



## EXPLAINING THE RELATIVE DECLINE IN TEACHER SALARIES

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### Abstract:

The article describes possible explanations for the relative decline in teacher salaries during recent decades. The article focuses on the Norwegian case, but the situation regarding teacher salaries in Norway is equivalent in many other countries across the globe. Based on comparisons with other professions, three contributing explanations are proposed. All of these contributing explanations relate to a common theme of flexibility. The first proposed explanation is flexibility in certification, while the second and third have to do with flexibility in hiring.

**Keywords:** teacher salaries, teacher status, teacher certification, teacher education, the teaching profession

### 1. Introduction

The level of teacher salaries is one of the most critical topics in the sociology of education. A recent OECD report states: 'Teachers' salaries relative to other occupations with similar education requirements, and their likely growth in earnings, may have a huge influence on a graduate's decision to become a teacher and stay in the profession (...)' (OECD, 2022, p. 333). A Nordic report of 2010 concluded that low salaries constitute the most important reason for Nordic youth to avoid the teaching profession (Nordic Council of Ministers, 2010, p. 12). Salaries influence who is recruited into the teaching profession and how motivated teachers are to stimulate pupils' learning.

Despite these reports, our understanding of how teacher salaries are determined is poor. Our limited understanding of this phenomenon is unfortunate because if teacher salaries are low, we can expect that teacher quality will also be low. Our limited understanding is not due to a lack of papers on the issue of teacher salaries as such. Numerous publications have been concerned with the issue of teacher salaries (e.g., Ackerman, 2006; Gjefsen, 2020; E. S. Han, 2021; S. W. Han & Borgonovi, 2020; Lazareva & Zakharov, 2020; Song *et al.*, 2020). However, few have attempted to explain the mechanisms behind teacher salary levels.

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The study of teacher salaries has a natural role to play in the continuation of studies on the relationship between education, cultivation and class (Boudon, 1974; Bourdieu, 1984; 1986; 1990; Dunne & Gazeley, 2008; Entwistle, 1978; Reay *et al.*, 2005). Moreover, the financial situation of teachers situates them in the hierarchy of occupations but can also play a role in the old discussion about whether teaching should be considered a 'profession' (Carr-Saunders & Wilson [1933] 1964, Etzioni, 1969). In addition, teacher salaries might affect pupils' social mobility, and some research suggests that higher teacher pay reduces gaps in student achievement (García & Han, 2022). For at least two reasons, we contend that sociologists of education should prioritise understanding salary developments in the teaching profession. First, the equilibria for teacher salaries in various countries are shaped by political and legislative systems that are, in turn, influenced by forces that can reasonably be considered *sociological* forces. Thus, it is reasonable to assume that sociologists are better equipped to conceptualise these forces than researchers from other disciplines, such as economics. Second, the long-term salary levels for teachers have, potentially, crucial consequences that are indeed *sociological*, for recruitment into the teaching profession, for the learning outcomes of pupils, and for social mobility. The weaker and less motivated the teachers are, the lesser the opportunity for the school system to assist pupils. *A priori*, we can assume that pupils from underprivileged backgrounds suffer more from teacher weakness and low teacher motivation than pupils from resourceful homes.

In addition to the research motivation that is distinctly sociological, a more general social science motivation for inquiries into the salary development for teachers is to inform the political level. It is an advantage for the political system if politicians, who, at least in Norway, frequently express their wish to promote the status of teachers, understand the social mechanics behind the developments in teacher salaries. Even if politicians support higher wages and higher status for teachers, which they often do, their attempts will be futile unless they understand the relationship between government regulations and teacher salaries. The aim of this article, then, is to provide informed speculations (Swedberg, 2021) about possible explanations of the social phenomenon of weak development in teacher salaries in Norway. We use the term 'speculate' because it has not been feasible to 'test' the validity of our suggested explanations against real-world data. It would also be difficult to quantify the magnitude of each of the proposed explanations. Moreover, we do not know of any natural experiments where the suggested explanations can be verified or falsified.

