Quality management in education:
A comparative case study in Swedish municipalities

Per-Olof HANSSON
Department of Management and Engineering, Linköping University,
Linköping, Sweden

and

Elin WIHLBORG
Department of Management and Engineering, Linköping University,
Linköping, Sweden

ABSTRACT

This paper focuses on the growing use of quality management in primary education and on processes at different levels, how processes can be supported either by professionals or/and technology to improve educational quality. The paper investigates quality in education by analysing data from Swedish public schools and the municipal administration. Case studies in five municipalities have been conducted, varying in size and by numbers of schools and structures of quality management. Based on this multi-case study we discuss implications. There is a need to clarify the roles and obligations of the different levels and actors in the education sectors. Further, there is a need to support and develop roles that can strengthen quality in public schools no matter of the size of the municipality administration. The support can be implemented by certain services as quality coordinators in a community of practice. Integration of new types of technology to support quality is another opportunity; people in a virtual community of practice collaborate online, share experiences and support each other in legislative matters, human resources etc. Finally, there is need to elaborate on the meanings of quality management in public settings, and open up the meanings of quality in relation to education in particular and public services in general.

Key words: Quality management, Education, Community of practice and Case Studies.

1. INTRODUCTION

There has been a rapid development and change of the public service system in Sweden during the last decades. Different forms of quality management and control has come to play key roles in the New Public Management (NPM) setting of welfare services [1]. NPM is a cluster of ideas from the business sector with a pure market approach, where attention is on cost control and financial transparency, transfer of market mechanisms to public services and privatization of public services [2].

The Swedish education system was reformed 1992 while other providers than municipality was allowed to provide educational alternatives. The basic idea of the reform was to keep all funding public but open up for different providers of education [3]. The impact is that the educational sector in Sweden has developed from a detailed regulated area to an openness of providers with a clear focus on aims and results [1]. The change towards control and evaluation, and the role of the Swedish Schools Inspectorate is a clear indication on this

[4]. The agency's main task is to follow up both processes and results in all schools; by surveys, students' grades, self-evaluations from the schools and visits. The agency has come to form and a steer how quality is arranged in Swedish schools [4].

There are several reasons for this quality turn in the public services and in particular in the educational sector [5]. The NPM setting and the public choices on the quasi-market of education is most often seen as the front argument. However, there is also a professional interest in quality management to improve practice and build knowledge [6]. There are several actor groups raising different aims; the professionals needs to visualize their outcomes as well as competences, the policy makers' demands to make schools accountable, parents and pupils' need to choose the "right" school. Hence, there is a need to follow up quality management in particular when there are several providers of public services. Quality can be seen both as a learning outcomes or more complex values relating to the social context and well-being of the pupils. However, it is far from clear what quality is in these new organizational settings of mixed public-private contexts.

There are global challenges to address quality in education [7]. The mix of actors are not just public and private, there are also several different organizational levels that interplay here. In spite of the local focus and provision of these services there is a lot of interaction, comparison and structures framed on national and even international levels. Thus, this paper investigates the quality management and its challenges for the Swedish compulsory educational sector. Even if there are indeed different outcomes regarding quality, this study rather focus on how municipality administration do work towards increased quality in the processes of education.

2. PREVIOUS WORKS

There has been a quite quick process of educational reforms in several western states since the mid- 1900's from rigorous central regulation over a period of decentralisation and deregulation and, more recently new forms of re-regulation have appeared [7]. Jarl, Fredriksson and Persson [8] have shown in the educational sector NPM in Sweden had the effect to turn local schools into semi-autonomous organizations. Hereby, the researchers also identified increased numbers and levels of manager positions. They also point at the double localities for the principals of local schools, as they have to "serve two entities: the state and subordinated local authorities (municipalities)" [8:436]. In this context the action space for

the municipal management, principals and teacher to deliver high quality education is constrained in several ways. The professional's roles and ambitions to contribute to quality in educations varies and the leadership in schools appears to be more and more important [9]. In addition, NPM reforms in public service can be seen as a way for politicians to reclaim power over the welfare state from the professions [10].

