalism

The individual and collective features that define professions are constantly evolving. In addition, definitions of professionalism are susceptible to cultural and contextual influence (Abdel-Razig et al., 2016_[41]). Given the malleability of the term, different authors select and give varying degrees of importance to different features of professionalism. This paper proposes that these features, often listed as part of definitions, can be roughly mapped under three broad domains: the cognitive sphere, the social and legal sphere, and the ethical sphere.

The cognitive sphere includes features pertaining to the knowledge base of a profession, which some argue is the most significant aspect. According to Brante (2010_[42]), for instance,

insofar as it is possible to find reasonably invariant, trans-historical elements in professions, they will be found at the cognitive level, that is, at the level of professional knowledge. (p. 845_[42])

Professional knowledge is one of the aspects that has made professionals “historically distinct” (Choroszewicz and Adams, 2019, p. 2_[43]). It follows that initial training and continuing professional learning, the means by which such knowledge is constituted, reinforced and developed, are central to the concept of professionalism. Most accounts, in addition, include a skill element alongside the theoretical knowledge base, or an understanding of theory-informed practice and expertise (Noordegraaf, 2020_[10]; Schultze, 2007_[19]).

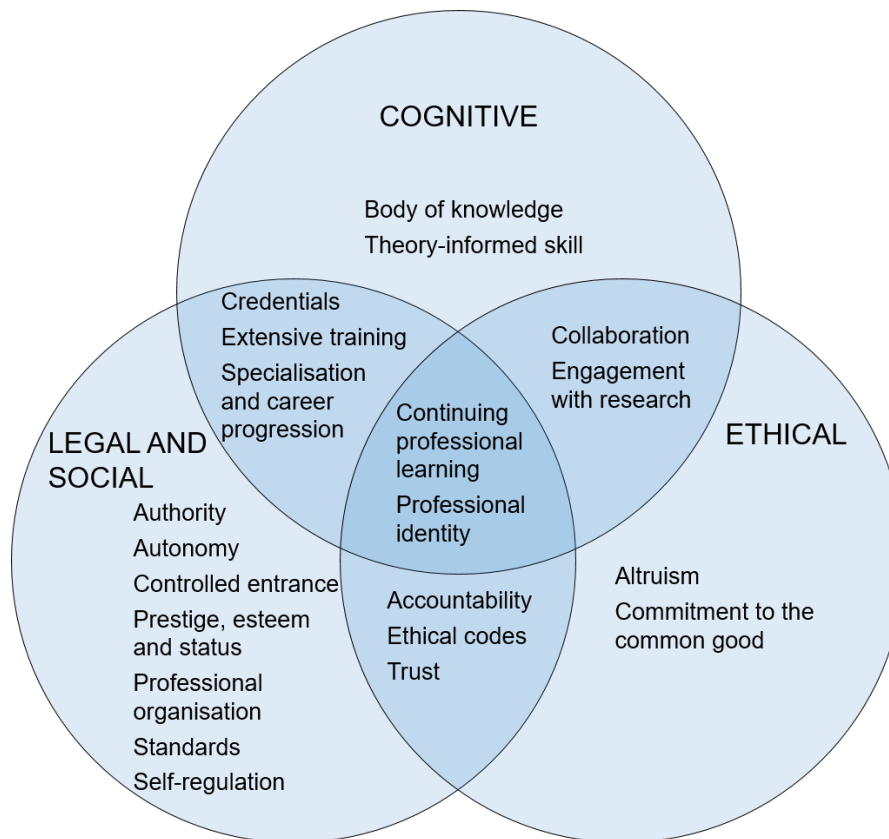
The social and legal sphere includes the organisational and bureaucratic infrastructure that allows professionals to practice within their legal context, alongside the social systems that confer them a position in society. Autonomy and authority are important concepts in this respect (Choroszewicz and Adams, 2019_[43]; Noordegraaf, 2020_[10]), both of the profession as a self-regulating, respected organism, and of professionals themselves in their ability to exercise judgement authoritatively. The concepts of remuneration (Ramsey, 2000_[21]) and “status, standing, regard and level of professional reward” (Hargreaves, 2000, p. 152_[25]) are often viewed as a practical parallel to these aspects.

The ethical sphere concerns the often-mentioned altruistic component of professionalism, a commitment to the best outcomes for both the “client” and for society at large (Adams, 2016_[44]). Noordegraaf and Schinkel (2011_[45]) refer to this sphere as follows:

In the sea of seemingly self-interested economic exchanges, professions are islands of cultural and social exchange that materialize social services, guard expertise and craftsmanship, symbolize the “goodness” of service provision, and generate material awards for the professional workers concerned. (p. 98_[45])

The three spheres can be populated with features of professionalism from a variety of sources (see Figure 2.1). Interestingly, several criteria transcend the boundaries between spheres, or cannot be straightforwardly mapped without contextual knowledge, underlining the importance of the links between professional knowledge, legal and social recognition, and ethical practice. This ambiguity also underlines the importance of context in determining the role and position of some of these criteria. For example, ethical standards play a role in setting the groundwork for status and social recognition, systems designed to impart professional knowledge draw on existing licensing requirements, and professional reward is inevitably linked to career structures within a given legal context. As a result, defining professions and professionalism is a complex exercise with multiple possible outcomes (Abadi, Ayentimi and Coetzer, 2020_[20]).

Figure 2.1. A new framework for conceptualising professionalism



Note: Mapping features of professionalism proposed in the literature into cognitive, legal and social, and ethical spheres emphasises links across domains as well as the role of contextual factors. See sources for each criterion in Table A A.1.

2.4. Trends challenging traditional conceptualisations of professionalism

It is important to avoid idealising traditional conceptualisations of professionalism. For instance, the very notion of professionalism stems from old yet pervasive ideas on class and gender (Hearn, 1982^[46]). Old definitions may also prove inadequate to face contemporary challenges. Ingersoll and Collins (2018^[6]), for example, give the following analysis of the recent state of medicine:

Medicine, long considered among the pinnacle professions and the clearest example of work that has successfully become professionalized over the past century, has been the subject of a great deal of criticism. The focus of this criticism is the negative consequences of the power and privilege of professionalization – monopolistic control over medical knowledge and the supply of practitioners, antagonism toward alternative medical approaches, and a power imbalance in the physician-client relationship. From this viewpoint, professionalization in medicine has brought many benefits, but also incurs in costs. (p. 211^[6])

Not only can traditional understandings of professionalism lead to detrimental side effects; professions, including those uncontroversially described as professional disciplines such as medicine and law, are facing numerous threats (Randall and Kindiak, 2008^[47]) (see Box 2.1). Choroszewicz and Adams (2019^[43]) emphasise that:

professionals appear to be losing autonomy and influence more quickly than other workers. At the same time, social change threatens to undermine those characteristics that have made professionals historically distinct: discretion, social authority, homogeneity, knowledge and skill. (p. 2_[43])

The processes at play in these changes are related to the public holding professionals to higher standards in a world where access to information is increasingly easy, and it is more challenging for professionals to hold a monopoly over their area of expertise. At the same time, the emergence of trends such as managerialism (Adams and Livingstone, 2020_[48]; Browes and Altinyelken, 2022_[49]) and the growth of new fields, such as technology (Susskind and Susskind, 2018_[50]) create challenges for traditional understandings of professionalism. Trends revolving around privatisation and technological developments make professionals increasingly dependent on external input, “to such an extent that they have lost control over the context of their work, while presumably retaining some control over its content” (Randall and Kindiak, 2008, p. 345_[47]).

Box 2.1. The impact of digitalisation and new technologies on professionals' work

During the COVID-19 pandemic, teachers around the world were asked to teach their students online. Many experienced technological, professional, and workload challenges as they navigated the complex environment of online teaching, as well as mental health strains and burnout (Singer, 2020_[51]). It is expected that online learning is here to stay. In this respect, it is valuable to consider research on the impact of technology on professional work.

Technological advances have altered professions and professional work in numerous ways. Firstly, even before the pandemic, mobile technologies (MTs), such as smartphones, tablets and laptops, were already used by lawyers to blur the boundaries between work and private life, which resulted in a new modelling behaviour of what represents a committed professional worthy of promotion (Choroszewicz and Kay, 2020_[52]). Moreover, MTs exerted control over professionals' work behaviour not only in their offices and during working hours, but also in private lives through the pressure of constant connectivity (Wajcman and Rose, 2011_[53]). Secondly, the rise of social media and its wide use for professional purposes have drawn attention to a new form of professionalism termed e-professionalism (Cain and Romanelli, 2009_[54]; Dobson, Patel and Neville, 2019_[55]) or digital professionalism (Ellaway et al., 2015_[56]), to advance discussion on appropriate professional behaviour and its violations in online spaces. While social media poses new dangers for professionals, such as online harassment and hate speech, specifically for women, research shows that it can also be used to challenge inherent sexist assumptions and gender inequality in the healthcare profession through sharing alternative and more gender-neutral perceptions about who can be, for example, a surgeon (Neville, 2019_[57]). Thirdly, new technologies are also changing the ways in which professional services are delivered, including increased opportunities for e-services in healthcare, education and law (Susskind and Susskind, 2018_[50]).

Professional associations and education programmes are faced with a need to adjust definitions of professionalism to encompass the issue of technological advances, including increased use of information communication technologies, digital media and platforms for professional work. Professional codes of conduct need to address rules around social media use and greater awareness around professional behaviours in online spaces. Finally, professional workplaces need to take a more active role in establishing

formal organisational rules and expectations regarding the work-related use of MTs by their employees outside of work hours and workplaces.

For teachers grappling with online learning, specific supports may be needed; these should encompass not only technological support and training, but also recognition of increased workloads and wellbeing needs.

Note: Original contribution by Marta Choroszewicz (University of Eastern Finland) and Tracey L. Adams (University of Western Ontario).

2.5. Possible futures for professionalism

Evetts (2009_[58]) describes two versions of professionalism. The first, termed “organisational professionalism” (p. 248_[58]), is characterised by increased standardisation and managerial control. “Occupational professionalism” (p. 248_[58]), on the other hand, is characterised by trusting dynamics between professionals and society allowing professionals to retain their discretionary judgement. Evetts argues that occupational professionalism is in decline and threatened by the rise of organisational professionalism.

Other authors provide insights into preferable versions of professionalism. Noordegraaf (2020_[10]) argues that the crucial dimensions of professionalism (expertise, autonomy and authority) need to evolve from fixed and closed entities (“protective” professionalism) (p. 206_[10]) to become relational and processual (“connective” professionalism) (p. 215_[10]). While older versions of professionalism may be facing multiple challenges due to recent changes, there is an opportunity for a more interdependent, process-centred and networked version of professionalism to thrive.

In the context of teaching, Sachs (2016_[12]) refers to the work of Hargreaves (1999_[11]) to draw a parallel between her “democratic” professionalism (p. 419_[12]) and Evetts’s (2009_[58]) occupational professionalism, envisioning new possibilities for a teacher-driven profession. In addition, versions of professionalism that acknowledge diversity in teacher approaches underline that there are multiple possible ways of being an excellent teacher (Campbell, 2019_[59]). A challenge for all professions, including teaching, is to understand how to move towards a preferred version of professionalism (referred to in this paper as connective or democratic interchangeably).

Public service professions face unique obstacles, threats and trade-offs. As a result, they represent a particularly interesting site for envisioning possible futures. The OECD has examined the changing nature of work and uncertainty and implications for public servants in central government (OECD, 2021_[60]). Findings identify emerging and future skills, such as the ability to learn, adapt and manage through ambiguous situations. Elements of a resilient workforce include wellness, motivation and commitment, anticipation and foresight, creative problem solving, as well as collaboration and learning agility. Collaboration includes the need to work across organisational boundaries to identify solutions to complex challenges, and requires skills to manage networks. A vision of the future public service includes a focus on distributed leadership, different career tracks, learning culture and clear development opportunities, trust, autonomy and accountability (see Table 2.1).

Table 2.1. OECD vision for creating a forward-looking, flexible and fulfilled public service

FROM	TO
A hierarchical focus on leadership skills	A generalised distribution of leadership skills
One dominant generalist profession (e.g. Public administration, law)	A wider diversity of technical professions and skills
A professional public service, where most public servants have the same career path and learning opportunities	A public service of professions, where different professions are on different career tracks, with clear development opportunities
Little consideration of retraining redundant employees	Tools and plans to reskill the existing workforce
Focus on traditional training, rules-based repetitive work	Learning culture, trying new things, experimentation, risk acceptance, learning from experience
Working for one specific unit within a hierarchical organisation	Working for the government as a whole, prioritising horizontal mobility
Focus on job stability	Focus on purpose and meaning
Rules-based management	Trust, autonomy and accountability for results
Managers as hierarchical supervisors	Managers as coaches enabling change

Note: The focus of the analysis is on public servants in a limited set of institutions related to the executive branch of the central government. Although it does not focus on the broader public sector, e.g. doctors or teachers, it provides insights for such employees.

Source: (OECD, 2021_[60]), *Public Employment and Management 2021: The Future of the Public Service*, <https://dx.doi.org/10.1787/938f0d65-en>.

3. What does “teacher professionalism” mean?

In the complex landscape of professions, teaching holds a unique position. Understanding what makes teaching distinctive lays the foundations for informed cross-sectoral work. Firstly, teaching is a predominantly public profession. OECD data show on average that 91% of primary school teachers, 90% of lower secondary school teachers, and 85% of upper secondary school teachers are employed in the public sector (OECD, 2021_[61]). This carries important consequences for current challenges and possible change (see Box 3.1).

Box 3.1. Teaching as a public service profession

How can teacher professional identity be strengthened? This is one of the big challenges for Dutch teacher policy. Looking back at around 25 years of teacher policy in the Netherlands, it is striking to note the lack of a thorough dialogue about what it means to be a teacher. This has highlighted the need for a shared understanding of the profession (Leenheer, 2019_[62]).

Present-day recommendations to the government (Meijer, Noordegraaf and Paalman-Dijkenga, forthcoming_[63]) mention that in current times, marked by significant transitions, polarisation and decreasing trust in professionals in general and teachers in particular, the societal value of teaching should be the starting point for rethinking teacher professional identity. An awareness that teachers are crucial in facing great societal challenges, from climate change to refugee crises and disinformation, is highly important.

According to American researchers Glazer and Mehta (2021_[64]), the magnitude of these challenges calls for collective professional action on the part of teachers. This goes beyond the individual teacher and classroom: thinking of teaching as a public profession helps to shape collective action.

Public professionalism has two sides. On the one hand, it is about the organisation of the profession. It means defining a shared understanding of what teachers are offering

society and, based on that, formulating the technical expertise, or the norms and standards of good teaching. On the other hand, public professionalism concerns public support for teachers, resulting in a new social contract between teachers and the public.

Further developing the idea of public profession and applying it to teaching requires a public dialogue between teachers and a broad range of education stakeholders, including students, parents, school leaders and school boards, civil society organisations, and businesses, among others. It will be challenging to shift the conversation on what teaching is about from the schools and classrooms to the public square.

However, the benefits of such a dialogue promise to be great: they include creating more understanding about teaching among the public and mobilising public support for the challenging role of teachers at the frontline of societal issues. It could also raise the status of the teaching profession. Lastly, it could change the relationship between schools, students and their parents as well as other stakeholders, from demand-supply relationships to genuine partnerships.

Note: Original contribution by Rien Rouw and Tim Schokker (Dutch Ministry of Education, Culture and Science).