Norwegian teachers have seen a weak salary development during recent decades compared to other professional groups (Aanensen, 2010). Unsurprisingly, this has led to concerns that teacher quality might be declining and, consequently, that pupils might learn less than they should. At least some findings in the literature suggest a connection between teacher salaries and educational quality (Johnson *et al.*, 2021). If there is a 'penalty' for teachers, i.e., if teachers receive lower wages than comparable peers in other professions, highly productive teachers are likely to leave the profession (E. S. Han, 2021). This might negatively affect the learning outcomes of pupils. Also, researchers have found that teachers who decide to remain in the teaching profession despite low salaries

are likely to suffer from declining morale and motivation (Lazareva & Zakharov, 2020). This conclusion is consistent with efficiency wage theories suggesting that people become more productive when they are paid more and vice versa (Adams, 1965; Akerlof, 1984). Thus, there are important motivations for studying salary developments in the teaching profession and, more precisely, the developments in the teaching profession compared with other professions.

Teacher salaries are rarely determined directly by market forces. In that sense, they differ from the determination of wages in private sector jobs in for example banking or engineering. This point has also been made by others before:

One may argue that in countries like Norway with inflexible wage-setting due to centralized collective bargaining and large public sectors, wages are less likely to reflect individual skills and productivity than in countries with less regulated and unionized labor markets. (Falch *et al.*, 2022)

Norwegian teachers are usually employed in the public sector, where the public sector acts as a monopsonist, i.e., the *de facto* sole buyer of teaching services. The market for teachers in Norway is also, by and large, a monopoly, where teacher unions negotiate salaries centrally and where the teachers can respond to unacceptable offers with strikes. But previous studies suggest that the monopsonist situation is unlikely to influence teachers' salaries. (Medcalfe & Thornton, 2006). Also, although the salaries are primarily negotiated collectively, the possibility for teacher unions to declare strike is no different from the options of unions in other professions and occupations. Thus, it is unlikely that we can find the explanation for weak developments in teacher salaries by examining the monopsonistic or monopolistic characteristics of the labour market for teachers.

In our study, instead of analysing the relationship between the organisations that negotiate teacher salaries, we sought to explain the weak development in Norwegian teacher salaries by focusing on the *intrinsic properties* of the labour market for teachers by examining regulations. In this manner we aimed to cover a gap in the literature. The economic literature on the matter has provided various valuable insights into teachers' salaries (e.g., E. S. Han, 2021; S. W. Han & Borgonovi, 2020; Hanushek, 2010), but not focused on explaining why teachers are lagging behind other comparable professions. Sociologists, on the other hand, while paying attention to a variety of developments in the teaching profession (e.g., Mathou *et al.*, 2023; Page, 2017; Spicksley, 2022), have shown surprisingly little interest in understanding the social cogs and wheels (Elster, 1989) of teacher salaries. We contend that it is, to a large extent, a *qualitative task* to detect and lay out the forces that underpin these developments.

## 2. Method

A key goal for sociology is to identify 'social mechanisms without black boxes' (Boudon, 1998). It is unsatisfactory to allow salary developments for teachers to remain a black box in the sociology of education. We employed the comparative method that Durkheim ([1895] 1982) was one of the first to propose. According to Durkheim, 'comparative

sociology is not a special branch of sociology; it is sociology itself, in so far as it ceases to be purely descriptive and aspires to account for facts' (Durkheim [1895] 1982, p. 157). Ideally, the explanations proposed in this paper should be tested against real-world data by comparing Norwegian teacher salaries with teacher salaries in countries where teachers have performed well financially. However, it is difficult to identify such countries. Even in Finland, which is frequently referred to as an example where the quality of teachers is high, teachers receive considerably lower pay than professionals such as doctors and lawyers (Paronen & Lappi, 2018, p. 13). Despite some researchers contending that recruiters should focus more on internal factors than salary considerations (Flores & Niklasson, 2014, p. 340), Finnish teachers view the salary situation as the biggest threat to the recruitment of teachers (Webb *et al.*, 2004, p. 176). Thus, using Durkheim's method of comparative sociology to 'account for facts' is difficult if the unit of comparison is *countries*. After all, teacher salaries are low in most countries.

