Chapter 5 Production, Transforming and Practicing 'What Works' in Education – The Case of Norway



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Abstract This article describes, analyzes and discusses key changes in the Norwegian education system during the last 60 years. It starts with the period from 1955 until about mid-1970s, often referred to as the golden era of social democracy. We will show how this period gave rise to a comprehensive education system, as well as to a public welfare system. During the next period (since the end of the 1980s), the Norwegian education system went through major reforms, influenced largely by new managerialist ideas, and we will discuss how and why new public management began to gather momentum in the 1990s, followed by an emphasis on 'what works' in schools. We argue that both individuals and organizations, often labelled as policy actors, have strongly influenced this change in educational policymaking. Although the basic values about equal opportunities and access for all seem to persist, we might see a process of re-imagination of these values through digitization in the local schools.

Keywords The social democratic legacy · New public management · Policy actors · School reforms · Digital education · Evidence-based research

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The Norwegian Education System 1955–1975: The Social Democratic Welfarist Legacy

Norway has a strong ideological tradition of emphasizing the role of educational institutions in the making of civic society. School access for children from all socioeconomic groups has been considered very important. In addition to preparing children to become able employees, the schools should prepare children to play constructive roles in a democratic society. Equity, participation, and welfare state have been recognised as the distinguishing features of the Norwegian model in education, and social democracy, both as political movement and broader ideology has had a crucial impact. The period from 1945 until about 1970 is often referred to as the golden era of social democracy (Telhaug, Mediås, & Aasen, 2006). The cornerstones are citizens' equal rights, responsibility of the state for welfare of all citizens, and the struggle towards narrowing the gaps in income and equality between men and women. The model has also been supported by the labour market model, with collective bargaining, and a developed legislation in co-operation between governments and labour organizations. This corporate democracy can be framed as a form of institutionalizing trust relationships between leaders and employees, and the State has in addition played an active role in securing jobs, i.e. when the market does not work, the State intervenes with various compensatory measures (Sejersted, 1997). In addition, nurturing a national identity has played an important role in the construction of national curricula. However, the model includes some gaps. For instance, the nation building project tended in the past for long to lead to an exclusion of the cultural rights of ethnic minorities in education. This was for instance the case for the Sami people and the Kvens (Stugu, 2001).

The development of the comprehensive school system is connected to the unique tradition of consensus-seeking politics in education. Both the right and left wing parties have sought compromises and agreements on educational reforms. This has its historical roots in the political mobilisation of and alliance between the farmers and the workers. It does not mean absence of conflicts, but there has traditionally been a political will in Norway to base decisions in education on consensus. Farmers' political involvement had a basis in social-liberal values and was also closely linked to the labour movement. The Social Democratic parties were not rooted in radical socialism, and after the Second World War the workers were able to ally themselves with the growing white-collar middle class. In this case the state played a role due to the expanding public sector. This political mobilisation was of great importance for the rise of the Social Democratic parties in the Scandinavian countries, and influenced the development of a non-selective comprehensive school system (Møller, 2009).

A supplementary dimension to understand the history of education in Norway is the very special form of popular resistance that was constituted by anti-elitist lay religious movements in the nineteenth century. People learned to argue against the rulers and stand up for their own arguments through participating in these movements and hegemony was questioned. In the late nineteenth century Norway was a poor country and, compared to Sweden and Denmark, the country did not have traditional aristocracy and economic elites. It implied a broad public involvement in both economic and educational developments (Stugu, 2001). The local teachers became agents of the civic society. They had the cultural and social capital to act on a trans-local level and to mobilise people to move on. Often the school-teacher became involved in a variety of activities. He or she ran the local youth club, sport activities, mission society and other charities. Even though the role of teachers as tenets of civic society declined after the Second World War, the images continue to influence the expectations of teachers, particularly in the rural areas. So, as a background for understanding the historical position of teachers in Norway, one has to know that the schools and their teachers played a crucial role in the processes of nation-building and in the shaping of national identities (Møller, 2009).

