Blindness to Change Within Processes of Spectacular Change? What Do Educational Researchers Learn from Classroom Studies?

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The object of this chapter is to address the problem of change within studies of educational change – or more precisely to address the way certain changes are denied or neglected in studies of educational change.

Despite recurring reform efforts and pressure for change in schools and classrooms over the last decades, researchers tend to describe contemporary teaching and schooling in terms of stability and status quo. A vast research literature tell us how huge reform efforts in education aimed at changing teaching and learning designs, teacher–student interaction(s) and teaching materials tend to be swept away and diminish into a well-documented pattern of interaction and instructional format, framed throughout the aphorism "the persistence of recitation" (Hoetker & Ahlbrand, 1969). Status quo in schools is often outlined as a problem and challenge for the schools and their professionals. This inertia is often attributed to elements at a local level: to schools and teachers, to the pupils and their parents. In this contribution I will discuss this as a problem – and a challenge – for researchers and policy makers. How do researchers (and policy makers) continue to reproduce schools, teaching and learning in terms of status quo? Existing literature tells us that irrespective of the huge amount of efforts invested in reforming education, teachers, students and parents continue to reproduce a rather stable and familiar pattern of interaction and repertoires in schools and classrooms which could be summed up by the catch phrase "Classroom business as usual". This might of course be an empirical fact pointing to institutional forces that keep everything in place. Established patterns of activities, subject matter and patterns of communication and interactions – the so-called "grammar of schooling" (Tyack & Tobin, 1994) – are so strong that they go through with their regime – despite all sorts of reform efforts. But it might also reflect a blindness in the "eye of the beholder"; that is the ability of educational researchers to grasp, analyse, document and envision elements of change within schooling studied as a scientific practice.

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The epistemologist Wallerstein (1991) has been occupied with the denial of change within social sciences, which he links to the absence of critical examinations and analyses of concepts, theories and methodological practices within the social sciences. Wallerstein states, for example, that concepts, theories and analytical framework developed throughout the nineteenth century no longer are adequate for defining and describing political and social changes, movements and activities in today's rapidly changing society. As a consequence social sciences are locked up with "... the denial of change in theories of change" (Wallerstein, 1991). The American educationalist Tom Popkewitz makes similar arguments when he claims that policy studies in education (and he actually uses Norway as an example) tend to reproduce their own common sense understanding because analytical concepts, categories and practices are not critically examined and analysed. This has as one of its consequences the "denial of change within educational change" and where the "knowledge system of policy and research denies change in the process of change" (Popkewitz, 2000, p. 25).

From a very different position in social theory, researchers influenced by actor network theorists claim that boundaries between reforms and their context are continuously subject to negotiation. Contrary to many social scientists who define reforms and policies as "prime mover" or "cause" in a linear relationship, actor network theorists underscore how reforms and contexts *mutually* constitute one another, and how their definitions and understanding shift as they expand through spatial and temporal contexts (Nespor, 2002, p. 365). They argue that contextual elements are part of reforms rather than constraining and supporting variables. Actor network theory is a relational and process-oriented sociology that treats agents, organisations and devices as interactive elements (both causes and effects (Law, 1992)). It is a relational material theory interesting in network *ordering* mechanisms, that is how agents, structures, machines and other artefacts stabilise and reproduce themselves. There are no privileged elements within mechanism of ordering within actor network theory (i.e. structure versus agents) and subsequently "social structure is better treated as a verb than as a noun" (Law, 1992, p. 389). In actor network theory there are many possible modes of ordering, not just one. Paraphrasing one of the strong spokesmen for actor network theory we could argue that educational reforms are "relational contingencies" (Law, 2002, p. 92) and how they grow up (or fade out/decline), and how the relations that produce them stabilise themselves, is primarily an empirical matter.

Larry Cuban introduces the concept of *hybrid* as an analytical tool for studying reform efforts in education. Instead of analysing the fate (success) of the reforms by giving privileged positions to certain anticipated modes of ordering, he argues for an approach that includes studying both how the reforms contribute to order the schools and how the schools order the reforms. Together with his colleague David Tyack, Cuban (1995, p. 64) consequently argues for how reforms should be deliberately designed to be hybridised, to be able to fit a variety of modes of orderings.

