

PISA and teachers' reflexivities. A mixed methods case study

Terje André Bringeland & Tone Skinningsrud

To cite this article: Terje André Bringeland & Tone Skinningsrud (2024) PISA and teachers' reflexivities. A mixed methods case study, *Journal of Critical Realism*, 23:1, 53-80, DOI: [10.1080/14767430.2023.2289776](https://doi.org/10.1080/14767430.2023.2289776)

To link to this article: <https://doi.org/10.1080/14767430.2023.2289776>



© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 12 Jan 2024.



Submit your article to this journal [↗](#)



Article views: 191



View related articles [↗](#)



View Crossmark data [↗](#)

PISA and teachers' reflexivities. A mixed methods case study

Terje André Bringeland  and Tone Skinningsrud 

Faculty of Humanities, Social Sciences and Education, UiT – The Arctic University of Norway, Tromsø, Norway

ABSTRACT

Neoliberal educational reforms include extensive use of standardized tests. We examine the Program for International Student Assessment (PISA) initiated and developed by the Organization for Economic Cooperation and Development (OECD). Examining previous research on teachers' reactions to neoliberal reforms altering their work context, we have identified three theoretical frameworks in use: labour process theory, derived from structural Marxism; post-structuralism, relying primarily on Foucault's conceptualizations; and 'new professionalism', which has emerged from the theory of professions. A major weakness in these frameworks is their inability to account for different reactions to the same structural and cultural conditions. Therefore, we suggest utilizing Archer's theories of reflexivity and reflexive modes to understand these reactions. Presenting one Norwegian lower secondary school teacher's reflexive engagement with PISA in the Norwegian school context as an example, our mixed methods case study indicates autonomous reflexivity as the prevailing mode. Meta-reflexivity rates second in prevalence.

ARTICLE HISTORY

Received 20 April 2023

Accepted 28 November 2023

KEYWORDS

Teachers's work; Labour process theory; post-structuralism; professionalism; reflexivity; reflexive modes

Introduction

Research on the consequences of neoliberal educational reforms at the micro level of the school and the classroom started out in the 1980s and 1990s when standardized testing, the demand for performativity and, increasingly, accountability regimes were introduced in schools. Some have traced the neoliberal turn in educational policies to 'New Right' think tanks, which in the 1980s furnished the US, the British and the Chilean government with ideas for a new educational policy (Fuller 2019). The central theoretical paradigm in early investigations on how neoliberal educational reforms impacted teachers was the neo-Marxist labour process theory formulated by Harry Braverman (1974). He saw the new forms of work control as a general tendency in capitalist economies, resulting in de-skilling, intensification of work, and a separation of the conception of work from its execution. Applications of the labour process approach to teachers' work were adopted on both sides of the Atlantic. Ozga and Lawn (1988) in Britain and Michael W. Apple

CONTACT Terje André Bringeland  terje.a.bringeland@uit.no  Faculty of Humanities, Social Sciences and Education, UiT – The Arctic University of Norway, Universitetsvegen 39, 9019 Tromsø

© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group. This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

(2013) in the United States were among the prominent early representatives of this theoretical tradition. However, at the time, Ozga and Lawn (1988) pointed to a lack in labour process theory and argued for the incorporation of (collective) agency in explaining the historical development of the skilling and de-skilling of the work force. They claimed that the reorganization of work and de-skilling was not inevitable and uncontested, though they still argued for upholding the labour process approach. This early paradigm, however, was criticized for its structural determinism and its lack of a subject (Reid 2003, 563). The structuralist perspective overlooked teachers' subjectivities, their agency, and the admittedly varied teacher reactions elicited by the new types of controls introduced by neoliberal reforms (Reid 2003).

Following the ebb of labour process theory, post-structuralist theory, leaning on Foucault's conceptualizations, took over as the leading theoretical paradigm. Though appearing to study a neglected domain in labour process theory, namely 'subjectivity', this approach tended to perpetuate some inadequacies of structural determinism not by neglecting subjectivity and agency, but by assuming that social agents and their subjectivities are totally determined by external forces, resulting in a kind of 'neoliberal subjectivity'. Thus Steven J. Ball provocatively asserted that neoliberal educational reforms not only determine what teachers do, but 'who they are' (Ball 2003, 215). Ball later modified this statement by claiming that subjectivity is 'a site of struggle' (Ball 2016, 1129), which may include 'resistance' (Ball and Olmedo 2013), but did not venture into studying more closely a broader variety of reactions, except for 'resistance'.

Despite the theoretical bias of labour process theory and post-structural theory, which emphasize the uniformity of teacher reactions, both early and more recent empirical studies guided by neither of these two divergent theoretical approaches have reported teacher responses that are more varied and defied the expectation of uniformity (Lewis and Hardy 2015; Troman 1996). What is missing from many of the empirical studies, however, is a general and coherent conceptual framework that can explain the variety of teacher reactions to the new forms of control.

Addressing the general question of how structure influences agency and how agency itself is a cause contributing to structurally situated practices, Margaret Archer (2000, 2003, 2007, 2012) has revitalized the concept of reflexivity.¹ Archer has suggested that reflexivity, or internal conversations, is the mediating process linking structure, culture, and agency. Various reflexive modes, i.e. communicative, autonomous, and meta – reflexivity entail that persons have different stances on or orientations to their structural and cultural environment. Some persons, however, have fractured reflexivity, which means they are unable to engage their personal reflexive powers, due to disabling internal or external circumstances. Applying the concepts of 'reflexivity' and 'reflexive mode' can account for why different agents may react differently to the same structural and cultural context. Agents' modes of reflexivity, or their 'way of being in the world', co-determine reactions to given structural surroundings. In this way Archer's theory can account for how social agents' constellations of personal concerns, that is, what they deeply care about, mediate and modify structural influences on their individual courses of action.

We consider Archer's theory of structure, culture, and agency, introducing reflexivity as the mediator of structural and cultural impacts, as a promising alternative to both structuralist and post-structuralist approaches. Observing the ontological distinctions between structure, culture, and agency, Archer's approach avoids conflating them in concepts such

as 'neoliberal subjectivity' and instead sees them as representing distinct causal powers. The conceptualization of reflexivity and reflexive modes as activated in individuals' internal conversations about their personal concerns, deliberating on how these may be pursued in a given structural and cultural context can help to explain why teachers vary in their reactions to new types of control and ideas associated with tests such as the Program for International Student Assessment (PISA).

Archer's concepts such as the internal conversation, reflexivity, and reflexive modes are based in a philosophical and social ontology of emergence (Archer 1995, 135ff), seeing reality as hierarchically stratified into levels with distinct causal mechanisms (Bhaskar 2016, 32). They are an integrated part of, and a further refinement of her morphogenetic approach, providing a more specified content to the 'vague' notion of structural and cultural 'conditioning' of action and interaction (Archer 2003, 2). This ensemble of concepts enable theoretically coherent explanations of the reported diversity of individual reactions to neoliberal educational reforms, which have been missing in previous empirical studies, for example Troman (1996, 474), Ball (2003, 215), and Ball, Maguire, and Braun (2012, 145).

In this article, we will illustrate how Archer's theoretical approach enables the analysis of teachers' responses to their structural and cultural context by reporting on one case study of a Norwegian secondary school teacher. In the following, we will first provide a short presentation of the Norwegian educational context, the implementation of New Public Management (NPM) reforms, which are a subspecies of neoliberal reforms, and Norway as a PISA-participant from the very beginning. We will then discuss the three major theoretical approaches that have predominated in international studies of teacher reactions to neoliberal educational reforms: labour process theory; post-structuralist theory based on Foucault; and the conception of 'new professionalism'. Our presentation of these research traditions examines typical examples from the vast literature that is available and are not meant as comprehensive research reviews. We will then present Archer's theory of structure, culture and (reflexive) agency, explaining how reflexivity mediates, in different ways, the impact of structure and culture on individual action. By presenting a case study of one Norwegian secondary school teacher, we illustrate how Archer's concepts may be applied in practical research. The teacher interview shows how social structure, in this case the teacher's obligation to administer the PISA test as part of his job, and expectations to use PISA to improve his work (assessment for learning) activates various modes of reflexivity. It also shows how his compliance in administering the test, which he is very critical of, is a product of both his structural context and his predominant modes of reflexivity.

The uneven adoption of NPM reforms in Europe

In this article we subsume NPM reforms under the general label of neoliberal reforms, though NPM is a separate branch of neoliberal ideas that concerns the organization of the public sector in particular. Neoliberal and NPM principles refer to market organization, management techniques and accountability regimes that are adopted from the private sector, aiming to improve effectiveness and efficiency in the public sector including education (Gunter et al. 2016; Møller and Skedsmo 2013). Investigations studying the introduction and implementation of NPM in ten different European countries showed discrepant and uneven developments. The investigators explained this by differences

in the national and local reform contexts (Gunter et al. 2016). Even among the Nordic countries, there are major differences in how neoliberal NPM-reforms have been implemented. While Sweden, since the 1990s, has introduced private schools on a previously unprecedented scale, Norway is described as a hesitant reformer, resisting educational competition and privatization (Møller and Skedsmo 2013). However, a common element in recent educational policies implemented in Norway, Sweden, Denmark, and Finland is their participation in the PISA test. Norway has participated in the test since its inception in the year 2000, and in 2004, the PISA test was included in the Norwegian National Quality Assessment System (NQAS) for education.

