Chapter 10
Bigger or Better? Research-Based Reflections on the Cultural Deconstruction of Rural Schools in Norway: Metaperspectives

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Patterns of the demographic balance between rural and urban life in Norway have changed fundamentally during the last hundred years. In 1900, 80% of residents lived in a rural setting and 20% in an urban one; in 2015, this proportion was reversed. This pattern of settlement indicates an uneven balance of political power between the country's center (the capital and its region) and its periphery; School history in Norway is therefore largely the history of rural primary schools in sparsely populated areas. Local communities and schools are social units and institutions for developing, delivering, implementing, and maintaining services within the welfare state and can be seen both as instruments for the benefit of the nation-state and simultaneously as a broadly contributing recruitment arena for meaningful community life at the municipal and county level. Closer analysis of the Norwegian situation, however, reveals a hegemonic relationship and conflicting conceptions of this relationship, with long historical roots representing a tension between "ordinary people" and the "power elite" (cf., Karlsen, 1991, 1993; Rokkan, 1987; Slagstad, 1998; Telhaug & Mediås, 2003) that have left the "ordinary people" at a disadvantage, particularly in rural parts of the country. Thus, Norway has a historically grounded rural-urban division. Small places and communities seems to be excluded from the hegemonic concept of space.

It is therefore necessary to sketch some contextual main lines in legitimizing the discussion of research themes (and indirectly the design and theory). The heading of the present paper—"Bigger or Better?"—implies questions on school quality, and quality for whom? Important conceptual dimensions that would clarify these qualities cross each other in this field of research: rural-urban, local-global, place-space, security and grounding-freedom. Researchers often formulate these dimensions normatively—what rural places and schools ought to be—towards the right rather than the left point of the dimensions. At the same time, they indicate the

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cultural deconstruction of rural schools. However, rural variation is too broad for this normative way of thinking to be constructive. Researchers must treat these concepts and dimensions of research analytically and empirically, inviting comparisons by specifying the concrete contexts of how they are applied when judging the quality, conditions, and processes of living in a rural setting and learning in rural schools.

On Research Themes

To judge the relevance of research themes, it is necessary to sketch and discuss what might be indicators of the deconstruction of rural schools and the development of the rural-urban transition or transformation such as rurality and scale; changing patterns of migration; remoteness and isolation; cultural deconstruction of places and communities; norms of quality and deficiency; closing rural schools; periods and patterns of decision making; production models of schooling; international educational governance.

Scale and Localization: A Reduction of Educational Space and Cultural Deconstruction of Rural Schools?

School size and localization are important for people living in a rural area. Rurality is strongly associated with a small scale. Such a scale—an historically important characteristic of everyday life in Norway—is clearly weakened by the ongoing processes of centralization. Rurality in Norway includes smaller communities, villages, and sparsely populated areas along the entire Norwegian coast, the islands, the Western fjords, and valleys, as well as the valleys of the eastern parts of the country and the mountain communities. This is contrary to the misleading proposition that in Norway a key locus of peripherality is spatialized as the "north" (cf., Corbett, 2015, p. 10).

Rurality is also associated with *remoteness* and *isolation*—as seen from the center. Remoteness, however, is bidirectional. Rural places have the potential to be more integrated into challenging nature; cities would be more integrated into mobile and socially crowded culture, living more on the run. Rural living is a choice of social grounding in a place, becoming place-competent, as a primary quality of rural life compared with urban freedom to move from place to place within the urban and global space. Adding to this, one can observe a change in the concepts of house and home. Homes and houses are usually understood as places to live, something material and cultural that one grows into—something that is contextualized by close nature, culture, and observable production even for children

growing up. Houses are part of a cultural life, world, and history (Bryson, 2012). What about small rural schools?

A new economic concept seems to be gaining hegemonic momentum: Houses are primarily conceived as a good or bad investment, meaning that the value of homes and houses is detached from their location and its physical and cultural grounding, rendering them more abstract by being defined by their potential economic value in a market. The focus on school costs indicates a similar thinking about rural schools: They are not primarily cultural and educational institutions, ensuring identity building, qualifications and recruitment to the region and local community, they are rather items of expenditure in a budget. Paradoxically, small rural schools are being closed during a historical period in which Norway is one of the richest countries of the world (Solstad, 2009). The closure of rural schools did not happen when the country was poor. In this process of dissociating people and persons from communities and places, homes are reduced to potential objects for sale, objects associated with an abstract economic freedom—an investment—that can be exchanged by migration for other "freedoms" elsewhere, most often in the cities. Everyday sociocultural thinking about homes and places is becoming economically directed. Childhood, children's bedroom talk, family traditions, and associations connected with one's own identity seem to be disappearing in the sales process, changing to something that the person can choose themselves after calculating their individual and personal benefit. The concepts of local rural place and community are sought reduced to urban and global space. Rural schools and their local communities are being culturally deconstructed and devalued as well.

Places and communities also have concrete contextual grounding and borders related to nature, culture, production, and history, and as communities they have inscribed different relations of discipline and power, with profound consequences for social learning (Foucault, 1984a). Their patterns of discipline and power would characterize their schools and other local arenas as well, and must be described, analyzed, and compared in each case for villages and sparsely populated rural areas, while respecting the variation of rural settings as arenas of learning. Present reformers of the Norwegian school system seem to be ignoring this aspect. The school owner, it seems, will no longer pay for small rural schools as institutions for building local and regional identity. Small rural schools can be sold to private interests.

This is an aspect of what Giddens (1991) more generally and theoretically refers to as disembedding or deconstructing social life in the late modern society. A paradox might be that rural people who learned to leave (cf., Corbett, 2007) and now have an urban freedom to move between places might experience the stronger need to belong to a place—perhaps a romantic dream of the place where they grew up to relieve their present estrangement? In a national study, Sørli, Aure, and Langset (2012, pp. 17–23) analyzed the motives of returning migrants in rural regions of Norway and found that work, residence, place qualities, identity, and family were central factors. Small-scale fishery and farming is protected by legislation. Fishing resources belong to the Norwegian people and cannot be sold to private interests,

even by the government. Only those who take part as fishers can own fishing boats. The sale of farms is restricted by the Allodial Rights Act.[1]

This reflects a kind of local life-world defense of rural resources that became grounded in national legislation after pressure from defenders of tradition. Because of the scattered nature of Norwegian settlements, children traditionally have a right to education in their neighborhood environment. During the first 120 years of Norwegian school history, (1740–1860) the school came to the pupils. Teachers travelled to children's homes. During the next 100 years, schools were built and democratically located as permanent schools with as equal distances from homes as possible for the pupils living in the different parts of a municipality. Neighboring environments or local communities are not defined in objective terms of time and distance. However, sparsely populated areas (SPA) are defined as local communities in which less than 30% of the population live in places/villages with more than 200 inhabitants. (In 2000, 142 municipalities of 435 in total were SPA municipalities). In the years after 1960, the hegemonic belief that large schools have better educational qualities produced a wave of centralization across the country. More than 2000 schools were closed and challenged the tradition of schools in the local environment of the pupils. Research did not support this belief of "bigger is better." The education act of 1969 consequently recommended small lower secondary schools and that each municipality have the right to decide its own school structure, while the nation state paid for the main costs, teacher wages.

The national curriculum plan included many locally decided qualities underscoring the importance of grounding school content in the local environment: the school supporting the family as an institution of primary education and upbringing, teaching themes/subjects reflecting pupil experience of a local nature, production, and culture; home-place knowledge; outdoor pursuit center; the procedures for school-parent cooperation. These educational qualities are founded on the ''Norwegian Education Acts'' and detailed in the "National curriculum plan" from 1987 (pp. 21, 24) and from 1997 (p. 44) emphasizing *the community active school*, for instance, not only preparing teaching connections to local nature, culture, and production, but also for the school to contribute to solving challenges of the local community, whether urban or rural. The new income system for the municipalities—the block-grant system—introduced in 1986 challenged the place-conscious content pattern and reinforced the standardization of schooling by teaching and learning abstract school subjects and starting a new wave of centralization that is still ongoing. The closure of small rural schools therefore represents a contradictory practice and is changing what rural schools were meant to be.

[1] An allodial right to a property is an old Norwegian legal tradition. Unlike other countries' inheritance rights, the Norwegian allodial right is a right to reclaim, not to inherit. Only properties with at least 25,000 m^2 of cultivated land or at least 500,000 m^2 of productive forest can be allodial properties. The first person to own the property for 20 years establishes allodial rights for him-/herself and his/her descendants. Although others can buy an allodial property, those with allodial rights have 6 months after the owner's registration to reclaim the property. Every owner of cultivated land and some areas of pasture must farm the land. The general rule is that the owner must reside on the property.

Learning by Imparting and Acquisition or Learning by Participation?