In this contribution I will address the denial of change within educational change. Inspired by the above assertions I will discuss the tendency towards what I will describe as "blindness to change within spectacular processes of change". Certain

types of changes are left out of the final accounts. I will engage in this analytical venture by focusing on three distinctive, but closely linked, factors relevant for how we – as educational analysts – frame, approach *and* neglect change in the process of change:

- theoretical and analytical assumptions underlying the different studies;
- types of data and methodological practices that establish the bases for analyses and conclusions;
- conceptual and analytical framework for analysing the situation.

In my analyses I will draw on empirical studies from schools and classrooms in Norway, Sweden and UK to exemplify and illustrate the "denial of change within educational change". I will lean especially on later classroom studies from elementary and lower secondary schools in Norway. These studies were conducted during a period of large reform efforts in Norway. In the 1990s Norway – as many other Western countries – experienced educational restructuring in education implying new ways of funding and steering the educational sector as well as new professional roles for educational stakeholders (Klette, 2002). A new national curriculum was introduced in 1997 and subsequently in 2006, putting new professional demands on the teachers as well as requiring new forms of classroom practices. The comprehensive school system was extended from 9 to 10 years of schooling during this period, and a quality assessment system based on a combination of performance indicators and the schools' self-evaluation was introduced (Carlgren & Klette, 2008).

Along with the reform efforts in Norway a large research program was initiated. The Reform 97 Evaluation program tried to grasp some of the effects and impact the reform had on the daily practices of teachers and students in schools. For the first time in Norway, we got an extensive documentation of instructional practices across subjects, sites and classrooms. In my recurrent discussion on educational change I will draw on examples from this rich toolkit of educational practices in combination with other and related studies. I will in particular use instructional practices and repertoires in classrooms and schools as a unit for analysing dimensions of change processes. Practices at classroom level draw together educational policies at the place where they are supposed to operate. The heart of improvement and reform efforts lies in changing teaching and learning practices at the classroom level. Classrooms and their different practices further shed light on how different events, sequences, settings and processes are not neatly and exclusively situated, but are ". . . entangled in multiple, and alternative scale constructions" (Nespor, 2002, p. 313). If we distinguish between micro, meso and macro as three level of timescales for analysing teaching and learning in schools and classrooms, actions taking place at for example micro level (i.e. teacher–student talk), will provide a rich basis for interpretations compared to their representation at a meso and macro level. Jay Lemke (1990, 2000) demonstrates how different levels of scales are candidates for possible interpretations, and where activities, actions and themes take on specific meanings depending on the contexts imposed by different scales. Scales demarcate the sites of a social contest. One of the problems in analyses of educational change is, as I will

argue, the tendency to give privilege to some scales, often the macro scale level, even though no rationale is provided for these analytical preferences.

The Problem of Status Quo in Education

Why does educational research tend to arrive at status quo as a way of describing how reform efforts interplay with educational practices?

A vast research literature seems to sum up the relation between policy (such as educational reforms) and practice (in terms of school practices) as the following research titles suggest:

- The persistence of recitation (Hoetker & Ahlbrand, 1969);
- The more you change, the more it will remain the same (Sarason, 1982);
- Teaching practice: Plus que ça change (Cohen, 1988);
- Reforming again, again and again (Cuban, 1990);
- The grammar of schooling (Tyack & Tobin, 1994);
- The predictable failure of educational change (Sarason, 1991);
- No news on the reform front (Monsen, 1998).

Decades with reforms in curriculum and associated school practices (i.e. such as instructional practices and engagement, patterns of interaction and subject matter involved learning tools and artefacts) showed again and again that the intended changes did not materialise. Research on the impact of the new policies and programs supports this impression even further (Goodlad, 1984; Monsen, 1998; Pollard, Broadfooot, Croll, Osborn, & Abbott, 1994). In a more recent article summarising the existing knowledge on curricula implementation in schools and classrooms, Hopmann (2003, p. 127) claims,

- Most teachers reported that the curriculum guidelines had no or little impact on their lesson planning, teaching, their students' involvement, student achievement, etc.
- The format, size, level of detail, etc. of the guidelines had no or very little impact on how students and teachers cope.
- Higher stakes, added content, etc. led to almost nothing, or rather the opposite.
- The main effect of the external process evaluation tools seemed to be legitimation and the distribution of new arguments around the curriculum, but neither innovation nor quality enhancement.