The introduction of NPM reforms in Norway

Describing the introduction of NPM-reforms in Norwegian education, Møller and Skedsmo (2013) claim that this happened in two separate waves. The first wave, starting at the end of the 1980s and the beginning of the 1990s, consisted in a restructuring of the governance of education, introducing management by objectives (MbO) and the restructuring of local governance. These changes reduced the influence of teacher professionals on the local governance of compulsory schools. The second wave started soon after the turn of the millennium, one milestone being Norway's participation in the PISA test for the first time. Other major structural innovations constituting the second wave were the introduction in 2004 of the National Quality Assessment System (NQAS), which included PISA among other international large-scale assessments such as Progress in International Reading Literacy Study (PIRLS) and Trends in International Mathematics and Science Study (TIMSS), and the introduction in 2006 of a national curriculum reform called the Knowledge Promotion Reform (K06), which reshaped the old national curriculum by introducing learning outcomes as its central feature. Being 'a hesitant reformer', Norway introduced these NPM reforms more than a decade after similar arrangements had been implemented in the UK. The introduction of PISA, however, is seen by Møller and Skedsmo (2013) as a turning point in Norwegian educational policy, releasing the second wave of NPM reforms. These changes to the Norwegian educational policy through decades have contributed to stronger unification processes in the Norwegian educational system, making it a centralized educational system (Bringeland 2022a; Skinningsrud 2019).

PISA in the Norwegian educational structure

The PISA test is administered every third year. It is incorporated into the National Quality Assessment System (NQAS) together with other international largescale assessments and National Tests, and other student tests and questionnaires. The national random sample participating in the PISA test is composed of single individuals from various schools and school classes. Test results are therefore not representative of specific schools or class units. The test is administered by Norwegian teachers who happen to be teaching students in the random sample sitting for the test. Administering the test is part of their duties as teachers. Moreover, as part of a feedback procedure, national PISA-results are disseminated to all Norwegian schools, where school leaders and teachers are expected to 'learn from them', that is, use them as feedback to improve school leadership and teaching practice.

The importance attached to PISA by Norwegian education authorities is underlined by the 'PISA-courses' to which leaders in Norwegian lower secondary schools are invited. These courses are offered on a regular basis by the PISA research team at the Department of Teacher Education and School Research at the University of Oslo (Aursand 2018; Aursand and Rutkowski 2021; Bringeland 2022b). As part of the National Quality Assessment System, PISA, along with other international and national standardized tests, constitutes a part of the Norwegian educational structure: it is mandatory for schools to take part in the test; teachers must administer the test if their school is in the randomly drawn national sample; and national results are disseminated in schools, where school leaders and teachers are expected to discuss, and possibly implement the results. A previous study on reflexivity and reflexive modes have identified the prevalent reflexive mode of three school leaders in their internal conversations about the PISA test as 'autonomous'. Meta-reflexivity was the next prevalent mode. The school leaders are mainly concerned with administrating the test and presenting and discussing the test results for possible further implementation. Secondly, they are to some extent critical of the test, especially the validity of the test results for their school due to random sampling (Bringeland 2022b).

Theoretical frameworks guiding previous research

As mentioned, three theoretical traditions stand out as distinct in their conceptual approach to the study of teacher responses to neoliberal educational reforms. Labour process theory focuses on the increased external control of teachers' work, resulting in loss of autonomy, deskilling and the separation of conceptualizations and execution of work tasks. The focus of this tradition was structural change in the work context.

An alternative approach, gaining ascendancy after the heyday of labour process theory, focused on changes in 'subjectivity' resulting from structural change. In this post-structural approach, relying heavily on Michel Foucault's conceptualizations, subjects were considered as 'disciplined' and 'obedient', almost totally malleable by their surroundings. The post-structural approach conceptualizes the worker/teacher as a 'subject' but lacks a conception of 'agency'. An analysis of English schools operating within this research paradigm refers to Foucault's concept *dispositif*, whose clarification is the stated overall aim of the research. 'Dispositif' is defined as *a thoroughly heterogeneous ensemble consisting of discourses, institutions, architectural forms, regulatory decisions, laws, administrative measures, scientific statements, philosophical, moral and philanthropic propositions – in short, the said as much as the unsaid*. (Cited from Foucault 1977, in Gordon 1980; and in Ball, Maguire, and Braun 2012, 141). By its definition, this ensemble contains structures, ideas, and material artefacts without any theoretical clarifications of how they are to be distinguished and possibly related to each other. The post-structural approach, accordingly, avoided the structure-agency debate which was ignited by studies based on the labour process, and instead introduced the concept of 'discourse' as a key in analysing education and educational institutions. Arguably, this represented a 'cultural turn' in the theoretical approach to the consequences of neoliberal educational reforms.

A third theoretical framing in studies of neoliberal educational reforms and their consequences for teachers' work practice is the theory of professions, epitomized in the

concept 'new professionalism', which raises the issue of recent structural change and their consequences for agency. The structural issue concerns the extent to which structural change affects autonomy at work, and the agency issue concerns the possible emergence of a new type of professionalism among teachers, produced by neoliberal reforms.

Labour process theory: focus on structural change, de-skilling, or up-skilling

Labour process theory originated in studies of industrial work. Accounting for the theory and its trajectory in the study of teachers' labour process, Reid (2003) claims that the theory lost its momentum in face of both theoretical and empirical critique. Only a few central concepts have survived in subsequent research, such as 'de-skilling' and 'intensification' of work. At the theoretical level the theory was criticized for being too universalizing and deterministic, universalizing in the sense of seeing 'scientific management'² as the only form of work control and deterministic in the sense of seeing 'de-skilling' and 'intensification' of work as inevitable in a capitalist economy. The role of (collective) agency in social development was neglected. Also, critics pointed out that 'scientific management' was not the predominant form of work control in education, and labour process theory was therefore not applicable to teachers' work. Reid (2003), defending the relevance of labour process theory, despite its shortcomings, argues that when applied in the field of education more attention should be paid to the particular circumstances and contexts of teachers' work (Reid 2003, 560).

Admitting that de-skilling was not inevitable, and that labour process theory lacked a conception of subjectivity and agency, Ozga and Lawn (1988) incorporated agency in their study of teachers' work by providing historical examples. Their approach was, however, criticized for merely providing descriptions and subjective experiences of teachers' work without formulating a theory which included both structure and agency and how they were related. Other studies of teachers' work claimed, on empirical grounds, that structurally determined de-skilling did not grasp the current situation at all, since teachers were developing more skills and experiencing greater autonomy in their work than ever before (Reid 2003, 563).

Neoliberal policy for the public sector, that is NPM, is based in 'public choice theory' developed by James Buchanan in the 1960s. This theory postulates that public sector workers, bureaucrats, and professionals, as well as everyone else, are pursuing their self-interest and thus perpetuating inefficiency under the guise of serving the common good (Hodge et al. 2018). This assumption fuelled caution among politicians who, according to the theory of public choice, would see teachers in a new light as the maximizers of self-interest rather than the public good. This idea promoted a new policy towards teachers (Connell 2009; Robertson 2012). The consequences of a policy informed by public choice theory were that public sector workers, bureaucrats, and professionals were targeted for maximizing their own interests (Hodge et al. 2018).

The assumption that teachers were a hindrance to raising educational standards, notably due to their pursuit of self-interest was, however, challenged when the OECD in the 2005 publication 'Teachers Matter: Attracting, Developing and Retaining Effective Teachers' (OECD 2005) argued that high quality teachers was an important precondition for high quality education, playing a potentially vital role in preparing students for the

new knowledge economy. The OECD recommendation of upgrading teachers' qualifications and providing good work environments for them apparently defied the trend, which labour process theory had predicted, towards the de-qualification and de-skilling of teachers. There was a renewed interest in what constituted a 'good teacher', and in several countries, for example England and Australia, lists of competencies were worked out indicating the kinds of knowledge and skills effective teachers would have to develop (Connell 2009; Robertson 2012).

However, long before OECD called for an upskilling of teachers, many countries, for example Norway, Finland, and Sweden, had upgraded their teacher education in what has been described as an academization process (Bergmark and Hansson 2021). Before the turn of the millennium teacher education in these Nordic countries had become upgraded to university level programmes. In 2010 Sweden made a decisive move to make education scientific, passing an act which requires teaching practice to be based in 'scientific knowledge' and 'proven experience', the latter referring to examples of 'best practice' and ideas of 'what works'. Though reportedly difficult to implement, this act confirms a policy determined to upgrade teachers' competencies (Bergmark and Hansson 2021; Hansson and Erixon 2020).

Paradoxically, these upskilling efforts, and in particular their emphasis on teachers' ability to understand and apply research results, can be a kind of de-skilling. Bergmark and Hansson (2021) point out that the Swedish 2010 act which requires education to be scientific by applying scientific knowledge, may in fact result in de-skilling, since teachers are called to apply scientific knowledge that has been developed by others. Thus, they may still be trapped in a work situation where the conceptualization of their work is separated from its execution.

Likewise, recent Canadian research on the professions of engineering and nursing show that these professions' knowledge base is changing from being a clearly defined body of knowledge specialized for the professions to becoming a hybrid and more heterogeneous field of knowledge which could, according to Adams and Sawchuk (2021), indicate a broader process of de-skilling in these professions. Thus, labour process theory, defended by Reid (2003) and others (Connell 2009), which thematizes the process of de-skilling, is not irrelevant to current occupational development. De-skilling may appear in new guises. Still, the theory's one-sidedness in only thematizing structural change and not the varied responses of agency to these changes is a critique that points to an absence in the theory, which still remains.

