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Educational research – public responsibility, private funding?

Palle Rasmussen 

ABSTRACT

Like other Nordic countries, Denmark is a mixed-economy welfare society, where capitalist production and market logics coexist with public policy having social cohesion and equality as important priorities. Educational and pedagogical research, which is a main knowledge base for policy and practice in schools and the education system, is also seen as a field of public responsibility, carried out mainly in universities and other public research institutes. In recent years, however, a number of private actors have engaged in funding research related to education and learning. The actors include private organizations doing research in connection with product development and privately established foundations initiating research and development projects. The interplay between public and private funding and management can promote quality research combining new general knowledge with societal relevance; but it can also lead to narrow criteria for topics and methods, unsettling important balances in the field of educational research. The article examines and discusses these developments, especially the role of private foundations, as well as the conditions for fruitful interaction between the public sector and private actors in educational research.

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Educational research and the capitalist welfare state

During the last decade private actors, especially foundations established by major business corporations, have significantly increased their funding contributions to Danish research institutions. This has happened in many areas of research, also in research on education and learning. The increasing role of private funding is not only found in the field of research, it characterizes the production of welfare in general. Denmark has had for a long time a sector of privately established foundations contributing to the public good through donations for different, more or less specific purposes. During the last 10–15 years, this sector has grown considerably and has undergone a process of concentration, so that a limited number of major foundations have come to dominate. According to Kristiansen (2019, p. 27) the 20 largest foundations contributed 88 pct. of all donations in 2015. Kristiansen (2019) points out that during this period, the foundations have also become more aware of their roles and influence in the field of welfare production and have developed strategic objectives for their work.

In the field of research, the growth in private funding has been welcomed by many, but it has also led to concern and questions about the aims and the impacts of private funding. Here these questions will be pursued for the field of educational research.

The impact of private funding in educational research can be seen as a two-step process. First, the

aims and criteria of funders may influence the research that is undertaken, its problem definitions and choice of methods. Secondly, the circulation and use of research results may influence policy and practice in education. To consider this second step, it is necessary to distinguish between different roles of educational research in relation to policy and practice. Several conceptualizations of this have been proposed (see for instance, Jensen, 2019; Wellington, 2015; Wittrock, 1991). Here I distinguish between four roles, enlightenment, innovation, maintenance and legitimation.

Like other social research, educational research may contribute to *enlightenment* by producing new general knowledge about education, learning, educational institutions and policies. In this role, research is not done to confront specific practical problems or devise solutions; it aims at advancing scientific knowledge about education as such, be it in the form of conceptual frameworks or empirical knowledge. Such research will often be provoked by scientific problems, such as contradiction between expected and registered patterns of learning in a certain context.

Innovation means new knowledge as basis for changed educational practice and policy. In contrast to the enlightenment role, in innovation educational research produces knowledge as part of attempts to establish distinctly new practices. To be sure, knowledge produced and circulated as part of enlightenment may also contribute to new practices, but in

taking on the role of innovation, educational research pursues this aim directly. The innovation role implies not merely limited adjustment of existing practices and policies but moving clearly beyond them.

In providing *maintenance*, educational research supports existing practices and policies. In parallel to the innovation role, the maintenance role focuses educational research on existing practices, policies and institutions, but in contrast to innovation, legitimation proceeds from the assumption that they should be preserved and continued. The task of research is then to substantiate and refine existing practices through improving their knowledge base and recommending necessary adjustments.

Legitimation also supports existing practices and policies but does so mainly by confirming the soundness of existing practices and institutions and protecting them against internal or external criticism. Legitimation often overlaps with maintenance, but it involves tension with the enlightenment role, because the eagerness to confirm may easily lead to neglecting or even suppressing knowledge about problems or shortcoming in existing practices.

This distinction between enlightenment, innovation, maintenance and legitimation has a general character and could be used also to characterize other fields of policy or organization where the production and distribution of knowledge is a significant activity. When used to characterize educational research it must take account of the specific socio-political context.

Thus the roles of educational research should be seen in the context of Danish society, state and education (Rasmussen, 2009). Denmark is a capitalist welfare state (Esping-Andersen, 1990; Kaspersen, 2013). The economy follows capitalist principles such as investments targeted at profit and circulation of commodities and money over markets. As in other societies, the private economy is on one hand supported, on the other framed by the nation-state, which takes responsibility for securing (relative) peace, compensating for the limited responsibility of capital and supporting the general basis of production and life. The Danish state belongs to the Nordic welfare tradition (Greve, 2007), where states have historically taken responsibility for decent living conditions and a fair degree of social equality and have attempted to implement this by way of legislation and public services funded through taxation. Public governance in Denmark mainly follows the pattern of the ‘parliamentary governance chain’ (Christiansen & Togeby, 2006), which combines representative democracy with hierarchical governance of public institutions and systems. In implementing policies the professional groups – doctors, economists, teachers and many

others – and their knowledge are often given a key role.