Instead, we decided to apply the comparative method with a different unit of comparison, namely *professions*. We used this method on the Norwegian case. Our study was inspired by a previous comparative study, where the researchers used professions as the unit of comparison, and where the focus was also on the Norwegian case. In their study, the researchers compared average cognitive ability among three professional groups: Teachers, doctors and lawyers (Møen *et al.*, 2012, p. 68). Others make the same comparison, i.e., comparing teachers with doctors and lawyers. For example, Geiger and Pivovarova (2018) compare with doctors and lawyers when they refer to the 'overall low salaries of teachers compared to other professions' (p. 607). From the perspective of the teaching profession, comparing with doctors and lawyers is compelling because doctors and lawyers have societal prestige and *de facto* much higher salaries than teachers. In addition, it is possible to argue that these three different professions are sufficiently equal to accept comparisons between them as sociologically meaningful. As a case in point, they are subject to approximately the same length of education. The integrated Norwegian education program for teachers takes five years, which is roughly equivalent to the integrated programs for doctors (6 years) and lawyers (5 years).

Møen *et al.* (2012) conclude that the quality of teachers has declined in Norway during the last couple of decades. There is reason to follow up on their study because, as Hanushek (2010, p. 467) has pointed out, 'the key element defining a school's impact on student achievement is teacher quality'. Also, Falch finds that '(...) graduates with high academic ability leave teaching to the largest extent at the schooling level where such ability is of the highest value' (Falch, 2022, p. 959). Møen *et al.*'s (2012) conclusion about declining teacher quality in Norway emanated from military data on cognitive test scores by male teachers. They found that the scores among those who move on to become teachers have declined compared with those who become doctors and lawyers. For example, teachers born in the late 1950s had a cognitive score of between 80 and 85 per cent of their contemporaries who became doctors. By 2010, however, the difference in cognitive ability between male doctors and male teachers had increased significantly (Møen *et al.*, 2012, p. 68). Møen *et al.* (2012) suggest that the relative cognitive decline of teachers is a causal effect of a relative decline in teacher salaries. As teacher wages

declined, compared to doctors and lawyers, cognitively gifted individuals increasingly decided to avoid pursuing a teaching career. This conclusion is consistent with the conclusion in equivalent studies (e.g., Leigh, 2007).

Møen *et al.* (2012) did not take a step further by attempting to *explain* the relative decline in teacher salaries. The task that we set out for ourselves, then, in the continuation of their study, was to take that next step and ask: Why is it that teachers in Norway have seen a relative decline in salaries? To explain the relative decline in teacher salaries, compared to professions such as doctors and lawyers, we needed to identify regulative factors that may have changed over time. In some way or another, some factors must have suppressed teacher wages relative to comparable professions. Comparing the three professions, we found that practices related to *certification* and *hiring* are crucial to the supply side of the respective labour markets. Thus, in the study behind the present paper, we narrowed our focus to these two elements.

- 1) *Certification*. Certification requirements are crucial because they strongly influence the number of potential employees in the professions. Thus, legislation on certification heavily affects the supply side. Accordingly, we qualitatively compared the regulations on certification requirements, student admissions, and the different routes to certification within the three professions.
- 2) *Hiring*. We also compared the regulations regarding hiring in the three professions. We should note that the three professions differ when it comes to the proportion of candidates that work in the public sector, which is the relevant sector for Norwegian teachers. But in all these three professions, hiring regulations considerably affect the supply side of the labour markets, and thus, the salary developments.

In summary, then, our study took the form of a *qualitative inquiry into the supply side* of the labour market for teachers working in Norway, compared with the supply side of the labour markets for doctors and lawyers. Although less precise than Durkheim's ([1895] 1982) paradigmatic comparisons, our comparisons provided conclusions that we believe have significant explanatory power.

### 3. Unit of comparison: Professions

By comparing teachers with doctors and lawyers, Møen *et al.* (2012) used extremes, in the sense that doctors and lawyers are acknowledged professions with high standing in most societies. By comparing the structural elements of the teaching profession with these prestigious professions, we can potentially elucidate how the teaching profession differs. In our study, we focused on certification, student admissions, and hiring practices because information and empirical material about these matters related to the *supply side* are easily accessible. By contrast, issues related to the demand side are highly complex.