Post-structuralism: focus on teachers' subjectivities

Post-modernist and post-structuralist approaches, challenging 'grand narratives' and 'totalizing' accounts of social development, grew strong in the 1980s and 1990s. The French philosopher Jean-François Lyotard (1984) in his translated publication 'The Post-Modern Condition' claimed that knowledge was no longer legitimated by the aspiration to find truth. Its new source of legitimacy was 'performativity', that is, its contribution to the economy, and effective production in the technological sense of having a favourable input/output ratio. The collapse of the modern epoch's 'grand narratives' of progress, or even emancipation, had lost their credulity, and this called for *petits récits*, that is, localized narratives on a smaller scale. In the social sciences this critique coincided with increased attention given to uneven development, and contextual variations of developmental trends.

The post-structuralists' charge against 'grand narratives' of being too universalizing and not accounting for the particularistic was detrimental to orthodox labour process theory. A leading voice in the Anglophone research literature on the consequences of neoliberal educational reforms for teacher subjectivities based in post-structuralist ideas is Ball (2003; 2016). His major source of intellectual inspiration is Michel Foucault. In Ball's widely read and much quoted article from 2003, 'The Teacher's Soul and the Terrors of Performativity', he considers performativity, the market and managerialism as 'policy technologies' included in 'the package of neoliberal educational reforms', attributing their promotion to international agencies like the World Bank and the OECD. Ball also wrote a book titled 'Global Education Inc.' in which he traces the foundations and think tanks that operate on a global scale with the explicit purpose of promoting neoliberal policies in all domains of society, including education (Ball 2012).

Ball sees performativity as 'a new mode of state regulation which makes it possible to govern in an "advanced liberal" way'. Essentially it requires self-disciplining, as individuals must organize themselves by responding 'to targets, indicators, and evaluation' (Ball 2003, 215). Emphasizing the uniformity of effects on individuals, the new imperative according to Ball is to set aside personal beliefs and commitments and instead live an existence of calculations. He describes the new performative worker as 'a promiscuous self, an enterprising self, with a passion for excellence' (Ball 2003, 215). Not only does the new framing of teachers' work entail an influence on what teachers do, it also changes teachers' identities. The 'inner-life of the teachers' is profoundly influenced by the policy 'technologies of marketization, managerialism' and demands for performativity (Ball 2003, 226). However, admitting to variable individual responses to the situation, Ball makes a distinction between those who see neoliberal reforms as an opportunity to 'make a success of themselves', and others, to whom it may result in 'inner conflicts, inauthenticity and resistance.' (Ball 2003, 215).

Ball, Maguire, and Braun (2012) provide a concrete example of their theoretical approach and empirical findings in *How schools do policy: policy enactments in secondary schools*. Reporting on ethnographic case studies of four English secondary schools, Ball and his team tell how teacher audiences attending presentations of their research frequently asked whether they had encountered resistance against neoliberal educational policy in the schools they studied. Their reply was 'very little'. As they see it, in their research they had to choose between focusing on variances and difference versus studying 'the colonization of practice by performativity' (Ball, Maguire, and Braun 2012, 150). This choice resembled an optical figure/ground dilemma, where one may see either an urn or two faces in profile, depending on what is seen as the figure and what is seen as the background. Despite opting for studying uniformity, or the total 'colonization of practice', the authors do report observations of differences among teachers' reactions. They observed policy enthusiasts, critics, and receivers, as well as senior teachers for whom policy responsibility is a 'career move'. 'Thus, some of those who work in schools are "policy carriers" and some "policy careerists".' (Ball, Maguire, and Braun 2012, 145).

Ball and his team admit to not having raised the question of the relationship between power, agency and the space for alternatives (Ball, Maguire, and Braun 2012, 149). They claim that resistance or refusal of policies among teachers were only found in the form of 'discontents, murmurings, indifference and disengagement', which to some extent is 'free-floating, rather than systematic' (Ball, Maguire, and Braun 2012, 143–144). They

conceptualize these responses as a kind of role distancing, i.e. 'disdainful detachment of the performer from a role he is performing' (Goffman 1961, 110; referred in Ball, Maguire, and Braun 2012, 150). Ball and his team, however, recommend that more work should be done on detailing the micro-politics of resistance and 'resistance within accommodation' (Ball, Maguire, and Braun 2012, 150).

The unwillingness, or perhaps inability, of Ball and his team to analyse and explain the variety of responses to neoliberal reforms might have something to do with the theory they use. The concept of social structure is absent from their analytical toolbox, as is a more elaborate theorizing of agency. Instead the authors aim to identify 'a set of master discourses that define schooling' (Ball, Maguire, and Braun 2012, 140). These discourses are identified as 'learning', 'curriculum' and 'behaviour', and are 'what makes the school'. The challenge, which Ball and his research team saw in their study of 'policy enactment' in English secondary schools was to 'join up politics and practices' by 'the concept of discourse' (Ball, Maguire, and Braun 2012, 140) – an approach that overlooks social structures in the schools, which is produced by macro-level politics – and how these influence local practices.

Ball's conceptual framing in studying the effects of neoliberal educational reforms has been widely influential in international educational research. Studies in countries as far apart as Australia, the US and Sweden have used Ball's conceptions of 'policy as discourse' (Holloway and Brass 2018; Lewis and Hardy 2015).

Australian researchers studying teachers' subjective experiences within the post-structural framework give an account of how high stakes testing, combined with target setting and the schools' struggle for a positive reputation, influence the subjectivities of those who work and learn in schools. Lewis and Hardy (2015, 245) refer to Ball's assertion that national 'policies discursively constitute the teacher as a performative subject – not merely changing what teachers *do*, but also ultimately who teachers *are*' – and they seem alarmed by the idea that teachers are totally determined by the structures they inhabit. They conclude that 'teasing out alternative practices and dispositions is important work for thinking such practices differently.' (Lewis and Hardy 2015, 261).

Holloway and Brass (2018), also working within Ball's post-structuralist paradigm positing 'neoliberal subjectivities', find that new generations of teachers are more accepting of neoliberal structuring of their work. They compared different generations of American teachers by studying two groups through and after their teacher training. One group of five teachers was followed for several years (2002–2005) through their one-year internship and first year of licenced teaching. Another group of seven middle school teachers was followed for two years about ten years later (2013–2014). The period of the first investigation coincided with the implementation of the No Child Left Behind (NCLB) Act during the Bush administration and the second with the implementation of 'Race to the Top' (RTTT) under the Obama administration.

Comparing the teachers' subjectivities/responses to the two reforms indicated a shift in the two groups concerning their 'subjectivities' and in their sense of professionalism. The teachers in the first group considered the steering mechanisms of the NCLB reform as an external intrusion on their autonomy, professionalism, and practice, while the second group accepted the RTTT's accountability mechanisms as 'the very modes by which they knew themselves and their quality' (Holloway and Brass 2018, 361). Holloway and Brass draw the conclusion that over time there is a 'collapse between the governed (i.e. the teachers) and the government (i.e. accountability mechanisms)' (Holloway and

Brass 2018, 361). A normalization of the managed and marketized teacher has taken place. Holloway and Brass (2018, 361) take their findings to confirm Ball's claim that accountability reforms 'produce new kinds of teacher subjects', a finding which they claim has been further corroborated by Evetts (2011) and Anderson and Herr (2015). Evetts is a central proponent of the notion of 'new professionalism'.

Professionalism – 'Old' and 'New'

The consequences of neoliberal educational reforms for teachers have also been studied from the perspective of changes in the professions and to professionalism. This theoretical framing overlaps with labour process theory in its focus on teachers' loss of self-determination and autonomy in their work, resulting in de-skilling and de-professionalization. Studies that focus on teachers' professionalism have developed conceptions of various 'new professionalisms', emerging as a consequence of structural change resulting from neoliberal reforms.

In social theory, the professions have received special attention as a group of occupations having more autonomy in their work than other groups. Professionals' work has been delineated from other types of work by its reliance on specialized fields of knowledge, exclusive access to job markets through education and licencing and, in Talcott Parsons' classical account, the professions are seen to adhere to generally accepted social values that serve the public interest. The historically established professions are in law, medicine and theology, but new professions have emerged such as teaching, nursing, and social work, which are called semi-professions by some authors since work autonomy in these fields has been less pronounced (Etzioni 1969).

Studies have indicated that the distinctiveness of the professions compared to other occupations has diminished, and the emergence of new kinds of professionalism is suggested (Evetts 2011; Svensson 2006). Neoliberal reforms are seen to threaten the traditionally distinctive characteristics of the professions such as relations of trust among the professionals themselves, between practitioners and clients, and between practitioners and employers. Likewise, egalitarian relations seem to have given way to legal-rational bureaucratic rationality and market-based competition, commercialism, and the commodification of services.

Evetts (2011) distinguishes between 'old' and 'new' professionalism, alternatively called 'occupational' and 'organizational' professionalism respectively, with special reference to public services. New/organizational professionalism entails that the practitioner identifies with and is loyal to the organization and organizational interests over normative commitment to professional values. Adams and Sawchuk (2021, 91) suggest that a hybrid type of professionalism is emerging. Hybridization, in their opinion, is a result of increased control of professionals' work and might in essence be an aspect of de-professionalization.

The various suggestions of emerging new types of professionalism continue the emphasis on uniformity in individual responses to structural change. At most they point to the division of professionals into two categories, 'old' and 'new' professionals, the new professionals being more accepting of and adapting to current structural change.