3.1. Gender imbalances in the teaching workforce

OECD data document persistent gender imbalances in the teaching profession. The average proportion of women among primary and secondary school teachers remained stable from 2005 (70%) to 2019 (72%) (OECD, 2021_[61]). Taking age groups into account reveals that the imbalance is likely to remain and even slightly intensify, due to greater proportions of women among teachers aged 30 or younger at all levels of education, compared to among older teachers (50 years and older). The gender imbalance is particularly pronounced at lower levels of education, specifically in pre-primary and primary education. The average proportion of women decreases at higher levels of education and there is a greater proportion of men teaching at the tertiary level, on average, in the OECD.

These averages mask considerable variation between OECD countries. Several have a more balanced gender ratio among teachers in secondary education (see second column in Table 3.1), whereas in others, women are the majority at all levels of school education (see fourth column in Table 3.1). Lithuania, among other Central and Eastern European countries, is characterised by particularly large proportions of women in teaching. Japan, at the other end of the spectrum, is characterised by a greater proportion of men than women in teaching from the lower secondary to the tertiary level. Further research into the contextual aspects that may frame and explain these findings would be beneficial for understanding policy options to attract a diverse range of candidates to the teaching profession.

Table 3.1. Considerable variation in gender ratios among education levels and OECD countries

Percentage of female teachers in public and private institutions (2019)

Level of education	Comparatively low proportion of women	OECD average	Comparatively high proportion of women
Pre-primary education	Netherlands (88%) Denmark (89%)	96%	
Primary education	Japan and Türkiye (64%) Denmark and Mexico (68%)	82%	Lithuania, Hungary, Italy (95-97%) Czech Republic, Austria, Latvia, Slovak Republic (90-94%)
Lower secondary education	Japan (43%) Colombia, Luxembourg, Mexico, Netherlands, Costa Rica (50-55%) Switzerland, Türkiye, France (56-60%)	68%	Latvia, Lithuania, Iceland, Estonia (82-84%) Israel, Czech Republic, Italy, Hungary, Poland, Slovak Republic (76-79%)
Upper secondary education	Japan (31%), Switzerland (45%) Colombia, Mexico, Denmark, Türkiye (49-51%) Korea, Sweden, Greece, Luxembourg, Netherlands, Norway, Austria, Chile, Germany, Spain (54-56%)	60%	Latvia, Lithuania, Canada (75-81%) Estonia, Ireland, Israel, Slovak Republic (70-72%)
Tertiary education	Japan (28%) Korea, Luxembourg, Switzerland, Greece, Colombia, Czech Republic, Italy, Germany (35-39%)	44%	Lithuania, Latvia (55%) Finland, New Zealand, Canada, United States (50-52%) Belgium, Estonia (49%)

Source: Compiled from data in OECD (2021_[61]), *Education at a Glance 2021: OECD Indicators*, <https://doi.org/10.1787/b35a14e5-en> (accessed on 14 June 2022).

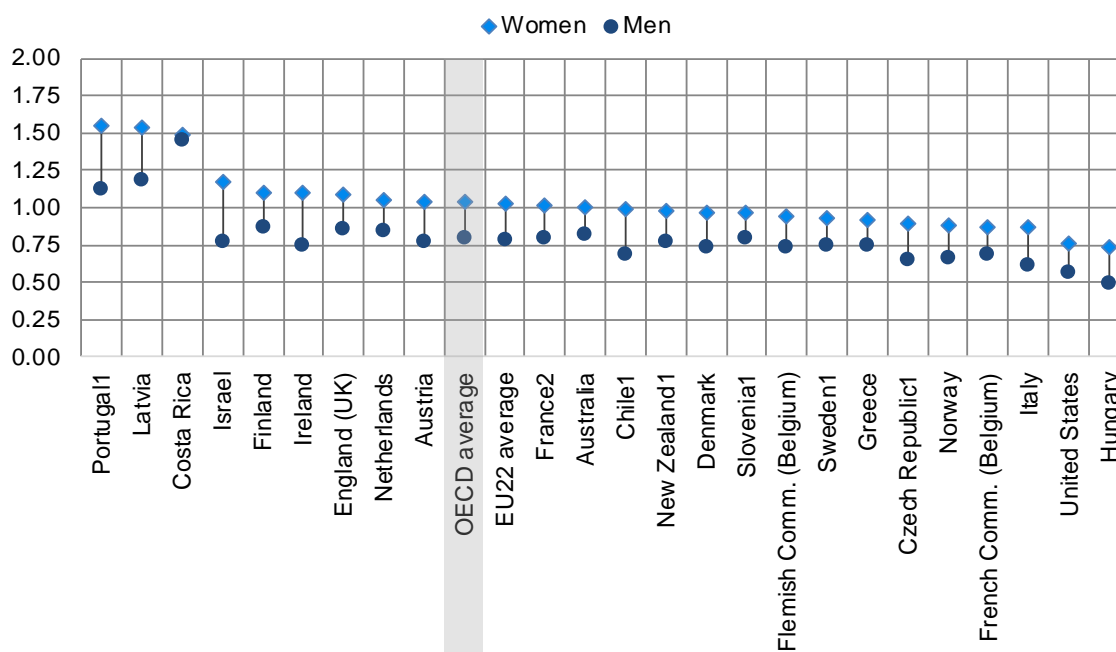
Researchers point to a link between gender and the concept of semi-profession (Abbott, 1998_[65]; Bolton and Muzio, 2008_[5]; Ingersoll and Collins, 2018_[6]). Indeed, despite being described by McDonald (1956_[66]) as “the mother of all professions” (p. 8_[66]) due to its role in educating younger generations and preparing them for the future, teaching is often classified as a semi-profession (Howsam, 1985_[4]), part of a set of occupations that “[fall] short of qualifying as full-scale professions” (Krejsler, 2005, p. 341_[67]).

A high proportion of women among practitioners is also a feature in a range of other occupations that are viewed as semi-professions, including nursing, social work and librarianship (Abbott, 1998_[65]; Krejsler, 2005_[67]). This suggests that gender biases may be operating against their full recognition. Hearn (1982_[46]) takes this idea a step further, viewing professionalisation as an undesirable process precisely because it is associated with a domination of the profession by men.

In all professions, one important form of reward is financial compensation. On this aspect, there is evidence that teaching remains comparatively more attractive as a career option for tertiary educated women, than for tertiary educated men (Figure 3.1). On average, the salaries of women in teaching in the OECD are in line with those of women who choose other professions following university education. On the other hand, for men there are very few countries in which a career in teaching offers rewards similar to or higher than other professions. Further research could focus on whether salary progression scales, which differ among countries, have an impact on the gender ratio of aspiring and practising teachers. This analysis might compare teaching and other professions in terms of progression between starting and highest salary grades, understanding the trajectory and its relevance for professional status.

Figure 3.1. The relative competitiveness of teaching salaries is higher for women in OECD countries

Ratio of actual salaries of lower secondary teachers in public institutions to full-time, full-year workers with tertiary education



Note: Teachers' salaries are for the year 2020, except for countries marked with '1' (2019) or '2' (2018). Countries and economies are ranked in descending order of relative actual salaries of women teachers. Source: OECD (2021_[61]), *Education at a Glance 2021: OECD Indicators*, Annex 3, Table D3.5, Figure D3.6, www.oecd.org/education/education-at-a-glance/EAG2021_Annex3_ChapterD.pdf (accessed on 14 June 2022).

In many fields of work, the proportion of women is progressively lower as leadership levels increase. Responding to the use of the term “female-dominated” (p. 323_[68]) to refer to social work, McPhail (2004_[68]) emphasises that “social work is more correctly described as a female-majority, male-dominated profession” (p. 325_[68]). There are many different forms of leadership throughout the education system and within schools. Available internationally comparative evidence on school leadership, reveals that countries tend to have higher proportions of principals who are men than teachers who are men (OECD, 2020_[69]). Adopting an intersectional lens is useful in developing a lifespan approach for supporting teacher professionalism (see Box 3.2).

Box 3.2. Gender, age and inequality

Research on the significance of gender and age in professional work and careers has increased in the last decade. This body of research demonstrates the ways in which gender disadvantages and advantages are often intertwined with age (Choroszewicz and Adams, 2019_[70]; Forson et al., 2017_[71]; Jyrkinen and McKie, 2012_[72]). Attitudes, gender norms and expectations about appropriate behaviour, appearance, skills, and lifestyle vary across age and life course stage. As a result, gendered experiences of life and work vary across age as well, with implications for career opportunities. Below, we provide

just a few examples from other professions and teaching to illustrate how gender and age are co-constructed to shape professionalism and inequality within professions.

Research on the male-dominated legal profession in Finland (Choroszewicz, 2019^[73]) captures the generational differences in attitudes to family life, parenthood and work-life balance. It shows that young lawyers who are men, like professional women, strive for a more balanced life, composed of a career and active participation as parents in childcare and family life. Yet, this ideal can conflict with the prevalent work ethos and often carries negative consequences for career progress. The traditional masculine ideology is sustained by older men, and imprints negatively on social change.

Research on dentistry in Finland shows that this traditionally female-majority profession has become internally stratified along gender lines with young men clustering in the private sector and in more financially rewarding areas. This includes specialisations that are viewed as more technical such as prosthodontics (Karaharju-Suvanto et al., 2021^[74]). Young women, by contrast, cluster in the public sector and in specialisations that enable a work-family balance and are characterised by care and provision of comfort such as periodontology. Young dentists also develop a gendered professional identity, with men perceiving themselves as technicians and entrepreneurs, and women as comforters, social workers and health promoters.

In teaching, new entrants can struggle to establish their professional identity – this may particularly be the case for those who feel excluded from prevailing norms of professionalism because of their racial/ethnic background, gender, or sexual orientation (Marom, 2019^[75]). Teachers who are parents may find it challenging to balance work and caregiving; women are especially affected, with implications for mental health (Corrente et al., 2021^[76]). Teachers in later career stages may face cumulative disadvantages: some research suggests that challenging working conditions and organisational reforms over the course of a career accumulate to decrease professional attachment and satisfaction; again, women are particularly affected (Cau-Bareille, 2017^[77]).

Adopting an intersectional lens reveals how experiences of work and professionalism can vary across gender, age and other factors like race, ethnicity, and sexual orientation. Policies need to take intersections into account as workers may require different forms of support. For a sustainable and more diverse workforce, policies need to broaden traditional definitions of professionalism and careers to value non-linear career patterns, recognise and accommodate fathers' as well as mothers' care responsibilities, and take career stages into account.

Note: Original contribution by Marta Choroszewicz (University of Eastern Finland) and Tracey L. Adams (University of Western Ontario).

3.2. Other distinct features of teaching

Besides being a largely public sector profession characterised by important gender imbalances, other aspects play a role in defining teaching. For instance, consistent with other public professions, teaching is characterised by a comparatively older workforce with respect to other professions and occupations. On average in the OECD in 2020, 27% of public servants were age 50 and over (OECD, 2021^[60]). Data collected in 2019 show that the share of teachers age 50 and over increases with education level, from 33% in primary education to 36% in lower secondary education and 40% in upper secondary education (OECD, 2021^[61]). As a result, in some countries an ageing teacher workforce is a pressing

concern, especially since an older teacher workforce does not always correlate with a more experienced workforce. As noted by Ingersoll and colleagues (2018_[78]) in the context of the United States, in 2016 teachers were on average older but also “greener” (p. 10_[78]) than in 1987, meaning with fewer years of experience in the profession, suggesting that older professionals switching careers play an important role in affecting workforce composition.

Some research points out that teaching is characterised by an unclear notion of the client. While physicians are usually conceptualised relative to a patient, and lawyers to a client, teachers serve students, or more precisely *groups* of students, who are usually children. There is some debate about whether the clients for teachers are students or parents. Hoyle (2001_[13]) perceives this as a fundamental challenge for teachers, who have to meet demands raised by children, parents (Ballet and Kelchtermans, 2009_[79]) and society, which may be contradictory (Biesta, 2015_[80]). An awareness of these tensions may serve discussions on teacher professionalism but also on professionalism generally, as other sectors face the rise of increasingly complex accountability systems and politicised arguments.

More generally, Hoyle (2001_[13]) notes that virtually everyone has contact with teachers during their lifetime leading to challenging consequences for the “professional mystique” (p. 141_[13]) of teaching. This may relate to the slow pace of innovation in education: virtually everyone has an outdated idea of education that is grounded in personal experiences of schooling, posing a challenge to future-looking approaches (Hargreaves, 2000_[25]).

In addition to the inherent differences that characterise teaching, different authors identify varying priorities in bridging the gap in professionalism that separates teachers from the established professions. For example, Guerriero and Deligiannidi (2017_[14]) call for an increased use of science-informed practice in education as a possible way of enhancing the pedagogical knowledge base of teachers, therefore increasing teacher professionalism. Other suggestions include developing options for career progression and specialisation (Ingersoll and Collins, 2018_[6]), strengthening teacher autonomy (Ingersoll and Collins, 2018_[6]; OECD, 2020_[69]) and strengthening teacher status (Hoyle, 2001_[13]; OECD, 2020_[69]).

3.3. Conceptualising teacher professionalism

As education systems face significant challenges, including an ageing teacher workforce as well as difficulties attracting and retaining excellent teachers (Ingersoll, 2003_[81]; OECD, 2020_[82]), a focus on teacher professionalism can support new practice, research and policy (Goodwin, 2011_[83]). Previous OECD work has conceptualised professionalism in teaching, identifying ways in which the features of professionalism described so far are relevant in education. Findings from the 2018 iteration of TALIS are shaped around five pillars of teacher professionalism (see Table 3.2).

Table 3.2. Five pillars of teacher professionalism from TALIS 2018

TALIS pillar of teacher professionalism	Description
Knowledge and skills base	Shared and specialised knowledge, captured through standards for access to the profession, pre-service training and in-service professional development
Career opportunities and working regulations applying to teaching	Contractual arrangements offering security and flexibility, competitive reward structures commensurate with professional benchmarks, appraisal systems or mechanisms, and room for career progression
Peer regulation and collaborative culture	Relies upon self-regulated and collegial professional communities that provide opportunities for collaboration and peer feedback to strengthen professional practices and the collective identity of the profession
Responsibility and autonomy	The degree of autonomy and leadership that teachers and school leaders enjoy in their daily work to make decisions, apply expert judgement, and to inform policy development at all levels of the system, so that professionalism can flourish
Prestige and standing of the profession	The ethical standards expected of professional workers, the intellectual and professional fulfilment of the job, as well as its perceived societal value and standing relative to other professional occupations

Source: OECD (2020^[69]), *TALIS 2018 Results (Volume II): Teachers and School Leaders as Valued Professionals*, <https://doi.org/10.1787/19cf08df-en>.

More recently, an OECD project has been examining an overarching policy question: how can education systems move beyond the state-of-the-art in teacher policy and address challenges facing the profession in the decades to come? The project aims to review the present knowledge base, including TALIS findings, to generate innovative thinking and ideas for the practice, research and policymaking communities and support countries in building their own vision and roadmap for teachers in the future. This work has identified individual and collective elements of teacher professionalism (see Table 3.3).

Table 3.3. Five elements of professionalism from *The Future of Teachers and Teaching*

Individual and collective elements of teacher professionalism	Description
Professional knowledge and competences	Professional teachers base their judgements, actions and work-related decisions on a specialised, systematised and scientific body of knowledge and shared professional values. In their practice they also have to build on further professional competences (e.g. attitudes, beliefs, teaching skills, strategies and practices)
Commitment to a high standard of practice as well as lifelong learning	Professional expertise is ensured through standards of access to the profession and entry requirements. Expertise is also built and maintained through quality training, induction and continuing professional learning
Professional exchange, collaboration and identity	As a professional community, teachers think collectively about important challenges. Constant collaboration and dialogue with peers and stakeholders help them learn and grow professionally. Together they reflect on how to improve and innovate teaching and schools. They provide each other with feedback and share a professional identity
Responsibility and autonomy	As experts, they have autonomy and responsibilities, both in exercising professional judgement and decision making in practice and in governance over the profession
Status and standing of the profession	As a consequence of the high standards and expertise that is required, teaching should be valued as a prestigious, intellectually and professionally fulfilling job not only by the teaching workforce but by society as a whole. Overall, certain working conditions and regulations need to apply (such as competitive reward structures and opportunities for career progression) so that teacher professionalism can flourish

Source: OECD (forthcoming^[84]), *The Future of Teachers and Teaching*.