The contours of two competing perspectives of schooling are becoming visible—learning by *participation* and learning by *imparting and acquisition*. The perspective of participation is associated with the community-active school, a sustainable, place-based, and place-conscious education most frequently found in rural communities: It says that place matters—not least in educational processes (cf., Berg-Olsen, 2008; Corbett, 2013, 2015; Edvardsen, 1981, 1983, 2004; Gruenewald & Smith, 2008; Karlberg-Granlund, 2009; Kvalsund, 1994; Kvalsund & Hargreaves, 2009, 2014; Rogoff, 2003; Rogoff, Paradise, Arauz, Correa-Chávez, & Angelillo, 2003; Schafft & Jackson, 2010; Sigsworth & Solstad, 2005; Solstad, 1978, 1994, 2009; Solstad & Andræ Thelin, 2006; Solstad, Leka, & Sigsworth, 2012).

In contrast, traditional *desk and classroom teaching* imparting second-hand knowledge in selected abstract school subjects is more characteristic of urban schools. The later primary school reforms represent a considerable pressure for changing rural schools in line with the imparting and acquisition perspective (Berg-Olsen, 2008). This represents a dissociation of school from local nature, culture, and production and the community-active school. A second main intention of the primary school reform of 2006[2] was to place the acquisition of school-subject knowledge at the forefront of teaching and learning, focusing on formally tested results and consequently on the measurement of pupil achievement in fairly abstract school subjects rather than on education for the broader moral values formulated in the general section of the national curriculum plan.[3] This seems to be an additional indicator of rural schools changing in the direction of what one might describe as "placeless service consumption." By its abstract quality school content is supposed to qualify rural youth as work force in a global, competitive economy.

Quality Norms of Small Rural Schools

A related theme exemplifying normativity has been the increasing hegemonic perspective of rural schools as *deficient schools*—deficient versions of larger urban schools in formal as well as in informal learning. Seen from this perspective, small rural schools are something to leave behind. The counter-perspective is that keeping rural schools and the long-lasting alteration of their content to better fit urban values in classroom teaching and learning, represents a direct challenge to the role schools are meant to play in local place-based identity building and local community survival. However, if these arguments of deficiency are valid, only cities are acceptable locations for schools. The *hegemonic concept of normality* in this sense

[2] The reforms is called *Kunnskapsløftet* (The knowledge lift).

[3] See https://www.udir.no/laring-og-trivsel/lareplanverket/generell-del-av-lareplanen/

has for years been—and still seems to be—urban, most often large and single-graded. This concept of the deviance or deconstruction of rural schools can be observed again and again in many individual cases of the closure of small rural schools, which were based solely on economic arguments referred to in economic reports from consulting firms rather than research. The reports do not even consider qualities and values small rural schools gain through being educationally place-based and place-conscious. Examples also exist of educational researchers advising the closure of rural schools without grounding their recommendation in relevant research (Kvalsund, 2014, 2017; Nordal, 2014; Solstad, 2009, pp. 188–206).

The School Conceived as a Knowledge Enterprise for Production

A concept of schools as knowledge-industrial production units (school as a knowledge enterprise) prevails and is the core presumptions in several analysis reports requested by the governmental Office of Municipalities and Regions and Modernization. Researchers of the Norwegian University of Science and Technology's (NTNU), Department of Economics have analyzed the efficiency potential of lower secondary schools by calculating the relationship between pupil grades in the abstract school subjects Norwegian, English, and Mathematics after 10th grade (dependent variable) and resources spent in the form of the number of teacher-labor years and teaching hours, controlled for parental social background. Municipal revenues, the fragmentation of political parties, and the proportion of socialists in the municipality council are additional independent variables and are said to have negative effects, increasing resource use and lowering performance. The conclusion, however, is that large savings can be achieved without reduced learning outcomes (grades) by continuing the process of closing small rural schools (Borge & Naper, 2005). A similar analysis is completed for 2010–2012 and the primary school sector has an efficiency potential of 24% (Borge, Nyhus, & Pettersen, 2014).

Another report—"Achievement Differences Between Schools and Municipalities: An Analysis of Standardized National Tests 2008"—was published in 2010 (SØF-rapport nr. 01/10) with regression analysis of test scores in abstract school subjects as the dependent variable. Independent variables were aspects of the pupils' social background (parents' education, occupation, and income), school characteristics (category of school, number of pupils in school and classes, gender distribution in the grades, teacher gender and education) and aspects of school localization (county, municipality size, municipal revenue). Theoretically, 100% of the variance and relative explanatory power of each factor could be explained—if all relevant factors were included in the model and could be measured precisely. However, the report's authors state that the study lacks information on pupil intelligence and quality of teaching, behavior, and interaction between the pupils—which are probably among

the more important factors in understanding and explaining differences in pupil subject learning and achievement. This lack of data turns interpretation of relationships between dependent and independent variables into a challenging and difficult process. The researchers report that 10–20% of the variation in test scores is explained by the variables in the model of the regression analysis, meaning that the major part remains unexplained. The statistical significance for many variable relationships reveals only very small effects, ones that are occasionally unreasonable and even in conflict. However, with many variables and a high number of participating units (e.g., a complete age cohort of pupils), relationships that are substantially without importance and interest would be presented as statistically significant and thereby imbued with a false educational importance. This low-quality SØF-report includes many results of this kind. Despite the restricted value of this research, the leader of the national Directorate of Education reported the results to deputy majors and members of the municipal councils at national meetings for small rural municipalities. The false and misleading message is that a small rural school is a risk factor in pupils' subject knowledge learning and thereby indirectly a risk factor for their future development. After the introduction of the block-grant system in 1986, local decision makers (and even a minister of the government) have therefore received and present seemingly research-based empirical evidence for closing small rural schools, evidence that a closer look reveals to be invalid (Solstad & Kvalsund, 2010). The empirical "evidence" was presented by what Solstad (2016, p. 30) describes as false prophets.

This oversimplified and misleading conception of schools and education at the elementary level, based on the logics of material production, stems from economic rather than educational research institutions. Studies like these lie behind the silent centralization in process. It is thought provoking that test results in abstract school subjects are accepted as the main indicator of educational quality, although children in many cases spend 11–12 h per week being bussed at only 6 years of age. That closing of small rural schools reduces children's spare time activities, conditions of physical exercises, and well-being (Solstad & Solstad, 2015)—that the rural community loses the local school as a cultural institution and intergenerational meeting place (Melheim, 2011)—that important local work places are centralized as well and the fact that young families will hardly settle down in places without schools—none of this is part of the regression equations and models of the referenced studies and production models above. Neither do the reports refer to peer-reviewed research whose authors analyze the potential qualities of small rural schools, such as social and educational interaction across age and gender, natural learning of responsibility, extended contact with adults in the local community, use of social context and nature in teaching and learning, as well as closer and more integrated contact with parents and caretakers—these qualities are among the more well-documented ones published in three PhD theses (Berg-Olsen, 2008; Johansen, 2009; Kvalsund, 1994). Changing the concept of schooling to better fit the logic of material production rather than cultural communicative interaction is part of the process of deconstructing the concept of rural schools.

Educational Governance and Achievement Testing

The present and reinforced centralization of schools is part of a larger picture associated with result-oriented economic production models of education and an emerging global educational governance observed internationally. Meyer and Benavot critically discuss the OECD PISA system in their book "PISA, Power and Policy: The Emergence of Global Educational Governance" (2013). The logic of PISA and of a global testing culture (Smith, 2017) is obvious. Norway can serve as an example. Without discussion of the founding historical, cultural, and ideological presumptions on which the Norwegian educational system and the national curriculum plan is built, PISA testing and teaching in selected theoretical school subjects now have priority in curriculum planning and daily practice in rural schools, communities, and municipalities. Teaching is practiced as if these measures were covering the content of the national and local curriculum plans—a quality they do not have. Within this reductionist educational regime, place-based content of rural schooling and teachers as knowledgeable agents are challenged by standardized teaching programs that are commercially developed and based on Randomized Trial Control (RTC) logic. Teachers are treated as a potential educational problem (Smith, 2016), because how the teacher in fact acts in the classrooms cannot be known or controlled under these programs (Kvalsund, 2017). An important aspect of governance and governmentality is making the professionals and ordinary people accept the logic by unnoticeable persuasion rather than arguments and conviction—indirectly deconstructing the meaning and qualities of rural schooling and invading local democratic processes.

Biased globalized and abstract school subject knowledge and curriculum content contribute substantially to the weakening of place-grounded thinking on identity and in many cases seem to be a push factor for out-migration from rural local communities and regions. The transition of rural youth to the urban areas of the country has been going on for years—in too many cases socially draining the local community by exporting the best and brightest recruits to urban areas and cities. To use Corbett's (2007) term on this process of qualification, these young people are in school learning to leave the rural. This is also the direction of migration and settlement.

The Block-Grant System: A Mechanism for Change of Rural Schooling

The pattern of school localization and the procedures for making decisions on school localization have changed dramatically. Until 1986, a municipality could not decide to close a school or change the school's structure unless the people of the catchment area and the county director of education had been heard. Each municipality was granted earmarked money from the Ministry of Education if the

county director approved the local school structure. Municipalities could not save money for other service sectors by closing small rural schools.