The regional policy dimension has been particularly central in Norway and throughout history the municipal level has played a strong role alongside a tradition of 'implementation from above'. The responsibility of educational administration at municipal level is shared between professional administrators and elected politicians. Through this linkage, education is connected to broader community affairs. Educational institutions have been and still are important for ensuring the survival of the many small communities in a country where the population is widely dispersed.

The Growth of Neo-Liberal Reforms in Education

During the 1980s and in the beginning of the 1990s, a neoliberal reform gained ground internationally. This wave also hit Norway. Politicians argued that the welfare-state project had turned national and local authorities into unresponsive, bureaucratic organizations (Uljens, Møller, Ärlestig, & Frederiksen, 2013). An alliance between neoliberal and neoconservative approaches whereby both questioned the role of professionals within welfarist systems, generated a call for parents to have a more dominant role in designing education (Apple, 2001). By promoting new public management (NPM)-related features such as local autonomy, devolution and horizontal specialization and flattened municipal hierarchies, the aim was to have more individualized and efficient public service delivery. The introduction of business practices into public education was a main issue for the neo-liberals, while neo-conservatives argued for shared values and control that was more parental.

In the beginning, NPM did not directly challenge the established tradition of schooling, since its main consequences were for the restructuring of the local school administration at municipal level in terms of deregulation, horizontal specialisation and management by objectives. However, the launch of the first Programme for International Student Assessment (PISA) report in 2001 accelerated a move to a policy influenced by neo-liberalism when Norway was listed among the

'lower-performing' countries. This became a turning point in the Norwegian public debates about educational quality (Møller & Skedsmo, 2013). Since then, international league tables based on PISA results have influenced national debates about education. Pressure for increased school accountability became a distinctive hallmark of developing a new educational reform in the new millennium. New assessment policies with an emphasis on performance measurement, expectations about the use of data to improve education and emerging accountability practices characterise the transition process over the last decade (Skedsmo & Møller, 2016). Due to concern with student outcomes on achievement tests the 'what works' agenda was reinforced and newer sets of public management approaches, borrowed from the private sector, were introduced. Simultaneously, crisis constructions of the Norwegian education system opened up the ground for digital technologies to become the best solution. These approaches included performance measurement, quality indicators, incentives and external accountability.

Both individuals and organizations, often labelled as policy actors, have strongly influenced this change in educational policymaking. Such policy actors include: professors and their new improvement and effectiveness models (e.g. Hattie, 2011; Nordahl, 2011; Robinson, 2011); international consultancy firms (e.g. McKinsey), liberal think tanks (e.g. Civita)¹ and supra-national organizations (e.g. OECD and the World Bank.) who provide solutions for 'educational problems'. The concept of "edu-business" captures the growing role of non-governmental organizations, for example McKinsey and Pearson, in defining the educational standards (Ball, 2012; Pettersson, Popkewitz, & Lindblad, 2017). Closely interrelated to the creation of "edu-business" is the exponential proliferation of technological advancement, and Internet-based learning technologies is rapidly dissolving the boundaries previously attached to national policy development. The downside of this development is how international benchmarking may lead to simplistic causal conclusions from aggregated data and uncritical transfer and adaptation of best practices (Saltman & Means, 2017) because the technique of recognizing successful education systems is largely based on the numerical data of student achievements. Such a policy permits educators to focus on uniformity to the exclusion of difference, equity and social justice (Shields, 2015).

In particular, the developments and changes of the Norwegian education system are intertwined with the policy recommendations by OECD (Pettersson, Prøitz, & Forsberg, 2017). Both in a Norwegian context and across the world, OECD has obtained a prominent position in setting the agenda for educational policy by constructing a global policy field of governance by comparison across countries and by providing indicators for best practices (Bieber & Martens, 2011; Lingard, Martino, & Rezai-Rashti, 2013; Møller, 2017). While education in Norway, early on, served as a role model for education and social welfare within the Organisation for Economic Co-operation and Development (OECD), Norway had now become a

¹https://www.civita.no/ currently led by a former Minister of Education and Research.

country in need of advice from the OECD in order to raise their educational performances. Today international ideals of competition, outcomes orientation and accountability challenge the ideals of publicly funded schooling and inclusive, comprehensive school systems (Prøitz & Aasen, 2017).