During the last two decades, the idea of evidence-based policy and practice has increasingly influenced public governance in the Nordic welfare states (Christoffersen & Petersen, 2019; Hansen & Rieper, 2010). The concept originated in the field of medicine as a programme of basing the clinical work of doctors – not least general practitioners – closely on available empirical research evidence. From there the idea migrated to other fields including education, where policymakers called for research evidence to tell what methods of teaching that work and what methods that do not. The ‘evidence wave’ has met with criticism from many educational researchers, who have pointed out the difficulties in identifying effective forms of practice and implementing these in general prescriptions for educators (Biesta, 2007; Kvernbekk, 2016). However, the idea clearly appeals to policymakers and managers, and it has contributed to shaping their expectations to educational knowledge and research. In the Nordic welfare states, the idea of making education more effective by basing it on evidence has special appeal, because the state accepts the responsibility for providing the whole population with good education, and because the cost of this responsibility, covered by the state through taxation, demands that education is run efficiently.

This demand for efficiency is a main reason that the Nordic countries have subscribed to two trends developed especially in the US and the UK: marketization and privatization (Dovemark et al, 2018). Marketization in public governance means that resources for institutions are allocated competitively, based on indicators for activity (such as the number of students in schools) and productivity (such as the academic results of students in schools). In Denmark, activity-based resource allocation has been implemented at all levels of education, but productivity-based allocation is mainly found in higher education.

Privatization is another way of easing the pressure on public education budgets. It means inviting or allowing private actors to invest in and run activities that are public responsibility and have traditionally been undertaken by public sector institutions (Powell, 2007). The general framework for private actor activities remains politically decided, but the activities also reflect a business logic, including a drive for expansion and profit that is assumed to encourage efficiency. A key example in the Danish context has been the introduction of private hospitals. In education, Denmark has a sector of free or private schools mainly funded by the state but with supplementary funding from tuition. Historically, this sector is not a clear example of the trend towards privatization in

the public sector. The free schools emerged in the 19th century, linked to the right of parents to choose other creeds than the protestant state religion; and schools are not allowed to take out profits. Nevertheless, they constitute an 'exit' option for parents and may in that way contribute to undermining the public provision of schooling. In higher education there has been no drive to establish private institutions.

Up to now, privatization in Danish education has not primarily taken the form of establishing private educational institutions. Rather, it has materialized as having private contractors providing certain activities in educational institutions. A historical example of this is the production and distribution of schoolbooks, but today this activity is not only supplemented but overshadowed by the growing role of computers, software and networks and the companies producing and distributing them. The growing role and influence of technology corporations in education is also evident in the USA and other western countries (Landri, 2018; Moeller, 2020).

Actors in the field of educational research

Danish educational research is a social field overlapping with other fields, especially in the research system and the school system, within the general space of the state (Bourdieu, 2014). Bourdieu describes the emergence of the modern state as a concentration and monopolization of symbolic power. He knows well that the state also embodies a concentration of not only physical but also economic power (established through the formalization of taxation), but he sees the concentration of symbolic capital as the core element. Through this, the state becomes the producer of classifications, the symbolic and cognitive structures that are embedded in everyday life, which establish order and predictability in how people relate to each other, institutions, and authorities. As an example, he describes the state's structuring of time through implementation of calendars (Bourdieu, 2014, p. 168). In the case of Denmark, some basic principles of the welfare state, as described above, have the status of general classifications. They are never contested, but they nevertheless permeate the space of the state and the terms on which different actors relate to each other.

In the field of educational research, it is possible to distinguish between four key actors or types of actors: Public authorities, funders, producers and users.

Public authorities establish legislation and administrative practise constituting binding frameworks and principles for educational research and its relation to the research system on one hand, the education system on the other. In relation to the education system, examples are guidelines for drawing on

research-based knowledge in teacher education and the established practice of evaluating educational reforms through systematic and often substantial studies. In relation to the research system, examples are the principle of reserving a significant part of university funds for research, laying down official guidelines for quality and impartiality in research activities and defining a certain level of competence (the PhD level) as a necessary qualification for university researchers.

Funders provide funding for educational research. As described below, there are many different funders in Danish educational research, both public and private. Even though public authorities define the general frameworks for the field, relations between public authorities and public funders are complex. The state funds research, including educational research, through basic grants for universities and dedicated research institutions, as well as through a system of public research foundations. However, public organizations such as ministries, ministerial sub-units and municipalities may also decide to support educational research that they find useful for their work. For instance, the Ministry of Children and Education often reserves funds for research and development projects targeted at current educational initiatives or challenges. The funding is allotted through calls and applications from selected public and/or private research agencies, and a 2014 mapping showed that more educational researchers had received funding this way than through the public research foundations (Damvad, 2014, p. 20).