Already Troman (1996, 474) early study of English primary school teachers' reactions to the introduction of neoliberal reforms distinguished between 'old' and 'new' professionals depending on the extent to which they accepted and adapted to their new work context. Referring to Pollard et al. (1994) and Hargreaves (1994), Troman mentioned adaptive

teacher responses indicating the emergence of a new type of professionals who consider the reforms as 'necessary measures to remedy deficiencies in the system' (Troman 1996, 474). This positive view of an emerging new professionalism fits well with the 'new professionalism' mentioned by Hargreaves (1994) which breaks teacher isolationism and promotes collaboration both internally in the school and with external groups such as parents and the local community. Another adaptive teacher response mentioned by Troman is the 'new entrepreneurs', who fully accept the new changes made in schools (Troman 1996, 474).

Troman also foreshadows Archer's approach when studying agents' reactions to their structural context by drawing attention to other studies of English schools, which show that individual agency is active in producing a variety of responses and reactions to changes in the work environment and to new definitions of teachers' work. He points out that 'teachers filter the policy of reforms and change through their existing professional ideologies, perspectives, and identities' (Troman 1996, 474). He lists a range of different reactions that have been reported, from compliance and accommodation to resistance and rejection. The missing element in these empirical accounts of divergent teacher reactions to current reforms, however, is a theory which can explain the variety of reactions. Is it by chance that some teachers become 'new professionals' or 'new entrepreneurs' and others take early retirement? When Troman (1996) suggests that variances in professional identities, ideologies and perspectives cause different adaptations to new structures, he does not specify which types of identity, ideology, and perspectives predispose a teacher to become a 'new entrepreneur' rather than seeking early retirement.

Research on new professionalism has also been carried out in the Scandinavian countries. One study, comparing Norwegian and Swedish teachers, indicates that despite variance within each country, teachers in these two countries diverge as groups (Helgøy and Homme 2007). Referring to Svensson (2006), Helgøy and Homme (2007) define old professionalism as 'professional practice relying on formal educational credentials, the monopolizing of certain occupations based on licensing', and new professionalism as 'competencies which are more personal, implicit, individual and related to context, tasks and actual performance'. The capability of each professional may increase his or her autonomy and responsibility. In other words, old professionalism is oriented to the collective of professionals, while new professionalism is more individualistic. Their different orientations may correspond to different accountability regimes; holding the profession accountable promotes old professionalism, while holding the individual accountable encourages new professionalism (Helgøy and Homme 2007, 234).

Norwegian teachers on the whole practiced old professionalism in the sense of experiencing less individual autonomy in their teaching practice than Swedish teachers. Swedish teachers had to a greater extent adopted new professionalism, that is, loyalty to their employer over loyalty to their profession (Helgøy and Homme 2007, 232).

Similar results from comparative studies of Norwegian and Swedish teachers are reported by Carlgren and Klette (2008), who found that national policy documents from the two countries in the 1990s signalled different expectations regarding teachers' work. In Sweden teachers were portrayed as 'professionally empowered curriculum makers', while Norwegian teachers were seen as 'curriculum deliverers' (Carlgren and Klette 2008, 129). In the Norwegian National Curriculum from 1997, the state prescribed – in detail – the content of schooling. However, in agreement with the findings of

Skedsmo and Mausethagen (2017), Norwegian teachers did not consider the Norwegian national curriculum as a constraint on their professionalism. Instead, they experienced it as an enablement. They could spend more time on teaching the curriculum, while Swedish teachers had to discuss and select curriculum content, choose teaching methods, formulate learning goals, and develop criteria for marking. With an expanding private education sector, Swedish teachers also had to attend to competition with other schools and negotiate their individual salaries.

Summing up

Studies on the effects of new educational structures on teachers' reactions and agency under the current 'neoliberal order' (Gerstle 2018) reveal disagreement among researchers. There is disagreement on the theoretical framing of such studies, and findings vary between countries regarding teachers' adaptation or resistance to their new structural environment. The divergent findings between countries could reflect that 'the neoliberal order' and 'neoliberal reforms' are not the same everywhere. The early labour process theorists tried to explain why the de-skilling and proletarianization of teachers' work did not stimulate collective protest. More recent post-structuralist approaches have emphasized the wholesale changes in teachers' subjectivities and the production of 'neoliberal subjects', who are compliant, disciplined and employ 'technologies of the self' to cope with demands. The theory of professions points to another type of adaptation, 'new professionalism', which entails a shift in loyalty from the professional group to the organization where they are employed.

Studies informed by all these theoretical frameworks mention variations in individual responses, but without being able to refer to theory that can accommodate and explain why, for example, external control in terms of a fixed national curriculum and standardized tests as part of accountability schemes is seen by some as constraining their work while others see the same controls as facilitating. Reported reactions among teachers to the restructuring of their work include both taking early retirement and becoming 'careerists'. What seems to be particularly lacking in theories guiding research in this area is the ability to account for differences in individual teachers' reactions to the same given structures and circulating ideas.

Archer's theoretical framework: structure, culture, and (reflexive) agency

Archer's concept of reflexivity seeks to resolve the structure/culture/agency issue in social theory. This issue has been prominent in theoretical debates, resonating in areas of applied research, in the sociology of education, and in studies of policy implementation, i.e. how educational reforms, creating structural and cultural change at the macro level, impact practices at the micro level of schools and classrooms. Introducing the notion of reflexivity as mediating structural and cultural effects on agency entails explaining the course of action taken by agents as caused both by their structural and cultural situation and internal deliberations about how to reconcile their structural and cultural context with their personal concerns and values. Archer, in her first full volume exploring the concept of reflexivity titled 'Structure, Agency and the Internal Conversation' (2003), starts out by posing the fundamental question: 'How does structure influence agency?'

Noting agreement among theorists that structure does not fully determine human agency, she suggests that there must be something else ‘involved in the process’ and she suggests that this ‘something else’ might be the ‘properties and powers of agents themselves’ (Archer 2003, 1).

Archer notes that in the critical realist research tradition the concept ‘conditioning’ has been used about the structure/agency relationship. That is, structure is said to ‘condition social action and interaction’. Archer also postulates that the same logic applies for culture (Archer [1988] 1996, 1995, 193, 2003, 3). However, the concept ‘conditioning’ tends to give primary emphasis to structure and culture, without accounting for how agency contributes to the action outcome. The question is how agents respond to structural and cultural conditioning, and what kind of processes are involved in producing subsequent action. Roy Bhaskar’s fundamental claim that ‘the causal power of social forms is mediated through human agency’ (Bhaskar [1979] 1998, 28), says nothing about the mediatory process and does not conceptualize the mediation. Archer’s contribution to clarifying the process of mediation is to introduce the concepts of ‘reflexivity’ and ‘reflexive modes’ (Archer 2003, 342). (Figure 1)

Two major implications of incorporating reflexivity in the structure-agency and culture-agency relations are:

- (i) a given structural [or cultural] context is not a *constraint* or an *enablement* per se; whether it is a constraint, or an enablement depends on the agent’s projects, i.e. what the agent wants to promote or obtain, that is, what the agent’s fundamental concerns are (Archer 2003, 5–6).

Neoliberal reforms in the education sector, such as the introduction of accountability mechanisms based on measured performance (test-based accountability, TBA) are generally seen to increase constraints on teachers’ work. Target setting and the use of ready-made tests have, moreover, been seen to result in the de-skilling of teachers, or at least to their decreased autonomy and freedom to exercise discretionary judgement. However, this is not necessarily the case. External controls may be experienced as supporting the learning process when they are seen to promote activities that increase students’ motivation and learning.³

- (ii) agents’ response to the same structurally [or culturally] defined situation are not uniform because they may activate different modes of reflexivity; since agents differ in what is their *predominant reflexive mode*, which is founded in their ultimate

Defining and dovetailing one’s	Developing concrete courses of action	Establishing satisfying sustainable
concerns →	projects →	practices
(Internal goods)	(Micro-politics)	(<i>Modus vivendi</i>)

Figure 1. Internal conversation and pursuit of the good life (Source: Archer (2007, 89).

concerns, what they care about most. Differences between agents' ultimate or fundamental concerns contribute to agency responding in different ways to a given structural [or cultural] context (Archer 2003, 41, 343–344).

Each mode of reflexivity entails a different stance, or orientation, towards society and its constraints and enablements. A stance (reflexive mode) is a mechanism at the personal level, which tendentially regulates relations between persons and their society. It is an overall response pattern to the totality of structural powers encountered by a person, and thus, it is a particular way of 'being in the world' (Archer 2003, 342).

By activating a particular mode of reflexivity, stance, or orientation, subjects attempt to regulate their personal-societal relationship (Archer 2003, 355). Depending on which stance is activated, the internal conversation leads the person-society relationship in different directions – 'thus, articulating the precise form of the micro–macro-link' (Archer 2003, 349). '[T]he "stance" is ventured as a generative mechanism, at the personal level, with the tendential capacity to regulate relations between the person and her society.' (Archer 2003, 343). Agents' stances towards society, their mode of reflexivity, has both internal effects on the agent and external effects on the agent's environment. Internal effects on the agent consist in agents' (i) prioritizing personal concerns and developing personal projects, and their (ii) establishing and consolidating orientations (stances) in encountering constraints and enablements (Archer 2003, 349).

Figure 2 below is our condensed presentation of Archer's model of the relationship between agents' various modes of reflexivity, their ultimate concerns, stances towards structural and cultural constraints and enablements, and external effects upon the agent's immediate environment from activating these different modes.

Mode of reflexivity	Ultimate concerns	Stance towards structural and cultural enablements and constraints	External effects
Communicative	Interpersonal relations (family and friends)	Evasive	Social reproduction; social integration (morphostasis)
Autonomous	Performative achievements (work)	Strategic	Goal achievement ('regional' social change; 'regional' morphogenesis)
Meta	Transcendent ideals	Subversive	No obvious effect (Negligible contextual effects but 'reactivation of <i>Wertrationalität</i> in the cultural system) ⁴
Fractured ⁵	Vacillating concerns	No consistent stance	No effect due to lack of agency

Figure 2. Modes of reflexivity – their basis in ultimate concerns, expressed as stances towards structural enablements and constraints, and their external effects (Source: Archer (2003)).