Trans-National Influences on the National Structures, Policies and Governance Relations

Overall, the changing social environment in Europe in general has led to new governance structures that provide a particular context for educational reforms, and both the European Union (EU) and the OECD seem to play powerful roles in driving and attenuating policy across nation states. These structures are also affecting the roles and responsibilities of school leaders and the approach to leadership development, but even if the international dimension is both important and constitutive, there are national and historical particularities.

For instance, to some extent, a market approach to educational reforms has been adopted in Norway. However, as a principle, marketization has been less embraced in the Norwegian context,² probably because a market of school choice for students and parents is only possible in larger cities, and private providers are by law not allowed to operate as 'for-profit' entities. The population in Norway is widely dispersed, and decentralized settlement is still a desirable aim for most political parties. Moreover, there has also been cross-party consensus to defend the traditional welfare state and a comprehensive school (Wiborg, 2013). Even so, the language of education at a policy level has increasingly been replaced by the international discourse of learning, which implies an economic way of thinking about education as a commodity to be delivered. This new language may erode a broader discussion about education for citizenship over the long term (Biesta, 2004).

Influenced by the NPM discourse, with its focus on strong leaders and entrepreneurs as a vehicle for the modernization project, the interest in principals as managers began to gather momentum in Norway in the mid 1990s. New titles were created for managers at the municipal level, and these people were trained and accredited as managers using business models. It was argued that the problematic PISA findings demonstrated the need for a new governance model in education, and in 2004, a new governance model for education was launched with a focus on deregulation, efficacy, competition and accountability (Ministry of Education, 2004). It also placed leadership and learning at the centre. Teachers and school leaders needed to do better than before, and each school needed ambitious school leaders with positive

²In Norway in 2018, only 3.8% of students attended a private elementary school, and 8% of students attended a private upper secondary school. There is a huge regional variety. While 16% of the upper secondary students in Oslo and Hordaland (including Bergen) attend a private school, in Finnmark, fewer than 1% do so (Statistics Norway, 2018).

attitudes to change and improvement. A national quality assessment system (NQAS) was established to help the schools to achieve their objectives in a better way, and simultaneously, it was a tool for enabling national authorities to maintain control of the output through measuring educational outcomes (Skedsmo, 2009). This can be described as a shift in the Norwegian education policy from the use of input-oriented policy instruments towards a more output-oriented policy. Information provided by NQAS offers a foundation for central policy development, coordination and management, and represents what can be called evidence-based policy in a Norwegian education context.

National expectations about using performance data to enhance educational quality are emphasized and local authorities, school principals and teachers are expected to use this information to improve their practice in ways that enhance student outcomes, particularly national test results. The use of new evaluation technologies both by managers at the municipal level and principals to monitor student outcomes can be read as a shift towards what has been termed organisational professionalism, which incorporates standardised work procedures and relies on external regulation and accountability measures (Evetts, 2009). Local autonomy is still highlighted in many policy documents, but it also argued for the need to strengthen the supervisory role of the state, in terms of introducing state inspection, to ensure that municipalities attended to their responsibilities according to the Education Act. These arguments illustrate how centralisation and decentralisation are interdependent processes that occur at the same time, and it echoes the management discourse promoted by the OECD, where a performance orientation is one of the main pillars, closely connected to output control.