This paper argues the importance of teachers themselves at the forefront of discussions of teacher professionalism. Approaches where teachers perceive a lack of agency are well-documented as barriers. Introducing policies from above and disregarding teacher realities have been criticised for failing to represent teacher views and to achieve intended goals (Parding and Abrahamsson, 2010^[85]), underlining the importance of teacher-driven or “ground-up” (Dalli, 2008, p. 174^[86]) professionalism. Similarly, policy changes may be

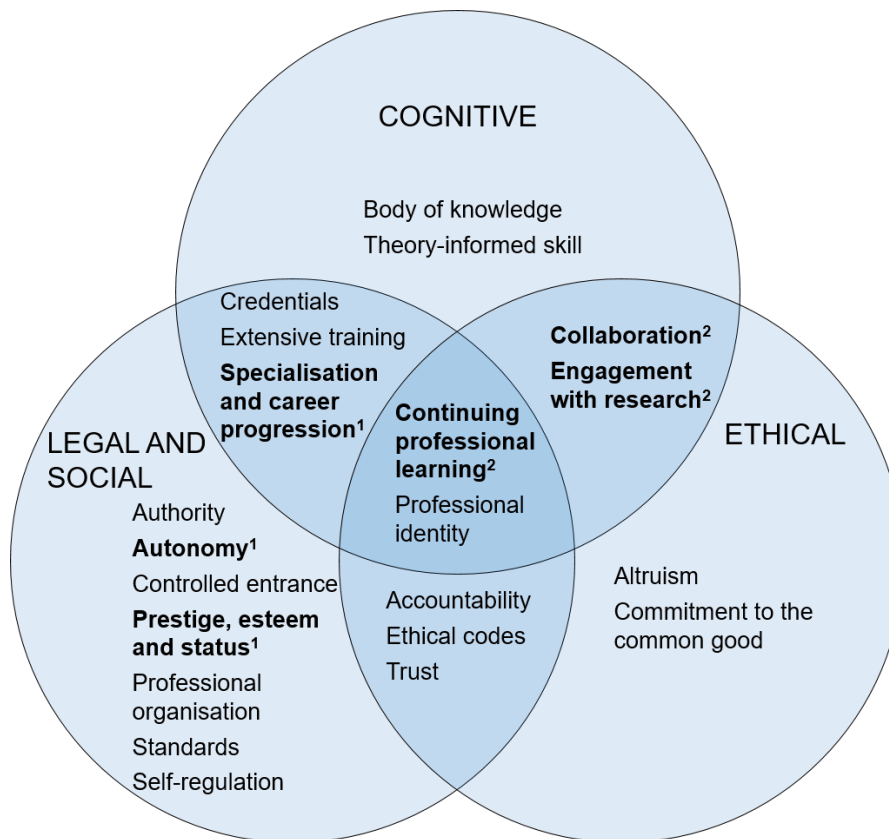
affected by miscommunication, rapidly changing priorities, reform fatigue, and uncertain local uptake of centrally-made decisions (OECD, 2020_[82]). Researchers have argued that attempts to professionalise may actually result in deprofessionalisation, for instance when evaluation systems are imposed from above (Sachs, 2016_[12]).

Using the conceptual framework (Figure 2.1), the remainder of this paper identifies cross-sectoral learnings to reinforce teacher professionalism. These are highlighted in Figure 3.2. The elements in Figure 2.1 and Figure 3.2 have been derived from an historical analysis, which maps changes in cross-sectoral thinking about the concept professionalism. There is overlap with current OECD descriptions of teacher professionalism (see Table 3.2 and Table 3.3) which might be developed further as new cross-sectoral insights are explored.

The Venn diagram (see Figure 2.1 and Figure 3.2) is an attempt at presenting features of professionalism in a way that (a) is relevant for professionalism generally and not just teaching, (b) stimulates discussion on the interactions between ethical, cognitive, legal and social dimensions, and (c) makes room for some flexibility by taking steps towards a more holistic/systems approach, indicating that the role and placement of features in the diagram may be affected by context, and that policies intended to affect specific features may have consequences for others as well. While the TALIS pillars (see Table 3.2) offer a vision for teacher professionalism, the Venn diagram is a tool to discuss and assess teacher professionalism in context and across sectors.

Section 4 investigates how turning to other sectors may offer constructive insights for improvement regarding specialisation and career progression, autonomy, prestige, esteem and status. Section 5 identifies areas where teaching is well placed to innovate professionalism itself, especially with respect to continuing professional learning, engagement with research and collaboration.

Figure 3.2. Cross-sectoral learnings to reinforce and innovate teacher professionalism



Note: (1) Features of professionalism that this paper considers in drawing from other sectors, (2) Features of professionalism where teaching can play a role in innovating professionalism.

4. How can drawing from other sectors reinforce teacher professionalism?

Cross-sectoral thinking supports the identification of policy options for strengthening teacher professionalism in terms of specialisation and career progression, autonomy, and status (Figure 3.2). Interestingly, important connections link these three aspects, suggesting that acting on one may have repercussions for the others. As seen above, teaching is already changing, and it is characterised by unique challenges and opportunities in the landscape of professions. This section turns to other professions to understand possible ways of strengthening teacher professionalism.

Existing comparative work draws parallels between teaching and medicine, which can be traced back to a 1975 report by the National Institute of Education (United States), which explores “the clinical act of teaching” (p. 10_[87]), associating teaching with notions such as “diagnosis” (1975, p. 14_[87]). Taber (2005_[88]) uses an analogy between teachers and doctors to argue in favour of more structured diagnostic approaches to understand “bugs in the teaching-learning system” (p. 226_[88]), or fixable faults that prevent learning. Work by Becher and Lefstein (2021_[89]) adapts the analogy between teaching and medicine to the realities of the classroom in an attempt to go beyond the dichotomy of whether or not the clinical lens is a beneficial approach for conceptualising teaching. Comparative approaches have also led to clinically inspired innovations in teacher education (Goodwin et al., 2015_[90]).

However, work on teaching as a clinical profession has been widely criticised, mainly due to debates around evidence-based practice (Atkinson, 2000^[91]; Biesta, 2007^[92]; Davies, 2003^[93]). Other cross-sectoral approaches have included comparisons of professional standards between professions, yielding insights especially at the national level (Ramsey, 2000^[21]). Here, the aim is to use cross-sectoral insights as useful heuristics, encouraging further reflection and discussion on ways to strengthen teacher professionalism. Other professions may point to areas for teaching to focus on for improvement, but many policy options and ideas for innovation come from examples within education itself.

4.1. Specialisation and career progression

Established professions tend to offer their members options in terms of specialisation and career progression. Specialisation refers to differentiation in the focus of professionals' expertise. In the words of Ingersoll and Collins (2018^[6]):

Few employers or organizations would require heart doctors to deliver babies, real estate lawyers to defend criminal cases, chemical engineers to design bridges, or sociology professors to teach English. (p. 206^[6])

Career progression, instead, refers to the advancement of the professional's role, responsibilities, job title and rewards, justified by their experience, expertise and professional growth. The two concepts are distinct but interconnected: a key feature shared by the two concepts is that they both point to differentiation among professionals who work in the same field, in terms of their expertise and accomplishment, specialty or a combination of these aspects. Rethinking these structures in education is a promising area of research that can harness the expertise within the profession and, in turn, enhance the status of teaching.

Specialisation and career progression are widely discussed in the context of several professions. While in some sectors these are linked to potentially detrimental levels of competition (Gustafsson, Swart and Kinnie, 2018^[94]), they have been found to positively affect professional work in different fields. In the context of nursing in the United States, for example, Adeniran, Bhattacharya and Adeniran (2012^[95]) suggest that a well-defined "career advancement trajectory with appropriate incentives to encourage participation" (p. 41^[95]) could be key not only in supporting the work of nurses, but also in improving the health system's effectiveness. In the context of the psychology professions, researchers point to specialisation as a tool in response to the "accelerating pace of knowledge generation and dissemination" (Neimeyer et al., 2014, p. 92^[96]).

As Armour, Makopoulou and Chambers (2012^[97]) note in the context of physical education teaching, education systems do not always offer clear options for career progression or specialisation for teachers. A challenge for teaching is to develop options for career progression that allow teachers to specialise and develop while maintaining a classroom role, alongside options involving more managerial tasks. Boeskens and Nusche (2021^[98]) point to the importance of work that teachers carry out outside the classroom. As a result, higher levels of responsibility should be recognised and matched with increased non-teaching working time.

The high proportion of teachers leaving the profession within five years of joining the workforce may be linked to perceptions of reduced opportunities for career advancement (Han and Hur, 2022^[99]). Career progression in teaching may also be hindered by gender inequalities, consistently with other fields such as accounting (Windsor and Auyeung, 2006^[100]), and higher education (Bowyer et al., 2022^[101]). In the context of law, there is evidence to suggest that women's perceived lower chance of promotion may have repercussions on their decision to leave their employment (Anker and Krill, 2021^[102]; Kay,

Alarie and Adjei, 2016_[103]). However, in teaching it is not clear how gender affects likelihood of exit from the profession, with different studies reporting conflicting findings (Struyven and Vanthournout, 2014_[104]).

One avenue for increased specialisation is subject specialisation, more common at the secondary level. Researchers in Sweden identified a positive relationship between teacher specialisation (understood as relevant teacher education for grade and subject) and student outcomes (Johansson and Myrberg, 2019_[105]; Myrberg, Johansson and Rosén, 2019_[106]). Ingersoll and Collins (2018_[6]), however, note that in the United States, secondary school teachers in public schools “are assigned to teach a substantial portion of their weekly class schedules out of their fields of specialty” (p. 206_[6]). They argue that this is not due to a lack of specialised teachers in given fields, but rather due to a mismatch between teachers’ training backgrounds and their responsibilities once employed. It emerges that systems-level thinking in terms of improving this fit may prove conducive to strengthening both teacher professionalism and student outcomes.

In terms of career progression, Vaughan-Marra and Marra (2017_[107]) explore various opportunities available to music teachers in the United States. Besides more managerial positions, they point to avenues for independent continuing professional learning and action research. However, they point out that despite their likely positive influence, these self-led forms of career development “do not typically lead to a significant promotion in an educator’s position or compensation” (p. 129_[107]). As a result, it is important for policymakers to reflect on ways to recognise, promote and reward professional growth.

One option for rethinking career structures could involve offering a career specialisation role focused on experience to support schools where experience is difficult to attract and retain. OECD data show that experienced teachers tend to work in socio-economically advantaged schools (OECD, 2022_[108]; OECD, 2019_[109]). Policies aimed at reducing unequal distributions of experienced teachers may create a vision for career progression rooted in teachers’ strong public service commitment, while reducing inequalities between students from different backgrounds. Parallel discussions in medicine underline the importance of providing sufficient reward for professionals working in disadvantaged contexts (Hastings and Rao, 2001_[110]).

Incentives for teacher specialisation could include financial and time compensation, as well as professional incentives such as networking and continuing professional learning opportunities specific to that role. One example is the creation of an Executive Principal role as part of improving education and learning outcomes for some Aboriginal communities in New South Wales, Australia. The interim evaluation has shown that (Goodall, 2016_[111]):

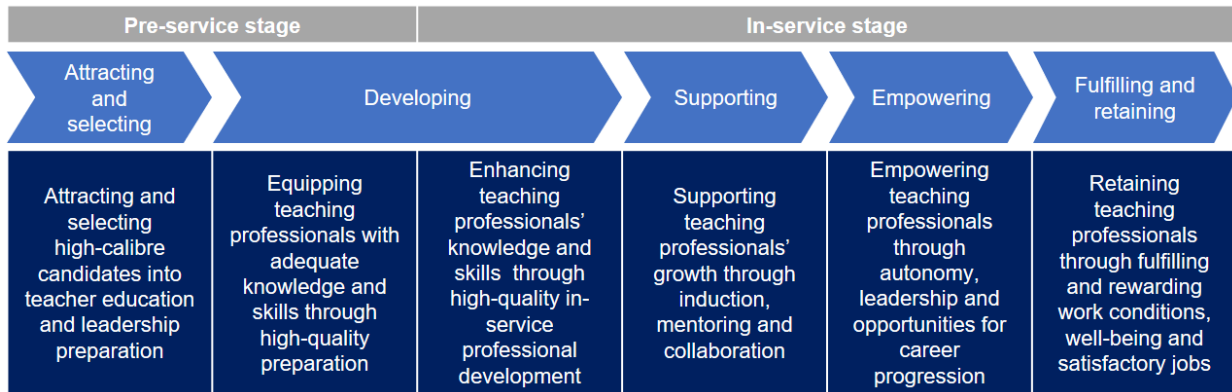
The appointment of Executive Principals has undoubtedly had a positive impact on the learning environment and quality teaching framework at the majority of schools. Executive Principals have also demanded high expectations from teachers and set clear and consistent expectations for student behaviour (p. 81_[111]).

Developing such a role for teacher leaders in difficult to staff areas could value accumulated experience, as well as expertise, and recognise the professional skills that these teachers possess.

Using a lifespan approach (Choroszewicz and Adams, 2019_[43]) can open up thinking about career specialisation at different stages which have benefits for policy and practice. This approach acknowledges that teachers possess varying demographic characteristics, and enables practitioners, researchers and policymakers to focus reflection and discussion at different points along the teaching career pathway (see Figure 4.1). As argued by several researchers, focused work on specific career stages, such as early career (Kutsyuruba et al.,

2021^[112]) or mid-career teachers (Booth et al., 2021^[113]), can yield useful insights for possible innovations, offering the potential to better understand evolving challenges and opportunities and to root discussion within specific legal, social and cultural contexts.

Figure 4.1. The teaching career pathway model



Source: Adapted from OECD (2020^[69]), *TALIS 2018 Results (Volume II): Teachers and School Leaders as Valued Professionals*, <https://doi.org/10.1787/19cf08df-en>.

Looking at other professions can shed light upon which aspects require further work, but ideas of how this work might materialise can be found within education. For example, the teacher career progression system in Singapore has attracted attention for offering three clear tracks (teaching, leadership and senior specialist) for encouraging advancement and career diversification (National Center on Education and the Economy, 2019^[114]). This has been argued to provide continuous support throughout the teaching career, for instance in terms of enabling practitioners to achieve their goals within and beyond the classroom and providing clear guidelines for those who wish to switch tracks during their careers (Goodwin and Low, 2021^[115]). Fisk Natale and colleagues (1995^[116]) include the Singaporean example and other diverse approaches to structuring career pathways, suggesting that multiple possible context-based options exist for promoting teacher growth and sustaining motivation.

4.2. Autonomy

Ingersoll and Collins (2018^[6]), with a focus on teaching in the United States, suggest that working on “authority, autonomy, and decision-making influence” (p. 212^[6]) would be particularly beneficial in the professionalisation of teaching. Discretion, understood as the autonomy to deliberate on complex cases in a context of trust and respect, is a central aspect of professional work (Evetts, 2006^[117]). Recent trends (see Box 4.1) have challenged professional discretion, underlining the importance for teaching to cultivate this trait.