1986 can be identified as a historical turning point for schools, a change from an expansive phase in developing the school system of the welfare state to a contractive phase: This was the year policymakers decided on a *block-grant system* for transferring money from the national to the local/municipal level. The block-grant system challenged the tradition of having a relatively decentralized school system across the country, which had been based on the educational qualities associated with place-based schooling and the connection between children's life experiences from the local community and school learning (Solstad, 2009, pp. 31–33). These values were even embedded in the national curriculum plan of 2006 (LK06), in the period in which policymakers had decided on a new direction: focusing on selected school subjects and achievement testing.

However, policymakers precalculated the grant for each municipality's schools by applying *the Agder model* (Hannevig Friestad, 1990; Hannevig Friestad & Johnsen, 1992) identifying theoretical school districts for standard schools. The block-grant system is the mechanism that makes room for strategic calculation in the field of schooling. Analyzing the census districts in the municipalities and counties, policymakers set the precalculated size of a school at 450 pupils (a school size that in Norway is to be found only in urban schools) and a minimum bus travelling time of half an hour, meaning that municipalities with a decentralized school structure were exposed to a heavy centralizing pressure. This was followed by a descaling of school-competent persons in the municipal school administration, not least the chief municipal education officer. The Agder model formed the conceptual core of a computer program used at the ministry level for precalculating theoretical cost-effective school structures in Norwegian municipalities. Within this technical and seemingly neutral perspective, schools and communities are considered and transformed into "industrial-like production units" (Hannevig Friestad & Johnsen, 1992).[4] Hanushek (1981, 1989) tells us that increasing teacher density has no educational effect. Based on these studies Norwegian policymakers claim that amalgamation and centralization have no negative educational consequences. Maintaining the small schools would mean "throwing money at schools," according to Hanushek (1981).

These narrow and limiting models of schooling focusing on test results in abstract school subjects as the only outcome and quality indicator may be judged consistent with New Public Management (NPM) concepts of individual freedom of choice, transforming the role of teachers to that of public service providers responsible for fostering their "customers" (pupils') individual careers as general service consumers. In this perspective, schools are conceived as production units and are expected to be effective independent of place. However, the realities of mountains, fjords, and valleys in rural Norway in most cases limit the available alternatives. Freedom to choose, therefore, is transformed into something very different from voluntary

[4] Bonesrønning and Rattsø (1992), for example, applied the school effectiveness model to upper secondary schools. Bonesrønning and Vaag Iversen (2010) analyzed differences in 2008 test results of national standardised tests as measures of effectiveness.

consumption: People must choose—to stay or leave. This is the true situation, although the authors of the Norwegian Education Act and the National Curriculum Plan insist that children in Norway have a right to go to schools in the near and local environment, independent of parental social background and where they live in the country. Closing small schools threatens important political aims about the whole country as a living landscape with local resources that should be only sustainably exploited. This was announced in St. Meld.[5] 21 (2005–2006), "Heart for the Whole Country." Once again, what was said and written was one thing—what is done seems to be something else.

However, the block-grant system established a new decision pattern—*centralized decentralization* as a first step. The central government in this way exports difficult and conflicting decisions about closing small rural schools and changing the local school structure to the municipal council (a kind of enforced governance by reduced funding of the block grant for the schools in the theoretical school structure, aimed at forcing local stakeholders to accept the changed economic possibilities as inevitable). Further centralization takes place at the municipal level—in other words, decentralized centralization, meaning closing and relocating schools from the sparsely populated places, most often to the municipal center, enhancing local conflicts, and weakening the local community as a collective social unit (Kvalsund, 2009). The block-grant system has made possible the cultural deconstruction of the educational idea of small rural schools and communities and made local actors to accept it as inevitable point of the agenda—an example of the concept of governmentality as introduced by Foucault (1991).

Migration and Changes in Child Settlement

An additional indicator of the process of the cultural deconstruction of rural schools and communities can be found in the new patterns of out-migration. In Norway, the long-lasting change from rural to urban living continues: Since 1995, the country's six largest cities have expanded and increased their population by 32%, compared with only 8% for the rest of the country. Centralization and urbanization seem to form a highway of change—but a highway that is leading in the wrong direction, judged against national goals of settlement in all parts of the country. Explanations of the Norwegian patterns of centralization and out-migration have changed over time: From unsubstantiated fear of irreversible *depopulation* of rural and sparsely populated areas in the years before 1980, the understanding has changed to the more nuanced concept of *thinning out communities*, describing effects of long-lasting population decline on social cooperation and services offered to the community members (Aasbrenn, 1989; Sørli, 2016)—schools included. Since 1990, a main challenge has been the increasingly *selective out-migration* to the cities by girls, who are not returning to their native rural communities to bear their children or raise

[5] St. Meld. means a report to the *Storting* (the Norwegian national assembly).

their own families, as they used to do. This change is characterized as the *increasing centralization of child settlement* (Sørli, 2016), which researchers have explained with a normative urban trend implying better material living conditions and noneconomic factors related to culture, consumption, and quality of life in urban areas—in other words, preferences that might change in the short-run if living costs were to undergo a sudden and marked increase (Wessel & Barstad, 2016). The resultant decline in the number of children forces rural municipalities to consider closing small rural schools. However, the later tendency in Norway is that larger schools are being closed as well.

Judging factors in the present situation, this wave of centralization in Norway is clearly normative and ideological—as demonstrated by the fact that reorganizing schools into larger units lacks solid grounding in research-based knowledge and is happening not only with small rural schools: The Norwegian government has recently initiated a parallel situation in the service fields of the welfare state, such as policing, health services and hospitals, courts, municipalities and counties (as well as in the primary production of small-scale fishery and farming). These fields all seem to be in a process of structural and cultural change towards the creation of larger units and concomitant impoverishing of rural institutions and communities, threatening their significance as sources of cultural identity. Smaller units are forced into larger ones framed with different and crossing borders in each field. Bigger is better.

This cloud of reforms makes the present situation very unclear and chances for democratic involvement extremely difficult for ordinary people as well as for researchers, including in reforms of school localization. Reforms are supposed to be innovations representing qualities of something new. However, qualities are difficult to measure because they are grounded in the unique. Therefore, real innovations can be measured only later. And later, after becoming measurable, the new is no longer an innovation. Looked at from a distance, considering the many indicators of a reinforced process of cultural de- and reconstruction of what rural schools are supposed to be, researchers studying rural schools as single and multiple cases, should focus on individual and collective experiences over time as seen from below and within a life-world perspective.

A Picture of the Present Research on Rural Schools and Their Communities: Themes and Research Questions

A central question is what research themes were preferred during the transition from the expansive to the contractive phase of the Norwegian welfare state. An overview is given in Table 10.1. During the entire period after World War II, the Norwegian school system has been characterized by centralization through specific education acts and national curriculum plans, although with an opening for the development of local curriculum content and local regional decisions on school

Table 10.1 Research on rural schools in Norway, 1960–2016: Some historical main lines

<table>
<tr><td colspan="2" rowspan="3"></td><td colspan="4">Phase of welfare state development in education and schooling—a turning point</td></tr>
<tr><td colspan="2">1960–1990
Expansive phase</td><td colspan="2">1990–2016
Contractive phase</td></tr>
<tr><td>Earlier</td><td>Later</td><td>Earlier</td><td>Later</td></tr>
<tr><td colspan="2"></td><td colspan="4">School system tradition—strongly regulated at national level</td></tr>
<tr><td colspan="2"></td><td colspan="4">Acceleration of closing small rural schools after the late 1980ies</td></tr>
<tr><td rowspan="3">Re-search themes</td><td rowspan="2">Factors within the school and classrooms</td><td rowspan="2">Inward oriented and separate didactic educational research</td><td rowspan="3">- Smaller integrated research projects
- Internal as well as contextual factors studied
- Case study orientation

Signal concepts of the time:
- Pupil and parent rights
- Devolution of power
- Local democracy and empowerment
- Community conscious schooling
- Cultural identity of pupils, schools and local communities-variation
- Local curriculum development tuned to seasonal changes in production

- Projects failed in leading to initiative of policy change at national level</td><td></td><td>1. Program research, Norwegian Research Council. Focusing on
- Teaching of school subjects
- Achievement testing
- School management and accountability</td></tr>
<tr><td rowspan="2">Research projects on rural schools and their communities:
1. School-localization: economic, sociological and educational aspects, 1989–1997 (Volda University College). Data from 19 smaller and larger schools in four counties and municipalities.
2. School and childhood in sparsely populated districts, 2004–2009 (Nesna University College). Data from 142 SPA[a] municipalities with 527 schools.</td><td>Conflicting signals:

- St.Meld[b]. 21, 2005–2006: ‘A heart for the whole country’
↕
- Reform 2007, ‘The knowledge lift’ (Main-focus on school subject learning)</td></tr>
<tr><td>Factors in the school context, communities and regions</td><td>Outward oriented and separate sociological research</td><td></td><td>2. Research project: Learning Regions, Sogndal University College (Attempts at explaining high PISA achievement scores among pupils in Sogn og Fjordane county). Data from 4 regions.</td></tr>
</table>

Source: Design by author

[a]SPA means Sparsely Populated Areas, in other words, communities in which less than 30% of the population live in places/villages having more than 200 inhabitants

[b]St.Meld. means report to the Storting (the Norwegian national assembly)

structure made at a municipal level. Kvalsund (2004b, 2009) and Kvalsund and Lauglo (1994) observe that prior to the mid-1970s, research on schools and their local community was separated into two branches: On the one hand, sociological and other social scientist researchers were outward oriented and excluded themselves from what was going on in schools and classrooms; instead, they focused on communities and society ignoring socialization, teaching, and learning. On the other hand, educational researchers were mainly inward oriented and locked themselves up in classrooms, with a narrow didactic perspective on educational research. This division seems to have lasted for several years.