School Reforms – Balances Between Educational Discourses

While central regulation was important in building up the comprehensive education system after World War II, decentralization has been more dominant as a reform strategy in the public sector from the 1980s onward, framed as a quality improvement strategy. At the same time, national curriculum guidelines have served as a central strategy. This shows that the relationship between the state, the municipalities, and the schools is rather complex. Historically, the national curriculum can be seen as a "contract" between the state and the teachers, which in practice meant that the schools were governed by the state (Gundem, 1993). This contract implied a division of labor between curriculum making at the national level and local curriculum work, with respect to making plans for instruction practices. On the one hand, the teachers were responsible for following up decisions made by the state regarding national aims and the content formulated in the curriculum guidelines. On the other hand, within these national frames, teachers had considerable leeway to develop locally adapted teaching programs based on their professional judgement (Sivesind, 2008).

The Norwegian national reform, the Knowledge Promotion, which took effect in August 2006, included new modes of governing structures, a reformulation of aims in the national curriculum into aims of competencies, and had a focus on students' learning outcomes. Key competencies were framed as five basic skills: reading, numeracy, expressing oneself orally and in writing, and using digital tools. These competencies all corresponded with how the OECD - program 'Definition and Selection of Competencies' (DeSeCo) had developed a response to educational challenges in a changing world and demonstrated how the educational reform was embedded within international trends promoted by OECD. The government also introduced a website, 'Skoleporten' ('The School Portal'), as a databank in which results of national tests, exam results and other educational statistics could be published and serve as a national bank of evidence for building school quality in Norway. This change from management by objectives to steering by competencies represents a major change in Norwegian education policy context the last 20 years. Performance measurement, standards and accountability seem to have become a key part of Norwegian educational reform practices.

The new model was partly motivated by the problematic PISA-findings and partly by the concerns about reducing disparities in educational outcomes across different social groups. Equality and excellence could be better achieved by working in a different way within the educational system. Norwegian pupils' high scores on the international CIVIC study, and their accounts about high self-esteem were not given weight. Hence, specific images of problems and solutions in education were constructed and contextualized, and new public narratives were constructed. The established school practices were segmented into specific problems like low test scores, high drop-outs rate in vocational upper secondary schools, and low discipline. To solve such problem a new system for governing was needed. It was mainly a focus on what can be done *within* the educational system (cf. Oakes & Rogers, 2006).

The school was given the responsibility to develop local curriculum-based aims of competencies. At the same time, there was an increased focus on measurement of achieved outcomes. Although professional autonomy was emphasized, trust in the profession itself seemed to be replaced by trust in the results. On one hand, it was argued that the managerial approach to education aimed at ensuring a basic standard for all, by levelling out disadvantages; on the other hand, it was a push for debureaucratisation and de-centralisation, ostensibly allowing for more differentiation and specialisation (Møller & Skedsmo, 2013). Accordingly, increased local autonomy was intertwined with more national regulation, and this created tensions and ambiguities in governing processes. At the same time, the basic Norwegian values about equal opportunities and access for all seem to persist.

Earlier analyses of the narrative constructions of teacher identity in public documents have emphasized the teacher as a care giver and as democracy oriented with concern for the individual pupil and for a good social climate in classrooms (Søreide, 2007). The new constructions highlighted the teacher as a person with primary concern for pupil outcomes, excellence, and effectiveness, although the caring and democracy orientation is still part of the construction. So, new elements have been added but also put up-front. The present focus on student achievement in basic skills has resulted in a strong push to reduce education to measurable outcomes (Biesta, 2016), often described as an outcome-based discourse characterised by competition and privatisation (Moos, 2017). At the same time, a major reason for the differences among schools is their diverse sociocultural and socioeconomic student composition – a well-documented fact drawn from decades of research (Nordenbo et al., 2010). This outcome-based discourse can be contrasted to a discourse focusing on the purposes of schooling and democratic participation.

Recently, this reform has gone through a renewal process (Ministry of Education, 2016) resulting in an emphasis on education for democracy and sustainable development. The strong focus on learning, basic skills and foundational literacies remains, but three additional interdisciplinary themes are presented in order to address challenges emerging in society: 'Democracy and Citizenship', 'Peoples' Health and Life Mastery', and 'Sustainable Development'.