Private research funding mainly comes from foundations established by private business actors, but with the purpose of contributing (in some way) to the public good (Kristiansen, 2019). Such foundations, which are exempted from almost all taxation, may be seen as gaining public trust and attention for business and supporting research that the private actors find relevant. Some of the most important foundations are discussed in the next section. One of them, the Velux foundation, has also established its own independent research unit. Some private companies, such as companies dealing in information technology products for schools, also fund research more directly, as an element in product development.

Co-funding is widespread in the field of educational research. Universities or university colleges often constitute one partner in a co-funding scheme, with other public funders (such as ministries and municipalities) or private foundations and organizations constituting other partners. PhD scholarships are a popular model for co-funding.

Producers carry out educational research. Most of these producers are part of the higher education system and other parts of the public sector. These institutions have departments or research units

focused on educational research; and the state also maintains research and development institutes such as VIVE (Centre for Social Science research), which has some educational research activity and EVA (Danish Evaluation Institute), which is dedicated to educational research with a practice-related profile. While most educational research is carried out by these public sector units, a substantial number of producers are found outside the public sector. These include consultancy firms, such as Rambøll and Epinion, who are often used by the Ministry of Education for focused evaluation or mapping tasks. Another type are think-tanks, sometimes with a distinct political or ideological profile, who combine applied educational research with generating publicity around certain political issues. A prominent example is the Danish Business Academy (DEA) think tank, which does not have a strong political profile; it generally works by teaming up with (and getting funds from) other actors, including public sector units.

Users make (or do not make) use of educational research in policy and practice. One type of users are the education practitioners – teachers in schools and other educational settings, who draw on research-based knowledge in choosing forms and instruments of teaching. Teacher education students are part of this group. Managers such as school heads may also be regarded as practitioners, but the knowledge they draw on is more administrative and system related. Another type of users is education policy actors and decision-makers, such as key officials in the Ministry of Education, members of parliament or local government, interest organizations such as trade unions, employer associations, student associations; other voluntary associations and journalists specializing in education issues. It is important to realize that the different types of users have different needs for and capacity for accessing and using formalized information about education and learning. An example is the knowledge provided by the comprehensive system of standardized national tests, which was introduced in Denmark in 2009. A study of the way test results have been communicated and used showed that while administrative officials and school heads find the information relatively useful, most teachers found it difficult to access and irrelevant to their work (Bjørnholt et al., 2020). Another difference is that some users have the power or the capacity to request certain knowledge, most often at the system or policy level, in the form of evaluation studies or surveys. In contrast, the educational practitioners cannot request specific knowledge but can draw on many types of research-based educational knowledge to the extent that it is useful for their work and that their situation allows accessing and considering it.

Educational research emerges and develops through the interaction of these four different types of actors. It is a complex process where different views and capacities manifest themselves. Since both education and educational research are mainly a public responsibility in Denmark, it might be claimed that the state just has to make clear decisions about the why, what and how of educational research and issue clear guidelines for all to follow. But in complex contexts, such simple formulas for governance seldom work, and if they did it could lead to a standardized, one-dimensional type of knowledge production. Sound ways of producing and using educational research will rather demand establishing and keeping balances between different interests and actors. Some examples of such balances are:

Balance between legislative and administrative control and initiatives on one hand, relative freedom for institutional actors and practitioners on the other. Both education systems and research systems are part of the public sector and as such need to follow and held accountable to political decisions. However, in some situations control may become too tight, allowing institutions or practitioners too little autonomy. An example is the introduction in 2006 of more exams, national tests and detailed curriculum objectives following the ‘PISA chock’ (Gustafsson, 2012). But control may also become too lax or target the wrong elements, and in a capitalist social environment this will often open the door for marketization and/or privatization. The development of the Swedish free school system is an example (Wiborg, 2015).

Balance in the relevance of knowledge to education practitioners and policymakers. There are no simple criteria for what is relevant to teachers and other practitioners, but there is a potential imbalance in the fact that policymakers often see relevance in terms of the more or less successful implementation of certain methods and initiatives, and that they have the power and funds to request this kind of knowledge. Furthermore, in their concern for the legitimacy of reforms or initiatives, policymakers may look for types of research, such as quantitative effect designs, that have currency in administrative and political circles.

Balance in the allocation of attention and funds to different issues and fields in educational research. Basic research funds allocated to higher education institutions may contribute to such balance because of the connection to the education of teachers and other practitioners in these institutions. However, in Danish higher education this link is not strong, because teacher education mainly takes place in the university colleges, while most educational research takes place in the universities. So there is also a need to keep balance of issues and fields in external

funding from public or private funding pools. Private foundations are not obliged to contribute to this balance, and they may focus strongly on specific issues, such as STEM competencies.