Communicative reflexives, whose ultimate concerns are ‘interpersonal relations’ (family and friends), tend to adopt a stance of ‘*evasion*’ in relation to structural and cultural enablements and constraints (Archer 2003, 192, 342). The external effect of this stance, on a micro scale, is social reproduction. By not undertaking ambitious projects, communicative reflexives manage to avoid constraints. They also tend to avoid enablements facilitating their social advancement. ‘Communicative reflexives’ are ‘collectivists’ towards the social in the sense that concerns and context are inseparable. They contribute to social reproduction by their strengthening of social integration, i.e. agreement among members of their network.

Autonomous reflexives, whose ultimate concern is performative achievements (work), meaning task performance ‘at a level which satisfies external standards of assessment’ (Archer 2003, 265–266), tend to adopt a *strategic* stance towards their structural and cultural context; its enablements and constraints. They are ‘accommodative’ towards the social, since to them, context is a means towards the realization of their concern, which is task performance. The external effect of this stance is increased goal achievement in whichever sector they are located, which means that they contribute to social change (morphogenesis) in the section of society where they work.

The ideals and concerns of the *meta-reflexives* transcend present social reality. To the meta-reflexives, the context is always inadequate in meeting their ideals and concerns (Archer 2003, 353). However, meta-reflexives tend to experience their job as an activity in which they can express their commitment to fundamental personal values (Archer 2003, 258). Nevertheless, meta-reflexives ‘pursue cultural ideals that cannot be accommodated by the current social structure and the array of contexts it defines’ (Archer 2003, 361). Because of their fundamental critique, they become *subversives* of the structural status quo and resist any ‘deal’ with it. At the micro level their actions may have negligible direct impact. However, one important effect is at the macro-level of the cultural system. By personifying their utopian ideals of truth and goodness, meta-reflexives are upholding cultural ideals, which may otherwise ‘sleep on in the Universal Library of Humankind’ (see Archer [1988] 1996, 104). ‘The meta-reflexives awaken these ideals and re-present them to society’ (Archer 2003, 361). Archer connects meta-reflexivity to Max Weber’s notion of *Wertrationalität*, that is, actions that have value in themselves and are not a means to something else (Archer 2003, 355–361).

The most pronounced feature characterizing *fractured reflexives* is that they have not developed or are unable to consistently adopt any determinate personal stance towards their social surroundings (Archer 2003, 343). This lack may be caused by various circumstances, emotional distress etc.

This research is illustrative and exploratory and primarily aimed at demonstrating that Archer’s conceptions of reflexivity and reflexive modes are usable in analysing a teacher’s internal conversation on PISA-related issues. If we can showcase the applicability of Archer’s concepts, i.e. if we are able to identify a teacher’s different reflexive modes and pinpoint the predominant mode, we will have illustrated that teachers’ subjectivity is not just an internalization of neoliberal principles and thoughts (the neoliberal subjectivity) or a facile adaptation to the aims of the organization or the school (new professionalism), but that teachers’ subjectivities are more complex, and personal ideals and concerns play an essential role in determining the course of action followed in encountering obstacles and demands from the school context. Analysing just one case of course precludes any attempt at generalizations, for example about what kinds of reflexive modes are prevalent

among Norwegian teachers. We have, however, at the end of our analysis offered a hypothesis about why the special constellation of reflexive modes discovered in this one case might be prevalent in the Norwegian context, primarily due to the characteristics of the Norwegian educational system. For these reasons our research questions are:

Which modes of reflexivity are activated in a mathematics teacher by the PISA test? Which mode(s) of reflexivity predominate(s)?

Methodology: selection of case and types of data

The mathematics teacher works in a lower secondary school. He is a regular member of the school staff and is not involved in the school leadership. He is, however, a member of two staff teams, one specific to the grade level he teaches and one specific to his subject specialism, mathematics.

Max was selected for the interview because he had first-hand experience in administering the PISA-test. He could therefore be expected to talk not just 'from the top of his head' about PISA, or to express some stereotype opinions about the test. Having administered it, he would know something about its content. Also, compared to teachers who had not been personally involved in administering the test, he was more likely to have reflected on its use and utility in the Norwegian educational setting.

Two types of data were collected⁴ in April 2020: (i) quantitative data generated by the Internal Conversation Indicator (ICONI), which is a short questionnaire consisting of thirteen items of the Likert scale type, measuring degree of engagement in different modes of reflexivity to establish the dominant general nonreferential reflexive mode, and (ii) qualitative data collected in a semi-structured Skype-interview focused on his opinions on PISA and its function in the policy and practice of Norwegian education to establish his reflexive modes activated by PISA.

Results

Quantitative data: internal conversation indicator (ICONI)

The instrument ICONI, which provides a quantitative measurement of persons' engagement of the various reflexive modes, is developed by Archer and her associates. The purpose of the index is primarily to serve as a screening device for selecting persons who practice a distinct dominant mode of reflexivity for further interview. In developing the questionnaire two requirements were that it should be quick to administer and items should be readily understandable. Besides, items should not contain any form of referential specificity which would preclude its use in other countries. When the questionnaire is administered, it is introduced to participants as 'an investigation of the processes of decision-making in everyday life' (Archer 2007, 331).

Based on results from previous interview studies on reflexivity (Archer 2003), subjects were expected to obtain scores on more than one reflexive mode, but to various degrees. Thus, the mode with the highest mean score would qualify as the dominant mode (Archer 2007, 331). In developing the questionnaire various versions were subjected to a series of trials, and the final version consists of thirteen items of the Likert scale type where the respondent may choose a score from 1 to 7 on each item. Consequently, each person

tested with the ICONI may be described by a ‘reflexivity profile’ consisting of a mean score for each mode of reflexivity.⁵

The ICONI was administered to our interviewed teacher, Max. Figure 3 shows that his highest mean score was on the ‘autonomous reflexive mode’, which indicated that his major personal concern was task performance. Added to the thirteen Likert scale items was an open question, which asked him to list the three most important areas of his life, ‘those that you care about deeply’ in a chronological order from 1-3, where 1 is of highest importance. Here, Max mentioned his relationship to his family (1), his relationship to his friends (2), and genuine interests (based on inner motivation) (3) as the most important areas of his life.

The ICONI scores indicated that Max engaged in ‘meta-reflexivity’ as his second strongest mode of reflexivity, and to some extent in ‘communicative reflexivity’. He also obtained a score on ‘fractured reflexivity’. Thus, Max’ ICONI profile included scores on all modes of reflexivity. At first sight, there was a puzzling discrepancy between his scores on the Likert-scale questions and his reply to the open question, where he did not include ‘work’ as one of ‘the three most important areas of his life’. In our ‘Discussion’, we will argue that Max was referring to his work when he mentioned ‘genuine interests’ as one of the most important areas of his life.

Reflexive modes	ICONI mean scores
Autonomous reflexive	4,6
Meta-reflexive	3,6
Communicative reflexive	3
Fractured reflexivity ⁸	2

Figure 3. Reflexivity profile of the interview subject on the ICONI (Internal Conversation Indicator)

Qualitative interview data and analysis⁶

The interview started with a question on how Max got to know about the PISA test. To this he replied that it was through his work as a teacher.

Reference 2

PI-I12: Do you remember how you got to know about PISA?

PI-R12: Oh my God, it was probably through work. I don’t remember if I knew so much about the PISA survey before I was exposed to it, to put it that way.

Max further clarified his involvement with the PISA test as a random happening as it was only every third year that he was teaching 10th grade students, who are the target group for the PISA test.

Reference 1

E-R3: Well, I have to say that personally, I had to think about when I was engaged in PISA. It was a bit random, as a secondary school teacher at our school you follow a cycle, every three

years you have 15-year-olds, the 10th grade. You are “lucky” to administer the test if it falls on that year you have a 10th grade class.

By making these initial remarks Max conveyed that it was not his choice to administer the PISA test. This was a result of circumstances beyond his control. He distanced himself from the test.

Autonomous reflexivity

The ultimate concern of *autonomous reflexives* is performative achievements (work), and they tend to adopt a *strategic* stance towards their structural and cultural context; its enablements and constraints. Because context is a means towards realizing their concerns, they accommodate to their context. The external effect of this mode (stance) is increased goal achievement. This entails that autonomous reflexives may contribute to social change (morphogenesis) in the section of society where they are located.

Tackling the situation in his school with an increasing number of standardized tests, Max explained that he had initiated the practice of ‘simulated test situations’. He used previous test items from national tests and exams to prepare students for upcoming tests. He justified this practice by saying that it would enable students’ achievement and remove their insecurity when taking tests. He claimed that choosing to practice what some would call ‘teaching to the test’ he succeeded in familiarizing the students with the test situation and made them feel more at ease when they were tested. He underlined that he had promoted this practice to the school administration and the team level, which resulted in it being adopted as a normal practice in his school.

Reference 2.

E-I25: Have you used tasks from national and/ or international tests to prepare students for upcoming tests?

E-R25: Yes.

E-I26: What tests?

E-R26: National tests and exams.

E-I27: Why do you think it is right to practice on previous test items before a test is to be conducted?

E-R27: [...]. Eh, mathematical it is to, okay then, you can say it’s to enable the students, or you can say, what should I call it, warm them up to have tests, get used to the type of assignment, eh, to remove insecurity before the tests are to be conducted.