Digital Education and Digitization

When the *Knowledge Promotion* was launched in 2006, the need for digital literacy was emphasized. Never before had digital literacy accomplished such status in curricula, neither nationally nor internationally. The strong focus on the use of educational technology gave both a lot of new possibilities, but also challenges for practice in today's school (Krumsvik, 2008). Since then, Norway has become one of the leading countries with regard to accessibility of technology in schools. However, during the first years of enacting the Knowledge Promotion, the evaluation of the reform showed that digital literacy was transformed to increasing teachers' ICT competence (Ottesen, 2013). Nevertheless, the digitization of education in Norway has resulted in a situation that leaves little doubt that it has made its mark both in society and school system to an even greater extent than that of in other countries (Krumsvik, 2008; Castells, 2001; OECD, 2001, 2003). Increasingly, policy makers at municipal level have decided that every student shall have their own iPad or computer, often called one-to-one solution. The ongoing development of portable internet-connected devices has resulted in a steady expansion of one-to-one projects - initiatives enthusiastically supported by the technology industry (Blikstad-Balas & Davies, 2017). In 2017, almost half of the municipalities had decided on a one-to-one solution for lower secondary education. In these municipalities there is a clear tendency for similar decisions to be made also for lower levels. The survey "Monitor school 2013" has shown that personal computer usage is widely used in upper secondary education, less in the lower secondary school and least in the last part of primary school (Gourvennec & Skaftun, 2019).

Paying for and choosing digital tools as iPads or similar devices for student use in classrooms are mostly made by local education authorities while the teachers still have autonomy over the choice of paper-based learning resources (Gilje et al., 2016). The policy solution for daily digital learning activities builds schools into data-production centers, responsible for constantly recording and auditing every aspect of student and school performance (Finn, 2016). Leaders are being called on to act on their data to improve their organizations, often using "learning and management-systems (LMS) to assist their administrative tasks (Selwyn, 2016). An increasing number of commercial actors are directing their business models and practice to engage in education, such as Google with its Google Apps for Education (Lindh & Nolin, 2016). In the Norwegian education context municipalities and local education authorities are subjects of commercial actors' marketing of i.e. the cheapest and best LMS systems to use in their schools (for example It's Learning, Blackboard, Fronter, and Canvas). Meanwhile, existing commercial 'edubusinesses' such as Pearson – a global textbook publisher – have moved to become prominent educational software providers and hence, a key collector of educational data (Hogan et al., 2016).

The fact that Norway is a leading nation in computer density in an educational context, raise important questions about the issues of data inequalities, the rise of so-called 'dataveillance' and the reductionist nature of data-based representation (Selwyn, 2016). Dataveillance is connected to central policy level and intentions of control and surveillance over student learning and standards for school quality. Dataveillance creates concerns about power, control and performativity as it can be understood as associated with the role of digital data. Digitization is reinforcing and intensifying the culture of managerialism within education, and data is now a core element of managerialist techniques of accountability, i.e. measuring, 'evidence based' practice, and effectiveness (Selwyn, 2016). Ozga (2009), among others, has shown how the use of data has been particularly notable in the growing use of goals, targets, benchmarking, measurement, performance indicators and monitoring within the English education system. Data-related technologies of governance are also noted in the Norwegian education context, as national testing and large-scale student test results have gained focus (Gunnulfsen & Møller, 2017). The digitization of education in Norway can be associated with the rise of the term 'policy by numbers' (Lingard, Creagh, & Vass, 2012), and this approach is closely connected to "the what works agenda".