The Swedish school system is framed in the multi-level governance system and public administration takes place at several levels that have to relate and integrate. This makes the public administrative praxis more professional, and there is a division of roles and functions [11]. Different professional actors have tendencies to learn from each other and interact when developing competences. They also have to make the praxis work across levels [12]. In this paper, there is an emphasis on local governance of education in both public and independent schools, even if there is a national curriculum that is evaluated and controlled by the Swedish School Inspectorate [6]. In relation to the increased focus on aims and results there is need of quality assurance and to visualise outcomes in public service.

Quality management and quality assurance can be seen as a concrete response to form and arrange methods for these processes. There are national as well local policy aims for educational services and there is knowledge control model, such as the international PISA (Programme for International Student Assessment) survey. This combination put a pressure to deliver high quality services but there are different interpretations of the public service with good quality and different ideas about how it can be controlled, implemented and evaluated. High quality of public services is also essential for legitimacy of the welfare state in general [13]. There are signs of differences in quality between different providers, and it has increased in recent decades. Studies show increased stratifications and increased disparities in student's performance between schools [10]. In addition, schools who are evaluated by the agency adapts its activities to what is measured. There is also easy to report with quantitative measures (i.e. attendance, grades etc.) thus less focus on qualitative aspects (i.e. knowledge production, social skills etc.) [2].

The Swedish municipalities have a high level of autonomy in the multi-level-governance system [14]. In the educational sector the municipalities are responsible to fund and organize education for its inhabitants. However, all education has to follow national regulations. The main issue for local political debates have been around the issues of independent schools [3]. This because right-wing parties approach are more open towards independent schools, and social democratic party on local level are eager to keep the number of public schools. These different approaches affect the governing approaches since the municipalities have more abilities to govern within their own organization and the public schools.

3. COMMUNITY OF PRACTICE

In this paper, we frame the inter-disciplinary analysis of the case studies by applying the perspective of community of practice to highlight social learning among the actors in the educational sector. Thus, one perspective to understand processes among people who share a profession is to use the concept community of practice. Wenger [15] extended an understanding of social learning systems by arguing that communities of social understanding and learning are defined by the group's history and social environment. Such perspective of learning relates to a sociocultural approach in

which knowledge is constructed within a community through social interactions with peers [16]. The notion of a community of practice is defined as an identity of a group with shared interest and a commitment to the interest. The membership is therefore shared competence that distinguishes members from other people. Having the same job does not make a community in practice unless interaction and learning from each other is there. Wenger [17:2] claims: "members of a community of practice are practitioners. They develop a shared repertoire of resources: experiences, stories, tools, ways of addressing recurring problems – in short a shared practice."

The development of a shared practice may be more or less self-conscious. People in the community may not be aware that regular discussions are the main source of enhanced learning and knowledge. Wenger, McDermott, and Snyder [18:4] point out "they may create tools, standards, generic designs, manuals, and other documents – or they may simply develop a tacit understanding that they share." Furthermore, the groups in a community of practice can consist of a variety of forms; small, large, local, or international. Some can meet face-to-face and others online. Wenger [17] claims the perspective is learning through reflection on practice to better understand the world. Hence, an appropriate perspective to use for analysis of quality at different levels.

4. METHOD

We conducted five case studies in variety of Swedish municipalities. They were selected to cover different sizes; two small municipalities (in a Swedish context), with less than 10 000 inhabitants and one is a medium size municipality. The final two are large municipalities with more than 100 thousand inhabitants. But there were also differences in inhabitant's level of education, socio-economic settings and political leadership in the municipalities. Some basic facts of the municipalities are summarized in Table 1 below.

Table 1. Basic facts of the studied municipalities

Demography	Municipality				
	A	B	C	D	E
Population*	546 000	150 000	26 000	11 000	4 000
Percentage of pop. with exams from higher education**	33	35	16	11	16
No. of public schools	139	48	10	5	2
No. of independent schools	42	11	1	1	0
Political leadership	Coali tion	Coali tion	Social demo cratic	Social demo cratic	Coali tion

* = Statistics Sweden [SCB]
** = Ekonomifakta.se (Swedish average is 25%)
All other information from the webpage of each municipality.

The issues of educational quality were indeed on the agenda in all municipalities but the management approaches differ. In this study, we conducted interviews in the central administration of education, most often called the *The Unit for Children and youth* or *The Unit for Education*. In the larger municipalities a professional staff member focus on these issues. In the smaller municipalities, on the other hand, these units only consist of a handful (or in the smallest municipality a single person as part

time employed) of people doing administrative support. The two large municipalities have implemented a role as area manager including management of several schools and principals. At the office for the area unit they also have administrative staff with budget and human resources responsibilities. In addition, we conducted interviews with principals at some schools in each municipality and in some cases even teachers. We selected teachers that have a specific assignment to address quality development and they are called first teacher.