However, the later part of the expansive phase of the welfare state up to the 1990s features a period of research clearly tuned to decentralization in research and development work, with researchers studying the context of schooling as well as internal school aspects. This is the situation before the turning point of centralized decentralization and the block-grant model of school cost in the municipalities. Local democracy, devolution of power, developing the cultural identity of pupils, schools, and communities, as well as place-conscious schooling are signal concepts of the time. Smaller research projects dominated. Examples of variables studied are school size and the degree of centralization related to pupil well-being, ability to attract qualified staff, discipline during classes, and social contact between pupils. Researchers were motivated by the desire to discover the factors that made for a better, higher quality school. Case studies of schools and communities involved in ongoing school centralization processes are part of the research picture—comparative research on schools with state-mandated and local school content analyzing pupil learning as well as recruitment and maintenance of the local community. Researchers analyzed local curriculum projects reflecting season variations, for example in local small-scale fisheries, as well as projects reflecting new ways of organizing schools and kindergartens into local cultural centers for intergenerational interaction and learning for children.

A subcategory of this research is formed by studies of social history exploring the schooling and consequences of rather brutal and disqualifying *Norwegianization* attempts to weaponize schooling to destroy the language, culture, and childhood of national minorities such as Sami, Coast Sami, and Romany people. Local democracy, devolution of power, and developing the cultural identity of pupils played no role here (Brandal, Døving, & Plesner, 2017; Kvalsund, 2009, pp. 5–7).

The next step and effect is that of decentralized centralization, meaning that local politicians distribute lack of money between small rural communities at the local municipality level—a consequence of which is the closure of small rural schools (Kvalsund, 2009)—a process that has accelerated for many years: Since 1986, 1391 small schools have been closed without any discussion by the *Storting* and the Government (Ertesvåg & Hegvik, 2017). This is about half of the number of primary schools still in existence. Solstad and Solstad (2015) have also documented that the number of primary schools in the 140 most sparsely populated municipalities in Norway have fallen from 500 in 1990 to just 300 today.

For years, researchers have wondered what knowledge grounded in relevant research explains why small rural school should be closed in conflict with children's

legal right to acquire an education at schools located in their local environment. Is this a result of research-based knowledge about the low quality of learning in small rural schools? What consequences do local communities experience when their voice is not heard by the central government and politicians at the national level in a question as central as whether their children have a school to attend in their local community, as expressed in the Norwegian Education Act? Research on what happens with the small rural schools and their communities has been funded to a very little extent. My best option is therefore to present three research projects that have been funded since 1989 to research localization and learning qualities in rural schools.

In 1980, during the transition period to the contractive period starting in the late 1980s, a national research project—"School Localization: Economic, Sociological and Educational Aspects"—started at Volda University College, financed by the Associations of Norwegian Municipalities and the Norwegian Research Council (NRC). The research project was not associated with any specific central reform and was funded by the open NRC Program for Educational Research. It was an open research study on the educational, sociological and economic aspects of comparing formal and informal educational processes in smaller and larger rural school—school localization. Its researchers asked whether place matters. Working with complementary theory, they made a comparative analysis of multiple cases of smaller and bigger rural schools and their communities. They discovered that vacant capacity rather than need for investment in new buildings, transportation costs, and smallness, per se, explained cases of small rural schools' high costs. The study included analysis of school closure and both immediate and long term out-migration. The researchers analyzed teacher settlement by studying a combination of human resources and resources of place. Other themes of comparative research were formal and informal parental contact and cooperation with the school; the informal social learning and social networks of the pupil in the three learning arenas lessons, recesses, and spare time; and transitions between the primary and lower secondary level (Kvalsund, 2000, 2004a, 2004b; Kvalsund, Løvik, & Myklebust, 1992; Myklebust, Kvalsund, Løvik, & Hagen, 1992). The research results are clearly in favor of small rural schools and communities (Kvalsund, 2009, pp. 8–9)—yet had no impact at the national level. The closure of small rural schools continued and later accelerated considerably. The main reason seems to be the new block grant system of financing schools at the municipal level, just as prior local warnings had predicted (Solstad, 2009, pp. 31–35).

The goals of a second research project referred to in Table 10.1, "Schooling and Growing Up in Sparsely Populated Districts," by Professor Karl Jan Solstad (2009), were funded by the NRC. This research project was independent of regulations from a national reform and analyzed schooling close to where children live as a democratic welfare good in 142 municipalities with sparsely populated districts and data on 527 schools. How has decentralization affected school equitability in the process of decentralized centralization? How can schools located 30 km away serve as a resource for the local community? How is social learning affected when the school and its teachers are using place-based learning resources located very

remotely? What are characteristics of threatened and closed schools? Who are the stakeholders behind the process and what characterizes local resistance and mobilization?

Solstad (2009) compared small schools and kindergartens as learning arenas as well as the development of social competence and peer socialization in sparsely populated districts with small schools. The study's variables were the context of childhood, the type of settlement, the industrial and production base, the school location and school transport, the level of teacher qualification, stability and turn over, teaching resources, and local content, availability, and systematics. This national study includes 142 municipalities with 433 of 527 (82%) schools responding. The average number of people in the municipalities is 2750. One research study of this project is a PhD thesis titled "Care or Strategy? Rationality and Dilemmas in Multi-Graded schools," by Anita Berg-Olsen (2008). Central research questions of this doctoral thesis are "What characterizes variations in education and learning activities in multi-graded schools? What are the concepts of teaching and learning behind educational measures and action in multi-graded schools? What learning contexts are developed by the way educational practice is understood and realized in multigraded schools?" (Berg-Olsen, 2008, p. 19) The project's research results, coming 10 years after the school localization project, support the study of aspects of school localization—in favor of the small rural schools. The project's details are documented in Solstad (2009).

This comparative educational research has been peer-reviewed and published nationally as well internationally in well-respected research journals. If one searches online for the researchers of these two projects, a pattern emerges: The central government does not refer to the research,[6] but a huge number of references are made by parents and local politicians mobilizing resistance and counter-forces against the closure of rural schools. One can even find related local comments to a governmental hearing on school legislation. It is therefore evident that the research-based knowledge from the two projects fulfills a democratic function in giving voice to life-world actors and interests in the regions and local communities.

Actors at the governmental level have turned down researchers' applications for funding this project as a monitoring, longitudinal data-base for what is happening to schools in the sparsely populated areas of Norway. The process of closing small and larger rural schools continues. Research on important dimensions—such as long-term consequences for children, parents, and the local community—is neglected. Focusing on the selected three projects therefore gives one a fairly comprehensive picture of research on rural schools over the last 30 years. The NRC-project researchers studying schools under the 2006 knowledge reform had data on small as well as larger schools, urban as well as rural. However, no research project produced a comparative analysis of small and large rural schools (Kvalsund, 2009).

[6] Melheim (2015) points to the fact that without understandable reasons the research project "Learning Regions" does not refer to research (not even a doctoral thesis) published either by the "School Localization" project at Volda University College nor the research project "Schooling and Growing Up in Sparsely Populated Districts," at Nesna University College and Norland Research.

However, actors at the central level granted a research project funding in accordance with the logic of "Reform 2007: 'The Knowledge Lift,'" with its main focus on school subject learning and achievement testing: The research was titled "Sogn og Fjordane county (SF)—A paradox?" and was related to the question of why rural SF has since 2006 been receiving the best results on national tests in reading, mathematics, and Norwegian language, at same level as schools in the capital city of Oslo. Researchers compare achievement results on standardized tests in selected abstract school subjects at schools in SF with the test results of schools in three low-performing counties with similar population structures and socioeconomic prerequisites, such as parental education, occupational background, and employment. The research project "Learning Regions" is funded by the NRC Program for Research and Innovation in the Education Sector, FINNUT and was directed by Professor Göran Söderlund, Sogndal University College. The research study was organized in 12 research groups. Each group has reported their results in the book "School Quality is Created Locally" (Langfeldt, 2015). The researchers' method is to treat the county as a general independent variable and results on the subject achievement tests as a dependent variable. The 12 different research groups then specify the general independent variable in several factors as potential explanatory factors of differences in achievement tests (presented on the home pages of NRC, my translation): (1) The regional historical tradition of school support; (2) Historical teacher authority; (3) A cultural two-language advantage (*Bokmål* related to Danish and *Ny-norsk* based on Norwegian dialects by Ivar Aasen); (4) Practicing management by objectives at the municipal level; (5) School as an agent of change—parent roles; (6) A learning educational system at the regional level; (7) The external culture of school, social integration, or conflict at the local community level; (8) Teacher competence level; (9) Self-efficacy beliefs and gender; (10) Teacher-pupil communication pattern; (11) Educational thinking, practice, and management; and (12) The importance of the learning environment. Of these 12 factors, two (3, 10) contribute to the correlation between the characteristics of schools and community in SF as a county and its students' high scores on achievement tests; two factors (9, 12) make partial and therefore minor contributions to the correlation.