Balance between different types of research producers. In looking for knowledge about specific issues or initiatives, policy actors often look for producers who can deliver this knowledge quickly and in a professional way. Consultancy firms generally have this capacity, and so they are often used; but the knowledge they produce is restricted to the specific issue and neither in content nor in format does it connect very much with broader educational research. It may contribute to innovation (at a management level) as well as to maintenance or legitimation, but little to enlightenment.

Private foundations in Danish educational research

The development and impact of private funding in Danish research during the last decade has been investigated in several studies.

The most comprehensive mapping of the research funding activity of Danish private foundations is an official report published some years ago (Undervisnings- og Forskningsministeriet, 2016). The report looked at private contributions to research, innovation and higher education, and compared the contributions of private and public funding pools. The mapping showed that during the years 2012–14, the 12 most important private foundations allocated altogether 9.7 billion DKK to research, innovation and higher education, while the 8 public foundations and funding pools awarded DKK 11.8 billion DKK. Funding for Innovation and higher education constitute a minimal part of this; research is by far the largest focus area for the private foundations. It should be noted that the major part of public research funding is not allocated as grants obtained through applications to public foundations and funding pools, but as part of the basic grants given to universities and other research institutions. But for the funding allocated through foundations and funding pools, there is not much difference between the public and the private contributions. And the role of private funding has been growing; a more recent analysis by the Danish Council for Research and Innovation Policy, covering the years 2010–2018, shows that contributions from private foundations has increased from 17 pct. to 32 pct. of external university research budgets and from 8 pct. to 14 pct. of the total university research and innovation budgets, which also include the basic grants (Danmarks Forsknings- og Innovationspolitiske Råd, 2020, p. 22).

The overall distribution of private foundation research funding is clearly different from that of public funding pools. The private foundations award a major part of their research funds within the health sciences. The 2016 mapping showed that health sciences field received 47% of the research funds provided by private foundations, while public foundations and funding pools allocated only 18% of their research funding to this field (Undervisnings- og Forskningsministeriet, 2016, p. 13). This reflects the fact that private foundations operate on the basis of their statutory purposes, which are individual sets of rules decided by the people establishing the foundations. These purposes are most often specific, confining support to activities within one or few narrowly defined scientific fields or disciplines. In contrast, the public research foundation system is obliged to support research that can ensure development in Danish society in a broad sense, and an important part of this is allocating in a versatile way across research fields.

In the 2016 mapping, educational research is treated as part of the social sciences. In this field, and also in the humanities, the difference in funding patterns between private and public funding pools is less distinct. Here both private and public research funding is relatively evenly distributed between the various fields. The report argues (Undervisnings- og forskningsministeriet, 2016, p. 93) that this can be explained by the fact that within social sciences and humanities, private foundations and public funding pools generally use the same types of funding mechanisms, such as small or medium-sized project grants and PhD scholarships. The major private contributors, accounting for 70 pct. of private funds for social science research are the Tryg Foundation, The Danish Industry Foundation, the RealDania Foundation and the Carlsberg Foundation.

In the amount of funding secured from private and public pools (not including the basic institutional research grants) educational research is one of the smaller fields in social science, but in the mapping of 2012–2014 grants it displays a distinct profile, having received much more funding (43 mil. DKK) from private foundations than from public pools (16 mil. DKK). Business studies is the only other field where private funding is higher than public funding (Undervisnings- og Forskningsministeriet, 2016, p. 93). In fact, the figure for private funding may be a low estimate. The mapping also covers private funding of higher education and here the largest single contribution found is at 189 mil. DKK grant for teacher training and educational development from the A.P. Møller foundation (Undervisnings- og Forskningsministeriet, 2016, p. 108). This grant was the first part of a 1 billion DKK donation aimed at improving the quality of teaching in the Danish

‘Folkeskole’; the rest of the donation was given in grants over the following years. Knowledge production was a key activity in many of the projects granted, and it is reasonable to assume that this also contributed to educational research.

A 2014 mapping of Danish educational research included information on funding patterns. It showed that during the years 2009–2013, 27 pct. of researchers had received private funding, mainly from private foundations (Damvad, 2014, p. 20). Most of these grants were small, so the mapping does not show the amount of private funding. However, a recent report commissioned by an advisory body under the Danish Ministry of Children and Teaching has mapped funding patterns in 2018 for educational research, focusing on pre-school, primary and lower secondary education (IRIS Group, 2020). The analysis shows that some 90 pct. of this research is carried out by researchers working in universities and university colleges. Approximately 55 pct. of the funding for research is internal, consisting of basic grants allocated to the institutions. The rest of the funding come from external sources, and half of it come from private foundations or other private sources, while half come from public funding pools (IRIS Group, 2020, p. 25). So private foundations account for 50 pct. of the external funding and 22–23 pct. of the total funding in this research field. This is different from what was found in the 2016 mapping but based on general knowledge of the field it does seem more realistic.