In the case of lawyers, they do not face the public sector as the sole buyer, i.e., as a monopsonist of their services, in the same way as teachers do. While the public sector is a prominent employer for Norwegian lawyers, the lawyers also have significant opportunities in the private market (Børing *et al.*, 2012, p. 19). As we will describe in the

following sections, however, we concluded that the supply side probably provides us with enough material to account for most of the differences in salary developments between teachers and the other two mentioned professions. We lay out key characteristics of the labour markets for doctors, lawyers and teachers regarding certification, student admissions and hiring within these professions.

### *a. Doctors*

The Norwegian legislation for the certification of doctors was, up until 1927, exclusively dependent on medical education. Since the medical degree at the university contained a practice requirement - the University of Oslo, hereafter referred to as UiO, was the only Norwegian university at the time - candidates received authorisation to work as doctors at the time of their graduation. This formally changed in 1927, when candidates, in addition to their graduation papers from UiO, were required to obtain a license from the Ministry of Social Affairs (Haave, 2007, p. 3267). However, in practice, this was only a formality; a medical degree from UiO was still sufficient to receive authorisation. The current legislation, which is from 1999, states that individuals with a medical degree from a Norwegian university or equivalent foreign institution, and who have also passed the practice requirement integrated in the degree, are certified to work as doctors in Norway (Lovdata, 1999, § 48a).

Certification as a doctor is an *absolute* requirement in Norway. The legislation does not give employers, such as hospital managers, any flexibility in the short-term or long-term hiring of doctors. In hiring doctors, whether short or long term, employers must ensure the individual has authorisation to work as a doctor. In other words, and unsurprisingly, one might add, the certification process for doctors is a subject of absolute rigidity. Currently, this is regulated in the Act relating to health personnel (Lovdata, 1999; Ministry of Health and Care Services, 2002), which unambiguously states that only individuals with a Norwegian medical degree or equivalent degree from abroad can work as doctors.

When it comes to student admissions to medical education, a 2019 report commissioned by the government found that the official number of entries per year for medical education was 636 (Ministry of Education and Research, 2019, p. 25). According to the report, approximately the same number of Norwegians are admitted to approved foreign medical education annually (Ibid.). In other words, around half of Norwegian doctors entering the labour market obtain their degrees abroad. The expert commission behind the report recommended that the number of medical education admissions in Norway should be increased by 440, from 636 to 1076 per year. However, this is still a low number, compared to the long-term demand for doctors (Ministry of Education and Research, 2019).

The low number of admissions is due to the extremely high costs related to the education of doctors (Ministry of Education and Research, 2019). Also, although it is lucrative for foreign doctors to enter the Norwegian labour market due to high average Norwegian salaries, the influx of foreigners has not been high enough to make a significant difference on the supply side (Ministry of Education and Research, 2019). In

summary, the rigidity in certification and the high medical education costs have contributed to securing the high status and salaries of doctors. The high costs entail a permanent structural economic barrier against increasing the number of student admissions to medical education. Also, although the Norwegian labour market is, in principle, easy to access, at least from the European Economic Area, Norway has not been flooded by foreign doctors (Ministry of Education and Research, 2019).

### ***b. Lawyers***

The current certification of lawyers in Norway is rigid, in the sense that the title of 'jurist' is formally protected (Lovdata, 2022, § 67), and also in the sense that a certain proportion of positions in society can only be held by people with a formal law degree from an approved university. For example, only individuals with the legal title of 'jurist', i.e., an individual who has passed the 5-year integrated law degree from a Norwegian university, or an equivalent degree from abroad, can act as a lawyer in the Norwegian court system (Lovdata, 1915, § 220). Also, only individuals with a law degree can act as a judge (Lovdata, 1915, § 54).

Notably, access to many typical lawyer positions is less rigid than what is the case for doctors. While doctors can only work with formal authorisation, many functions that lawyers often perform do not formally require a law degree. Also, a substantial proportion of typical lawyer jobs could, at least in principle, be held by anyone considered competent. In the public sector, for example, although lawyers frequently hold administrative management positions in counties and municipalities, these positions do not formally require a law degree. Also, although the ministries often announce vacancies for lawyers, the ministries are usually not legally obligated to hire individuals with a formal law degree. Thus, when it comes to certification, the situation for lawyers is more multifaceted than for doctors.