The researchers of this project did not undertake a comparative analysis of potential effects of differences in characteristics of smaller and larger rural schools, such as school size, even if the data material would have invited such an analysis. Experienced teachers and researchers in SF heavily criticized this deficit (Fagerheim, 2015), a criticism answered by the research project by Söderlund, Vangsnes, and Tønnesen (2015) and discussed by Melheim (2015). Söderlund et al. (2015) state that researchers are uninterested in small schools as an explanation of good results on achievement tests because they comprise only a minor part (2.8%) of the pupils in SF county: To explain that small rural schools have the best results on achievement tests because they are small would be to generalize from subjective experiences. Rather, they contend, it is an effect of "the tyranny of small numbers," meaning that a small number of very high or very low scores might change the average score significantly. The authors refer to the Wainer and Zwerling (2006) article "Evidence that Smaller Schools Do Not Improve Student Achievement," whose authors found

no correlation between small size and strong test results. However, Melheim (2015) points out that the Learning Region project has a misleading definition of small schools, because only schools with less than 30 pupils are categorized as small, although the Norwegian criterion is 90 pupils. It is also documented that Wainer and Zwerling used schools with 360 pupils as examples of what is meant by an American small school, making their arguments irrelevant for the Norwegian context. The teachers' and researchers' criticism that a comparative study of school size is still missing therefore prevails.

The most obvious characteristic of the research situation is that the massive closure of small rural schools is still ongoing—without updated research-based knowledge about consequences of school size at any level. The consequences for the local communities are described as county politics, not as educational and social science research with local educational relevance. The presented picture of research on rural schools indicates that researchers can only obtain funding by focusing their research on explaining characteristics of achievement results in selected school subjects. In this way, a lack of research contributes to the deconstruction of the concept of rural schools and communities.

Two social scientists have suggested concepts that can be used to give an overview—Habermas (1983, 1985, 1989) and Foucault (1984a, 1984b, 1991). Habermas suggests two concepts: *the system* and *the life world perspectives.*[7] The system perspective invites us to analyze the practice of the central government, the state bureaucracy, and the capitalist economic interests, to understand the school as a production and knowledge enterprise for qualifying young people as the nation's work force in the international competitive economy.

The system perspective is external to the local community, its actors directing it top-down with an interest in implementing what is decided at the central level as reform measures. In many cases, this top-down implementation produces resistance and conflict (Solstad, 2009).[8] The funding of research on knowledge learning in abstract, decontextualized, or placeless globalized school subjects, monitored and controlled by systematic achievement testing, demonstrates that the system perspective frames the practice of Norwegian research and school development described in this article.

So far, indicators illustrate how rural schools and communities are in a process of being culturally deconstructed, showing that the system world perspective is

[7] Habermas's concepts are *system* and *life world* in English translation. The concept of the life world points to the experienced actor meaning of every-day life. However, the system of arrangements has interacting agents as well—a system world. In the paragraphs to follow, I will therefore use *system* and *system world* as synonymous expressions.

[8] The author of the present article and a critical friend of the research project has suggested the establishment of a national database monitoring the development in schools and communities of sparsely populated areas in Norway. This could be done by continuing the data collection of the research project "Schooling and Growing Up in Sparsely Populated Districts" at intervals of 3–5 years as a cooperative project between Volda University College and Nesna University College. Possibilities for funding the operation, maintenance, and further development of the database were also explored at the governmental level without producing any conclusive results.

hegemonic, as demonstrated by the series of school reforms from the 1990s up to 2007. Researchers have paid little attention to the interests of actors in the local life world. Foucault (1991) has introduced the corresponding concept of *governmentality*, referring to the way in which the state exercises control over the bodies of the population (here the local school actors), trying to persuade them, rather than convincing them by argument to accept the control system by which they also indirectly learn to govern themselves and their fellow countrymen—for example through school management (not leadership), accountability, and achievement testing, or the closure of small rural schools. The process of centralized decentralization—grounded in block-grant funding of schools at the community level as described earlier in this text—is an example of governmentality: learnt control of themselves by accepting to close "deficit" small rural schools in reference solely to economic reasons, as a normal and accepted political procedure. The narrow block grant or money decides.

Moreover, the best and brightest pupils are not only learning to leave the local community for urban arenas of life course adaptations, but also to accept this as the normal path. This contributes to the development of thinning out communities within the meaning framework of Norway's large and silent school reform—the closure small rural schools without the issue appearing on either a local, regional or a national research agenda. The community consequences of closing rural schools are neglected both at the formulation and realization level, as seen from the system perspective.

In Fig. 10.1, the second Habermas concept, the life world, is complementary to the system world concept and is directed from the bottom up. The system's stakeholders are the more powerful agents and will in most cases invade the life world. The school as an institution of learning by participation in local and regional nature, culture, and production is challenged, as is residents' ability to live meaningful local rural lives with an intrinsic value. The legitimation of learning in school is also to ensure recruitment to the local community by practicing place-based and place-conscious education. Parents and teachers in rural schools and communities are faced with the challenge of communicating the qualities of rural schooling as equitable. The quality of schooling seen from the local perspective is clearly not given priority as a dependent variable in research projects such as the "Learning regions" project. County effects on rather narrow achievement test results in abstract school subjects seems to be something that cannot be appreciated highly enough by central government and the leaders of suggesting research projects in NRC.

To settle conflicts on the differences of meaning between system and life world perspectives, Habermas has utilized a universalistic theory of discourse to develop the democratic procedure of negotiating consensus, applying his discourse ethics based on what he describes as "the better argument at the formulation level," referring to the political intentions of the reforms. This is the first position of the second dimension of Fig. 10.1, the *formulation level*, in which educational policy, reforms, research and their value base are described, legitimized and decided. At the other end of this dimension lie concrete operationalization and attempts at realization

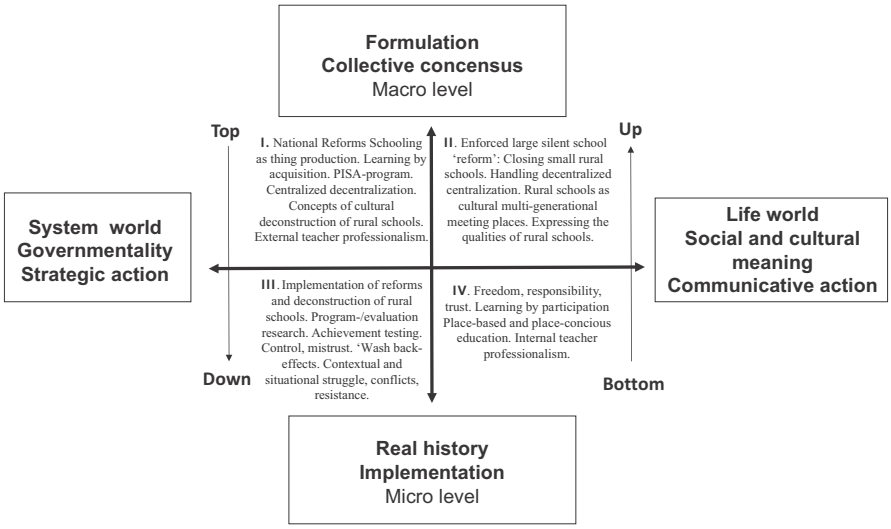

Fig. 10.1 Researching small rural schools in Norway: A meaning-table of research themes. Source: Designed by author

at the local level seen from system perspective. It might also refer to a competing or conflicting conception of schooling established as a pattern of learning by local teachers, parents, and pupils.

However, a profound problem has emerged in this analysis of the Norwegian practice of closing small rural schools: What can be done when the better argument is based on values pointing in opposite directions and that are not accepted at the local level? Foucault points to the phenomenon of governmentality and the *real every-day situations* where actual power relations are situated in concrete contexts: Communication presumes power. Conflicts can be resolved only by pursuing practical wisdom, common sense to the best of one's judgement in these concrete situations. Foucault considers handling concrete resistance, conflict, and struggle (compared with the Habermas's discourse-ethical negotiation of consensus) the better way of establishing freedom and democratic decisions. This is relevant for an increasingly marginalized rural population resisting the situation of the cultural deconstruction of rural communities and schools.

Researching school learning from a local life-world perspective focusing on identity development and comparing categories of local communities would be an important counter-position for research on rural schools. Some relevant subthemes of research would be studying teacher professionalism from within schools—a teacher life world perspective—compared with the externally directed teacher professionalism associated with the dominating national reforms. Multi-grade teaching compared with the socially restricted learning of single-grade teaching could be studied as a preventative measure against the "peer-society" and ageism (Hagestad & Uhlenberg, 2005), pointing to the risk that the profound age segregation

of schooling of today disqualifies pupils from communicating with older and younger cohorts in the future.