As part of the report, research managers such as heads of department were interviewed about their assessment of developments in this research field. They generally think that the volume of research has been growing and point to different causes for this. One is that several private foundations have reserved more funding for research on pre-school and school education. Much of this funding targets the STEM subjects, based on arguments that better teaching and learning in mathematics, science and technology is necessary to cope with life in the modern world and that more people need to be recruited for higher education in this field.

The report summarizes the priorities and investments of some main private funders in school education research in table 1 (IRIS Group, 2020, p. 27). The table includes five foundations established by private business corporations and one established by a labour market organization.

There are other private funders than those covered by the IRIS Group table. One important funder is the LEGO Foundation, established by the owners of the well-known toy producer. The LEGO foundation encourages and funds research on learning and play, and it collaborates with educational researchers in universities all over the world. In 2018 the foundation

initiated a comprehensive research and development initiative on ‘Playful Learning’, connected to the teacher and pre-school teacher education programmes in Danish university colleges. The initiative includes 12 PhD scholarships co-funded by the foundation and placed at different university colleges, where many teachers are also involved. The research projects will use the approach of design-based research. According to Alexander von Oettingen, vice-dean for education and research at the University College South Denmark, the LEGO Foundation has collaborated on the initiative in a very open-minded way. Nevertheless, the initiative has provoked concern among some educational researchers, who fear that ‘Playful Learning’ represents a specific pedagogical approach, which will influence teaching and learning in the higher education programmes (Sigumfeldt, 2020).

In sum, investigations of private research funding indicate that private funding of research carried out by public research institutions has increased considerably in recent years. This funding comes mainly from foundations established by major business organizations. Compared to public research funding, private funding is more selective and narrow, being directed by the statutory regulations and the strategies of each foundation. Medical research is the main priority for private funders.

For educational research, private funding has also increased. In the field of pre-school and school education, half the external funding comes from private foundations and actors. Although private funding for social sciences and humanities is less selective than for other research fields, private funding for educational research still focuses more on specific issues.

Priorities and approaches of private foundations

In tracing the contributions and influence of private research foundations in Danish educational research two features stand out. Most of the foundations have a preference for funding projects investigating and promoting education in science and technology, and the foundations are eager to assess the effects of education and of the programmes that they fund, often drawing on quantitative methodologies.

Strengthening education in science and technology – the STEM field – and motivating more children and young people to pursue these subjects is a priority in national education policy but especially among private business actors. For instance, the Confederation of Danish Industry (Danish acronym: DI) often emphasizes that Denmark produces too few higher education graduates in science and technology and that this hampers national economic competitiveness. The confederation argues that its member

Table 1. Private foundations in Danish educational research.

Foundation	Research focus	Examples of major investments
Tryg Foundation	A main focus on the well-being of children and establishing equal opportunities for all children.	<i>The Tryg Foundation Children Research Centre:</i> In 2013 the foundation established a children research programme, hosted by Aarhus University, with a 60 mil. DKK grant. A further 40 mil. DKK grant was added in 2019.
Nordea Foundation	Focuses on improving the well-being of children and on early interventions. Research projects concern important factors for success in early life and on children's behaviour.	The aim of the <i>iMMOW! Research project</i> is to uncover what patterns of physical activity that best support the well-being and learning of children. Supported by a 5.7 mil. DKK grant, hosted by the VIA University College.
Novo Nordic Foundation	Supports projects with a focus on the development of STEM competencies among young people.	<i>'Krible krable' – more little researchers in nature:</i> The project aims at supporting small children's initial journey of science learning with a special focus on small animals, nature and science. Supported with a 17 mil. DKK grant.
Lundbeck Foundation	A focus on the STEM field and supports research projects aiming to improve student learning and the competence level in STEM subjects.	<i>Engineering in school:</i> The aim of the project is to integrate engineering in STEM teaching in primary and lower secondary school. Supported with a 5 mil. DKK grant.
Villum/Velux Foundation	One focus (among others) is for children to develop a 'science capital'. This leads to research projects contributing to the improvement of STEM competencies among children and young people.	<i>Children and young people in Denmark¹¹:</i> The aim of this research project is to produce a substantial knowledge base about welfare and well-being in the Danish children population, as a basis for new social interventions targeting children. Supported by a 4.2 mil. DKK grant, hosted by the VIVE research centre.
BUPL Research Foundation	The foundation supports different types of research in the field of education and pedagogy, focusing on school and pre-school.	<i>Centre for Pre-School Institutions Research:</i> BUPL (the organization of day-care pedagogues) has initiated this research centre, hosted by Roskilde University and focusing on pre-school pedagogical institutions for children between 0 and 6.

companies have long experienced problems in recruiting highly qualified employees and that this is a main barrier for company growth (Lind & Jensen, 2019). Even though enrolment in higher education STEM programmes has increased in recent years, the confederation warns that this is far from enough. This message is repeated every year when the enrolment figures for higher education are published. Business actors further argue that deficiencies in the STEM teaching of schools is one of the reasons that the technical programmes of vocational education are chosen by less than 15 pct. of a youth cohort while general upper secondary education is chosen by a large majority of young people.