Another factor that makes the situation for lawyers more complex is that the *de facto* proportion of lawyers employed in the private sector is much higher than the corresponding *de facto* proportion of doctors (Børing *et al.*, 2012). For example, lawyers work in banks, insurance companies, and divisions within major corporations (Børing *et al.*, 2012, p. 19). Most often, the companies that hire lawyers for these positions do not need the formal competence that the lawyers possess, but they need the *de facto* competence. In many cases, however, companies will only consider individuals with a formal law degree to avoid risk. As in most other sectors, a demand from the private sector entails a degree of upward pressure on the salaries for lawyers, also from the public sector that wishes to compete for competent lawyers. As Børing and his colleagues conclude, there will likely be a shortage of formally certified lawyers in the coming years (Børing *et al.*, 2012, p. 38). This is, in part, due to demand from the private sector.

When it comes to admissions, the situation is considerably different for lawyers compared to doctors. It is considerably less expensive for the state to educate a lawyer than a doctor. Thus, the number of admissions to law education has increased significantly more in Norwegian higher education institutions than what is the case for medical education. For example, the Norwegian Business School was recently allowed to

educate lawyers. Unsurprisingly, the decision to let another institution educate lawyers spurred outrage from law students at the established institutions, who saw declining salaries on the horizon and started a petition campaign to stop the establishment of additional law programs (VG, 2021).

Regarding entry into the law profession in Norway by people educated abroad, the language barrier acts as a suppression mechanism. While Norwegian academic talents travel in droves to countries such as Poland and Hungary to take their medical degrees (Ministry of Education and Research, 2019), most lawyers working in Norway come from Norwegian universities. Although lawyers in the European Economic Area have easy formal access to the Norwegian labour market, the language, culture and differences in judicial systems prevent influx of foreign lawyers. Børing *et al.* (2012), who studied the labour market for lawyers specifically, did not even consider it relevant to analyse the influx of foreign workers in their assessment of the future situation for lawyers in Norway, presumably due to the low influx numbers. In summary, a combination of factors secures the status and salaries of the law profession in Norway: A rigid certification system for a significant proportion of law positions, a language barrier to the influx of foreign lawyers, and a substantial demand for law services from the private sector.

### *c. Teachers*

Teachers are comparable with doctors and lawyers in the sense that the standardised length of study is approximately the same for all three groups. However, beyond the length of study, there are significant structural differences between these three professions in Norway. First, the demand for teaching services from the for-profit private sector is minuscule. Thus, public sector teachers do not experience the indirect upward pressure on salaries enjoyed by public sector lawyers who also get offers from the private sector (Børing *et al.*, 2012). But perhaps even more importantly, numerous educational avenues can lead to certification as a teacher. It is possible to get a teaching certificate by finishing the five-year integrated teacher programs and which resembles the integrated programs for doctors and lawyers. But in addition, one can get teacher certification by completing a regular degree in many different subjects if one takes a one-year pedagogical course after the degree. Consequently, there is a steady stream of candidates from all kinds of educations that boost the supply side of the market for teachers by taking a one-year pedagogical course (Statistics Norway, 2021a). Many of the students who take this one-year course are candidates who have finished degrees with a low market value in the private market. Also, while the number of student admissions to medical education has been consistently low in all of Norwegian history, compared to the demand, the number of student admissions to 'cheap' subjects within the social sciences and humanities has increased dramatically during the recent decades (Grøgaard & Støren, 2006). These 'cheap' subjects guarantee a stream of new formally qualified teachers into the labour market and contribute to suppressing teacher salaries.

As a result of the flexibility in certification, Statistics Norway predicts that the production of teachers will surpass the demand for teachers in the years to come



(Statistics Norway, 2021a). In other words, there is no problem for Norwegian municipalities when it comes to the long-term recruitment of teachers.