The impact of educational reforms, i.e. such as how curricular reforms have impact on educational practices at the classroom level, points to a complicated and multifaceted discussion that I will not go deeply into here. David Cohen, Deborah Ball and their colleagues have for example underpinned how

[S]chools and teachers simply cannot meet the expectations of the center (reforms), because they do not have the fiscal and human resources that are required, teachers do not have the skills that are asked of them, and/or they are not given the training and education required to develop those skills (Cohen, Raudenbusch & Ball, 2002).

In this contribution I will take a slightly different perspective on how educational and curricular reforms have an impact on educational practices in schools and classrooms, and discuss the lack of change – or the denial of change to quote Tom Popkewitz – as a function of the way educational researchers frame their studies and the methodological tools used.

This I will do by getting more deeply into three different – but slightly interrelated – arguments:

(i) Theoretical perspectives underlying the different studies (reform fidelity vs. reform hybrids/looking for large-scale change)
(ii) Methodological tools and types of data that establish the bases of analyses and conclusions
(iii) Analytical framework and established concepts for analyses.

But first I will give a brief description of how educational literature describes educational practices in classrooms.

Classroom Business as Usual? An Overview

What defines/constitutes educational practices in the classrooms? According to a vast research literature there are some routinised patterns of schooling and teaching that seem to continue to define interaction, roles and repertoires in classrooms – the so called "grammar of schooling" (Tyack & Tobin, 1994). The "grammar of schooling" could be linked to the following two features:

The persistence of plenary teaching – plenary teaching dominates. Despite numerous reforms efforts trying to transform classrooms into spaces for enquires, investigations and sites of unfolding learning processes based on the pupils' individual needs and interests, teachers continue to design and redesign classrooms as sites for recitation[1] and plenary teaching.

Classroom talk – regulated, dominated, evaluated and monitored by the teacher. Teachers dominate, regulate, define and evaluate all communication and activities in the classroom. This communication can be described by the rule of the 2/3, which means that for approximately 75% of the time, teachers talk, regulate and monitor all official classroom conversation. The dominant pattern of interaction follows a predefined IRF(E) pattern of communication where the teacher poses a question or initiative (I) followed by a student's response (R) for then being followed up

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[1]The term *recitation* here should be treated as an algorithm rather than a literate expression of what is going on in classrooms.

(F) or evaluated (E) by the teacher. These IRF(E) patterns of communication point to prevalence across different studies and periods (Bellack, Kliebard, Hyman, & Smith, 1966; Cazden, 1988; Dysthe, 1995; Edwards & Mercer, 1987). The pupils are left with small possibilities for participation and influence within these patterns of communication according to the researchers.

If we examine the impact of reform and curriculum innovations in schools and classrooms, the picture becomes even grimier, or as stated earlier, from different studies, teachers' report that the curriculum guidelines had little or only limited impact on their lesson planning, teaching repertoires, their students' involvement, etc. The bottom line could be summed up by one the titles quoted earlier: "Reforming Again, Again and Again" or "The Predictable Failure of Educational Change".

The different studies identify different mechanisms for explaining this situation such as:

- School structure and school organisation;
- Epistemological traditions of schooling and teaching;
- Teachers' and students' competences and repertoires;
- Power relations;
- Schools as certificates for social reproduction.

I will not go deep into the different explanations here. My point is that in spite of reform efforts during different periods, researchers continue to report that principal modes of instruction (lecturing, recitation, demonstration, seat work) continue to dominate despite the increasing range of options that is being constructed.

In my further argumentation I will penetrate these findings and conclusions by carefully examining how our theoretical, conceptual and methodological framework might lead us to scrutiny of conservatism and status quo.