E-I28: Is this a choice, a decision made at the team level, or administrative level?

E-R28: No, it is a choice I make. But there is also ... I have probably been promoting it so that it is at least said that it should be done from the administration - and also at the team level.

These excerpts from the interview indicate that Max adopts the stance of an autonomous reflexive in administering tests in general. He is goal oriented in the sense of wanting his students to perform optimally on tests, giving them the opportunity to practice test-situations, and thus removing their sense of insecurity. He adapts to the situation in his school where students are regularly subjected to standardized tests, which he and the other

teachers are obliged to administer. Practicing autonomous reflexivity, he uses his work context to exercise his performative skills as a teacher, obtaining optimal results from his students. His involvement in goal attainment on behalf of his school, i.e. increasing test scores, is further underlined by his initiative to make ‘simulated test situations’ a regular part of the school’s programme. However, PISA was not a test used in his simulations.

Meta-reflexivity

Meta-reflexivity means being reflexive about one’s own acts of reflexivity (Archer 2003, 255). For example, reflecting ‘why did I think this is Friday, when in fact it is Thursday?’ (Archer 2003, 255). In internal conversations meta-reflexivity is not about whether propositions are true or false, right, or wrong, but why they have been uttered (Archer 2003, 255). One must distinguish between meta-reflexivity, which includes all acts of self-monitoring (Archer 2003, 256), and the shared characteristics of meta-reflexives (whose dominant mode is meta-reflexivity) some of which are that they are social critics and critical of themselves as persons and the lives they lead. Their criticism of society and themselves is caused by their ideals and that no existing social arrangements nor their own lives approximate to these ideals (Archer 2003, 258). Meta-reflexivity is adding an extra loop in one’s internal conversations, i.e. reflecting on one’s own reflexivity.

‘Meta-reflexives’ are often motivated for their work by a sense of ‘vocation’. Commitment to a ‘vocation’ entails ‘a subjective investment of the self’, a personification of ideal qualities associated with a specific type of work (Archer 2003, 266–267). Having a ‘vocation’ is different from just occupying a role, and not all teachers experience teaching as their ‘vocation’. They may have chosen to become teachers for quite different reasons such as family traditions, expediency, or practical considerations. Meta-reflexives are idealists constantly seeking a better fit between who they try to become and their social environment which, to various degrees, permits their expression of it (Archer 2003, 258). Meta-reflexives tend to adopt a *subversive* stance towards experienced enablements and constraints in the sense that they are willing to ‘pay the price’ for pursuing actions that will not be rewarded by society, thus subverting the causal powers of society (Archer 2003, 289). Their ideals make them into social critics since nothing around them measures up to their ideals. They represent ‘the conscience of society’ (Archer 2003, 274).

Some sections of the interview indicated that, to a considerable degree, Max also engaged in meta-reflexivity. This stance was expressed when he engaged in a general assessment of the PISA test. He understood the test to be a ranking instrument, the purpose of which he considered meaningless (compared to providing feedback for students’ learning). In the beginning and midway through the interview he expressed a negative opinion of the test. However, towards the end, in a typically meta-reflexive way, he reflected on his own reflections and tried to understand and explain his own negative reactions to the PISA test.

Reference 1

E-R30: [...] all schools, all the principals that I know of, use the results [on standardized tests] to show the rankings and how they relate to other schools and municipalities, and in relation to the country as a whole. Even the PISA surveys are used in relation to our rating in the global context. Which is totally, even more meaningless.

Reference 4

PI-I7: How do you understand the intention of PISA?

PI-R7: A tool for rankings.

PI-I8: A tool for rankings.

PI-R8: Yes. Quite simply. I think I recall that there is a place that, well, that this is a survey being taken all over the world, and there are a lot of different political governance we have around and mindsets, that is, hello, it is really just nonsense, the whole PISA survey.

Reference 6

PI-I41: How do you experience your competence in interpreting PISA results?

PI-R41: Eh, to interpret the results.

PI-I42: Mhm.

PI-R42: Do you think in a statistical way?

PI-I43: Yes, for example.

PI-R43: No, that would work out fine. I should be able to do so.

At the end of the interview, Max reflected on his own reflection saying that at the start of the interview he might have been too critical about the PISA test, as he was coloured by what happened when the results from the first test were announced in 2001. At that time, the Education Minister Kristin Clemet fronted a shift in Norwegian educational policy, which resulted in a stronger centralization of the system (Bringeland 2022a). Despite being critical of the test, Max confirmed that he was able to interpret PISA results.

Reference 5

PI-R12: [...]. I'm probably colored and negatively influenced by the ravages Kristin Clemet did in her time. This is something that is still stuck in my memory and that I cannot get over. She started, in my opinion, to destroy the Norwegian school when she came to power. So, ehm, that will probably be the contributing cause to my attitude to this test, I think. [...].

Reference 2

E-R31: After all, it was PISA that started her and K06 [the new National Curriculum of 2006].

Reference 6

PI-R53: I may sound very strict, or too oppositional, or what should I call it. There are tasks in the PISA survey that may be individually relevant and exciting for students' development of competence, but there is more, there is more, what should I say. It is the method that is a problem to me. That this should be a test, that is, a measuring instrument.

In Max' opinion, the PISA test is resisted by the teacher professions, and its continued use in the Norwegian education system is a result of the exertion of power from the top, serving the interests of politicians rather than the concerns of the teacher profession.

Reference 8

PI-I56: Would you say that the PISA survey is better suited at the political level than at the level of teaching practice, in formative assessments, or evaluation?

PI-R56: I think if you had asked, if you let the teachers in Norway decide, it would have ended long ago. To be honest.

PI-I57: So, you think it is due to the exertion of power that the PISA survey has not been terminated?

PI-R57: Clearly.

Reference 8

PI-R55: [...] the politicians need arguments for making changes, and they probably don't trust the method, the methodology, that what we practice today is good enough. They also think such a study will confirm that they were right about this. So, the educational policy situation we have in the country is miserable now. It shows, after all, that they use the PISA survey to bang on their chest, so that politicians no matter where they stand, eh, would welcome such an argument.

This section of the interview exemplifies that Max also engages his meta-reflexivity in his internal conversation about the test. He carefully adds an extra loop in his reflections on the test, reflecting on his own attitude – whether it was influenced by his negative view of the educational policy which it is part of, and the way in which it is used by politicians. He is critical of not only the PISA test, which he considers to be an irrelevant ranking instrument, but also of the national education policy in general.

Communicative reflexivity

The ultimate concerns of *communicative reflexives* are 'interpersonal relations' (family and friends). They tend to adopt a stance of *evasion* in relation to structural and cultural enablements and constraints. By not undertaking ambitious projects, communicative reflexives manage to avoid constraints, and they also tend to avoid enablements that might facilitate their social advancement. 'Communicative reflexives' are 'collectivist' towards the social in the sense that concerns and context are inseparable. The external effect of this stance, on a minor scale, is social reproduction in the sense of strengthening social integration, i.e. agreement among members of their network. In the context of this investigation, we regard the concern of 'interpersonal relations' as referring to collegial relationships in the school where our informant works.

Max described his relationship with colleagues as amicable and fruitful and the work environment as good. He mentions talking about the PISA test with his colleagues when the results were published and announced and presented at his school.

Reference 2

E-I43: Is there anything more you want to say about the environment before moving on to the next topic, which could be of relevance?

E-R43: No, no other than that we have an environment that tries to follow what we agree on. It can at times be a quite fruitful and useful collaborative climate. There are few dominant

figures that knocks through their needs. It is a pretty good and practical environment within the collegium.

Max stated that all school leaders (principals) that he knew of presented test-results to the staff – even PISA results. The school leaders present the results by PowerPoint or projector, followed by discussions in smaller groups.

Reference 1

E-I31: Where is this presented, how is this happening at your school, who is taking the initiative to present these results, and how is it being presented?

E-R31: The principal presents them in plenary for the entire collegium. Happily, with a PowerPoint, or a projector. And then you are asked to discuss in groups, preferably in subject sections, and reflect on why things are as they are, why we are where we are, etc.

Reference 6

PI-I47: How do you perceive your colleagues' competence to possibly interpret PISA results?

PI-R47: My leader is good, I think, and probably competent, and the same with the mathematics teachers. After all, there will always be someone who doesn't care about those things [PISA].

This section of the interview indicates that communicative reflexivity was activated by Max, in relation to his colleagues, who seemed to function as a collective that was able to reach agreements among themselves on school matters. They discussed PISA and other test results among themselves when these were presented to the staff by the principal. Max also considered colleagues having competencies for interpreting PISA results, but not all staff members care about PISA.

Discussion

The reflexivity profile resulting from ICONI indicated that generally Max was an *autonomous reflexive*, someone who prioritized work before leisure activities and interpersonal relations, and whose ultimate concern was performative achievement in school, adopting a strategic stance to his environment. However, answering the open question included in ICONI, Max did not mention 'work' as one of the three most important areas of his life, but he mentioned 'genuine interests' in addition to 'family' and 'friends'. 'Genuine interests' could have referred to his ambition to be a good teacher, thus, to his work. This interpretation of the reply 'genuine interests' as Max's interest in his work is underscored by the qualitative interview. For example, Max maintaining that student motivation in mathematics was a reason for him creating 'simulated test situations'. This concern seemed to be one of his top priorities in school due to his focus on goal achievements, performing well, and maintaining motivated students. The interview data concerning his internal conversations on PISA and other tests confirmed his engagement in autonomous reflexivity. Thus he adapted to the situation and made the best of it, exemplified by him introducing 'simulated exams and tests' for his students, and his promotion of this practice in the whole school. He wanted to enable his students to achieve optimally on tests, which both satisfied his own concern to perform as a teacher at a high level in accordance with external standards, and enabled goal attainment for his school by raising students'

achievements. Max mentioned that he used items from National tests and exams in his 'simulated test situations'. Norwegian lower secondary school teachers are measured on their achievements by the results on National Tests in 8th and 9th grade, results which are accessible for the public, which might explain why Max is focused on national tests items in his test-simulations. The reason Max is focused on exams items in his test-simulations might be their relevance for his students' final exam(s) in 10th grade.