As noted above, recruiting more students for the STEM field is also national policy, and the state pursues this policy in collaboration with business and labour market actors. One initiative is the 'Technology Pact' established in 2018 by four ministries including the Ministry of Children and Education and the Ministry of Business (Teknologipagten, 2021). The pact aims to establish collaboration between different partners in the STEM field, increase focus on the lack of Danes with STEM competencies and show how different projects and actors work to handle this common societal task. The pact supports and coordinates a variety of development projects and among its objectives are that 20 pct. more people should complete a STEM higher education and 20 pct. more people a STEM vocational education. The pact is led by a council of 18 persons, mainly representing the business world.

The state thus accepts the importance of STEM education and takes a general responsibility for getting students more interested in it and producing

more graduates. What is the significance of funding from private foundations in this context? There are several answers to this. It is of course important for the foundations to confront issues that their business founders perceive as important, and STEM education is high on this list. Through funding research and development projects in the STEM field, business actors also demonstrate that they give priority to the field and can demand that state agencies do the same. Unlike public research agencies, privately funded projects do not need to adhere to a balance between general and specific objectives; they can focus on promoting STEM without considering consequences for other parts of education, and they can follow clear practical objectives such as having more students choose STEM subjects. Taken positively, the funding of STEM projects by private foundations can be seen as a division of labour, where the foundations sponsor projects that the state also wants but is unable to find sufficient funding for. In a less positive perspective, it can lead to a situation where educational research is expected to legitimize the importance of STEM and where critical analysis and assessment of the strategies for STEM is unwelcome, because it may challenge the image of the beneficial character of science and technology in general and STEM in particular (cf., Rasmussen, 2010).

As described above, the private foundations primarily fund research in the health sciences and to a lesser degree in the natural sciences. Compared to the social sciences and the humanities, researchers and policy actors in these research fields tend much more to understand knowledge as clear, measurable and applicable. It is to be expected that this view of knowledge will be prevalent among board members

and managers in the private research foundations, even when they look at other fields, such as educational research. Further, foundations need to be accountable to the priorities of their business founders, and this need becomes more urgent when the foundations engage in actively pursuing strategic priorities. On this background, it is not surprising when private foundations focus on ‘hard’ research methods such as surveys and quantitative effect models in order to document the value of project investments and convince policymakers (Rasmussen & Andreasen, 2020). To be sure, this position is not shared by all private foundations. When the LEGO Foundations ‘Playful Learning’ initiative will use design-based approaches in its PhD projects, it seems to signal an openness towards ‘softer’ methodology. The main example of the ‘hard’ approach is the ‘Children Research Centre’ established by the Tryg Foundation. As shown in Table 1, the centre was established in 2013 and has received a total of 100 mil. DKK from the foundation. It has also received project grants from the Ministry of Children and Education for evaluating different programmes and initiatives in the Danish school system. The centre is not hosted by a department of educational research but by the Department of Economics in Aarhus University, and it has specialized in studying the effects of educational interventions through randomized controlled trial (RCT) designs. An important prerequisite for such research is standardized and quantifiable knowledge about student achievement, and this became available with the introduction of the national system of mandatory standardized tests in Danish schools. The centre has drawn much on this source and the possibility of linking test results to other register-based variables on an individual basis.

A study of RCT-based educational research in the Nordic countries, done by researchers from the Tryg Foundation centre (Pontoppidan et al., 2018), shows that this type of educational research has been used more in Denmark than in Norway and much more than in Sweden. The study distinguished between policy-related research (mainly initiated and funded by government education agencies) and researcher-initiated research. In Denmark, 13 policy-initiated RCT projects were identified, compared with four in Norway and only one in Sweden. In discussing the possible reasons for this difference, the authors claim that the culture of educational research is dominated by qualitative approaches. They argue that this culture is preserved because researchers make up parts of the boards of funding agencies and act as reviewers of proposals, and also because educational policymakers are often recruited among people with a background in pedagogy and educational science. Furthermore, RCT research is more costly than

most other types of educational research. The authors argue that because of these factors, increasing use of RCT designs to measure the effect of educational interventions demands government initiative; government agencies such as Ministries of Education must ask for valid and reliable research on interventions and make information (such as standardized test results) and funding for his available. This has in fact been the case in Denmark; here the Ministry of Education in 2014 decided a strategy for experiments and development initiatives emphasizing effect evaluation of development projects in order to get reliable knowledge on which initiatives and methods have proven useful (Undervisningsministeriet, 2014). In contrast, government initiative has been lacking in Sweden, but the authors find signs that it is (in 2018) emerging.