Theoretical Assumptions Underlying the Different Studies

As acknowledged in the introduction there has been a strong tendency to separate innovations from their contexts. Many discussions on school change focus subsequently on the intention and kernels of the reform such as principles, organisational forms, knowledge organisation, instructional formats, etc. Reform intentions and reform kernels are studied from one standpoint – that of the authors, facilitators or the researcher(s) studying the reform. The success of the reform, in this view, is verified/ascertained by the "... kernel's subsequent encounters with spatially and temporally discrete 'contexts'" (Nespor, 2002, p. 365). Structural conditions, implementation tools and legitimacy processes are in this approach recognised respectively as facilitators and constraints of the reform. In the field of education a fidelity to the kernel of the innovation (a structural–instrumental tradition – a fidelity

approach – if you like) persists. Within a structural/instrumental approach to educational change, the focus is shifted from the strategic apex to rational and cognitive structures surrounding the reform, and tools and implementation processes facilitating and supporting the reform: Who was involved in the process, central means and resources surrounding the innovation, types of implementation processes, etc. Stephen Ball's policy cycle model (1994, p. 26–28) and Lidensjö and Lundgren's (2000) distinction between the level of policy formulation versus the level of policy realisation can stand out as two distinguishing examples of this tradition within research on educational reforms and their impact at local levels.

This way of thinking about reforms makes it difficult, however, to ask and understand how reforms and contexts mutually constitute each other and how contextual elements are a part of the reform process rather than constraints and supports for them. Instead of treating contextual elements as barriers (or supports) of the reforms, contexts define, negotiate and materialise the reforms across spaces and spheres, sites and settings. In a contextual approach (cultural–institutional approach, if you like), the focus is neither on the programmatic or the intentional part of the reform nor on how the institutions neglect and counteract the reform efforts, but rather on how institutions and agents selectively negotiate, ignore, redesign and adapt to the reform. As emphasised earlier, a contextual approach (i.e. cultural–institutional approach) gives no preference to one privileged order or one privileged practice but is concerned with how different reforms efforts interact and are negotiated at different levels. Since the world, and the contexts of reforms, might produce a diversity of effects, their mechanisms of orderings do not come in "big epistemic blocks" (Law, 2002, p. 92). Consequently, rather than be interested in how the reforms change the schools, analysts should be interested in how the schools change the reforms.

Let me illustrate with the following example:

Project work and cross-disciplinary work have been introduced and reintroduced as favourable ways of classroom instruction over the last century. In Norway cross-disciplinary teaching and learning has been an element in all national curricula reforms since the 1970s. With the reform 1997 curriculum, though, project work became an obligatory part of teachers' repertoires in classrooms. In their evaluation of project-organised ways of working in Norwegian classrooms, the scholars Rønning and Solstad (2004) reported that teachers and student struggled with implementing cross-disciplinary (i.e. project work and topic work) ways of working. They portrayed how the teachers felt unconfident and anxious in how to understand, define, implement and assess project work (2004, pp. 33–34). They further emphasised how existing repertoires and dispositions among the students (and teachers) were hindrances and barriers to the possible fulfilments of project work as a learning device (p. 44). Contrary to seeing curriculum plans as devices to be negotiated, renegotiated and acted upon, they concluded that the teachers became trapped within traditional teaching methods versus cross-disciplinary ways of working:

Manglende disiplin og manglende modenhet medfører i følge lærerne at elever mislykkes. (…) Skolen har altså ikke noen klar plan og progresjon for arbeidet, og lærerne finer seg ofte i en situasjon der de opplever at de gir elevene frie, åpne oppgaver som eleven ikke har

de nødvendige forutsetninger for å kunne beherske. Resultatet blir my uro og en følelse av at verdifull tid kastes bort (*To be translated*).

Cuban (1993) is among the spokesmen for the value of contextual definitions of reform effectiveness on schools and teaching and learning. Rather than looking for what he describes as a fidelity and efficiency approach to the impact of reforms, he advocates perspectives that reverse the causal chains of mainstream research – by allowing schools to change reforms. He introduces popularity perspectives and diffusion perspectives as alternate criteria for evaluating the impact of the reform. Such perspectives enable us to describe how educational practitioners reconstruct innovations at the operative level – that is, in classroom instruction, Cuban argues. Cuban finds it useful viewing reform plans ". . . not as clearly mandated policies but as concepts to be evaluated on their practical effects, positive or negative, and then reframed accordingly" (Cuban, 2002). Together with his colleague Tyack (1995, p. 64), he claims that reforms should be deliberately designed to be hybridised, to be able to fit local circumstances.