**d. Summary of comparisons**

A summary of the trends in the labour markets for doctors, lawyers and teachers is shown in Table 1 below. The four first categories apply to the supply side (certification flexibility, hiring flexibility, student admissions and the influx of foreigners). The final category, private sector demand, applies to the demand side. The sharp relative increase in salaries for doctors (compared to teachers) is probably primarily due to low flexibility in certification, low flexibility in hiring and low student admissions. Low flexibility in certification and low flexibility in student admissions also help explain the relative increase in salaries for public sector lawyers (as compared to teachers). But also, a reason why public-sector teachers are lagging behind their lawyer counterparts is that there is little private-sector competition for teachers.

**Table 1: Comparisons**

	<b>Doctors</b>	<b>Lawyers</b>	<b>Teachers</b>
Certification flexibility	Low	Low	High
Hiring flexibility	Low	Moderate	High
Student admissions	Low	High	High
Influx of foreign workers	Low	Low	Low
Private sector demand	Low	High	Low

**4. Explanations**

Based on our observations of the labour markets for doctors, lawyers and teachers, we contend that the three mechanisms laid out below provide most of the explanation of the relative decline in teacher salaries in Norway compared to the two other professions.

***Explanation 1: Flexibility in the certification of teachers***

In the Norwegian case, which we focus on in this article, there are numerous avenues that students can follow that will eventually give them formal certification as teachers in the Norwegian school system. Statistics Norway, the government-funded official bureau of statistics in Norway, has a standardised classification of education where they list a variety of educational programs as sufficient for certification as a teacher in the Norwegian school system (Statistics Norway, 2023). Moreover, students can choose between many options regarding which subjects they study if they want to qualify as teachers. For example, almost any non-teaching degree in the social sciences and humanities will be considered a qualification for teaching in the compulsory school system if the candidate has also finished a one-year pedagogical course. It does not matter which higher education institution the degree is from; it could be from anywhere, in Norway or abroad, as long as the degree is equivalent with a Norwegian degree. Also, high school graduates do not need to decide at an early stage whether they want to

become teachers in the same way future doctors and lawyers have to; students can make this decision after completing a degree in almost any subject.

The integrated teacher programs currently have requirements for high school grades (Lovdata, 2017, § 4-7). Still, if students fail to get the required grades, they can get admitted to studies without grade requirements and supplement this grade with a one-year pedagogical certification course. Poor grades in higher education are also no hindrance for teacher certification. For example, if a student gets the worst possible pass grade, i.e., an E, on all exams including the master's thesis, this student is nevertheless qualified to teach in the Norwegian compulsory school system. In principle, the theoretical 'all E' student can also get a degree as a doctor or lawyer. Nevertheless, although we do not currently have evidence, there is reason to believe that getting an E or better on one of the exams in the medical degree or the law degree is harder. For example, medical education in Norway requires maximum specialisation in chemistry from high school (Lovdata, 2017, § 4-2). This requirement in a STEM subject entails that there is only a theoretical chance that academically weak students can enter medical education in the first place. Thus, it seems likely that passing the exams in teacher education requires less than it does in medical and law education.

### *Explanation 2: Flexibility in the hiring of teachers*

The Norwegian Education Act states the following regarding qualification requirements for teaching staff:

Persons appointed to teaching positions in primary, lower secondary and upper secondary education must have relevant professional and educational qualifications. (Lovdata, 1998, excerpt from Section 10-1)

The Education Act does not refer to 'teacher degree' as a concept. By contrast, the equivalent acts for doctors and lawyers refer to 'medical degree' and 'jurist degree' respectively (Lovdata, 1999; Lovdata, 2022). Consequently, the school owner that hires teachers does not face nearly as rigid regulations as a hospital manager who will hire a doctor or a court manager who will hire a lawyer. While the hospital manager and the court manager must make sure the employee satisfies certification requirements that are unambiguous and need no subjective judgment, school owners are allowed to make subjective judgments.