Box 4.1. Professionalism, autonomy and workplace change

Autonomy has long been considered a central component of professionalism. Professionals are granted leeway to draw on their knowledge, experience, and ethics to make decisions about how best to provide safe, effective services to others. In recent years, however, changing management philosophies have brought a decline in professional autonomy. Traditional forms of professionalism characterised by discretion and collegiality are giving way to organisational professionalism, reflecting standardisation, closer management, and performance review (Evetts, 2011_[118]). In many countries, this trend results from New Public Management (NPM) – the application of private sector managerial techniques of control to public sector professional workplaces. NPM originated in the United Kingdom in the 1980s and 1990s, and while its impact has perhaps been most felt in the United Kingdom, Australia, North America, and Europe, NPM policies and practices have been adopted piecemeal in locales around the globe (Common, 1998_[119]; Osborne, 2006_[120]). NPM has been associated with closer supervision and the application of performance measurement techniques to assess professional performance. For professional workers, this has often brought increased workloads, precarity, and decreased autonomy.

Research has explored the impact of NPM on professionals in a variety of fields, including tertiary education. Studies have documented an increase in professional precarity as reliance on contract teachers increases (Muzzin and Martimianakis, 2016_[121]). At the same time, research faculty face increased pressures to publish and win research funding. Both types of workers experience work intensification and more job stress with NPM reforms (Shin and Jun, 2014_[122]). With increased scrutiny and pressure, professor “autonomy gives way to accountability” (Evans, 2008, p. 20_[123]).

Declines in autonomy are also clear among primary and secondary level teachers (Lundström, 2015_[124]). Teachers face increased pressure from management, students and parents, resulting in altered and increased workloads (Lundström, 2015_[124]; Parding and Berg-Jansson, 2016_[125]). Higher work pressures combine with lower autonomy to increase workplace stress (Lundström, 2015_[124]; Parding and Berg-Jansson, 2016_[125]), potentially leading to burnout (Javadi, 2014_[126]). Deteriorating working conditions and lower autonomy also encourage teaching turnover and attrition (Worth and Van den Brande, 2020_[127]). Research documenting the negative implications of decreased worker autonomy for both workers and the clients they serve supports calls for increased worker autonomy. Autonomy provides professionals with more fulfilling working conditions, improving their wellbeing and enabling them to practise most effectively to meet the needs of the populations they serve.

Public administration scholars argue that NPM has now given way to new management philosophies (Osborne, 2006_[120]), but trends underlying NPM including a drive for efficiency, and a commitment to doing more with less, mean that in many locales, professional workers’ autonomy continues to deteriorate. Policymakers should recognise that professional autonomy has benefits for workers and their clientele, and adopt management strategies that build up, rather than undermine, worker autonomy.

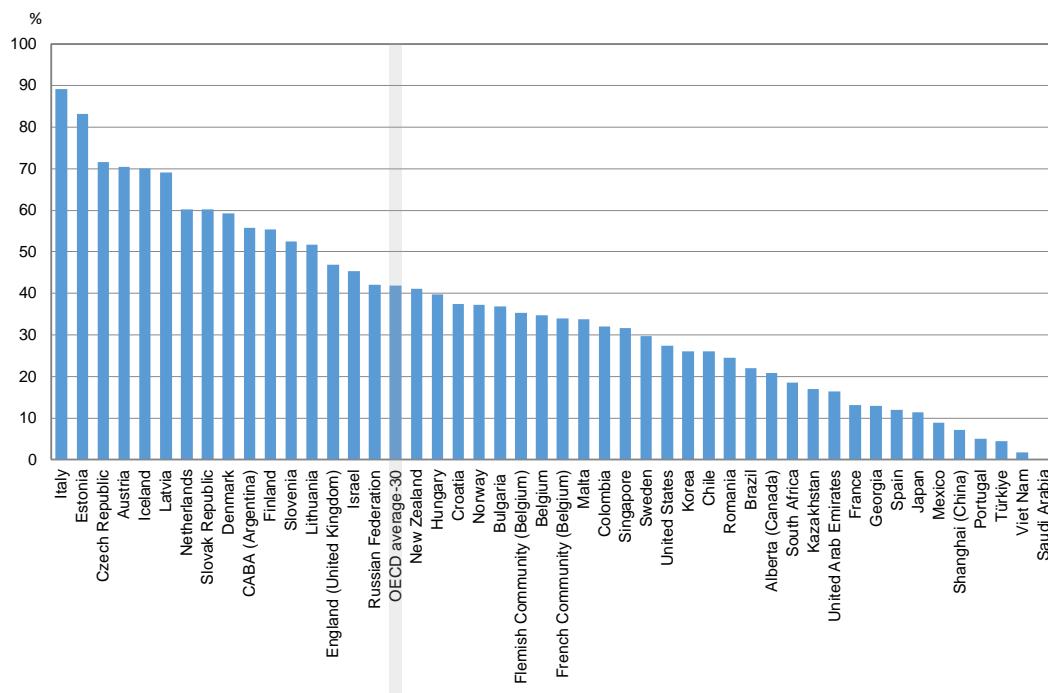
Note: Original contribution by Tracey L. Adams (University of Western Ontario) and Marta Choroszewicz (University of Eastern Finland).

Findings from the nursing profession suggest that increased nurse autonomy is associated with improved patient outcomes (Rao, Kumar and McHugh, 2017_[128]). In the context of

teaching, autonomy can reflect work both within and outside the classroom. In the classroom, it includes aspects such as curriculum, pedagogy and assessment practices (OECD, 2020_[69]). Autonomy can also apply within a school context, in terms of the extent to which teachers are part of decision-making processes, partially determined by levels of school autonomy within education systems (OECD, 2020_[69]). The challenge is to balance providing space for teachers to offer their influence based on expertise with other aspects of professionalism, in a way that supports teachers rather than increasing their workload (Ballet, Kelchtermans and Loughran, 2006_[129]).

OECD data show that lower secondary teachers have very little involvement in school-level staffing and budgetary decision making (OECD, 2020_[69]). On average, they are more likely to have greater responsibilities for school policies, curriculum and instruction, though there is significant variation between countries (see Figure 4.2). Much of the difference observed between countries relates to general governance structures and school autonomy levels (OECD, 2018_[130]). France, Mexico, Spain and the Republic of Türkiye, for instance, are characterised by more centralised systems. In Canada, Japan, Korea and the United States, the majority of key decisions are taken outside schools by different levels of government. However, even in some systems with comparatively high levels of school autonomy, such as England (United Kingdom), the Flemish Community of Belgium, and the Netherlands, results suggest that there is generally scope for greater and more systematic involvement of teachers in decision making.

Figure 4.2. Overall teachers' responsibilities for school policies, curriculum and instruction



Note: Percentage of lower secondary school principals who report that teachers have significant responsibility in a majority of tasks related to school policies, curriculum and instruction (TALIS 2018 data). This percentage is calculated based on whether principals report that teachers have significant responsibility in at least four of the following six tasks: “establishing student disciplinary policies and procedures”; “approving students for admission to the school”; “establishing student assessment policies”; “choosing which learning materials are used”; “deciding which courses are offered” and “determining course content”.

Source: OECD (2020_[69]), *TALIS 2018 Results (Volume II): Teachers and School Leaders as Valued Professionals*, <https://doi.org/10.1787/19cf08df-en>.

While traditional understandings of autonomy underline individualism, in recent decades the concept of “relational autonomy” has received attention (Dove et al., 2017_[131]). This involves focusing on the “networks of social relationships and interdependencies that facilitate autonomous action” (MacDonald, 2002, p. 195_[132]), recognising that autonomous judgement derives from the relationships that enable it. Consistent with writings on relational autonomy, the latest analysis from TALIS 2018 results suggests there may be a positive relationship between autonomy of teachers and collaboration with colleagues (OECD, 2020_[69]). Furthermore, autonomy and collaboration need not be viewed as polar opposites, but rather as attributes that support and complement one another (Vangrieken et al., 2017_[133]).

TALIS 2018 results also found a positive relationship between autonomy and work satisfaction (OECD, 2020_[69]), in line with similar findings from England (UK) (Worth and Van den Brande, 2020_[127]). Strengthening teacher professional empowerment may then yield benefits for professionalism and contribute to teacher retention.

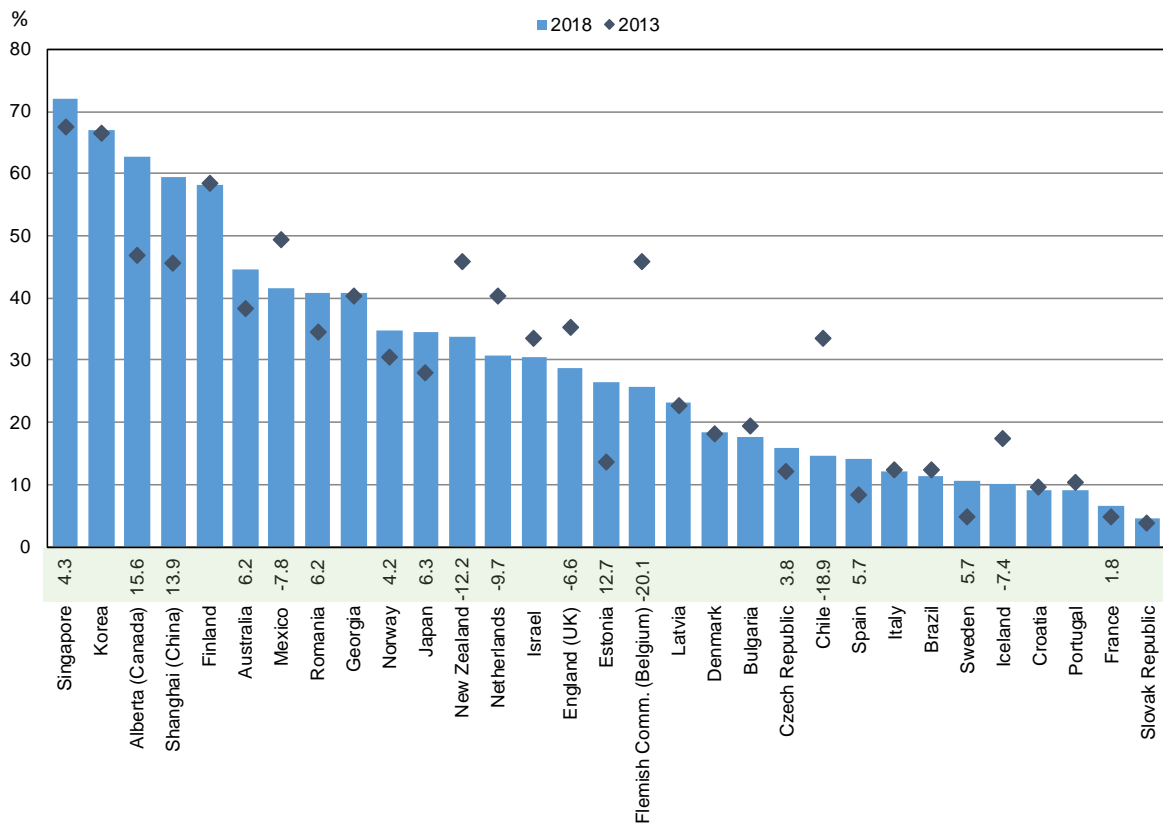
4.3. Status

The importance of teachers’ status plays a role in framing many arguments about the professionalisation of teaching. The term “status” is multifaceted and has been argued to contain different dimensions. Hoyle (2001_[13]) argues that the debate around status would benefit from breaking down the concept into three independent phenomena:

1. Occupational prestige: “the public perception of the relative position of an occupation in a hierarchy of occupations” (p. 139_[13]).
2. Occupational status: whether teaching can, formally and semantically, be described as a profession.
3. Occupational esteem: “the regard in which an occupation is held by the general public by virtue of the personal qualities which members are perceived as bringing to their core task [...]: dedication, competence, and care” (p. 147_[13]).

Professional status stands in a complex relationship with other features of professionalism: while some directly influence status, additional dimensions are also at play. TALIS 2018 data contain important insights for the prestige, or public perception, of teachers. Figure 4.3 shows that the extent to which lower secondary teachers feel valued in society varies greatly by country, and that there is no unidirectional trend in terms of changes from 2013 to 2018. Moreover, findings suggest that teacher perceptions are generally in line with public opinion (Dolton et al., 2018_[134]; OECD, 2020_[69]) and consistent with the perceptions of primary and upper secondary teachers in countries where they were included in the survey (OECD, 2020_[69]). The magnitude of change – in either direction – that some countries have witnessed in a 5-year timespan suggest that teacher prestige is highly susceptible to change. Teacher professionalism as an enacted feature of teaching has the potential for initiating improvements in teacher prestige. However, it appears that losing ground over relatively short periods of time (e.g. 5 years in Figure 4.3) is also possible, which underlines the importance of process-based approaches to professionalism that seek continuous improvement. As the most recent data were collected prior to the COVID-19 pandemic, the next iteration of TALIS will offer insights with repercussions for foresight exercises in terms of crisis preparedness.

Figure 4.3. Change in perceived societal value of teaching from 2013 to 2018



Note: Percentage of lower secondary school teachers who “agree” or “strongly agree” that the teaching profession is valued in society. Only countries and economies with available data for 2013 and 2018 are shown. Countries and economies are ranked in descending order of the percentage of lower secondary teachers who “agree” or “strongly agree” that the teaching profession is valued in society in 2018.

Source: OECD (2020^[69]), *TALIS 2018 Results (Volume II): Teachers and School Leaders as Valued Professionals*, <https://doi.org/10.1787/19cf08df-en>.

Hoyle (2001^[13]) is pessimistic about the possibility of increasing teacher status within a system of managerialist professionalism, due to an atmosphere of over-regulation that results in an erosion of trust (Evetts, 2009^[58]; Evetts, 2013^[18]; Sachs, 2016^[12]). It follows that a strengthening of teacher status can only take place in the context of a more connective and democratic professionalism (Noordegraaf, 2020^[10]; Sachs, 2016^[12]). Noordegraaf argues that enacted professionalism, especially within teaching, is less about the specialist knowledge base and dependency on a single professional, and more about developing relational expertise where an ecosystem of professional teachers work interdependently to meet shared goals for the children and young people that they serve.

5. How can teaching play a role in innovating professionalism?

As seen above, looking to other professions is a productive exercise in identifying ways to strengthen teacher professionalism. Despite this, there are significant ways in which teaching can contribute to innovating professionalism generally. Teaching is well placed to explore new avenues towards more connective and democratic models of occupational

professionalism that may be relevant in other sectors. Three key features of teaching determine this potential.

Firstly, teaching is typically characterised by a strong commitment to serving students and public interest. According to TALIS 2018 results, the three motivations to become a lower secondary school teacher most commonly rated as important are “teaching allowed me to influence the development of children and young people” (92.3%), “teaching allowed me to provide a contribution to society” (88.2%) and “teaching allowed me to benefit the socially disadvantaged” (74.7%) (OECD, 2019, p. 124_[109]). This altruistic motivation holds significant potential for development and innovation.

Secondly, teaching is deeply rooted in communities, and is characterised by strong connections with students, families and wider society. This provides the opportunity for teachers to engage in meaningful collaboration, re-defining professionalism as an open and cooperative process. Teachers can be empowered while strengthening connections with diverse stakeholders, setting an example for wider cross-sectoral exchange.

Thirdly, pedagogical knowledge, which is at the heart of teacher professionalism (Révai and Guerriero, 2017_[135]), has immense import for innovating the ways in which professionals receive their initial teacher education and continue to develop throughout their professional life. The positioning of teaching in the education sector offers a privileged position to explore, innovate and co-create initial and continuing teacher education. This knowledge may be employed in dialogue with other professions to improve professional preparation across the board.