In a theory of professions perspective Max might be seen to represent 'new professionalism', as his desire to perform well as a teacher coincided with the interest of his school, perhaps at the cost of spending more time on promoting knowledge among his students. The latter would have indicated a stronger leaning towards 'Old Professionalism' and the norms of the professional community to which he belonged. The depth that Archer's concept of autonomous reflexivity brings to this analysis is that Max's 'project' and actions were derived from his concern about performing well as a teacher.

Although his ICONI scores confirmed Max as a predominantly autonomous reflexive, the interview data indicated that the meta-reflexive mode was almost equally prevalent. The major difference between his engagement in the two modes of reflexivity was that his reflection in the autonomous mode resulted in action. In his autonomous mode he completed the sequence concerns → project → practices (Archer 2007), exemplified by his introduction of trial exams and 'simulated tests'. His meta-reflexive mode, on the other hand, did not issue in projects and specific practices. Max engaged the meta-reflexive mode when he reflected on why he was so critical of PISA. He hinted that his ideals as a teacher were not compatible with using the PISA test, when he emphasized that he had been assigned to administer the test rather than chosen to apply it; when he expressed his disapproval of using the test as an instrument for rating student performances; and when he situated the test as part of 'the miserable state' of Norwegian education and Norwegian educational policy. Despite being critical, Max reassured that he was able to interpret PISA results. Max adopted a 'subversive stance' towards the larger picture of Norwegian education, but this stance had no definite project and thereby no practices, which suggests negligible contextual effects. However, Max was perhaps a person who experienced teaching as his 'vocation' in the sense of investing his 'self' in his work as a teacher and having certain moral standards. No definite conclusion can be drawn regarding this from the present interview though it confirms that he embraced certain ideals about teaching, which were contrary to ranking students' results.

To some extent Max also engaged in communicative reflexivity in his collaborative work with the rest of the staff, describing his work environment as amicable, characterized by agreements among colleagues and his willingness to discuss PISA-results with other colleagues. Besides discussing PISA-results with his colleagues now and then, he had no clear projects and practices himself concerning PISA that involved his colleagues. Max confirmed that his teacher colleagues and the principal were able to interpret PISA results, but not all staff members cares (deeply) about PISA. Thereby Max contributed to social integration amongst the staff. However, how his autonomous, meta-, and communicative reflexivity contributed to his 'modus vivendi', balancing his different concerns, is an open question that would require further investigations.

Perhaps the combination of autonomous and meta – reflexivity which combines criticism with strategic adaptation to the status quo is specific to countries that have centralized educational systems like Norway (Bringeland 2022a; Skinningsrud 2019). In

centralized systems, educational structures are generally determined in central political arenas and consequently difficult to challenge at the level of the individual school and by the individual teacher (Archer 2013; 1984; Bringeland 2022b; Skinningsrud 2019). Further research on modes of reflexivity among teachers encountering structural and cultural constraints in educational systems with various degrees of centralization might explore whether teachers in countries that have undertaken various types of neoliberal educational reforms activate different modes of reflexivity in dealing with their structural and cultural settings. For example, the possible identification of a predominance of 'autonomous reflexives' in centralized educational systems could suggest that teachers easily accommodate to central policy and are flexible towards change as they are concerned with 'goal achievement' and successful performance. Thereby they could possibly contribute to social morphogenesis in their situated context, which is in line with central policy and agendas.

Conclusion

This article outlines the various theoretical approaches that have been applied in the study of teachers' reactions to the introduction of neoliberal reforms in education. Firstly, labour process theory, which emphasizes de-skilling, intensification of work, and the separation of conceptions and execution of work tasks; secondly, the post-structural approach, which applies Lyotard's conception of performativity and Foucault's notions of power, discipline, and discourse; and thirdly, conceptions of 'new professionalism'. All three theories have been criticised. Labour process theory emphasizes structural change and generally lacks a conception of agency. It has also been criticized for not being sufficiently specific when describing the new educational control regimes. Post-structural theory introduces the notion of 'subjectivity' but not agency since a uniform 'neoliberal subjectivity' is seen to result from neoliberal structures. Thus, like labour process theory, post-structural theory emphasizes the determining force of external influences on subjectivity. Likewise, theories of the professions, distinguishing between old and new professionalism consider the impact of new controlling structures to result in uniform reactions, shaping discourses and identities. At the same time, they conflate structure, culture, and agency under the umbrella of 'new professionalism'. All these theories, although two of them incorporate subjectivity, lack a precise conception of agency in the sense of persons possessing causally effective personal powers that codetermine their action.

As an alternative to these approaches, we suggest Margaret Archer's theory of structure, culture, and reflexive agency with her conceptions of various modes of reflexivity. Archer founds her theory of reflexivity in a basic tenet put forward in the philosophy of critical realism, that 'the causal power of social forms is mediated through human agency' (Bhaskar [1979] 1998, 28). Exploring the process through which agency mediates structure she has empirically identified three major modes of reflexivity, the *communicative*, the *autonomous* and the *meta reflexive* mode. In addition, *fractured reflexivity* occurs when reflexivity is thwarted and disoriented due to external or internal disabling conditions.

We have presented a case study of a Norwegian secondary school teacher, who answered the questionnaire ICONI measuring his reflexivity profile, i.e. his mean score on the various modes of reflexivity in a general nonreferential manner, and, in addition,

data from a qualitative semi-structured interview about his reflections on the PISA test related to his work context. The major merits of Archer's theoretical approach are maintaining a clear ontological distinction between structure, culture, and agency, thus postulating their independent causal powers, and distinguishing between various modes of reflexivity based on agents' ultimate concerns. The various modes of reflexivity have the potential to explain why reactions to the same environments (structure and culture) differ between individual teachers, depending on their different personal concerns and what they care deeply about.

Our case study with a secondary school teacher shows how a specific combination of modes of reflexivity, the autonomous and the meta-reflexive modes, under the given circumstances, operates through a *strategic* and *critical* stance towards existing state of affairs. This might be a feasible *modus vivendi* for teachers with PISA. Interestingly, a similar prevalence of the autonomous and meta-reflexive modes regarding PISA was discovered among Norwegian school leaders (Bringeland 2022b). Based on these joint findings our hypothesis is that this specific combination of the autonomous and meta-reflexive modes might have been promoted by the type of educational system in which both school leaders and teachers are located, namely the centralized Norwegian educational system. A prominent feature of such systems is that major decisions regarding educational structures are made at the central level of political decision making. In such systems individual teachers, despite their criticism of current arrangements, are unable to directly influence structural change. A substantiation of our hypothesis would require further studies of larger samples of teachers and comparative studies between countries whose educational systems differ regarding degrees of centralization and their specific configuration of neoliberal reforms.

Notes

1. Reflexivity refers to real ongoing internal conversations in which all normal individuals engage when they discuss with themselves which course of action to pursue.
2. 'Scientific management' refers to Frederick Winslow Taylor's theory of management, developed at the beginning of the 20th century, aiming to improve productivity and efficiency in industrial work by analysing and synthesizing work operations in new ways, for example time-motion studies and assembly line operations. It was criticized by 'human relations theory' for focusing only on physical and behavioural aspects of work, while neglecting social relations in the workplace (see Elton Mayo's Hawthorn studies).
3. Interestingly, Norwegian research on the reactions among teachers and principals to National Tests and a fixed National Curriculum indicates that increased state control is not necessarily experienced as a constraint by teachers (Carlgren and Klette 2008; Skedsmo and Mausethagen 2017, 178).
4. The project and data collection has been approved by the Norwegian Centre for Research Data (NSD).
5. For further details about how ICONI was constructed, see Archer (2007, 326ff) (Methodological appendix).
6. Reference numbers below refers to the number of selection coded/cited data to a node (category).

Disclosure statement

No potential conflict of interest was reported by the author(s).

Notes on contributors

Terje André Bringeland, PhD-student in Education at UiT the Arctic University of Norway in Tromsø, has done research on effects of PISA, applying Margaret Archer's social realist theories. His research includes history of education, comparative education, and educational sociology.

Tone Skinningsrud, Professor of Education at UiT the Arctic University of Norway in Tromsø, has done research in the history of education, comparative education, educational sociology, and methods of field work.