Judging the Norwegian research situation against this background (cf., Fig. 10.1), the need arises for a research process grounded in a rural life-world perspective as seen from below, starting with a power analysis of school political documents at the national level, identifying potentially conflicting points with the local and regional interests (e.g., Engebretsen & Heggen, 2012). The main theme of research should be the cultural deconstruction of rural communities and schools.

On Research Design and Methods

A research design has several main functions. The first is to describe the packages of research activities that comprise the research study within an overall strategy that includes describing details about the methods of data collection and data analysis. The second is to justify the choice of research strategy grounded in the project's purpose, research theme, and research questions. The analysis of the research situation on rural schools and communities above is an example of such a justification. A third function is to explain the logical sequence of the phases of the research process and how it is connected to the philosophical presumptions of the research study, which I earlier referred to as theory of science and reflections about the actor-structure balance. The theory of science is based on presumptions, urging the researcher to remember that we cannot know for sure, keeping the researcher doubt about scientific knowledge alive.

Research design has several aspects: (1) use of theory; (2) time frame, whether the study is cross-sectional or longitudinal, and the time perspective prospective or retrospective; (3) case- /variable-number relationship—an intensive or in-depth study (small case number/high variable-number) or extensive or broad study (small variable number/large case number); (4) a controlled (experimental; comparative studies) or natural (case studies, historical studies) research context; (5) quantitative (numbers) or qualitative (words and images) data. Another important aspect is the single, idiosyncratic, worthwhile-in-itself case on the one side and the many, general, and instrumental cases on the other. This difference is what Stake (2005) meant when in his analysis of case studies he described some as intrinsic others as instrumental, extracting knowledge from the cases to compare, understand and explain a common aspect. Again, the three research projects will illustrate choices about design aspects of Norwegian research on small rural schools.

Under pressure at the national level to evaluate formal learning in central school subjects, the researchers of the School Localization project decided to examine the informal learning processes to complement the knowledge field on learning in multi-graded schools.[9] The idea was that informal learning processes might be even

[9] The leader of the project at the central level came to Volda and very much wanted us to develop knowledge tests and compare test results for pupils at smaller and larger rural schools. The project

more important than the formal learning processes, either by compensating for or reinforcing what happened in periods of formal learning at school. As this implied researching children's play and cultural activities, it called for a design that could ensure room for new voices—not least the voices of children. Tiller (1989) discussed the meaning of the concept of children and pointed to a bias in child research. The tendency in Norwegian social science research on children's life situation up to the late 1980s had been give voice to adults, those working with children, rather than children themselves and what they had to say about being children, for example in schools. The children's voices are central in trying to analyze the rural school situation by tracing meaning patterns from below and from a life world perspective.

The educational aspect of the research project meant that we had to chart the pattern of social relations between pupils and know about their relational pattern in three different arenas—school classes, the recesses between classes, and the spare-time arena after the end of the school day. This gave us an overview of the whole day. Researchers have shown that a child will be able to give reliable and valid answers to questions about who they usually worked and played with. Asking about specific points of time has not proven to be a reliable method (Kvalsund, 1994). We also needed a reliable picture of the inner structure of relationships among children, reflecting such processes as exclusion, inclusion, and isolation related to the age and gender of the pupils. We also needed to know the cultural meaning of these structural patterns to understand the informal learning of the children's life world. The idea was that informal learning processes might be even more important than the formal learning processes, either by compensating for or reinforcing what happened in periods of formal learning at school.

The project members chose to collect complete network data from all children except the 6-year-olds and then to conduct intensive research interviews of the historians among the pupils, the sixth graders who knew the traditions and changes over time. In this way, we could base our analysis on quantitative as well as qualitative data, including data from field observations. The details of the analysis included reconstructing categories and developing typologies to catch the qualities of inner life and informal learning.

Combining the two dimensions, points in space (one versus several) with points in time (one versus several), we create a meaning table or a typology (Fig. 10.2) with several fields of design and methods. Doing a comparative analysis, the School Localization project studied informal learning in multiple cases of schools and local communities (Design Category II: multiple cases, variations, cross-sectional, extensive, synchronous; quantitative survey and qualitative interviews).

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members insisted on conducting a research review of formal knowledge learning and preferred to put research efforts into studying informal learning based on a broader aim of moral education. A couple of years later, when Kvalsund (1994a) defended his PhD on informal learning, the same leader thanked us for not having listened to him, because we had come up with new knowledge on multi-graded teaching and learning through comparative research.

		Points in time	
		one	**several**
Points in space – the cultural variation of space and places	**one**	I. Single unique cases and places. Mixed methodology: Intensive observational studies. Qualitative intensive studies Quantitative network analysis	III. Longitudinal, single case studies, case histories. Comparative, dia-chronous analysis. Individual prospective and retrospective studies of transition and life course changes
	several	II. Multiple cases variations Cross-sectional, extensive synchronous; Quantitative survey and qualitative interviews. Sampling logic; Logic of replication.	IV. Longitudinal. Multiple cases, logic of replication vs sample logic. Repeated cross-sectional studies. Transitions and life courses. Case histories. Time series

Fig. 10.2 Dimensions of design and methods. Adapted from Kvalsund and Hargreaves, 2009, *International Review of Educational Research, 48*(2), p. 145. Adapted with permission)

We selected four municipalities in four different counties: the fjord municipality, the valley municipality, and the northern and western coastal municipalities to avoid the effects of local educational fashion trends. Economic reasons were decisive—these four municipalities also contained the whole range of different school sizes and community locations. We also wanted to compare the relational patterns before and after the transition to lower secondary school. The School Localization project's design for researching informal learning was a longitudinal multiple case study of 19 schools, [six single-graded and 13 multi-graded schools (11 bipartite, two tripartite)] although the time of transitions to lower secondary school was only 1–2 years later.

We chose our case studies out of an interest in understanding schools and local communities as comprehensive social units and contexts for informal learning.

Single case studies concentrating on rich descriptions of distinctive qualities of single cases—what Stake (2005) characterizes as intrinsic case studies, worthwhile in themselves—would not be sufficient. Our interest in comparing smaller and larger schools led us to finally research several points in space, with a multiple or instrumental case study meaning that we would also be focusing on some selected qualities, here informal learning.

We chose to study embedded cases in each school, in groups of interacting pupils in lessons, recesses, and spare time. We identified a total of 1321 groups in single-graded schools, distributed across the three arenas as follows: 487, 311 and 523. In multi-grade schools, the corresponding number of groups were 459 in total, distributed across lessons, (87), recesses (221), and spare time (151). We identified these groups with network data in the program UCINET and manually categorized them according to a typology divided up by age and gender (*integrated groups*: both genders, several age levels; *segregated groups*: one age level, one gender; *age-segregated, gender-integrated groups*; and *gender-segregated, age-integrated groups*). We used this typology to describe a profile of social learning for each arena complemented by interview data from 120 interviews with 5th and 6th graders and 80 interviews with the same persons 1 year later.

Our interest lay in trying to explain and understand similarities and differences in informal learning pointed to a specific logic on which the design was based. We followed a replication logic for multiple case studies suggested by Yin (2009): We made series of replications, here of social integration/segregation in multi-graded and single-graded schools, then compared the identified patterns of social interaction among pupils in the three arenas (classes, recesses, and spare time) in one multi-graded school with the patterns of social interaction we obtained by analyzing data for the next school of the same category. This is an attempt at refuting the results from the first school following the research logic of Popper (1989). Finding the same results in the second school is considered a *literal replication* that strengthens the results. From the replications in 11 bipartite and two tripartite multi-grade schools, we established two patterns as nonrefuted. For reasons of comparison, we completed a series of literal replications for the six single-graded schools identifying the same relational main pattern. Comparing the multi-grade and the single-grade results reveals a common difference that can be explained by formulating reasons expressed as an explanatory theory with described conditions of validity (balance of mechanisms of similarity and mechanisms of difference). This is what Yin (2009) describes as *theoretical replications*. Based on the research logic of the multiple case study, we generalize to the empirically generated *balance theory* of mechanisms of similarity and mechanisms of difference, not to a sample of schools and accordingly refer to replication logic and not sampling logic. In principle, this resembles the way we think in doing experiments, though under more naturalistic conditions.

We also did replications 1–1.5 years later to study the longitudinal pattern reflecting the transitions from primary to lower secondary school. Transitions are important to study from a life-course perspective (George, 1993; Giele & Elder, 1998) because they reveal new expectations and anticipations of what will happen as to

social integration or segregation. We based our follow-up research in other municipalities 5 years later, on this design and found no refutations of the same patterns, strengthening the validity of the results even further. Further details of typologies, analysis, and results can be found in Kvalsund (2017).