All interviews were semi-structured and focused on quality management in education; what it is considered to be, how it is organized in their municipality and relations between administration and schools. We also discussed their experiences of being evaluated by the Swedish Schools Inspectorate and if there are other forms of regular evaluations taking place in their municipality. Finally, we opened up for questions regarding what they see as the best forms of quality management and challenges in management in education. In total, we interviewed 33 persons (two focus group interviews including four respectively eight people in each group) and complemented with document analysis. The analysed documents regarding the organisation of the educational sector in the municipalities as well as the municipal reports form the evaluation made by the national Swedish Schools Inspectorate. The agency publishes a report on all schools in each municipality after their inspection including the underlying material as questionnaires to parents, pupils and teachers. The inspection reports and the self-evaluation form of the municipal board are available on the web-site of the agency. We used a cross-case analysis to search for patterns and different perspectives on the same issues; in particular challenges in quality management and arrangement for development in new ways [19].

5. FINDINGS

Quality management is seen as an additional new task to the schools and it is not really embedded into daily routines or community of practice even if that is what the administration are struggling towards. There are indeed different outcomes regarding quality in education, this study rather focus on how municipalities, as management, and schools do work towards increased quality in the processes. There is a strong focus on processes in order to improve quality, however the pressure on presenting products is omnipresent. Hence, of most importance is to present pupils' grades, and one principal in the study means "it is a terrible focus on grades. That is what we most frequently talk about." The reasons are different ranking lists; politicians' demand of easily measured quality aspects and recurrent evaluations, media comparisons of schools, PISA surveys, etc.

Moreover, the Swedish Schools Inspectorates quality assurance of schools creates a lot of paper work for management and principals if the school is selected to be controlled and evaluated. The respondents claim it is a huge work load to produce documents to the agency. One principal in the study means "the follow up hysteria is a sign of lack of trust." In addition, the director of education in one municipality claims "the Swedish Schools Inspectorate has honestly not played a constructive role at all. It is one of the major concerns in the Swedish school system to give the Inspectorate destructive mission…//… it creates a culture of fear to do wrong." However, there are respondents that argues for the inspectorate is important for school development.

If the Swedish Schools Inspectorate plays a major role for the quality development in municipalities, so do the National Agency for Education. The agency provides inspirational material and web-based support but also funds to improve development in municipalities. The support is based on national prioritizations thus justified on shortcomings and challenges identified in studies. The funds are designated for selected areas (i.e. Mathematics, reading or writing skills, gender equality etc.,) and is an important contribution the school budget. However, the management spend considerable time on applications and quality assurance of funds. The principals also mean that the allocated funds have a steering effect on the development of the school. The management and local school staff have identified other challenges but are forced to implement the national priorities ones thanks to both pressure of fulfilling national standards and contribution to the school budget.

In addition, the quality in schools heavily depends on the principal and his/hers visions and strategies. Principal's superiors, with support of the National Education Act from 2011, claims that the principal is free to organize and implement actions at the school. But the superiors also point out that the principals are not taking this opportunity. On the other hand, the principals' mean "the freedom was supposed to be strengthened by the new Education Act and the mandate we received. But it has instead decreased with all controls and all directives from diverse directions."

In all studied municipalities it is obvious that the multi-level arrangement of quality management is complicated and tricky to manage. An overall impression is that the large municipalities both have resources and capacities to address issues more coherent. On the other hand, the complexity of the practices increase not at least since there are more schools in other management forms and thereby partly out of the reach of the municipal management. A general statement from the respondents are that large municipalities have more resources and competences, thereby develop and improve the support to the principals. Hence, large municipalities have professional administration that can meet up the demands from the Swedish Schools Inspectorates. However, advantages in the small municipality was considered to be short ways to decisions thus flexibility is prominent. On the other hand, the smaller municipality has limited resources which leads to less time spent on paper work to the Swedish Schools Inspectorate. There is also obvious that the NPM reform has its challenges in a smaller municipality. For example, the number of independent schools are less or none in the smaller municipalities (see Table 1)

The informants highlighted the need to elaborate and address quality, and to have competence and resources to improve on quality. The implementation of a quality coordinator was an innovated way to improve on quality matters in the educational sector. The coordinators worked close to the practice, thus with schools, principals and teachers. In municipality B this system was most developed, while in other municipalities there was still ongoing discussions. However, it was voluntarily for the schools to establish relations to the coordinator which led to not all schools were attached. This created a weak mandate for the quality coordinator. The coordinator was not fully trusted to work in all schools thus it was difficult to implement quality aspects in the whole municipality in order to establish equal terms for all pupils.