The ministerial strategy clearly reflects the ‘what works’ approach to educational research that has gained popularity with policy-makers as part of the attempted turn to evidence-based public policy. As noted above, this approach has provoked many objections in educational research. Among the questions raised are the validity of knowledge obtained through standardized testing, the possibility of identifying effects that can be linked to specific methods and generalized across contexts and the risks of prescribing specific educational methods ‘from above’.

There seems to be a strong link between the 2014 ministerial strategy document and the approach to educational research pursued by the Tryg Foundation centre. It is noticeable that the strategy document was produced the year after the establishment of the centre and that the centre has been entrusted with evaluating a number of the Ministry’s development projects. The ministerial research and development strategy has not been pursued rigorously, and the RCT approach has not come to dominate; but the approach of the Tryg Foundation centre has no doubt influenced – and continues to influence – policymakers’ ideas about what constitutes relevant educational research.

Conclusion

The question pursued in this paper is the role and influence of private funders, especially private foundations, in Danish educational research. There is no doubt that this type of funding has been growing and that it influences the field of educational research in certain problematic ways. However, the impact of private funding must be seen as part of a general trend. Danish educational research is marred by an increasing gap between on one hand research carried out by academics in higher education institutions, on the other hand research commissioned by policy actors and carried

out by specialized public research units or private consultancies. The first type of research covers a variety of topics, chosen by researchers or institutions, draws on different disciplines and theoretical approaches in the social sciences and the humanities and employs different methods, often in combination. The second type is targeted at specific issues, such as mapping problem areas or evaluating policy initiatives; it mainly empirical using social science methods and offers few connections to the broader landscape of educational research.

The growth in private funding of educational research risks adding to this gap, because private foundations tend to follow more selective and narrow research interests and research methods. But government agencies and public policy actors are often no less narrow in their perceptions and calls for research-based knowledge about education. Put sharply, they want to make systems work and care less about the broader relevance and communication of knowledge. Professional research skills and the ability to design and complete focused studies are called for, broader frameworks and critical perspectives are generally not.

The argument here is not that targeted and policy supporting educational research is not needed. It clearly is, and despite the narrow approaches it often contributes not only to policy implementation and legitimation but also to knowledge about education in general, especially by being used in public debate. And educational research done by academics in higher education institutions has its limitations. It generally has a stronger theoretical profile, but despite its links to teacher education it may become too unfocused; and partly because of restrictions on time and resources it sometimes relies too much on limited samples of (especially qualitative) data.

The argument here is rather that there is a need for balance and interaction between these two types of research, if educational research is to fill the roles of enlightenment, innovation and maintenance rather than just providing legitimation. A mixed economy state like Denmark draws on and strives to coordinate the resources and initiative of organizations in capitalist business, civil society and the public sector. In this context, private actors may well contribute to the funding and the production of educational research, but the public authorities have to provide legislative and administrative frameworks for the responsibilities and the influences of funders, producers and users in the field.

The increasing contribution of private funders, especially foundations, to educational research makes public regulation even more necessary. In a situation with scarce resources, public research institutions most often welcome private donations or investments; and politicians hesitate to challenge the priorities of private foundations claiming to contribute to the public good. But without better public regulation – which is not the same as tighter public

control – private funding will probably increase the gap in Danish educational research.

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References

- Biesta, G. (2007). Why “What works” won’t work: Evidence-based practice and the democratic deficit in educational research. *Educational Theory*, 57(1), 1–22. <https://doi.org/10.1111/j.1741-5446.2006.00241.x>
- Bjørnholt, B., Flarup, L. H., Hindsholm, M. F., Brændgaard, N. W., Andersen, C. M., & Jensen, S. V. (2020). *Anvendelsen af de nationale test [Uses of the National Tests] Delrapport 5: Evalueringen af de nationale test*. VIVE.
- Bourdieu, P. (2014). *On the State. Lectures at the College de France, 1989-1992*. Policy Press.
- Christiansen, P. M., & Togeby, L. (2006). Power and democracy in Denmark: Still a viable democracy. *Scandinavian Political Studies*, 29(1), 1–24. <https://doi.org/10.1111/j.1467-9477.2006.00139.x>
- Christoffersen, D. D., & Petersen, K. S. (2019). *Er der evidens for evidens?* Samfundslitteratur.
- Damvad. (2014). *Kortlægning af forskning i læring i dagtilbud, grundskole og overgange til ungdomsuddannelserne [Mapping research on learning in daycare, school and transitions to secondary education]* (Copenhagen: Damvad).
- Danmarks Forsknings- og Innovationspolitiske Råd. (2020). *Forskningsfinansiering – Forandringer og konsekvenser [Research Funding – Changes and Consequences]*. Ministry of Education and research.
- Dovemark, M et al. (2018). Deregulation, privatisation and marketisation of Nordic comprehensive education: Social changes reflected in schooling. *Education Inquiry*, 9(1), 122–141. <https://doi.org/10.1080/20004508.2018.1429768>
- Esping-Andersen, G. (1990). *The three worlds of welfare capitalism*. Policy Press.
- Greve, B. (2007). What characterise the nordic welfare state model. *Journal of Social Sciences*, 3(2), 43–51. <https://doi.org/10.3844/jssp.2007.43.51>
- Gustafsson, L. R. (2012). *What did you learn in school today? How ideas mattered for policy changes in Danish and Swedish Schools 1990-2011* [Ph.d.-afhandling]. Politica.
- Hansen, H. F., & Rieper, O. (2010). The politics of evidence-based policy-making: The case of Denmark. *German Policy Studies*, 6(2), 87–112.
- IRIS Group. (2020). *Analyse af forskningsmidler på dagtilbuds- og grundskoleområdet [Analysis of Research Funds on the Field of Pre-school and School Education]*.
- Jensen, H. S. (2019). Pædagogikken i videnskabernes mosaik. Om forskningsformer og teorier inden for pædagogikken. *Studier I Pædagogisk Filosofi*, 8(2), 80–94. <https://doi.org/10.7146/spf.v8i2.110509>
- Kaspersen, L. B. (2013). *Denmark in the World*. Hans Reitzel.