Given these points, this section outlines some of the areas in which teaching has an opportunity to be at the forefront of innovating professionalism by continuing work on or turning greater policy focus to altruism, networks and communities, and structures to share and develop pedagogical knowledge. Goodwin (see Box 5.1) puts forward the case for why now, more than ever, there are compelling reasons for teachers to seize opportunities and use the concept of professionalism to create space for change.

Box 5.1. Teachers as initiators of change

The COVID-19 pandemic uncovered numerous fault lines in health, education and social systems globally, underscoring the precariousness of human existence. With 1.6 billion children shut out of schools, the impact of the pandemic was pronounced, not just on students and their teachers, but on everyone given the central role education and schools play in our collective lives. The heavy responsibilities teachers shoulder in caring for and educating the world’s young people became more visible, with teachers everywhere lauded for their selfless contributions. Indeed, an unanticipated consequence of the pandemic was the public’s increasing awareness that teachers’ work is extremely challenging, requires unique skills and specialised knowledge, and supports the smooth functioning of society.

Unsurprisingly, given this global crisis, the dual-sided issue that is teacher quality and teacher professionalism is *the* contemporary concern as all nations strive towards excellence at all levels in a post-pandemic era. This comes amidst an unexpected reversal in public sentiment that deified teachers but now demonises them for not doing enough as schools reopened, with little sympathy for the enormous stress teachers experience as they endeavour to keep themselves and their students healthy and safe, juggle competing demands from multiple stakeholders, stay abreast of shifting policies governing school safety precautions and opening guidelines, source necessary supplies

(curriculum materials, digital tools, testing kits), and gradually nurture students back into the familiar yet strange reality of being in school and collectively engaging in-person with peers and adults outside their immediate families.

We face a watershed moment for teacher professionalism which could dictate where teaching is headed given the enduring struggle that has seen the teaching profession make progress towards professionalism only to be pushed back once again to semi-professional status. Strategies to elevate the status of teachers have included greater remuneration, continuing professional development, stricter credentialing requirements and career advancement opportunities. Yet, these important levers for teacher professionalism cannot permanently raise teachers' status until teachers' work and worth are fundamentally redefined as more than direct instruction and interaction with students. Teaching well involves an ecology of actions and tasks, often completed by teachers outside school hours and therefore rendered invisible—and discounted. Valuing the complexity of teachers' work is fundamental to any notions of professionalism, especially work beyond stereotypical conceptions of teaching.

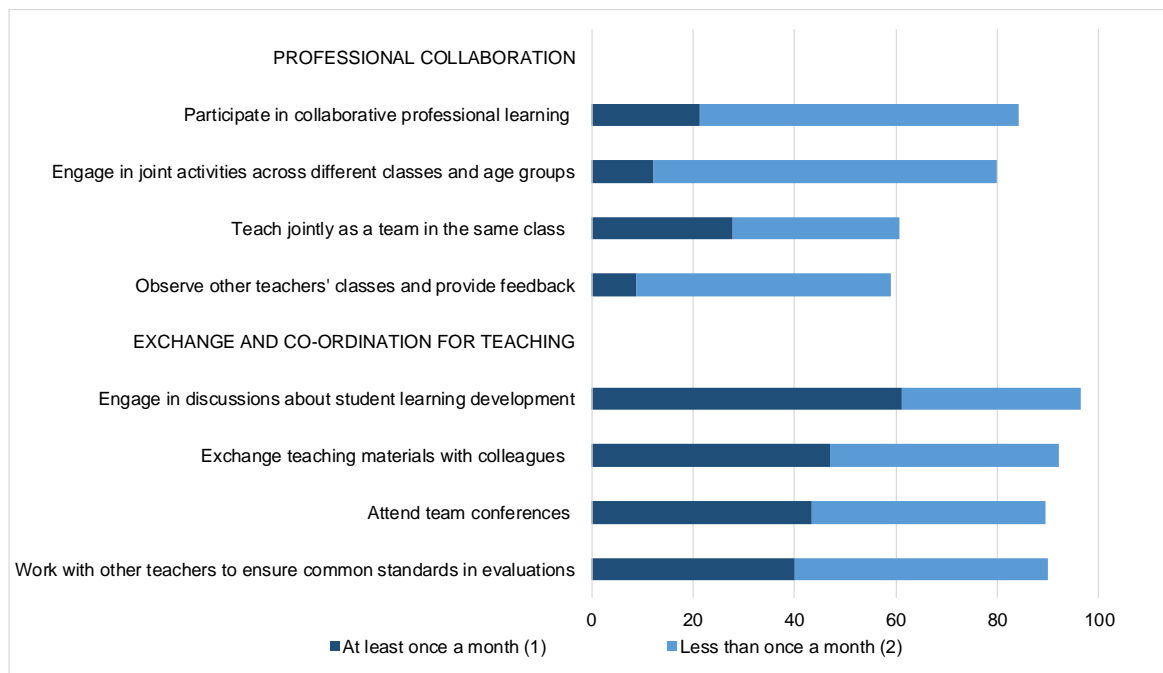
Once the complexity of teachers' work is acknowledged, then teachers' workday will be restructured to afford teachers the time needed to (co)-plan, collaborate, mentor, create, learn, research and share what/as they learn. Indeed, high performing systems such as Singapore, whose teachers feel their work matters to the nation, provide professional development to all teachers as an entitlement that occurs during “office hours”, and enable teachers to work together, mentor junior colleagues, conduct research, engage in professional learning communities, and share practices all within the regular “timetabled” school day. Treating teachers as professionals means seeing them as initiators of change not simply implementers, and believing that they have the right—and the authority—to shape decisions that impact their work, their lives and their students.

Note: Original contribution by A. Lin Goodwin (University of Hong Kong).

5.1. Collaboration

While teaching is generally constrained by regulation due to being a predominately public profession, a strength of teaching is in its systems for collaboration and shared discourse. Collaboration is now a general characteristic of teaching (Révai and Guerriero, 2017^[135]): findings from TALIS show that the majority of teachers are collaborating with each other in some way (see Figure 5.1). While it remains an area for continuous improvement, collaboration is embedded within many OECD education systems.

Figure 5.1. Teacher's collaboration with colleagues



Note: Percentage of lower secondary school teachers who report engaging in the following collaborative activities in their school with the following frequency (OECD average-31).

(1) “At least once a month” covers the following response options: “1-3 times a month”, “Once a week or more”.

(2) “Less than once a month” covers the following response options: “Once a year or less”, “2-4 times a year”, “5-10 times a year”.

Values are grouped by type of collaborative activity and, within each group, ranked in descending order of the collaborative activities in which lower secondary teachers report to engage.

Source: OECD (2020^[69]), *TALIS 2018 Results (Volume II): Teachers and School Leaders as Valued Professionals*, <https://doi.org/10.1787/19cf08df-en>.

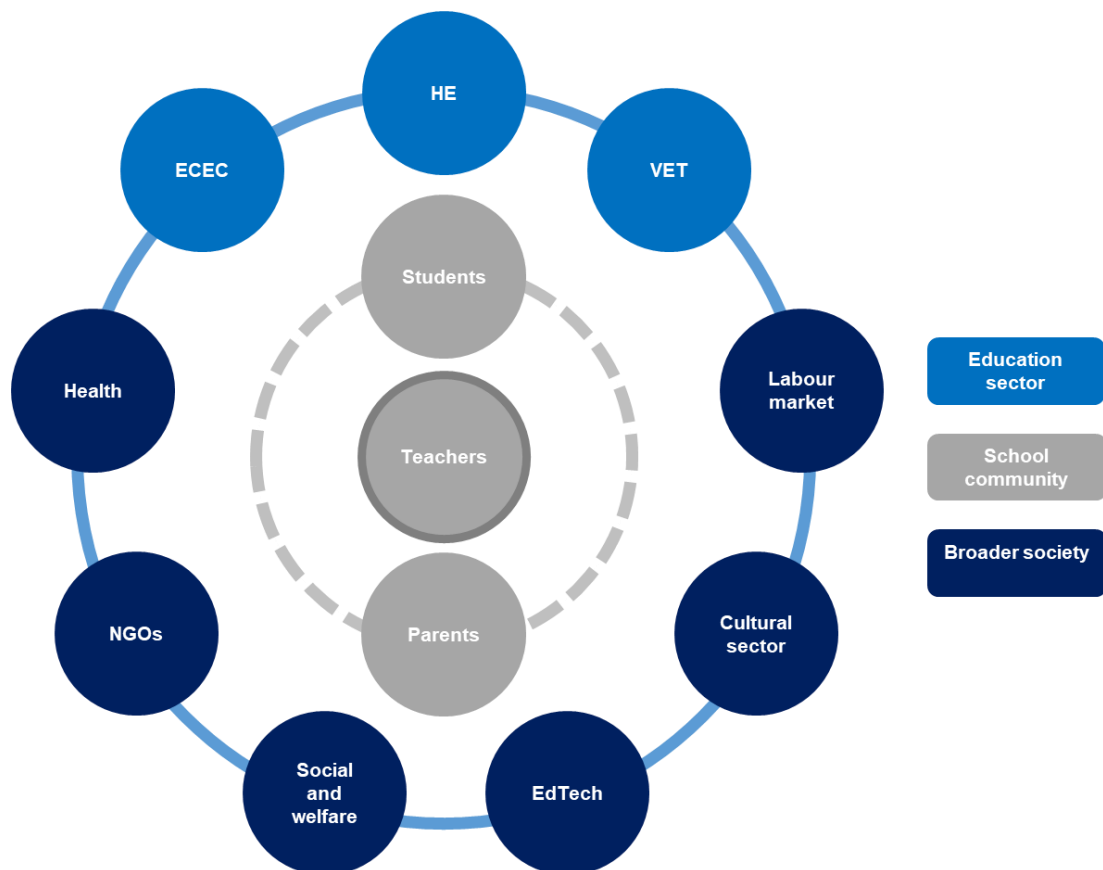
Collaboration can take a wide variety of forms. Mentoring, especially in the context of challenging schools, holds a particularly important place in the work of teachers and carries significant potential for reducing early-career attrition (OECD, 2019^[109]). Mentoring is also key in other professions such as nursing (Adeniran et al., 2013^[136]) and in the context of higher education (Brown et al., 2022^[137]). As a form of support to new teachers and a bridge between initial teacher education and early-career years, strengthening mentoring systems is important for building teacher professional identity (Suarez and McGrath, 2022^[7]) and improving student outcomes (OECD, 2019^[109]). Mentoring may be particularly relevant for retaining a diverse workforce, as suggested by findings in higher education (Brown et al., 2022^[137]). At the same time, given the relative scarcity of policies encouraging collaboration *after* the first few years in the profession, developing collaboration options for mid-career professionals (Kutsyuruba et al., 2021^[112]) and supporting teacher professional identity across the lifespan of a teacher’s career (Suarez and McGrath, 2022^[7]) are crucial.

Beyond strengthening collaborations among teachers, the next challenge is to promote a culture of collaboration with other stakeholders (see Figure 5.2) (Burns and Gottschalk, 2020^[138]; Burns and Köster, 2016^[139]; Epstein, 2018^[140]). Schools have the potential to explore and further their role as community hubs, offering innovative perspectives on how collaborations between professionals may strengthen trust (OECD, forthcoming^[84]). Research suggests that cross-sectoral or interdisciplinary collaboration holds significant

“democratic potential” (Knapp, 2021, p. 375_[141]), indicating that exploring cross-sectoral partnerships between education and other stakeholders may bring about insights for other sectors, as well as for other education levels or systems. Mockler (2013_[142]) compiles some insights from cross-sectoral work between schools and universities for teacher professional learning in Australia, and offers the following lessons:

- Focusing partnerships on processes rather than specific projects, limiting “externally imposed parameters” (p. 285_[142]) and concentrating on the current needs and context of the community.
- Avoiding hierarchical relationships, choosing instead to interact on an equal plane.
- Acknowledging that “partnership takes time” (p. 285_[142]), and that this is conducive to trust and authenticity.

Figure 5.2. Teachers at the heart of a collaborative ecosystem



Note: HE stands for “higher education”, ECEC stands for “early childhood education and care”, VET stands for “vocational education and training”, NGOs stands for “non-governmental organisations”, and EdTech stands for “education technology”.

Teaching is particularly well placed to explore the importance of collaboration for increasingly democratic and connective versions of professionalism. As seen in Section 4, collaboration is a necessary condition for a series of other improvements to take place. Effective collaborations put teachers at the forefront of a form of professionalism that, in the words of Sachs (2016_[12]), is:

premised on a conscious form of social movement where there is trust, respect and reciprocity amongst various stakeholder groups that work together to improve the working conditions and status of teachers (p. 419_[12])

As a result, further research in cross-sectoral processes, centred around teachers, has the potential to stimulate further collaboration among other sectors while innovating teacher professionalism.

5.2. Continuing professional learning

In general, the teaching profession remains unsatisfied that models for continuing professional learning (CPL) are as effective as they could be to support the work of teachers (Popova et al., 2022_[143]). However, from a broader professionalism perspective, the teaching profession's commitment and capacity to collaborate highlight their strength, especially compared to professions in which practitioners traditionally work more independently. As noted by Sachs (2016_[12]), different types of professional development are conducive to different versions of professionalism. For instance, it is crucial that developments in CPL be co-created with teachers, responding to their needs and respecting their collective wishes (Parding and Abrahamsson, 2010_[85]). Similarly, Bautista, Toh and Wong (2018_[144]) note that the “one-size-fits-all” approach to CPL is ineffective. They mention that “for [professional development] to be meaningful and transformative, it needs to be designed in response to teachers’ own motivations, needs, and preferences” and that “teachers’ perspectives should be always taken as one of the main starting points” (p. 197_[144]). Yan and Saguin (2021_[145]) concur, emphasising the importance of catering to the needs of teachers.

As general concepts of professionalism are changing, teaching is well placed to innovate professional development through the use of research in the educational sciences. Learnings can be shared across sectors for innovative professionalism across the board, continuing the policy focus on developing CPL structures. For instance, the importance of a social and emotional component to CPL is emerging (Malm, 2009_[146]), and may be relevant for professional development beyond teaching. Innovating continuing professional learning means innovating professionalism itself.

5.3. Engagement with research

As with CPL, direct engagement with research as part of teachers’ work is a focus for development (Slavin, 2002_[147]). Despite this, numerous possible configurations linking teachers and research already exist, from individual practitioners using academic literature to inform their work, to large-scale collaborations between schools and research institutions (BERA-RSA, 2014_[148]; Burns and Köster, 2016_[139]). Sachs (2016_[12]) views teacher engagement with research as a crucial element for the development of democratic teacher professionalism, suggesting that as professionalism continues to evolve, a focus on inquiry can be the starting point for teacher-driven innovation.

Many authors offer insights and suggestions in terms of the specific kinds of research that may support teachers in this process. Zhao (2017_[149]), for instance, invites researchers to consider side effects in education research, thus improving research quality and

applicability. Hiebert, Gallimore and Sigler (2002_[150]) emphasise the importance of valuing small-scale improvements and strengthening teacher-researcher partnerships. Mockler and Groundwater-Smith (2015_[151]) recommend going beyond using research to celebrate achievements, opting instead for sharing “unwelcome truths” (p. 603_[151]) alongside success stories. They underline the importance of critical approaches as a tool that:

opens the door to professional formation and (real) development, contributes to local knowledge production, stimulates teachers’ curiosity about learning, and fosters dynamic, collaborative learning communities (p. 612_[142])

At the systems-level, Lomas and Brown (2009_[152]) call for greater synergies between stakeholders to promote relevant research that responds to present challenges, thus meeting school and teacher needs. Burns and Köster provide policy recommendations to strengthen teacher engagement with research (see Table 5.1).