In addition to the subjective judgment of the school owner in the hiring of permanent staff, people can get temporarily appointed to teaching positions without having the professional and educational qualifications referred to in Section 10-1 of the Education Act. There is even a code in the main tariff agreement, 7960, coined *Teacher without approved certification* (KS, 2022, p. 58). In other words, in Norway, there is an officially established category of workers employed in schools despite lacking the necessary qualifications. We found no equivalent code for doctors or lawyers working in the court system. As the Education Act states:

If no applicants satisfy the qualification requirements for teaching staff laid down in section 10-1, a temporary appointment may be made. (Lovdata, 1998, excerpt from Section 10-6)

If no applicants satisfy the qualification requirements for teaching staff laid down in section 10-1, another applicant who is undertaking relevant education may be appointed on the condition that this education will be completed. (Lovdata, 1998, excerpt from Section 10-6a)

The possibility of using judgment in assessing who has ‘relevant professional and educational qualifications’ and temporarily hiring non-certified staff are flexibilities of the teaching profession. The equivalent flexibilities do not exist in the labour market for doctors and lawyers. Statistics Norway reported in 2021 that individuals without formal competence as teachers performed approximately one in six person-years in Norwegian compulsory schools (Statistics Norway, 2021b). The flexibility in hiring teachers boosts the supply side massively. Thus, we can expect that this flexibility suppresses teacher salaries. Equivalent numbers do not exist for doctors in hospitals or lawyers in the court system; hiring non-certified doctors in hospitals or non-certified lawyers as judges would entail breaking the law.

### ***Explanation 3: Flexibility in the subject specialisation of hired teachers***

The third proposed explanation is also related to hiring but is slightly more complex than the second explanation offered above. It is related to the subject specialisation of the teachers. The Education Act does not only give school owners flexibility in hiring non-certified staff. It also allows them to give teaching assignments to teachers who do not have formal skills in the subjects they teach.

The Education Act states that ‘Teaching staff must have relevant qualifications in the subjects they teach’ (Lovdata, 1998, § 10-2). Consequently, the teaching and medical professions are technically equivalent. In the same way as only qualified orthopedics should perform knee operations, only teachers with formal competence in English should teach English. However, in the Education Act, there are two significant exemptions. Consequently, there are numerous teachers in the Norwegian educational system to whom the subject qualification requirement does not apply:

The requirement for relevant qualifications in the subjects taught does not apply to temporary appointments pursuant to section 10-6 or pursuant to the Working Environment Act, or to appointments made pursuant to the conditions in section 10-6a. Anyone who has completed the general teacher training programme, and anyone who until 1 January 2014 met the requirements for appointment to a teaching position, is exempt from the requirement given pursuant to the second subsection until 1 August 2025. (Lovdata, 1998, excerpt from Section 10-2)

Section 10-6a, which the quote refers to, states that it is allowed to hire teachers temporarily if there are no applicants with certification. This entails that not only can non-certified employees be hired as teachers, but they can also teach subjects where they have no formal qualifications. In addition, it is also possible for school owners to give teaching assignments to *permanent* staff who do not have formal qualifications in the subject:

The school owner may, to the extent necessary, waive the requirement for relevant qualifications in the subjects taught if the school does not have sufficient qualified teaching staff in the subject. This must be assessed for each school year. (Lovdata, 1998, excerpt from Section 10-2)

Research has shown that low teacher salaries might have a particularly suppressing effect on recruiting STEM teachers (S. W. Han & Borgonovi, 2020). In the Norwegian case, however, the subject of English also seems problematic when it comes to recruitment. A Statistics Norway report concluded that 50 per cent, 23 per cent and 35 per cent of teachers in the compulsory school system lacked formal competence in English, Norwegian and mathematics, respectively (Statistics Norway, 2019, p. 64). Thus, the school system fails to comply with the subject-specific competence requirements to an even higher degree than the school system fails regarding the overall teacher competence. School owner flexibility on subject-specific competence increases the number of formally qualified candidates and thus likely contributes to the suppression of teacher salaries.