In his overview on how reforms impact teachers, instruction and learning (based on American experiences), Cuban (2002) states that over time teachers ignore, combine and adapt different reform strategies. Educational reforms do affect educational practices if they

- are built on and reflect teachers' expertise;
- acknowledge the realities of the school as a workplace;
- accept the wisdom of those teacher adaptations that improve the intended policy.

Let me illustrate his point with an example from the Reform 97 evaluation program in Norway. One of the projects identifying a fairly high degree of reform success in relation to the new national curriculum reform is within writing skills in language arts in lower secondary school in Norway. Contrary to other findings on students' performance among Norwegian youngsters (see for example PISA, 2000, 2003), Evensen and his co-scholars (2004, 2005) describe writing skills among 16 years students as robust, vital and fairly good.

The scholars base their analyses on depth analyses of National examination tests in written language arts. Evensen & Wagle (2004) describe writing skills in lower secondary schools in Norway in terms of vitality and pluralism and with a high correlation between the criteria for how the students design their texts and the criteria external evaluators use in reviewing the same texts. They link this correlation in vitality and standards to the way the students write their texts (the use of textual approaches, textual tools, etc.) as well as established norms for good writing among the evaluators. Textual pluralism, trust and confidence impregnate both the students' way of writing and the established norms for good writing within the evaluators' corpus, tied to established norms in process writing. Evensen et al. emphasise how this situation reflects sensus comunis in first language writing skills between literacy teachers' established norms for good writing in upper secondary classes, the way the national curriculum defines textual competence *and* established instructional

practices in language arts classrooms. Process writing has become a national standard for good writing, recognised by teachers, students, evaluators and curriculum designers. Process writing has been spread and made popular through a systematic and deliberate use of developmental teachers' pioneer work in this respect (supported with robust tools and recipes) and is today recognised as the good way of writing among professionals, students and national evaluators as well as within curriculum texts. Process writing is a vivid illustration of an innovation designed for being hybridised, able to fit multiple local circumstances. Process writing as an innovation further recognises and acknowledges the variability of contexts and hosts for producing possible effects. The innovation is designed for being able to fit this variability of contextual circumstances. Instructional devises in process writing (tools, recipes and instructional formats) are designed for local adaptation and multiple contingencies. Its success is not relying on one "epistemic block" or one privileged topos of change.

Methodological Tools – How Methodological Tools Interplay with Conclusions

Another way to understand the denial of change within educational change is linked to methods of measurements and design used in the different studies.

If we look to recent studies of teaching and learning – and especially the studies identifying some aspects or traces of change – they are rely on some sort of *in-depth studies* and *how data* (see for example Alexander, 2000; Klette, 2004; Pollard et al. 1994; Sahlström, 1999).

If we use the Norwegian Reform 97 evaluation as an example, the studies identifying new forms of practices are all based on some sort of qualitative data or a combination of survey data and qualitative data. To put it another way, studies leaning solely on survey information tend to be valid at mapping educational routines in terms of the *what* aspect, but seem to be less able to identify ongoing changes, emergent patterns and especially changes related to the *how* aspect. Survey studies enable us to see patterns of distribution and variation across groups, individuals and contexts on a large scale. Survey studies are however less valid when identifying substantial and detailed variances. Perhaps ongoing changes in educational practices are related to substantial rather than structural elements and are better envisaged by *in depth* and *how* related data.

I do not mean to mandate a specific methodological program – in terms of advocating ethnographic methods or discourse analysis – by putting emphasis on this argument. What I do want to address is how our methodological tools define the universe of conclusions that we select. Paraphrasing Lemke's (2000) notion of scales, methodologies tend to privilege some level of change (like time and space) in favour of others (like matter and information transfer). As a consequence, methodological designs and accompanying indicators often tend to reproduce their own "common sense" within the existing knowledge systems of research.