- Kristiansen, M. H. (2019). Fondenes betydning I velfærdsproduktionen – Fra donation til defintionsmagt? [The significance of foundations for welfare production – From donation to defining power?]. *Dansk Pædagogisk Tidsskrift*, 2019(2), 26–36.
- Kvernbekk, T. (2016). *Evidence-based practice in education*. Routledge.
- Landri, P. (2018). *Digital governance of education: Technology, standards and europeanization of education*. Bloomsbury Academic.
- Lind, B., & Jensen, M. J. (2019). *Danmark halter bagud med STEM-uddannede [Denmark is lagging behind in STEM education]*. Confederation of Danish Industry.
- Moeller, K. (2020). Accounting for the corporate: An analytical framework for understanding corporations in education. *Educational Researcher*, 49(4), 232–240. <https://doi.org/10.3102/0013189X20909831>
- Pontoppidan, M., Keilow, M., Dietrichson, J., Solheim, O. J., Opheim, V., Gustafson, S., & Andersen, S. C. (2018). Randomised controlled trials in Scandinavian educational research. *Educational Research*, 60(3), 311–335. <https://doi.org/10.1080/00131881.2018.1493351>
- Powell, M. (ed.). (2007). *Understanding the mixed economy of welfare*. Bristol University Press.
- Rasmussen, P., & Andreasen, K. (2020). Innovation and research in the Danish public school. In J. Donovan, K. Trimmer, & N. Flegg (Eds.), *Curriculum, schooling and applied research. Challenges and tensions for researchers* (pp. 103–118). Palgrave Macmillan.
- Rasmussen, P. (2010). The critical perspective on education and on mathematics education. In I. H. Alrø, O. Ravn, & P. Valero (Eds.), *Critical mathematics education: Past, present and future: Festschrift for Ole Skovsmose* (pp. 161–169). Brill | Sense.
- Rasmussen, P. (2009). Educational research and knowledge policy: The case of Denmark. In T. A. C. Besley (Ed.), *Assessing the quality of educational research in higher education: International perspectives* (pp. 293–314). Brill | Sense.
- Sigumfeldt, P. (2020). *LEGO-donation kan forandre velfærdsuddannelserne for altid [LEGO donation may change welfare education programmes for ever]* (DM Akademikerbladet, marts 2020 <https://www.akademikerbladet.dk/aktuelt/2020/marts/lego-donation-kan-for-andre-velfaerdsuddannelserne-for-altid>).
- Teknologipagten. (2021). *Årsberetning 2020* (Yearly Report 2020).
- Undervisnings- og Forskningsministeriet. (2016). *Private Fonde. En kortlægning af bidraget til dansk forskning, innovation og videregående uddannelse [Private Foundations. Mapping their Contribution to Danish research, Innovation and Higher Education]*. Ministry of Education and research.
- Undervisningsministeriet. (2014). *Strategi for forsøg og udvikling i Undervisningsministeriet [Strategy for experiments and development work in the Ministry of Education]*. Ministry of Education.
- Wellington, J. (2015). *Educational research. Contemporary issues and practical approaches*. Bloomsbury.
- Wiborg, S. (2015). Privatizing education: Free school policy in Sweden and England. *Comparative Education Review*, 59(3), 473–497. <https://doi.org/10.1086/681928>
- Wittrock, B. (1991). Social knowledge and public policy. Eight models of interaction. In P. Wagner, C. H. Weiss, B. Wittrock, & H. Vollman (Eds.), *Social science and modern states* (pp. 333–354). Cambridge University Press.