## 5. Discussion

In this article, we have provided possible explanations for the relative decline in teacher salaries. First, numerous student routes can lead to teacher certification. Students can take an integrated five-year teacher degree. Alternatively, they can finish a regular degree in almost any subject and follow up with a one-year pedagogical course. This easy access to certification continuously boosts supply and thus likely suppresses salaries. Second, both in the short and long term, school owners have considerable flexibility in hiring. They can temporarily hire individuals without teacher certification if there are no certified applicants. Also, school owners can use their judgment to decide whether an individual has the proper requirements relating to subject knowledge and pedagogical competence. By contrast, Norwegian health institutions are not allowed to hire doctors without full certification even in the short term. Hospital managers cannot use their judgment to decide whether a doctor is qualified or not; only formal certification is sufficient. Third, school owners have an almost unlimited right to give teaching assignments to staff who do not have formal education in the subjects they teach. For example, school owners can ask an employee with a degree in biology to teach English. These three forms of flexibility allow school owners freedom in hiring, which is unheard of in hospitals or the court system. We predict that teacher salaries will continue decreasing, compared with the other mentioned professions. There is reason to believe that parental demand for certified teachers is low, given that parents vote for political parties that allow flexible teacher legislation. The low salaries entail that many young individuals will not consider spending five years preparing to become a teacher in an integrated teacher program.

Now, let us scrutinise our conclusions using some real-world observations. In recent years, the number of applicants to integrated teacher education programs has plummeted in Norway. By contrast, integrated programs in medicine and law are trending upwards in student popularity. How can this be? We can regard this as a puzzling phenomenon that sociologists should aim to explain (Elster, 2007). Why would

youngsters compete hard to get into integrated medicine and law programs while shunning integrated teacher programs? Can the conclusions in this article explain this puzzling social phenomenon?

While their peers in the integrated medical and law programs have *exclusive* routes to certification, students in the integrated teacher program face a different reality. Like their peers in medicine and law, integrated teacher students get certificates. But unlike their peers, teachers also face overall competition from a considerable number of students from other programs who get certification by taking an add-on year of pedagogical education. Seemingly, Norwegian politicians believed that copying the models from other integrated educations such as medical and law education would significantly elevate the status of the teaching profession. What they may have failed to realise, however, is that doctors do not have high salaries because of the sheer *existence* of integrated medical programs. The status of doctors and lawyers stems from rigidities in certification and hiring in that the integrated educational program in these professions is the *only* way to get authorisation.

Suppose Norwegian state-level politicians would like to elevate the status and salaries of teachers to the level of doctors and lawyers. In that case, our comparative study suggests that they will probably have to copy two characteristics of the labour market for doctors: Rigidity in certification and rigidity in hiring. First, when it comes to rigidity in certification, certification as a doctor is *exclusive* for those who complete integrated medical programs. Correspondingly, if politicians wish to increase the status and salaries of teachers, they may have to make teacher certification *exclusive* for candidates who finish *integrated* teacher education programs. Second, politicians may have to legislate rigidity in hiring teachers, and they may have to eliminate the flexibilities in hiring teachers currently regulated in law. Hospitals cannot rely on judgment to decide whether a candidate is qualified to work as doctor, and it might be necessary to rescind the opportunity for school owners to judge whether an individual has the required professional and educational qualifications to work as a teacher. Presumably, to secure upward pressure on salaries, lawmakers might also have to prohibit school owners from giving teaching assignments to teachers without subject-specific competence.

## 6. Conclusion


We have proposed that the relative decline in teacher salaries can be explained by flexibilities in the labour market for teachers. First, there is flexibility in certification. Students can get certification as a teacher by finishing an integrated teaching degree. Alternatively, they can get certification by finishing a non-teaching degree and supplement it with a one-year pedagogical course. By contrast, lawyers and doctors can only get certification by taking an integrated degree. Second, school owners are allowed to hire unqualified teachers temporarily, and third, they are allowed to ask teachers to teach subjects where they have no formal competence. By contrast, Norwegian courts and hospitals do not have this flexibility in the hiring of lawyers and doctors, respectively.

If these flexibilities of the teaching profession persist, then teachers' status, salaries and motivation are likely to stay low or decline further. From the perspective of pupils, the flexibilities in the labour market for teachers entail that the home situation of pupils is likely to increase in importance for their life outcomes. To use Bourdieu's (1984; 1986; 1990) terms, having weak teachers increases the likelihood that the habitus and social capital of the families are reproduced. In other words, social mobility becomes more unattainable for pupils. Low teacher salaries are convenient for Norwegian municipalities, which are responsible for offering compulsory education. But considering the low quality of the teachers they might end up with, as a consequence of the low salaries, this is a convenience that might come with a long-term social cost.

### Conflict of Interest Statement

The author declares no conflicts of interest.

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