Let me again illustrate with an example. Although frontal teaching and teacher-centred instructions – and especially the IRF pattern – still define central aspects of classroom interaction in Norwegian classrooms, these patterns of interaction are differently played out today than those identified by Mehan (1979), Cazden (1988) and Dysthe (1995) and other well-recommended studies. One of the big differences in the teacher–student interaction of today, compared to earlier studies, is the role of the students and their possibility for participation and contribution. In that sense the IRF patterns in Norwegian classrooms of today are much more "student centred" in terms of the students' possibilities for initiation, negotiation and involvement. *What data* then might bring you to the wrong conclusions concerning classroom interaction in this respect. The persistence of an activity over time does not mean that we are describing identical phenomena. If we use *how data* we see that teacher-centred questions – recitation patterns of today to paraphrase Hoetker and Ahlbrand – give much more room for student participation and student latitude. Question–answer sequences of today further allow the students the possibility of exposing questions and their misunderstandings (and misconceptions) without the sense of authoritarian regulations and repression from the teacher described in earlier studies.

The following example from a recitation sequence in a math classroom at the ninth grade can illustrate:

> The teacher uses the blackboard to give instruction in geometry – (the class is working on Pythagoras). He draws several triangles on the blackboard – and where they are given information about one angle and one side of the triangle. "What can we know on the bases of this information?" the teacher asks the class. One of the students offers an answer that is obviously not correct, and where to the teacher responds (totally without irony): "I am so glad you produced this response Peter, because it demonstrates for us what we actually do *not* know". He uses this opportunity to unveil unsolved mathematical problems within this area of geometry (. . .). The teacher then continues to write on the blackboard guided by the students' responses and suggestions and asks: "Who is able to solve this problem; and this one?" Based on the students' initiatives, questions and suggestions, the teacher and the students allocate probable solutions together on the blackboard. The teacher is open and sensitive to the students' suggestions, encouraging them with comments and questions like "That's an interesting proposal – why do you think that is a good solution?" He supplementary challenges the other students to come up with adjoining or competing proposals (Klette, 2003, p. 62).

From a structural activity point of view, the above quotation points to a very familiar pattern of classroom interaction which could be described within the frames of teacher-centred instruction and an IRF(E) patterns of interaction. A closer look shows that despite structural familiarity with established forms of classroom interaction, students of today are encouraged to suggest possible solutions and expose their preferred alternatives regardless of whether the proposed solution is wrong or not. The teacher actively embraces Peter's proposed wrong response because it gives him – as a teacher – the possibility to demarcate the boundaries for existing knowledge within this area of geometry. The quotation further highlights how whole-class instruction, carefully supported with the teachers' use of question–answer sequences and IRF patterns of interaction, provides scaffolding structures that enables collective problem solving within the frames of whole-class instruction. Drawing on

comparative classroom studies from Asia, Europe and North America, Alexander (2000) puts emphasis on the teachers' deliberate and systemic *use* of different learning activities rather than the activity in itself, as decisive for determining the quality of a teaching-learning sequence. The above quotation suggests extended possibilities for learning *beyond* the recognised conceptual activity (i.e. teacher-centred instruction) and pattern of interaction (i.e. IRF pattern). Teacher-initiated recitation patterns of today convey learning opportunities and patterns of dialogic interaction (both between teacher–student and student–student) not recognised in the existing structural and conceptual research design.

The above quotations illustrate that it is not sufficient to only register the *what* aspects of an activity. Substantial *how*-related data are required in addition. The persistence of an activity across studies and periods might lead us to the conclusion that we are describing the same phenomenon. Behavioural frequencies of an activity without more contextual and substantial descriptions of the same activity might mislead us however to believe that we are describing identical phenomenon. Quantitative registrations of teacher-centred instruction in today's classroom do not assume that we are automatically dealing with the same instructional formats as described earlier. Qualitative in-depth investigations reveal, for example, that classroom interactions of today embrace more dialogic and interactive patterns of interaction than identified in earlier studies.

Analytical and Conceptual Language Underlying the Different Studies

A third pathway to understanding "the denial of change within educational change" can be linked to the established analytical and conceptual language available for analysing teaching and learning in educational practices. Within the field of education we have many concepts established for analysing educational practices such as:

- teacher centred vs. student centred;
- traditional vs. progressive;
- mimetic vs. transformative;
- monological vs. dialogical;
- process vs. content;
- control vs. autonomy.