Substantial comparative research has presented how data play a key role in efforts to equalize the complex European education situation, with data systems being used to 'construct policy problems and frame policy solutions beyond and across the national scale' (Ozga, 2012, 440). Similarly, the crisis constructions of the Norwegian education system after the failing results in the first PISA tests in 2000 have developed a ground for digital technologies to become the best solution. The national tests in Norway are planned and conducted with aim to measure the similar basic skills which are tested in PISA, where reading and numeracy are chosen as two of the most important competence areas. These competencies, as well as the national quality evaluation system, school performance measures, and test comparisons, correspond with the OECD – program DeSeCo,. The numbers are increasingly important in the ways the Norwegian education authorities monitor, steer and reform the national education system. That is, the "the technology of statistics

creates the capacity to relate to reality as a field of government" (Hunter, 1996, p 154). Data production, data management and the associated state of 'constant comparison' underpin how the Norwegian education system is increasingly governed by central policy initiatives influenced by dataveillance through national testing and PISA-results.

Also, studies in a Norwegian education context have shown how the agenda of standardization and digitization is seeping into the Norwegian arena of national policy on school inspection (Hall, 2017; Hall & Sivesind, 2015). The question of a "one-size-fits-all" approach, through the use of digital tools as rubrics and surveys is raised, where templates actively shape the thinking of actors involved on both the meso- and micro-levels of policy enactment (Braun, Maguire, & Ball, 2010; Weick, 2009). Digitization is hence also part of new modes of school inspection in Norway. A recent article about challenges for quality and competence in Norwegian schools on the national authorities' web-site states that digitization has many aspects. It is e.g. related to educational innovation, to organizational innovation and to new ways of communicating and informing. It also brings new challenges with both legal and ethical aspects. An example of this is social media which contributes to blur or make the distinction between school and student leisure time unclear, and also where the boundary goes for what is the school's responsibility. Digitization and new technology can create privacy challenges. There are high expectations for school principals when it comes to developing the school as a digitally mature organization. School leaders should be able to plan and support the teachers' pedagogical work with ICT, through competence and organizational development. They must also have good expertise in obtaining and managing digital content, teaching materials and equipment, as well as facilitate infrastructure in line with school plans and educational goals (Udir.no, 2020).³

Evidence and What Works

The discussion about evidence-informed policy research is not new. In 1995, a report published by the OECD raised the issues underlying the discussion and identified weak links between research, policy and innovation in education (OECD, 1995). Twelve years later, the call for evidence-based practice research or the 'what works' agenda was reinforced with the report, 'Evidence in education: Linking research and policy' (Burns & Schuller, 2007). Although there was no agreement within the OECD on what should count as evidence, it was argued in the report that identifying what works was crucial in educational policymaking and that the best method for achieving this involved doing randomized controlled trials.⁴ (Gorard &

³ https://www.udir.no/kvalitet-og-kompetanse/etter-og-videreutdanning/rektor/ nye-utfordringer-for-skoler-og-skoleledere/

⁴This type of research has its origin in medical research based on 'randomized controlled trials' aiming at testing the effect of drugs.

Cook, 2007). That is, results from quantitative, large scale data is by many believed to represent the best evidence for developing schools and setting standards for good school quality which is by OECD defined as important to improve education (Møller, 2017). In the current curriculum reform in Norway, Fagfornyelsen ('Subject Renewal 2020') it is explicitly expressed that the teaching profession must build its professional practice on shared values and a common research and experience-based knowledge base.⁵

The need for applying evidence-based research in improving schools has no doubt become a buzzword and almost a panacea for Norwegian policy-makers during the last 15 years, greatly influenced by professors with school effectiveness models, consultancy firms and supra-national organizations arguing for educational "best-practices (Møller, 2017). One argument is that evidence-use will never be fully or meaningfully realized unless school leaders prioritize evidence-based practice as a school commitment, including an accountability regime shaped by evidence- informed decisions (Brown & Zhang, 2016). While it is easy to follow an argument how essential it is to develop systematic knowledge about school effectiveness and improvement based on research, politicians' arguments are often linked to a special kind of research, i.e. research based on large-scale quantitative methodology aiming at providing standardized and representative knowledge which can be used across different context As such, evidence-based research in education becomes closely connected to the so-called 'what works agenda' in school improvement in which 'randomized controlled trials' are highlighted as the gold standard of research (Simons, 2003). Although such research is beneficial in many cases, knowledge with great relevance for research-based policy and practice in education might be lost if other types of knowledge are excluded. In other words, the problem is not the application of this methodology as such, but the "categorical" or "instrumental mistake" (Skjervheim, 1976). For instance, qualitative studies are not part of an established evidence hierarchy and findings based on such studies are therefore, often dismissed. It seems 'forgotten' or ignored that questions like what it means to ask for knowledge that works in schools, or what it means for practice to be based on evidence, have for long been strongly debated in educational research (Kvernbekk, 2011, 2013).