Table 5.1. Key characteristics needed for evidence-informed practice

Key characteristics of evidence-informed practice gathered from reviews	
Continuing specialist support	<ul style="list-style-type: none"> • Training, including instruction in the essential core of new approaches and facilitation of the development of an understanding of the key principles underpinning those approaches. • Modelling demonstrating innovative strategies at work in a range of settings and contexts and practising what is being preached. • Guidance and critical friendship to challenge orthodoxies and expand views about what is possible on a sustained basis – interchangeably called coaching, mentoring, or collaborative enquiry. • Tools and frameworks such as observations frameworks to support learning from looking, analysis grids and planning tools to secure consistency and coherence.
Continuing peer support	<ul style="list-style-type: none"> • Professional learners make themselves reciprocally vulnerable thus increasing ownership, commitment and a willingness to take risks. • Peer support speeds up the process of developing trust that enables unlearning of old assumptions and habits as well as the development of new understandings and practices.
School leader support	<ul style="list-style-type: none"> • School leaders need to provide time for teachers to plan, analyse and reflect together on the process and outcome of trying new things. • Encourage risk-taking.
Collaboration	<ul style="list-style-type: none"> • Learning how to learn from close observations of learning and teaching exchanges.
Structured dialogue	<ul style="list-style-type: none"> • Structured dialogue rooted in evidence from trying things out with pupils that disturb the status quo.
Ambitious goals	<ul style="list-style-type: none"> • Ambitious goals may be mandated externally provided there is a strong element of peer support through which instructions from others can be interpreted from professional learners’ own views.

Source: Burns and Köster (2016_[139]), *Governing Education in a Complex World*, <http://dx.doi.org/10.1787/9789264255364-en>.

Existing and potential connections between teaching and research institutions can be utilised to integrate research into practice, thus paving the way for a version of professionalism that values curiosity and informed innovation. These can lead to other benefits for professionalism, including opportunities for autonomy, career specialisation and enhanced status, as well as broader benefits to create innovation and provide mechanisms to attract and retain teachers within the profession.

6. Conclusions

This paper has taken a cross-sectoral approach to explore teacher professionalism, highlighting areas where learnings from other professions may be used in the context of teaching. This paper also highlighted areas where teaching can seize the opportunity to spearhead innovation among professions generally.

Implications for teachers and school leaders include an invitation to value and celebrate the strengths of the teaching profession. Teachers can voice their views as part of influencing and decision-making processes, playing an active role in defining the future of teacher professionalism. School leaders can encourage involvement in CPL and seek opportunities for collaborative partnerships and engagement with research.

Implications for researchers include an invitation to develop further the cross-sectoral field of research in education, and to work towards developing partnerships and collaborations with schools that support the work of teachers. Further work on many of the aspects raised in this paper would contribute to more informed policy and practice. This may include comparative research on the effects of different career pathway structures, research on teacher prestige during the COVID-19 pandemic, and increasing the availability of data reflective of professionalism at different education levels. There is also an opportunity to situate discussions about elements of teacher professionalism within the context of professionalism generally, providing a benchmarking process to acknowledge the strengths of the teaching profession and to contribute to the growth of understandings about the evolving nature of new professionalism and other professions.

Implications for policymakers include an acknowledgement that best practice is context-dependent (Mulcahy, 2011^[29]), and an invitation to maintain a future-looking focus in designing policies to strengthen teacher professionalism. Policies pertaining to increased teacher autonomy, increased non-teaching time for additional responsibilities, mentoring systems, and structures for recognising and rewarding professional development, would be interesting areas to investigate in partnership with teachers and other stakeholders with a view to developing locally grounded policies to strengthen professionalism. Supporting the development of teacher professionalism will have benefits for teachers, students, communities and education systems as a whole.

The COVID-19 pandemic showed that the ability of teachers to act with confidence and discretion in unprecedented situations is a key factor in school resilience (Nilsberth et al., 2021^[3]). As crisis preparedness becomes an increasingly important policy angle in the context of climate change and conflict (OECD, 2020^[82]), teacher professionalism should be included in future-looking thinking supported by cross-sectoral exchange.

References

- Abadi, H., D. Ayentimi and A. Coetzer (2020), “The meaning and essential nature of a profession: a multi-perspective approach”, *Labour and Industry: A Journal of the Social and Economic Relations of Work*, Vol. 30/1, pp. 85-96, <https://doi.org/10.1080/10301763.2020.1723784>. [20]
- Abbott, A. (1998), “Professionalism and the future of librarianship”, *Library Trends*, Vol. 46/3, pp. 430-443. [65]
- Abdel-Razig, S. et al. (2016), “Creating a framework for medical professionalism: An initial consensus statement from an Arab nation”, *Journal of Graduate Medical Education*, Vol. 8/2, pp. 165-172, <https://doi.org/10.4300/JGME-D-15-00310.1>. [41]
- Ackroyd, S. (2016), “Sociological and organisational theories of professions and professionalism”, in Dent, M. et al. (eds.), *The Routledge Companion to the Professions and Professionalism*, Routledge, Abingdon. [158]
- Adams, T. (2020), “Professions”, in Ritzer, G. (ed.), *The Blackwell Encyclopedia of Sociology*, John Wiley & Sons, Oxford, <https://doi.org/10.1002/9781405165518>. [16]
- Adams, T. (2016), “Professional self-regulation and the public interest in Canada”, *Professions and Professionalism*, Vol. 6/3, pp. 1-15, <https://doi.org/10.7577/pp.1587>. [44]
- Adams, T. (2010), “Profession: A useful concept for sociological analysis?”, *Canadian Review of Sociology/Revue canadienne de sociologie*, Vol. 47/1, pp. 49-70, <https://doi.org/10.1111/j.1755-618X.2010.01222.x>. [32]
- Adams, T. and D. Livingstone (2020), *Self-Regulating Professionals and Experts in the “Knowledge Economy”: Autonomy and Authority Compared*, https://www.oise.utoronto.ca/clsew/UserFiles/File/Expert_paper_for_CLSEWwebsite_FinalNov24_20.pdf (accessed on 15 June 2022). [48]
- Adeniran, R., A. Bhattacharya and A. Adeniran (2012), “Professional excellence and career advancement in nursing: A conceptual framework for clinical leadership development”, *Nursing Administration Quarterly*, Vol. 36/1, pp. 41-51, <https://doi.org/10.1097/NAQ.0b013e31823b0fec>. [95]
- Adeniran, R. et al. (2013), “Career advancement and professional development in nursing”, *Nursing Outlook*, Vol. 61/6, pp. 437-446, <https://doi.org/10.1016/j.outlook.2013.05.009>. [136]
- Allegretto, S., S. Corcoran and L. Mishel (2004), *How Does Teacher Pay Compare? Methodological Challenges and Answers*, Economic Policy Institute, Washington, D.C. [9]
- Alvehus, J., N. Avnoon and A. Oliver (2021), “‘It’s complicated’: Professional opacity, duality, and ambiguity—A response to Noordegraaf (2020)”, *Journal of Professions and Organization*, Vol. 8/2, pp. 200-213, <https://doi.org/10.1093/jpo/joab006>. [30]
- Anker, J. and P. Krill (2021), “Stress, drink, leave: An examination of gender-specific risk factors for mental health problems and attrition among licensed attorneys”, *PLoS ONE*, Vol. 16/5, pp. 1-18, <https://doi.org/10.1371/journal.pone.0250563>. [102]

- Armour, K., K. Makopoulou and F. Chambers (2012), “Progression in physical education teachers’ career-long professional learning: Conceptual and practical concerns”, *European Physical Education Review*, Vol. 18/1, pp. 62-77, <https://doi.org/10.1177/1356336X11430651>. [97]
- Atkinson, E. (2000), “In defence of ideas, or why ‘what works’ is not enough”, *British Journal of Sociology of Education*, Vol. 21/3, pp. 317-330, <https://doi.org/10.1080/713655359>. [91]
- Ballet, K. and G. Kelchtermans (2009), “Struggling with workload: Primary teachers’ experience of intensification”, *Teaching and Teacher Education*, Vol. 25/8, pp. 1150-1157, <https://doi.org/10.1016/j.tate.2009.02.012>. [79]
- Ballet, K., G. Kelchtermans and J. Loughran (2006), “Beyond intensification towards a scholarship of practice: Analysing changes in teachers’ work lives”, *Teachers and Teaching*, Vol. 12/2, pp. 209-229, <https://doi.org/10.1080/13450600500467415>. [129]
- Barber, B. (1963), “Some problems in the sociology of the professions”, *Daedalus*, Vol. 92/4, pp. 669-688, <https://doi.org/10.1177/073088847800500301>. [159]
- Bautista, A., G. Toh and J. Wong (2018), “Primary school music teachers’ professional development motivations, needs, and preferences: Does specialization make a difference?”, *Musicae Scientiae*, Vol. 22/2, pp. 196-223, <https://doi.org/10.1177/1029864916678654>. [144]
- Becher, A. and A. Lefstein (2021), “Teaching as a clinical profession: Adapting the medical model”, *Journal of Teacher Education*, Vol. 72/4, pp. 477-488, <https://doi.org/10.1177/0022487120972633>. [89]
- BERA-RSA (2014), *Research and the Teaching Profession: Building the Capacity for a Self-Improving Education System*, <https://www.thersa.org/globalassets/pdfs/bera-rsa-research-teaching-profession-full-report-for-web-2.pdf> (accessed on 15 June 2022). [148]
- Biesta, G. (2015), “What is education for? On good education, teacher judgement, and educational professionalism”, *European Journal of Education*, Vol. 50/1, pp. 75-87, <https://doi.org/10.1111/ejed.12109>. [80]
- Biesta, G. (2007), “Why ‘what’ works won’t work: Evidence-based practice and the democratic deficit in educational research”, *Educational Theory*, Vol. 57/1, pp. 1-22, <https://doi.org/10.1111/j.1741-5446.2006.00241.x>. [92]
- Boeskens, L. and D. Nusche (2021), “Not enough hours in the day: Policies that shape teachers’ use of time”, *OECD Education Working Papers*, No. 245, OECD Publishing, Paris, <https://dx.doi.org/10.1787/15990b42-en>. [98]
- Bolton, S. and D. Muzio (2008), “The paradoxical processes of feminization in the professions: The case of established, aspiring and semi-professions”, *Work, Employment and Society*, Vol. 22/2, pp. 281-299, <https://doi.org/10.1177/0950017008089105>. [5]
- Booth, J. et al. (2021), “Mid-career teachers: A mixed methods scoping study of professional development, career progression and retention”, *Education Sciences*, Vol. 11/6, pp. 1-33, <https://doi.org/10.3390/educsci11060299>. [113]
- Bowyer, D. et al. (2022), “Academic mothers, professional identity and COVID-19: Feminist reflections on career cycles, progression and practice”, *Gender, Work and Organization*, Vol. 29/1, pp. 309-341, <https://doi.org/10.1111/gwao.12750>. [101]
- Brante, T. (2011), “Professions as science-based occupations”, *Professions and professionalism*, Vol. 1/1, pp. 4-20, <https://doi.org/10.7577/pp.v1i1.147>. [17]

- Brante, T. (2010), "Professional fields and truth regimes: In search of alternative approaches", [42]
Comparative Sociology, Vol. 9/6, pp. 843-886, <https://doi.org/10.1163/156913310X522615>.
- Browes, N. and H. Altinyelken (2022), "Professionalism in the era of accountability: Role discrepancy and [49]
 responses among teachers in the Netherlands", *British Journal of Sociology*, Vol. 73/1, pp. 188-205,
<https://doi.org/10.1111/1468-4446.12917>.
- Brown, B. et al. (2022), "Exploring personal, relational, and collective experiences and mentorship [137]
 connections that enhance or inhibit professional development and career advancement of Native
 American faculty in STEM Fields: A qualitative study", *Journal of Diversity in Higher Education*,
<https://doi.org/10.1037/dhe0000376>.
- Brown, E. (1936), *Nursing as a profession*, Russell Sage Foundation. [36]
- Brundage, J. (2008), *The Medieval Origins of the Legal Profession: Canonists, Civilians, and Courts*, The [23]
 University of Chicago Press, Chicago, <http://dx.doi.org/10.7208/chicago/9780226077611.001.0001>.
- Burnham, J. (1998), "The sociology and history of professions: A path that mid-century medical historians [35]
 did not take", *Medical History*, Vol. 42/S18, pp. 69-97, <https://doi.org/10.1017/S0025727300072987>.
- Burns, T. and F. Gottschalk (2020), *Education in the Digital Age: Healthy and Happy Children*, OECD [138]
 Publishing, Paris, <https://doi.org/10.1787/1209166a-en>.
- Burns, T. and F. Köster (2016), *Governing Education in a Complex World*, OECD Publishing, Paris, [139]
<https://doi.org/10.1787/9789264255364-en>.
- Burrage, M., K. Jarausch and H. Siegrist (1990), "An actor-based framework for the study of professions", [166]
 in Burrage, M. and R. Torstendahl (eds.), *Professions in theory and history: Rethinking the study of the
 professions*, Sage, London.
- Cain, J. and F. Romanelli (2009), "E-professionalism: a new paradigm for a digital age", *Currents in [54]
 Pharmacy Teaching and Learning*, Vol. 1/2, pp. 66-70, <https://doi.org/10.1016/j.cptl.2009.10.001>.
- Campbell, L. (2019), "Pedagogical bricolage and teacher agency: Towards a culture of creative [59]
 professionalism", *Educational Philosophy and Theory*, Vol. 51/1, pp. 31-40,
<https://doi.org/10.1080/00131857.2018.1425992>.
- Carr-Saunders, A. and P. Wilson (1933), *The Professions*, Clarendon Press, Oxford. [37]
- Cau-Bareille, D. (2017), "How to support the lengthening of careers of teachers in France?", *Retraite et [77]
 société*, Vol. 77/2, pp. 87-107, <https://doi.org/10.3917/rs1.077.0087>.
- Choroszewicz, M. (2019), "Fathers in private law practice in Finland: Reconciling work and family life for [73]
 male lawyers from different generations", in Choroszewicz, M. and T. Adams (eds.), *Gender, Age and
 Inequality in the Professions*, Routledge, New York & London.
- Choroszewicz, M. and T. Adams (2019), "Gender and age in the professions: Intersectionality, meta-work, [43]
 and social change", *Professions and Professionalism*, Vol. 9/2, pp. 1-13, <https://doi.org/10.7577/p3432>.
- Choroszewicz, M. and T. Adams (eds.) (2019), *Gender, Age and Inequality in the Professions*, Routledge, [70]
 New York & London, <http://dx.doi.org/10.4324/9781351052467>.
- Choroszewicz, M. and F. Kay (2020), "The use of mobile technologies for work-to-family boundary [52]
 permeability: The case of Finnish and Canadian male lawyers", *Human Relations*, Vol. 73/10,
 pp. 1388-1414, <https://doi.org/10.1177/0018726719865762>.