For our second research project, "School in Sparsely Populated Districts," we also chose case-study research as our design perspective to study social learning and is because of data collection from many cases at only one point in time to be in Design Category II. In one of the intensive studies, two schools located on two islands and one school located on the main land in a forest region. This design is closer to intrinsic case studies and thick descriptions reflecting the fact that cultural meaning of teaching and learning is situated. This is the point of departure when meaning is abstracted or condensed from the data material and in this way throws light on the qualities of multi-grade teaching and informal learning (Berg-Olsen, 2008). Johansen (2009, pp. 85–107) selected 44 pupils of both genders from seven small remote rural schools (less than 60 pupils), teachers working with these pupils and parents. This is an instrumental case study associated partly with the logic of replication in selecting informants and analyzing social learning and competence development.

As a backdrop for these intensive research studies, an extensive survey of the schools and the sparsely populated communities was undertaken. A picture is developed of the relationship between equitable schools and centralization by analyzing changes in historical and expected school structure in the next 5 years as an expression of the risk of insecurity and school closure. Researchers have also analyzed the relationship between conditions of learning and teaching (economy, low number of pupils, educational quality of teaching) when schools are threatened by closure and local resistance is active (Solstad, 2009, pp. 72–170). This combination of survey and case studies is a meaningful and responsive design giving a relevant situational backdrop for intensive research on social learning and multi-grade teaching.

The design of the "Learning Regions" project is very complicated, as it involves the researchers of 12 different and separate projects trying to establish a correlation between the single separate county characteristic factor (independent variable) and high scores on national achievement tests (the dependent variable). This is why I restrict the present design evaluation to this overall presentation of the study rather than analyzing the design of each separate research project of the bundle. Presenting these factors as simultaneously operating explanatory variables or factors, as a design for a kind of multivariate analysis, is rather misleading. Judging some of the listed factors, content overlap is a problem. For other factors of the collection, the correlation might be spurious. Differences in research methods as well as lack of knowledge about what factor operated first mean that there is no analysis and control of causal direction and the relative and controlled explanatory power of the factors, as would be provided with a logistic regression analysis of longitudinal data. The context of independent variables is the county and the research projects are organized as a collection of separate projects.

The conclusion so far is that over the last 10 years, a period with accelerated closures of small rural schools, no research project can be identified working with research designs for analyzing local people's life-world experiences with changing

rural schools as seen from below. The system perspective with central formulation and local implementation of reforms is hegemonic. The dominating design is cross-sectional. The implication is that the cultural deconstruction of rural schools and communities continues.

On Theory and Concepts

In this part of the chapter, I will clarify what is meant by theory and then describe main points of the theories chosen by the leaders of the three research projects referred to in Table 10.1. Theory is about how we can understand, interpret, and explain research results and answer the question of *why*. Social and educational science speak of "regular patterns" representing typical or expected "ways of action" over time within a broad specter of individual variation. Theory is more closely related to how and which persons act rather than to what statically is. The purpose of social science research and educational research is to uncover the meaning underlying various patterns of action. Therefore, theory can be thought of as "the glasses" or a tool by which researchers analyze the actual research field when they interpret and explain research data. Theory explains the relationship between two or more variables (phenomena, concepts, characteristics of humans).

From this point of departure, some logical consequences can be drawn as to what theory means: Theory referring to knowledge about the relationship between variables implies an explanatory structure of the knowledge. Theory understood as "looking glasses" or categories of understanding and explanation is a reminder that the use of theory bears the potential for subjective bias, because in most cases it is easier to collect confirming rather than refuting data. In the relationship between the social world and how it is understood, theory or concepts consequently do no more than chart aspects of the empirical world. Propositions about the empirical world are not identical with the world. Theory is not pictures of the world. This is the epistemological aspect of theory. Theories as a conjecture about relationships between variables also implies that theory is composed of selected concepts judged as most relevant for the understanding of some social phenomenon. The implication is that theory is abstracted knowledge (i.e., the map-terrain aspect of theory, mirroring the fact that no one can benefit from or use a map with the scale 1:1). A consequence of the abstract quality of theory is that it must be testable against reality and therefore is continuously open for refutation and revision—an abstraction with empirical grounding.

However, many empirical studies are only weakly related to theory and give an atheoretical impression with a main emphasis on comments to for example frequency tables and they might hardly be considered as research. The authors of other studies refer to specific perspectives of theory to expose concepts without applying them in analysis. Another category of research studies presuppose that categories, concepts, and theory should be developed from below, being grounded in the life-world of the informants and therefore sensitive in interpreting and understanding the data collected (Charmaz, 2011; Corbin & Strauss, 2008). Theory devel-

oped in this way is often complemented by externally formulated theory enabling the researcher to interpret his or her data in ways *the natives*[10] have not thought of in the first place. Theory can also be used to guide the study in an explanatory way as in multiple case studies (Yin, 2009).

Aakvaag (2008) presents a categorization of modern sociological theory. Theory can be categorized by level of abstraction: concepts with empirical grounding as a base, then explanatory theory of the middle range, offering explanations restricted by specific conditions to be judged as valid. An example is a theory which includes the temporal perspective and treats lives as units of analysis. Giele and Elder (1998) and Elder, Johnson, and Crosnoe (2004) speak of "life-course theoretical concepts" and principles such as time and place, social relations, and linked lives, timing and transitions adding up to life course trajectories grounded in prospective rather than retrospective data.

The next level is general sociological theory, or what is described as *diagnosis of contemporary society*, presented for example by Giddens (1984, 1991), Beck (2000), Beck and Beck-Gernsheim (2002), and Bauman (1997, 1998, 2001). Bauman presents a profound critique of postmodern strategic benefit calculating individualization—"What is in it for me?"—as a core characteristic of postmodern society. Madsen (2014) has formulated a similar critique, identifying a diagnosis of contemporary society—*the therapeutic turn*—leading to an individualizing reductionist understanding of society with psychological grounding. Proponents of these general theoretical models attempt to mediate an overall understanding of society—with good intentions but weak empirical grounding.

Theory at the most abstract level is metatheory or the *theory of science* (ontology, epistemology and methodology) and important in all research, reminding us about what we do not know, the assumptions of social science, and keeping important doubt alive. The external world exists and ontological questions are relevant. However, reality has no voice or language of its own. Empirical social science therefore must accept the blurred division between the world out there (social ontology), how we can have knowledge about it (theory of knowledge), and the strategy of research methods and the underlying philosophical assumptions (methodology). In a specific research study, the founding assumptions are implicitly or explicitly part of a theoretical framework. This wider concept of theory refers to an integrated cluster of concepts, a conceptual frame of reference closer to a "world view" directing our attention to more general underlying assumptions—in other words, general theory including theory of science.[11] The underlying presumptions would underpin the perspective that is adopted on the research topic, the questions asked, shape the nature of the investigation, its methods and what would count as

[10] The concept of native is from anthropological science pointing to the researchers' risk of "going native" rather than balancing the emic position (internal and native) and the etic position (external) when researching life-world phenomena.

[11] Layder (1993) and Sayer (2010) discuss different categorizations of theory in social science. Danermark, Ekström, Jakobsen, and Karlsson (2002, pp. 115–149) discuss different types of theory in presenting critical realism as an epistemological position.

worthwhile data and point to the limits of what conclusions that can be drawn (Denscombe, 2010).

The researchers of the "School Localization" project at Volda University College adopted a pragmatic view on the theory of science, combining different theories and methods mirroring the phenomena under study to fuse a realist with a reconstructivist perspective into what is now presented as a theory of critical realism, as presented by researchers such Bhaskar and Danermark (2006). I will here use it as a tool to judge the consequences of ontological presumptions in the theory of science. The social world is very complex and must be understood as equivocal with probable rather than solid and secure research-based knowledge. Critical realism represents a nonreductionist schema of understanding social behavior and practice, a system that refers essentiality to several different levels of reality (Bhaskar & Danermark, 2006, p. 280). This is what Bhaskar (1975) describes as the real layer of reality—the deep dimension of reality where we find the generative mechanisms extending beyond the directly observable in producing observable events. Social reality exists independently of any individual's knowledge of it. However, reality is not always observable: Proponents of critical realism have a wider and deeper view of reality, meaning that conductors of social scientific research utilize relationship analysis to point out the difference between what we experience (*the empirical layer*), what happens without our being able to observe it, such as routinized social interaction and events (*actual layer*), and the underlying mechanisms that produce the events (*real layer*). In the perspective of positivism, these three layers are collapsed into a single, empirical layer—in other words, a very restricted concept of reality: The reality is out there, objective facts about a knowable world, organized in a multitude of scientific disciplines; the researcher finds them and formulates relevant concepts, the relationships between central variables, mechanisms and counter-mechanisms.

The layered reality makes scientific practitioners within critical realism presuppose that there is a reality independent of our concepts and theories of it, outside our mind. Therefore, the external reality and its causal mechanisms are not always accessible to immediate observation, in other words, reality is not necessarily transparent. The mechanisms can be experienced indirectly through their causing events—being "the something else behind" what happens in the world. With critical realists viewing reality as independent from the human mind, researchers cannot avoid producing interpretations—concepts and theory—of reality, interpretations which by necessity are fallible and provisional. It is this interpretative dimension of our theories, explanations, and related critiques that Bhaskar (1998) and Danermark et al. (2002, pp. 22–24) refer to as the transitive or changing dimension of social science knowledge. The role of theory is therefore deeply embedded in the understanding of social reality. Research methods—quantitative as well as qualitative—are "theory laden" and would hardly be considered as neutral tools. Theory and methods are closely connected.