The management in municipalities use computer programs to analyse the outcome of quality. However, the large municipalities have more time and resources to analyse the data from different evaluations (i.e. surveys with pupils, parents and

teachers). The quality coordinator provides the principal and the schools with data, charts and tables showing pupils development during the past school year in comparison with previous years. Accordingly, we noticed that the coordinators, principals and teachers evoked a community of practice. The shared practice and learning by reflections produced knowledge and action which was useful for the participants or the community of practice. In the smaller municipality the principal was responsible for the analysis, and to select and present information to the staff members. Clearly, new technology is an area for integration in all municipalities not least in the smaller ones.

6. DISCUSSION

This study highlights quality management in education with an inter-disciplinary perspective. From the findings of the multi-case study we discuss implications. There is a need to clarify how and by whom quality management is arranged in the multi-level governance structure of the educational sector in Sweden. The municipalities with extended quality management system are also those who have managed to combine the national regulation into the local policies and implemented in the schools. This was apparent in the two larger municipalities thanks to resources and competences in their central administration, but if and how it reached out in the singles schools were far from obvious. There is indeed a complexity in how educational quality is managed and what is seen as responsibility for different actors at different levels.

Schools and the educational sector must include all pupils thus the challenges for municipalities are enormous. Hence, there is a need to support and develop roles that can strengthen quality in public schools no matter of the size of the municipality administration. Implementation of support can be quality coordinators to address strategic issues. The coordinator has a background as a teacher or principal thus capacity to improve quality in schools. This support was embedded into pedagogical practices. Thus, in the study, the quality coordinators and practitioners grew together and developed their community of practice by a variety of activities. For instance, problem-solving, finding updated information, coordination, collaboration, shared experience, etc. It also accrues in the personal satisfaction of knowing colleagues who understand each other's perspectives and of belonging to an interesting group of people [16].

The support can also be improved by digital technology. This was not common in the study but certainly there is an opportunity to support quality management by new technology tools. With an online arena there is also an opportunity for quality coordinators to have frequent contact with each other in a community of practice. This is not least important in small municipalities with less resources therefore a larger need of increased network and support. In this study, it was obvious that schools in less favourable areas have greater challenges to reach good quality. There is a need to develop models that support and develop strategies to provide quality given different situations, resources and capacities. Implementation of digital technology support has a bottom-up approach of quality where the people in the virtual community of practice collaborate online, share experiences and support each other in legislative matters, human resources etc., [20]. Furthermore, open access for the management and teachers can improve transparency, and strengthen the analysis of quality data that is collected on annual basis by the municipalities.

Finally, there is need to elaborate on the meanings of quality management in public settings and open up the meanings of quality in relation to education in particular and public services in general. In public health care management, there is a close link created by different group of players to develop quality and access government funds. This creates a view of quality as method-contingent, not only goal-focused [21]. The quality management in the educational sector, however, do not appear to be a problem based on the multi-level governance system but rather the different interpretations and management models of the political and professional governing structures. The capacity to deliver what is seen as good quality education is indeed an issue of legitimacy since education is a wide ranging public service and a critical institution for each nation.

7. CONCLUSIONS

With the implementation of NPM the Swedish education system has moved into control and evaluation, and less on development of qualities. The high demand to focus on outcome has created a system based on what is simple to measure. However, there is a strong interest to change from goal and performance management and instead develop steering models based on trusting relationships between politicians and administration.