Media outlets have been particularly active in reporting results of performance indicators and play a pivotal role in making this information available and known to a wide audience. As such, the media is strengthening the production and transformation of 'what works' in education. An extensive study based on a database of 3047 newspaper article in Norwegian local newspapers from 2004–2018, has examined how the press reports on national testing and demonstrates how the media mainly uses test results to rank, compare, blame and praise schools, municipalities and counties (Camphuijsen & Levatino, 2021). Often the results are presented as indisputable facts. This media coverage seems to reinforce the perception of test scores as a valid measure of school quality.

⁵https://www.udir.no/lk20/overordnet-del/

However, there is, currently, an ongoing public debate in the Norwegian context about these issues, and some journalists call for more involvement in the debate from left-wing politicians about what counts as evidence to improve educational quality (Skurdal, 2020). Disagreements regarding methodological shortcomings within school effectiveness research and knowledge claims are questioned in academic journals (cf. Bjerrum-Nielsen & Malterud, 2019) but among politicians it seems as if much power is concentrated in an echo chamber shaped by policy actors who are promoting the so-called evidence movement (Bjerrum-Nielsen, 2019; Fladberg, 2019). Research that addresses issues of for instance social justice have tended to be less appealing among politicians compared to studies which provide hard science, statistics and evidence about what works. As a consequence, ideologies of technocratic rationality dominate knowledge claims of educational policy-makers and it is not acknowledged that seemingly politically neutral models of "best practices" promoted by for instance OECD, are still politicized (Møller, 2017).

In Norway, national testing and PISA-results represent types of policy instruments which constitute condensed knowledge about school quality, student learning and teacher practice which in turn structure public policy according to its very own logic. Closely linked to this is the notion of accountability and the production of evidence that proves the effectiveness in terms of measurable results of whatever is accomplished in the name of improvement (Williamson, 2017). Performativity make the question of what counts as worthwhile activity in education into the question of what can be counted and what evidence can be given for it. Such a policy permits policy-makers to focus on equality and uniformity to the exclusion of difference and equity. Therefore, it is important to raise questions like 'what type of knowledge is used by politicians, and who are regarded as knowers and why?' (Gunter, 2012). In addition, we need researchers who whatever methodology they use, acknowledge limitations connected to all kinds of education research, included their own preferences.

Conclusion

In this chapter, we have traced changes in the Norwegian education system during the last 60 years. We have demonstrated how both individuals and organizations, often labelled as policy actors, have strongly influenced a change in which educational policymaking increasingly is legitimized by so-called evidence-based research. National expectations emphasize the use of performance data to enhance educational quality, and it echoes the "what-works" – agenda promoted by the OECD, where a performance orientation is one of the main pillars, closely connected to output control. In addition, digitization is reinforcing and intensifying a culture of managerialism within education where data has become a core element of managerialist techniques of accountability. Today, the need for applying evidencebased research in improving schools has become a buzzword and almost a panacea for Norwegian policy-makers. While disagreements regarding methodological shortcomings within school effectiveness research and knowledge claims are questioned in academic journals, among politicians it seems as if much power is concentrated in an echo chamber shaped by policy actors who are promoting the so-called evidence movement. The basic values about equal opportunities and access for all seem to persist, but we might see a process of re-imagination of these values through digitization in the local schools.

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