- Cogan, M. (1953), "Toward a definition of profession", *Harvard Educational Review*, Vol. 23/1, pp. 33-50. [154]
- Common, R. (1998), "Convergence and transfer: A review of the globalisation of New Public Management", *International Journal of Public Sector Management*, Vol. 11/6, pp. 440-450, <https://doi.org/10.1108/09513559810244356>. [119]
- Corrente, M. et al. (2021), *Stakeholders speak up: Mental health realities across the profession*, Healthy Professional Worker Partnership – Teaching, <https://www.healthyprofwork.com/teachingupdated/#stakeholder-interviews> (accessed on 24 May 2022). [76]
- Dalli, C. (2008), "Pedagogy, knowledge and collaboration: Towards a ground-up perspective on professionalism", *European Early Childhood Education Research Journal*, Vol. 16/2, pp. 171-185, <https://doi.org/10.1080/13502930802141600>. [86]
- Davies, B. (2003), "Death to critique and dissent? The policies and practices of new managerialism and of 'evidence-based practice'", *Gender and Education*, Vol. 15/1, pp. 91-103, <https://doi.org/10.1080/0954025032000042167>. [93]
- Dobson, E., P. Patel and P. Neville (2019), "Perceptions of e-professionalism among dental students: a UK dental school study", *British Dental Journal*, Vol. 226/1, pp. 73-78, <https://doi.org/10.1038/sj.bdj.2019.11>. [55]
- Dolton, P. et al. (2018), *Global Teacher Status Index 2018*, The Varkey Foundation, <http://www.varkeyfoundation.org>. [134]
- Dove, E. et al. (2017), "Beyond individualism: Is there a place for relational autonomy in clinical practice and research?", *Clinical Ethics*, Vol. 12/3, pp. 150-165, <https://doi.org/10.1177/1477750917704156>. [131]
- Edwards, A. (2010), *Being an Expert Professional Practitioner: The Relational Turn in Expertise*, Springer, Oxford. [162]
- Ellaway, R. et al. (2015), "Exploring digital professionalism", *Medical Teacher*, Vol. 37/9, pp. 844-849, <https://doi.org/10.3109/0142159X.2015.1044956>. [56]
- Englund, T. (1996), "Are professional teachers a good thing?", in Goodson, I. and A. Hargreaves (eds.), *Teachers' Professional Lives*, Falmer Press, London and Philadelphia. [169]
- Epstein, J. (2018), "School, family, and community partnerships in teachers' professional work", *Journal of Education for Teaching*, Vol. 44/3, pp. 397-406, <https://doi.org/10.1080/02607476.2018.1465669>. [140]
- Etzioni, A. (1969), *The Semi-Professions and Their Organization*, Free Press, New York. [155]
- Evans, L. (2008), "Professionalism, professionalism and the development of education professionals", *British Journal of Educational Studies*, Vol. 56/1, pp. 20-38, <https://doi.org/10.1111/j.1467-8527.2007.00392.x>. [123]
- Evetts, J. (2014), "The concept of professionalism: Professional work, professional practice and learning", in Billet, S., C. Harteis and H. Gruber (eds.), *International Handbook of Research in Professional and Practice-based Learning*, Springer International Handbooks of Education. [160]
- Evetts, J. (2013), "Professionalism: Value and ideology", *Current Sociology*, Vol. 61/5-6, pp. 778-796, <https://doi.org/10.1177/0011392113479316>. [18]

- Evetts, J. (2011), “A new professionalism? Challenges and opportunities”, *Current Sociology*, Vol. 59/4, pp. 406-422, <https://doi.org/10.1177/0011392111402585>. [118]
- Evetts, J. (2009), “New Professionalism and new public management: Changes, continuities and consequences”, *Comparative Sociology*, Vol. 8/2, pp. 247-266, <https://doi.org/10.1163/156913309X421655>. [58]
- Evetts, J. (2006), “Trust and professionalism: Challenges and occupational changes”, *Current Sociology*, Vol. 4/2, pp. 515-531, <https://doi.org/10.1177/0011392106065083>. [117]
- Fisk Natale, C. et al. (1995), *Creating Sustainable Teacher Career Pathways: A 21 st Century Imperative*, https://sep4u.gr/wp-content/uploads/pearson_edu.pdf (accessed on 15 June 2022). [116]
- Flexner, A. (1915), “Is social work a profession?”, *Research on Social Work Practice*, Vol. 11/2, pp. 152-165. [34]
- Forson, C. et al. (2017), “Academics at the intersection of age and gender: A Ghanaian experience”, in Broadbent, K., G. Strachan and G. Healy (eds.), *Gender and the Professions: International and Contemporary Perspectives*, Routledge. [71]
- Freidson, E. (2001), *Professionalism: The Third Logic*, Polity Press, Cambridge. [161]
- Frelin, A. (2013), *Exploring Relational Professionalism in Schools*, Sense Publishers, Rotterdam. [163]
- Glazer, J. and J. Mehta (2021), “Downward spiral or upward trajectory?”, in Ehren, M. and J. Baxter (eds.), *Trust, Accountability and Capacity in Education System Reform*, Routledge, London. [64]
- Goodall, A. (2016), *Connected Communities Strategy: Interim Evaluation report*, Centre for Education Statistics and Evaluation, Sydney, <https://education.nsw.gov.au/content/dam/main-education/about-us/educational-data/cese/2016-connected-communities-strategy-interim-report.pdf> (accessed on 23 June 2022). [111]
- Goode, W. (1969), “The theoretical limits of professionalization”, in Etzioni, A. (ed.), *The Semi-Professions and Their Organization*, The Free Press, New York. [38]
- Goodwin, A. (2011), “Teaching as a profession: Are we there yet?”, in Lasky, S. (ed.), *The Routledge International Handbook of Teacher and School Development*, Routledge. [83]
- Goodwin, A. et al. (2015), “A closer look at the practice and impact of ‘rounds’”, *International Journal of Educational Research*, Vol. 73, pp. 37-43, <https://doi.org/10.1016/j.ijer.2015.06.006>. [90]
- Goodwin, A. and E. Low (2021), “Rethinking conceptualisations of teacher quality in Singapore and Hong Kong: a comparative analysis”, *European Journal of Teacher Education*, Vol. 44/3, pp. 365-382, <https://doi.org/10.1080/02619768.2021.1913117>. [115]
- Greenwood, E. (1966), “The elements of professionalization”, in Vollmer, H. and D. Mills (eds.), *Professionalization*, Prentice-Hall, New Jersey. [156]
- Greenwood, E. (1957), “Attributes of a profession”, *Social Work*, Vol. 2/3, pp. 45-55. [39]
- Guerriero, S. and K. Deligiannidi (2017), “The teaching profession and its knowledge base”, in Guerriero, S. (ed.), *Pedagogical Knowledge and the Changing Nature of the Teaching Profession*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264270695-en>. [14]

- Gustafsson, S., J. Swart and N. Kinnie (2018), “‘They are your testimony’: Professionals, clients and the creation of client capture during professional career progression”, *Organization Studies*, Vol. 39/1, pp. 73-92, <https://doi.org/10.1177/0170840617708001>. [94]
- Han, D. and H. Hur (2022), “Managing turnover of STEM teacher workforce”, *Education and Urban Society*, Vol. 54/2, pp. 205-222, <https://doi.org/10.1177/00131245211053562>. [99]
- Hargreaves, A. (2000), “Four ages of professionalism and professional learning”, *Theory and Practice*, Vol. 6/2, pp. 151-182, <https://doi.org/10.1080/713698714>. [25]
- Hargreaves, A. (1999), “Reinventing professionalism: Teacher education and teacher development for a changing world”, *Asia-Pacific Journal of Teacher Education and Development*, Vol. 2/1, pp. 65-74. [11]
- Hastings, A. and M. Rao (2001), “Doctoring deprived areas cannot rely on exceptional people”, *BMJ*, Vol. 323/7310, pp. 409-410, <https://doi.org/10.1136/bmj.323.7310.409>. [110]
- Hearn, J. (1982), “Notes on patriarchy, professionalization and the semi-professions”, *Sociology*, Vol. 16/2, pp. 184-202, <https://doi.org/10.1177/0038038582016002002>. [46]
- Hiebert, J., R. Gallimore and J. Stigler (2002), “A knowledge base for the teaching profession: What would it look like and how can we get one?”, *Educational Researcher*, Vol. 31/5, pp. 3-15, <https://doi.org/10.3102/0013189X031005003>. [150]
- Howsam, R. (1985), “Educating a Profession”, *Report of the Bicentennial Commission on Education for the Profession of Teaching of the American Association of Colleges for Teacher Education*, <https://eric.ed.gov/?id=ED270430>. [4]
- Hoyle, E. (2001), “Teaching prestige, status and esteem”, *Educational Management & Administration*, Vol. 29/2, pp. 139-152, <https://doi.org/10.1177/0263211X010292001>. [13]
- Ingersoll, R. (2003), *Is there really a teacher shortage?*, https://repository.upenn.edu/gse_pubs/133 (accessed on 15 June 2022). [81]
- Ingersoll, R. and G. Collins (2018), “The status of teaching as a profession”, in Ballantine, J., J. Spade and J. Stuber (eds.), *Schools and Society: A Sociological Approach to Education*, Pine Forge Press/Sage Publications. [6]
- Ingersoll, R. et al. (2018), *Seven Trends: The Transformation of the Teaching Force-Updated*, https://repository.upenn.edu/cpre_researchreports/108/ (accessed on 15 June 2022). [78]
- Javadi, F. (2014), “On the relationship between teacher autonomy and feeling of burnout among Iranian EFL Teachers”, *Procedia – Social and Behavioral Sciences*, Vol. 98, pp. 770-774, <http://dx.doi.org/10.1016/j.sbspro.2014.03.480>. [126]
- Johansson, S. and E. Myrberg (2019), “Teacher specialization and student perceived instructional quality: what are the relationships to student reading achievement?”, *Educational Assessment, Evaluation and Accountability*, Vol. 31/2, pp. 177-200, <https://doi.org/10.1007/s11092-019-09297-5>. [105]
- Jyrkinen, M. and L. McKie (2012), “Gender, age and ageism: Experiences of women managers in Finland and Scotland”, *Work, Employment and Society*, Vol. 26/1, pp. 61-77, <https://doi.org/10.1177/0950017011426313>. [72]
- Kahnweiler, W. (2009), “HRD as a profession: Current status and future directions”, *Human Resource Development Quarterly*, Vol. 20/2, pp. 219-229, <https://doi.org/10.1002/hrdq.20011>. [165]

- Karaharju-Suvanto, T. et al. (2021), “The reproduction of gender differences in early career choices and professional identity of young dentist in Finland”, *European Journal of Dental Education*, Vol. 25/3, pp. 451-459, <https://doi.org/10.1111/eje.12620>. [74]
- Kay, F., S. Alarie and J. Adjei (2016), “Undermining gender equality: Female attrition from private law practice”, *Law & Society Review*, Vol. 50/3, pp. 766-801, <https://doi.org/10.1111/lasr.12077>. [103]
- Knapp, C. (2021), “Unlocking the democratic potential of urban planner–librarian collaborations”, *Journal of Planning Education and Research*, Vol. 41/4, pp. 375-381, <https://doi.org/10.1177/0739456X18810125>. [141]
- Krejsler, J. (2005), “Professions and their identities: How to explore professional development among (semi-)professions”, *Scandinavian Journal of Educational Research*, Vol. 49/4, pp. 335-357, <https://doi.org/10.1080/00313830500202850>. [67]
- Kutsyuruba, B. et al. (2021), “Early career teaching progression: Examining Canadian teachers’ experiences during their first five years in the profession”, *The New Educator*, Vol. 18/1-2, pp. 1-26, <https://doi.org/10.1080/1547688X.2021.1940406>. [112]
- Larson, M. (1977), *The Rise of Professionalism*, University of California Press, Berkeley, <http://dx.doi.org/10.1525/9780520323070>. [157]
- Leenheer, P. (2019), *De bril van de leraar [The Teacher’s View]*, Phronese, Culemborg. [62]
- Lieberman, M. (1956), *Education as a profession*, Prentice-Hall, New Jersey. [153]
- Lomas, J. and A. Brown (2009), “Research and advice giving: A functional view of evidence-Informed policy advice in a Canadian Ministry of Health”, *The Milbank Quarterly*, Vol. 87/4, pp. 903-926, <https://doi.org/10.1111/j.1468-0009.2009.00583.x>. [152]
- Lundström, U. (2015), “Teacher autonomy in the era of New Public Management”, *Nordic Journal of Studies in Educational Policy*, Vol. 2015/2, pp. 73-85, <https://doi.org/10.3402/nstep.v1.28144>. [124]
- MacDonald, C. (2002), “Nurse autonomy as relational”, *Nursing Ethics*, Vol. 9/2, pp. 194-201, <https://doi.org/10.1191/0969733002ne498oa>. [132]
- Malm, B. (2009), “Towards a new professionalism: Enhancing personal and professional development in teacher education”, *Journal of Education for Teaching*, Vol. 35/1, pp. 77-91, <https://doi.org/10.1080/02607470802587160>. [146]
- Marom, L. (2019), “Under the cloak of professionalism: covert racism in teacher education”, *Race Ethnicity and Education*, Vol. 22/3, pp. 319-337, <https://doi.org/10.1080/13613324.2018.1468748>. [75]
- McDonald, R. (1956), “The professional standards movement in teaching: Progress and projection”, in *Routledge Handbook of Teacher and School Development*, Routledge, Milton Park. [66]
- McPhail, B. (2004), “Setting the record straight: Social work Is not a female-dominated profession”, *Social work*, Vol. 49/2, pp. 323-326, <https://doi.org/10.1093/sw/49.2.323>. [68]
- Meijer, P., I. Noordegraaf and I. Paalman-Dijkenga (forthcoming), *Investeren in leren: De maatschappelijke waarde van leraren, leraarschap en lerarenbeleid [Investing in Learning: The public value of teachers, teachership and teacher policy]*, Dutch Ministry of Education, Culture and Science. [63]
- Miles, S. (2005), *The Hippocratic Oath and the Ethics of Medicine*, Oxford University Press, Oxford. [24]

- Mockler, N. (2013), “The slippery slope to efficiency? An Australian perspective on school/university partnerships for teacher professional learning”, *Cambridge Journal of Education*, Vol. 43/3, pp. 273-289, <https://doi.org/10.1080/0305764X.2013.818103>. [142]
- Mockler, N. and S. Groundwater-Smith (2015), “Seeking for the unwelcome truths: Beyond celebration in inquiry-based teacher professional learning”, *Teachers and Teaching: Theory and Practice*, Vol. 21/5, pp. 603-614, <https://doi.org/10.1080/13540602.2014.995480>. [151]
- Mulcahy, D. (2011), “Assembling the ‘Accomplished’ Teacher: The performativity and politics of professional teaching standards”, *Educational Philosophy and Theory*, Vol. 43/S1, pp. 94-113. [29]
- Muzzin, L. and M. Martimianakis (2016), “The professoriate and professionalism in the academy”, in Denis, J. and E. Kuhlmann (eds.), *The Routledge Companion to the Professions and Professionalism*, Routledge, London. [121]
- Myrberg, E., S. Johansson and M. Rosén (2019), “The relation between teacher specialization and student reading achievement”, *Scandinavian Journal of Educational Research*, Vol. 63/5, pp. 744-758, <https://doi.org/10.1080/00313831.2018.1434826>. [106]
- National Center on Education and the Economy (2019), *Singapore’s Career Ladder System*, https://www.ncsl.org/Portals/1/Documents/educ/International_Ed_Study_Group_2020/Singapore/7.SingaporeCareerLadderSummaryNCEE.pdf (accessed on 15 June 2022). [114]
- National Institute of Education (1975), *National Institute of Education Conference on Studies in Teaching: Panel 6, Teaching as Clinical Information Processing*. [87]
- Neimeyer, G. et al. (2014), “The diminishing durability of knowledge in professional psychology: A second look at specializations”, *Professional Psychology: Research and Practice*, Vol. 45/2, pp. 92-98, <https://doi.org/10.1037/a0036176>. [96]
- Neville, P. (2019), “Male’ficence or ‘miss’understandings?: Exploring the relationship between gender, young healthcare professionals, social media, and professionalism”, in Choroszewicz, M. and T. Adams (eds.), *Gender, Age and Inequality in the Professions*, Routledge. [57]
- Nilsberth, M. et al. (2021), “Classrooms going online: Nordic lower secondary teachers’ readiness at the COVID-19 outbreak”, *Education in the North*, Vol. 28/3, pp. 44-62, <https://doi.org/10.26203/6358-rk88>. [3]
- Noordegraaf, M. (2020), “Protective or connective professionalism? How connected professionals can (still) act as autonomous and authoritative experts”, *Journal of Professions and Organization*, Vol. 7/2, pp. 205-223, <https://doi.org/10.1093/jpo/joaa011>. [10]
- Noordegraaf, M. and W. Schinkel (2011), “Professional capital contested: A bourdieusian analysis of conflicts between professionals and managers”, *Comparative Sociology*, Vol. 10/1, pp. 97-125, <https://doi.org/10.1163/156913310X514092>. [45]
- OECD (2022), *Mending the Education Divide: Getting Strong Teachers to the Schools That Need Them Most*, TALIS, OECD Publishing, Paris, <https://dx.doi.org/10.1787/92b75874-en>. [108]
- OECD (2022), *Why is the Gender Ratio of Teachers Imbalanced?*, Education Indicators in Focus, OECD Publishing, Paris, <https://doi.org/10.1787/8fea2729-en>. [15]
- OECD (2021), *Education at a Glance 2021: OECD Indicators*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/b35a14e5-en>. [61]