ORCID

Terje André Bringeland  <http://orcid.org/0000-0003-0268-9158>

Tone Skinningsrud  <http://orcid.org/0000-0002-2671-6416>

References

- Adams, Tracey, and Peter H. Sawchuk. 2021. "Professional-Organizational Contradictions and Hybridization of Knowledge: Insights from the Study of Engineering and Nursing in Canada." *Vocations and Learning* 14 (1): 75–93. <https://doi.org/10.1007/s12186-020-09253-1>.
- Anderson, Gary, and Kathryn Herr. 2015. "New Public Management and the New Professionalism in Education: Framing the Issue." *Education Policy Analysis Archives* 23 (84): 1–9. <https://doi.org/10.14507/epaa.v23.2222>.
- Apple, Michael W. 2013. "Controlling the Work of Teachers." In *Knowledge, Power and Education: The Selected Works of Michael W. Apple*, edited by Michael W Apple, 126–141. New York/Abingdon, Oxon: Routledge.
- Archer, Margaret S. 1984. *The University Edition of Social Origins of Educational Systems*. London: Sage Publications.
- Archer, Margaret S. 1995. *Realist Social Theory: The Morphogenetic Approach*. Cambridge: Cambridge University Press.
- Archer, Margaret S. 2000. *Being Human: The Problem of Agency*. Cambridge: Cambridge University Press.
- Archer, Margaret S. 2003. *Structure, Agency and the Internal Conversation*. Cambridge: Cambridge University Press.
- Archer, Margaret S. 2007. *Making Our Way through the World: Human Reflexivity and Social Mobility*. Cambridge: Cambridge University Press.
- Archer, Margaret S. 2012. *The Reflexive Imperative in Late Modernity*. Cambridge: Cambridge University Press.
- Archer, Margaret S. [1979] 2013. *Social Origins of Educational Systems*. London: Sage.
- Archer, Margaret S. [1988]. 1996. *Culture and Agency: The Place of Culture in Social Theory*. Cambridge: Cambridge University Press.
- Aursand, Leah Rose. 2018. "What [Some] Students Know and Can Do: A Case Study of Norway, PISA, and Exclusion." Master's Thesis, Department of Education, University of Oslo, Oslo, Norway.
- Aursand, Leah Rose, and David Rutkowski. 2021. "Exemption or Exclusion? A study of Student Exclusion in PISA in Norway." *Nordic Journal of Studies in Educational Policy* 7 (1): 16–29. <https://doi.org/10.1080/20020317.2020.1856314>.
- Ball, Stephen J. 2003. "The Teacher's Soul and the Terrors of Performativity." *Journal of Education Policy* 18 (2): 215–228. <https://doi.org/10.1080/0268093022000043065>.
- Ball, Stephen J. 2012. *Global Education Inc: New Policy Networks and the Neo-Liberal Imaginary*. London: Routledge.
- Ball, Stephen J. 2016. "Subjectivity as a Site of Struggle: Refusing Neoliberalism?" *British Journal of Sociology of Education* 37 (8): 1129–1146. <https://doi.org/10.1080/01425692.2015.1044072>.
- Ball, Stephen J., Meg Maguire, and Annette Braun. 2012. *How Schools Do Policy: Policy Enactments in Secondary Schools*. Abingdon, Oxon: Routledge.

- Ball, Stephen J., and Antonio Olmedo. 2013. "Care of the Self, Resistance and Subjectivity Under Neoliberal Governmentalities." *Critical Studies in Education* 54 (1): 85–96. <https://doi.org/10.1080/17508487.2013.740678>.
- Bergmark, Ulrika, and Kristina Hansson. 2021. "How Teachers and Principals Enact the Policy of Building Education in Sweden on a Scientific Foundation and Proven Experience: Challenges and Opportunities." *Scandinavian Journal of Educational Research* 65 (3): 448–467. <https://doi.org/10.1080/00313831.2020.1713883>.
- Bhaskar, Roy. 2016. *Enlightened Common Sense: The Philosophy of Critical Realism*. London: Routledge.
- Bhaskar, Roy. [1979] 1998. *The Possibility of Naturalism: A Philosophical Critique of the Contemporary Human Sciences*. London: Routledge.
- Braverman, Harry. 1974. *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century*. New York: Monthly Review Press.
- Bringeland, Terje André. 2022a. "The Impact of PISA on Education in Norway: A Morphogenetic Perspective on Structural Elaboration in an Education System." In *The Morphogenesis of the Norwegian Educational System: Emergence and Development from a Critical Realist Perspective*, edited by Margaret S. Archer, Unn-Doris K. Bæck, and Tone Skinningsrud, 147–180. Milton: Taylor & Francis Group.
- Bringeland, Terje André. 2022b. "School Leaders' Reflexive Mode in their Internal Conversations on PISA." In *The Morphogenesis of the Norwegian Educational System: Emergence and Development from a Critical Realist Perspective*, edited by Margaret S. Archer, Unn-Doris K. Bæck, and Tone Skinningsrud, 181–210. Milton: Taylor & Francis Group.
- Carlgren, Ingrid, and Kirsti Klette. 2008. "Reconstructions of Nordic Teachers: Reform Policies and Teachers' Work during the 1990s." *Scandinavian Journal of Educational Research* 52 (2): 117–133. <https://doi.org/10.1080/00313830801915754>.
- Connell, Raewyn. 2009. "Good Teachers on Dangerous Ground: Towards a New View of Teacher Quality and Professionalism." *Critical Studies in Education* 50 (3): 213–229. <https://doi.org/10.1080/17508480902998421>.
- Etzioni, Amitai. 1969. *Semi-Professions and Their Organization; Teachers, Nurses, Social Workers*. Edited by Amitai Etzioni. New York: The Free Press.
- Evetts, Julia. 2011. "A New Professionalism? Challenges and Opportunities." *Current Sociology* 59 (4): 406–422. <https://doi.org/10.1177/0011392111402585>.
- Fuller, Kay. 2019. "'That Would Be My Red Line': An Analysis of Headteachers' Resistance of Neoliberal Education Reforms." *Educational Review (Birmingham)* 71 (1): 31–50. <https://doi.org/10.1080/00131911.2019.1522042>.
- Gerstle, Gary. 2018. "The Rise and Fall (?) of America's Neoliberal Order." *Transactions of the Royal Historical Society* 28: 241–264. <https://doi.org/10.1017/S0080440118000129>.
- Gunter, Helen M, Emiliano Grimaldi, David Hall, and Roberto Serpieri. 2016. *New Public Management and the Reform of Education: European Lessons for Policy and Practice*. Edited by Helen M Gunter, Emiliano Grimaldi, David Hall and Roberto Serpieri. Abingdon, OX: Routledge.
- Hansson, Kristina, and Per-Olof Erixon. 2020. "Academisation and Teachers' Dilemmas." *European Educational Research Journal* 19 (4): 289–309. <https://doi.org/10.1177/1474904119872935>.
- Helgøy, Ingrid, and Anne Homme. 2007. "Towards a New Professionalism in School? A Comparative Study of Teacher Autonomy in Norway and Sweden." *European Educational Research Journal* 6 (3): 232–249. <https://doi.org/10.2304/eej.2007.6.3.232>.
- Hodge, Steven, John Holford, Marcella Milana, Richard Waller, and Sue Webb. 2018. "Economic Theory, Neoliberalism and the Interests of Educators." *International Journal of Lifelong Education* 37 (3): 279–282. <https://doi.org/10.1080/02601370.2018.1484009>.
- Holloway, Jessica, and Jory Brass. 2018. "Making Accountable Teachers: The Terrors and Pleasures of Performativity." *Journal of Education Policy* 33 (3): 361–382. <https://doi.org/10.1080/02680939.2017.1372636>.
- Lewis, Steven, and Ian Hardy. 2015. "Funding, Reputation and Targets: The Discursive Logics of High-Stakes Testing." *Cambridge Journal of Education* 45 (2): 245–264. <https://doi.org/10.1080/0305764X.2014.936826>.

- Lyotard, Jean-François. 1984. *The Postmodern Condition: A Report on Knowledge. Vol. 10, La Condition Postmoderne*. Minneapolis: University of Minnesota Press.
- Møller, Jorunn, and Guri Skedsmo. 2013. "Modernising Education: New Public Management Reform in the Norwegian Education system." *Journal of Educational Administration and History* 45 (4): 336–353. <https://doi.org/10.1080/00220620.2013.822353>.
- OECD. 2005. *Teachers Matter: Attracting, Developing and Retaining Effective Teachers, Education and training policy*. Paris: OECD.
- Ozga, Jenny, and Martin Lawn. 1988. "Schoolwork: Interpreting the Labour Process of Teaching." *British Journal of Sociology of Education* 9 (3): 323–336. <https://doi.org/10.1080/0142569880090305>.
- Reid, Alan. 2003. "Understanding Teachers' Work: Is There Still A Place for Labour Process Theory?" *British Journal of Sociology of Education* 24 (5): 559–573. <https://doi.org/10.1080/0142569032000127134>.
- Robertson, Susan L. 2012. "Placing Teachers in Global Governance Agendas." *Comparative Education Review* 56 (4): 584–607. <https://doi.org/10.1086/667414>.
- Skedsmo, Guri, and Sølvi Mausethagen. 2017. "Nye styringsformer i utdanningssektoren - spenninger mellom resultatstyring og faglig-profesjonelt ansvar [New Forms of Management in the Education Sector—Tensions between Performance Management and Professional Responsibility]." *Norsk pedagogisk tidsskrift* 101 (2): 169–179. <https://doi.org/10.18261/issn.1504-2987-2017-02-06>.
- Skinningrud, Tone. 2019. "Vindicating Archer's Concepts of Educational Systems – Centralized and Decentralized – As Exemplars of Critical Realist Theorizing." *Journal of Critical Realism* 18 (4): 453–473. <https://doi.org/10.1080/14767430.2019.1656924>.
- Svensson, Lennart G. 2006. "New Professionalism, Trust and Competence: Some Conceptual Remarks and Empirical Data." *Current Sociology* 54 (4): 579–593. <https://doi.org/10.1177/0011392106065089>.
- Troman, Geoff. 1996. "The Rise of the New Professionals? The Restructuring of Primary Teachers' Work and Professionalism." *British Journal of Sociology of Education* 17 (4): 473–487. <https://doi.org/10.1080/0142569960170404>.