One innovative way is to implement quality coordinators, which can be supplemented by integration of new technology, to create a comprehensive system of development. Digital technology adoption can support and facilitate service with the aim of increasing efficiency and quality by stimulating learning and cooperation between municipalities and regions. Even if the size of municipality appears to be the main factor explaining weaker outcome of quality management, it is not an argument to merge into larger units. We rather argue that there is a need for the Swedish Schools Inspectorates to be more flexible and able to meet the different pre-requests in the municipalities. The small municipalities cannot be expected to deliver same reporting nor same extensive services. But still other qualities can be found as the ability to address situations simply and quickly. Moreover, schools play a key role for local identity and development in the small municipality. Finally, it should be emphasized that the overall aim for the management in all municipalities is the meeting between teachers and students; for students to be able to process knowledge, understand subject content and relate to their own learning.

8. ACKNOWLEDGMENT

REFERENCES

[1] M. Jarl & J. Pierre, eds., **Skolan som politisk organisation,** Gleerups: Malmö., 2012.

[2] S. Ahlbäck & Widmal, S., "Att göra rätt – även när ingen ser på", **Statsvetenskaplig tidskrift**, Vol. 1, 2016, pp. 7-17.

[3] J. Nyhlén, **Styrideal och konflikt: om friskoleetablering i tre norrländska kommuner,** PhD-thesis. Östersund: Mid University., 2011.

[4] L. Rönnberg, "Exploring the intersection of marketisation and central state control through Swedish national school inspection", **Education Inquiry**, Vol. 2, No. 4, 2011, pp. 689-707.

[5] M. Elg, E. Wihlborg & M. Örnerheim, "Public quality – for whom and how? Integrating public core values with quality management", **Total Quality Management & Business Excellence**, 2015, pp. 1-11.

[6] J. Engström, M. Elg, B. Poksinska, L. Witell, & H. Snyder, "The role of customers in the development of public organizations". In P-E. Ellström, M. Elg, M. Klofsten & M. Tillmar, eds., **Sustainable Development in Organizations: Studies on Innovative Practices**. Cheltenham, UK: Edward Elgar., 2015.

[7] R. P. Dickenson, J. H. Rogerson & V. N, Azarov, "Building an infrastructure for quality management in Russia", **Quality Assurance in Education**, Vol. 8. No. 2, 2000, pp. 70-75.

[8] M. Jarl, A, Fredriksson & S. Persson, "New public management in public education: a catalyst for the professionalization of Swedish school principals", **Public administration**, Vol. 90, No. 2, 2012, pp. 429-444.

[9] M. Jarl & L. Rönnberg, **Skolpolitik: från riksdagshus till klassrum**, Malmö: Liber., 2010.

[10] P. Blomqvist, "NPM i välfärdsstaten: hotas universalismen?" **Statsvetenskaplig tidskrift**, Vol. 1, 2016, pp. 39-67.

[11] P. Bogason, **Public Policy and Local Governance**, Cheltenham: Edward Elgar., 2000.

[12] S. Montin & M. Granberg, **Moderna kommuner**, Malmö: Liber., 2013.

[13] B. Rothstein, **The quality of government: corruption, social trust and inequality in international perspective**, Chicago: University of Chicago Press., 2011.

[14] I. Bache & M. Flinders, **Multi-level governance**, Oxford: University Press., 2004.

[15] E. Wenger, "Communities of practice and social learning systems", **Organization**, Vol. 7, No. 2, 2000, pp. 225–246.

[16] E. Wenger, **Community of practice. Learning, meaning and identity**, New York: Cambridge University Press., 1998.

[17] E. Wenger, "Communities of practice: A brief introduction", Retrieved October 2, 2015, from http://wenger-trayner.com/wp-content/uploads/2013/10/06-Brief-introduction-to-communities-of-practice.pdf, 2006.

[18] E. Wenger, R. McDermott & W. Snyder, **Cultivating communities of practice: A guide to managing knowledge,** Boston: Harvard Business School Publishing., 2002.

[19] M. Q. Patton, **Qualitative research and evaluation methods**, 3rd ed., Thousand Oaks, CA: Sage., 2002.

[20] P-O. Hansson, **New ways of learning. Participatory action research and Kenyan runners' appropriation of smartphones to improve their daily lives and participation in m-learning,** Linköping Studies in Behavioural Studies no 189, Linköping: Linköping University, 2015.

[21] M. Örnerheim & E. Wihlborg, "Path dependence on new roads". **Scandinavian Journal of Public Administration**, Vol 18, No 2, 2014, pp. 3-22.