- OECD (2021), *Positive, High-Achieving Students? What Schools and Teachers Can Do*, TALIS, OECD Publishing, Paris, <https://doi.org/10.1787/3b9551db-en>. [1]
- OECD (2021), *Public Employment and Management 2021: The Future of the Public Service*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/938f0d65-en> (accessed 28 June 2022). [60]
- OECD (2020), *Back to the Future of Education: Four OECD Scenarios for Schooling*, Educational Research and Innovation, OECD Publishing, Paris, <https://dx.doi.org/10.1787/178ef527-en>. [82]
- OECD (2020), *TALIS 2018 Results (Volume II): Teachers and School Leaders as Valued Professionals*, TALIS, OECD Publishing, Paris, <https://doi.org/10.1787/19cf08df-en>. [69]
- OECD (2019), *TALIS 2018 Results (Volume I): Teachers and School Leaders as Lifelong Learners*, TALIS, OECD Publishing, Paris, <https://doi.org/10.1787/1d0bc92a-en>. [109]
- OECD (2018), *Education at a Glance 2018: OECD Indicators*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/eag-2018-en>. [130]
- OECD (2005), *Teachers Matter: Attracting, Developing and Retaining Effective Teachers*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264018044-en>. [8]
- OECD (forthcoming), *The Future of Teachers and Teaching*, OECD Publishing, Paris. [84]
- Osborne, S. (2006), “Editorial: The new public governance?”, *Public Management Review*, Vol. 8/3, pp. 377-387, <https://doi.org/10.1080/14719030600853022>. [120]
- Parding, K. and L. Abrahamsson (2010), “Learning gaps in a learning organization: Professionals’ values versus management values”, *Journal of Workplace Learning*, Vol. 22/5, pp. 292-305, <https://doi.org/10.1108/13665621011053208>. [85]
- Parding, K. and A. Berg-Jansson (2016), “Teachers’ working conditions amid Swedish school choice reform: Avenues for further research”, *Professions & Professionalism*, Vol. 6/1, pp. 1-16, <http://dx.doi.org/10.7577/pp.1416>. [125]
- Popova, A. et al. (2022), “Teacher professional development around the world: The gap between evidence and practice”, *The World Bank Research Observer*, Vol. 37/1, pp. 107-136, <https://doi.org/10.1093/wbro/lkab006>. [143]
- Pratte, R. and J. Rury (1991), “Teachers, professionalism, and craft”, *Teachers College Record*, Vol. 93/1, pp. 59-72, <https://doi.org/10.1177/016146819109300111>. [26]
- Ramsey, G. (2000), “Quality in other professions”, in *Quality Matters – Revitalising Teaching: Critical Times, Critical Choices*, NSW Department of Education and Training. [21]
- Randall, G. and D. Kindiak (2008), “Deprofessionalization or postprofessionalization? Reflections on the state of social work as a profession”, *Social Work in Health Care*, Vol. 47/4, pp. 341-354, <https://doi.org/10.1080/00981380802173855>. [47]
- Rao, A., A. Kumar and M. McHugh (2017), “Better nurse autonomy decreases the odds of 30-day mortality and failure to rescue”, *Journal of Nursing Scholarship*, Vol. 49/1, pp. 73-79, <https://doi.org/10.1111/jnu.12267>. [128]
- Reeves, J. (2007), “Inventing the chartered teacher”, *British Journal of Educational Studies*, Vol. 55/1, pp. 56-76, <https://doi.org/10.1111/j.1467-8527.2007.00365.x>. [164]

- Révai, N. and S. Guerriero (2017), “Knowledge dynamics in the teaching profession”, in Guerriero, S. (ed.), *Pedagogical Knowledge and the Changing Nature of the Teaching Profession*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264270695-en>. [135]
- Sachs, J. (2016), “Teacher professionalism: Why are we still talking about it?”, *Teachers and Teaching: Theory and Practice*, Vol. 22/4, pp. 413-425, <https://doi.org/10.1080/13540602.2015.1082732>. [12]
- Saks, M. (2021), “The context to the analysis of professions”, in Saks, M. (ed.), *Professions: A Key Idea for Business and Society*, Routledge, Abingdon and New York. [22]
- Saks, M. (2012), “Defining a profession: The role of knowledge and expertise”, *Professions and professionalism*, Vol. 2/1, pp. 1-10, <https://doi.org/10.7577/pp.v2i1.151>. [33]
- Schön, D. (1987), *Educating the Reflective Practitioner*, Jossey-Bass, San Francisco. [170]
- Schott, C., D. van Kleef and M. Noordegraaf (2016), “Confused Professionals?: Capacities to cope with pressures on professional work”, *Public Management Review*, Vol. 18/4, pp. 583-610, <https://doi.org/10.1080/14719037.2015.1016094>. [31]
- Schultze, R. (2007), “What does it mean to be a self-governing regulated profession?”, *Journal of Property Tax Assessment & Administration*, Vol. 4/3, pp. 41-53. [19]
- Shin, J. and J. Jun (2014), “Academics job satisfaction and job stress across countries in the changing academic environments”, *Higher Education*, Vol. 67, pp. 603-620, <https://doi.org/10.1007/s10734-013-9668-y>. [122]
- Shon, C. (2006), “Teacher professionalism”, *The Korean Journal of Visual Impairment*, Vol. 22/1, pp. 43-59. [27]
- Singer, N. (2020), *Teaching in the pandemic: ‘This is not sustainable’*, <https://www.nytimes.com/2020/11/30/us/teachers-remote-learning-burnout.html> (accessed on 24 May 2022). [51]
- Slavin, R. (2002), “Evidence-based education policies: Transforming educational practice and research”, *Educational Researcher*, Vol. 31/7, pp. 15-21, <https://doi.org/10.3102/0013189X031007015>. [147]
- Struyven, K. and G. Vanthournout (2014), “Teachers’ exit decisions: An investigation into the reasons why newly qualified teachers fail to enter the teaching profession or why those who do enter do not continue teaching”, *Teaching and Teacher Education*, Vol. 43, pp. 37-45, <https://doi.org/10.1016/j.tate.2014.06.002>. [104]
- Suarez, V. and J. McGrath (2022), “Teacher professional identity: How to develop and support it in times of change”, *OECD Education Working Papers*, No. 267, OECD Publishing, Paris, <https://doi.org/10.1787/b19f5af7-en>. [7]
- Susskind, D. and R. Susskind (2018), “The future of the professions”, *Proceedings of the American Philosophical Society*, Vol. 162/2, pp. 125-138. [50]
- Taber, K. (2005), “Developing teachers as learning doctors”, *Teacher Development*, Vol. 9/2, pp. 219-235, <https://doi.org/10.1080/13664530500200249>. [88]
- Ulferts, H. (ed.) (2021), *Teaching as a Knowledge Profession: Studying Pedagogical Knowledge across Education Systems*, Educational Research and Innovation, OECD Publishing, Paris, <https://doi.org/10.1787/e823ef6e-en>. [2]

- Vangrieken, K. et al. (2017), “Teacher autonomy and collaboration: A paradox? Conceptualising and measuring teachers’ autonomy and collaborative attitude”, *Teaching and Teacher Education*, Vol. 67, pp. 302-315, <https://doi.org/10.1016/j.tate.2017.06.021>. [133]
- Vaughan-Marra, J. and C. Marra (2017), “Teaching music in the Flat World: Reflections on the work of Darling-Hammond and Rothman”, *Arts Education Policy Review*, Vol. 118/2, pp. 123-132, <https://doi.org/10.1080/10632913.2016.1249322>. [107]
- Vollmer, H. and D. Mills (1966), *Professionalization*, Prentice-Hall, New Jersey. [28]
- Wajcman, J. and E. Rose (2011), “Constant connectivity: Rethinking interruptions at work”, *Organization Studies*, Vol. 32/7, pp. 941-961, <https://doi.org/10.1177/0170840611410829>. [53]
- Wilensky, H. (1964), “The Professionalization of Everyone?”, *American Journal of Sociology*, Vol. 70/2, pp. 137-158, <https://doi.org/10.1086/223790>. [40]
- Windsor, C. and P. Auyeung (2006), “The effect of gender and dependent children on professional accountants’ career progression”, *Critical Perspectives on Accounting*, Vol. 17/6, pp. 828-844, <https://doi.org/10.1016/j.cpa.2004.11.007>. [100]
- Wise, A. (2005), “Establishing teaching as a profession: The essential role of professional accreditation”, *Journal of Teacher Education*, Vol. 56/4, pp. 318-331, <https://doi.org/10.1177/0022487105279965>. [167]
- Worth, J. and J. Van den Brande (2020), *Teacher autonomy: How does it relate to job satisfaction and retention?*. [127]
- Wright, P. (1951), “What is a “Profession”?”, *The Canadian Bar Review*, Vol. 29/7, pp. 748-757. [168]
- Yan, Y. and K. Saguin (2021), “Policy capacity matters for capacity development: comparing teacher in-service training and career advancement in basic education systems of India and China”, *International Review of Administrative Sciences*, Vol. 87/2, pp. 294-310, <https://doi.org/10.1177/0020852320983867>. [145]
- Zhao, Y. (2017), “What works may hurt: Side effects in education”, *Journal of Educational Change*, Vol. 18/1, pp. 1-19, <https://doi.org/10.1007/s10833-016-9294-4>. [149]

Annex A. Sources on professionalism

Table A A.1. Sources of the features of professionalism appearing in Figure 2.1

Feature	Sources
Accountability	(Flexner, 1915 ^[34] ; Lieberman, 1956 ^[153] ; Schultze, 2007 ^[19])
Altruism	(Cogan, 1953 ^[154] ; Etzioni, 1969 ^[155] ; Flexner, 1915 ^[34] ; Wilensky, 1964 ^[40])
Authority	(Greenwood, 1957 ^[39] ; Greenwood, 1966 ^[156] ; Noordegraaf, 2020 ^[10])
Autonomy	(Abadi, Ayentimi and Coetzer, 2020 ^[20] ; Etzioni, 1969 ^[155] ; Goode, 1969 ^[38] ; Larson, 1977 ^[157] ; Lieberman, 1956 ^[153] ; Noordegraaf, 2020 ^[10])
Body of knowledge	(Abadi, Ayentimi and Coetzer, 2020 ^[20] ; Ackroyd, 2016 ^[158] ; Barber, 1963 ^[159] ; Cogan, 1953 ^[154] ; Evetts, 2014 ^[160] ; Freidson, 2001 ^[161] ; Goode, 1969 ^[38])
Collaboration	(Dalli, 2008 ^[86] ; Edwards, 2010 ^[162] ; Frelin, 2013 ^[163] ; Reeves, 2007 ^[164])
Commitment to the common good	(Abadi, Ayentimi and Coetzer, 2020 ^[20] ; Barber, 1963 ^[159] ; Flexner, 1915 ^[34] ; Freidson, 2001 ^[161] ; Goode, 1969 ^[38] ; Lieberman, 1956 ^[153] ; Schultze, 2007 ^[19])
Continuing professional learning	(Kahnweiler, 2009 ^[165] ; Reeves, 2007 ^[164])
Controlled entrance	(Ackroyd, 2016 ^[158] ; Burrage, Jarasch and Siegrist, 1990 ^[166] ; Freidson, 2001 ^[161] ; Kahnweiler, 2009 ^[165])
Credentials	(Abadi, Ayentimi and Coetzer, 2020 ^[20] ; Ackroyd, 2016 ^[158] ; Freidson, 2001 ^[161] ; Goode, 1969 ^[38] ; Wilensky, 1964 ^[40])
Engagement with research	(Reeves, 2007 ^[164] ; Sachs, 2016 ^[12])
Ethical codes	(Abadi, Ayentimi and Coetzer, 2020 ^[20] ; Barber, 1963 ^[159] ; Greenwood, 1957 ^[39] ; Greenwood, 1966 ^[156] ; Kahnweiler, 2009 ^[165] ; Lieberman, 1956 ^[153] ; Schultze, 2007 ^[19])
Extensive training	(Carr-Saunders and Wilson, 1933 ^[37] ; Etzioni, 1969 ^[155] ; Evetts, 2014 ^[160] ; Wilensky, 1964 ^[40])
Prestige, esteem and status	(Ackroyd, 2016 ^[158] ; Burrage, Jarasch and Siegrist, 1990 ^[166] ; Flexner, 1915 ^[34] ; Goode, 1969 ^[38] ; Greenwood, 1957 ^[39] ; Greenwood, 1966 ^[156] ; Hargreaves, 2000 ^[25])
Professional identity	(Abadi, Ayentimi and Coetzer, 2020 ^[20] ; Goode, 1969 ^[38] ; Greenwood, 1957 ^[39] ; Suarez and McGrath, 2022 ^[7])
Professional organisation	(Abadi, Ayentimi and Coetzer, 2020 ^[20] ; Ackroyd, 2016 ^[158] ; Carr-Saunders and Wilson, 1933 ^[37] ; Cogan, 1953 ^[154] ; Flexner, 1915 ^[34] ; Greenwood, 1966 ^[156] ; Kahnweiler, 2009 ^[165])
Self-regulation	(Abadi, Ayentimi and Coetzer, 2020 ^[20] ; Burrage, Jarasch and Siegrist, 1990 ^[166] ; Lieberman, 1956 ^[153] ; Schultze, 2007 ^[19] ; Wise, 2005 ^[167] ; Wright, 1951 ^[168])
Specialisation and career progression	(Burrage, Jarasch and Siegrist, 1990 ^[166] ; Freidson, 2001 ^[161] ; Lieberman, 1956 ^[153])
Standards	(Englund, 1996 ^[169] ; Etzioni, 1969 ^[155])
Theory-informed skill	(Brante, 2011 ^[17] ; Carr-Saunders and Wilson, 1933 ^[37] ; Flexner, 1915 ^[34] ; Lieberman, 1956 ^[153] ; Noordegraaf, 2020 ^[10] ; Schön, 1987 ^[170] ; Schultze, 2007 ^[19])
Trust	(Abadi, Ayentimi and Coetzer, 2020 ^[20] ; Ackroyd, 2016 ^[158] ; Ramsey, 2000 ^[21] ; Sachs, 2016 ^[12] ; Schultze, 2007 ^[19])