All these concepts and analytical frameworks are developed within the epistemologies of the early versions of social sciences and are more or less adequate and sensitive for describing social life in classrooms today. The dichotomised language, moreover, puts emphasis on *either* teacher centred *or* student centred, or *either* subject centred *or* pupil centred, with little latitude for blurred and transcending ordering mechanisms and effects. A polarised conceptual framework additionally

has the tendency to force the analysts to conclude in terms of either stability and status quo or change and renegotiated practices, regardless of nuanced and mixed descriptions available at hand.

Existing conceptual frameworks in education (and other social sciences) have the tendency to privilege some scale(s) and criteria in relation to all others without making their own criteria and scales for evaluating the degree of change explicit. Consequently some scales (often human scales) are seen as favourable (although implicit), with weak recognition of alternative topologies of change.

Let me once again illustrate with data from the Norwegian curriculum evaluation program. If we look into the qualitative and quantitative data that were collected in Norwegian classrooms after the new Curriculum Reform, hybrid forms of educational practices that cut across established dualistic conceptual descriptions for life in classrooms are prevalent. If we use teachers' style as an example, our teachers combine and merge aspects of teacher-centred methods with student-centred methods in a rich, nuanced and vigorous way. Likewise cross-disciplinary work and project work merge elements of students-centred ordering mechanisms with subject-centred ordering mechanisms. Instructional formats in language arts – like process writing – can serve as a third illustration for how instructional practices of today cut across offered conceptual frameworks. Dualistic concepts such as teacher centred vs. student centred or traditional vs. progressive do not offer an empirical, sensitive and synthesising way of describing the observed classroom practices. In most classrooms the teachers combined aspects of teacher-centred organised activities with more student-centred and activity-organised patterns of organisation. For many classrooms (and especially at the higher levels (grades 6 and 9)) the work plan (arbeidsplan) or work schedule seems to be the driving force for organising the school day (Carlgren, Klette, Myrdal, Schnack, & Simola, 2006). Rather than describing the classrooms as teacher vs. student centred, they seem to be activity and work schedule centred. This implies new challenges for the teacher as a classroom supervisor and where the teachers hold a new role as task manager rather than instructor. In their comparison of Swedish classrooms from the 1970s and the 1990s, Lindblad and Sahlström (2002) state that although plenary sessions are less frequent in the classrooms of the 1990s (where seat work at desks dominates), the teacher as a master and conductor of the activities seems to be more central in the classrooms of the 1990s. They state for example,

> What we also find when comparing the materials (1970 classrooms and 1990 classrooms – speaker's comment) is that there are substantially longer sequences of instruction of *how to perform* in the 90's material, often with a high level of detail.

And they continue:

> The introduction of desk work thus seems not only to have introduced a new way of working, but it also affects the organisations of the seemingly plenary teaching.

Available established concepts and analytical framework might contribute to a prolongation of established practices and an inscription of status quo also during periods impregnated with changes.

Concluding Remarks

There is a saying in English: the devil is in the details. In a sense, educational research should play along with the devil and endeavour to go beyond everyday language and critically examine existing analytical concepts and framework in its search for possible new ordering mechanisms. For those of us interested in how educational practices change, expand, destabilise and stabilise through varied spatial and temporal contexts, there are strong arguments for detailed in-depth studies (alongside survey studies and other more comprehensive studies) in education. Carefully designed and clearly focused in-depth studies enable us to see how classroom activities (events, activities and themes) are designed and redesigned across contexts and scales. Depending on preferred level of scales and analytical framework, events, activities and themes accordingly can be interpreted from multiple understandings. The degree of change – or stability – will then subsequently not automatically follow as one privileged order or one privileged practice.

To be able to grasp ongoing changes in educational practices further requires that educational researchers make their own criteria for evaluating the degree of change explicit, and stop privileging one level of change or one topos of change in relation to all others. There is a strong tendency to see human exchange scales as the only scales in our field of research and subsequently weak recognition of different topologies of scales like tools and material products, information transfer, etc. In order to take into account these complexities, I propose to cross over a step by making explicit the time scales of investigations, whatever they are.

Wallerstein (1991) underpinned how concepts and analytical framework (and we could add methodological tools and theoretical perspectives) need critical examination and analyses so they can fulfil their potential as tools for describing social changes, movements and activities. Without examining the common sense of its own analytical understanding, research can preserve the very systems that are to be interpreted and engaged in critical conversations.

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