The intransitive dimension of social science knowledge, concepts, and theory refers to those causal mechanisms by which social science seeks to discover and which exist in themselves regardless of our concepts constructed in language.

However, compared with the objects of natural science, which are socially defined but naturally produced (and therefore exist intransitively independently of our language and concepts), the objects of social science are both socially defined and socially produced (cf., *double hermeneutics*, the social reality that both actors and researchers conceptually interpret). Yet the objects of social science remain real and continue to intransitively exist relationally, structurally, and materially related as generative, enabling, or counter-active, constraining mechanisms behind the events. They are operating independently of intentional actors here and now. The distinction between the transitive and intransitive realms of reality clarifies the mistake of constructivism and hermeneutics: Reality is equated with its interpretation, primarily expressed as texts. What we can know about reality (language) is interchanged with the way reality exists (being) (Bhaskar, 1975).

Critical realism has room for both actors (transitive practices) and structures (intransitive generative and counter-mechanisms behind events). Combining actor and structure as pairs of "causal" and "effectual" concepts make up a typology

		'Causal' concepts	
		Actor	**Structure**
Effectual concepts	**Actor**	**I.** Psychological and social psychological theory. Theory of self-identity (Mead, 1998). Social self-conception (Harter) (Kvalsund, 1995)	**IIb.** Theory on the structuring of actions. Theory of the middle range. Specific explanatory theory. Structuration theory (Giddens, 1984). Life course theory (Giele & Elder, 1998). Network Theory (Wellman & Berkowitz, 1991, Scoti, 2017). Theory of frame conditions (Dahlöf, 1971). Sense-making systems (Weick, 1994)
	Structure	**IIa.** Theory on how action and interaction develops structures. Theory of the middle range. Specific explanatory theory. Structuration theory (Giddens, 1984). Life course theory (Giele & Elder, 1998). Theory of frame conditions (Dahlöf, 1971)	**III.** Macro-level theory. System theory. Theory of demography and migration (Sørlie, 2016). Socio-ecological theory (Bronfenbrenner, 1979). Theory of social justice, equality and equity (Coleman, 1968; Hernes, 1974; Lidensjø & Lundgren, 2000). Theory of governance (Meyer & Benavot, 2013). Theory of community (Cohen, 1992). Theory of place (Massey, 1991, 1994, 2005)

Fig. 10.3 Typology of "causal" (The quotation marks indicate that strict causal relations hardly exist in social science and differ from causations in natural science) and effectual concepts. Examples from three research projects doing comparative analysis of counties or small rural schools. Adapted from Kvalsund and Hargreaves, 2009, *International Review of Educational Research, 48*(2), p. 143. Adapted with permission

(Fig. 10.3)[12] that can be used to analyze and compare the theoretical profile of research projects. Causal means both explanation and understanding.[13] I will here compare central concepts and theories from three Norwegian research projects into small rural schools during a period of nearly 30 years. The actor-structure duality invites judgement of the constructivist-realist balance of theory combinations in these projects. The typology also invites one to discuss the concept of being place-conscious, by comparing being based in the local community and being place-based by referring to Massey, who Hubbard, Kitchin, Bartley, and Fuller (2002) have called attention to because of her new thinking on the concept of place.[14] To close the discussion of applying theory in research on small rural schools, I will compare three central research projects during the last 30 years, described earlier in this text: All three projects are grounded in some level of space. Their researchers analyze social units at different levels, as expressed in their project titles—"The School Localization" project (school in local community), "School in Sparsely Populated Districts" (school in municipalities), and "Learning Regions" (processes in selected counties with educational relevance)." I will focus on the concepts and theories of the School Localization project alongside selected comparisons with the two others research projects.

In Category III of the typology, structures at the macro level cause other structures to develop at other levels. The implicit Fig. 10.3 overall theory of the Learning Regions project is a theory of governance within a system world perspective in searching for factors that can explain why counties like SF have the highest achievement results on national standardized knowledge tests. The theoretical perspective lies at the macro level and is both global and structural: In his book "The Global Testing Culture, shaping education policy, perceptions and practice" (2016, pp. 7–23), Smith describes the system of achievement testing and refers to *world culture theory*, focusing not on the power of the actors but on the governmentality power of the culture itself; similar structures and policies develop in educational systems across the globe. According to Smith (2016, pp. 12–13), global cultural theorists formulate core assumptions about values and individual behavior: These assumptions are *instrumental positivism* and *individualism*. Instrumental positivism means developing hypotheses that can be empirically evaluated through quantitative statistical techniques to form law-like statements. Individualism is understood as the belief that when individuals are given freedom to choose, they will act in their own self-interest. Global cultural theorists highly value the academic subjects of mathematics and science, and view standardized testing measures as educational

[12] The typology was developed in a special issue of *International Review of Educational Research* 2009 with Kvalsund and Hargreaves as guest editors and authors.

[13] A basic difference between Giddens's theory of structuration and critical realism is that Giddens does not accept intransitive causal mechanisms—structures—as existing out there. Structures exist only when the actors have them in mind (cf., Giddens, 1984).

[14] I do not intend to provide a more comprehensive discussion of relevant theories of place here. It is sufficient to refer to the book "Spatial Theories of Education: Policy and Geography Matters," edited by Gulson and Symes (2007) to understand this.

qualities equivalent across heterogeneous communities. They do not question instrumental positivism and individualism as epistemological positions and values. Very complex questions at the structural level are given very simple answers at an individual level. This seems to fit into the research logic and theory of the Learning Regions projects.

Researchers also apply a theory of structures when they analyze the consequences of deconstructing rural schools and communities, such as the demographic structures produced by selective out-migration of rural girls to urban centers that over time result in "thinning out communities." This gradually alters the age structure of pupils in school, the grade structure, and the school structure of the municipality (Sørli, 2016). Another example is the reference to two theoretical concepts, *decentralization* and *equity*.

Decentralization is a structural or rather basic cultural idea to ensure wider representation of legitimate local democratic interests in the field of schooling. Local curriculum and season adapted methods of teaching and learning, for example following the rhythm of the coastal fisheries, would reflect the principle of decentralization of power. Decentralization might also be a measure when a government office experience falling legitimacy as with the phenomenon centralized decentralization.

Decentralization has consequences for how people think about school and education, not least the principle of *educational equality*. Researchers of empirical studies have documented that school reproduces social inequalities, and they have introduced and discussed the concept of *equal opportunities of schooling* (Coleman, 1968; Hernes, 1974; Lidensjø & Lundgren, 2000; Solstad, 2009).

However, the equality concept made urban school a model for rural schools (Solstad, 1978). A possible alternative is the concept of equity or the equitable school, meaning a school that is equally worthwhile for all. Equity has the consequence that school must meet pupils, parents, and communities differently and give space for learning content grounded in the local community. This is theory of cultural meaning of schooling for actors inside the local communities, but also a structural theory about the school pattern seen from the outside; these were founding concepts and ideas of the research project "School in Sparsely Populated Districts" as well as the "School Localization" project more than 15 years earlier. Kvalsund (1991) and Kvalsund and Lauglo (1994) discusses the concept of local community and concludes with an empirical, analytical rather than a normative concept judging local communities as separate cases.

Massey (1995, p. 61) describes her concept of place as "the locus of intersecting social relations or activity spaces," She seems to understand places as points in a structural network. Places are not static, they have process qualities and no dividing boundaries to frame a simple enclosure from the outside world. According to Massey, places are open and have relations to the outside world. They are filled with internal conflicts and have no single identity. The specificity of places is formed by social interaction and constantly reproduced at all geographical levels. Places form

a network of power in which all individuals and groups are positioned in the network according to their power. Place is more like geometrical points or faceless spaces in a power-structured network map. Massey's picture of place is observed from the outside rather than participated from within, giving a representation of the world that differs from living in the world. What questions can be formulated and what perspective can used is restricted. Massey's structural concept of place seems to impart no understanding of places as a context for human and cultural interaction, learning, and identity. The actor's life is missing from this model (Massey, 1991, 1994, 1995, 2005). The inner life of local places seems to be wiped out. This concept of place is clearly relational and structural, with place conceived of as simultaneously local and global. Massey's concept of place has the characteristics of a faceless global space. The human cultural dimension is lacking. However, globalization is impossible without concrete activities in local communities with a potential of being transformed when local and external impulses meet. An important question is what values form the basis for the actual changes. The problem is the presumption that all persons in the community must act as *consumers*, an expectation grounded in the growing commodification, disembedding, and out-lifting of local culture and knowledge and the practice of production (cf., Giddens, 1984, 1991).

As I have elaborated, Habermas complements the concept of system world with the life world of everyday life in a community. Places can be seen from within even if they maybe invaded by the system. The typology in Fig. 10.3 has three other fields. Field I, refers to specific theory and concepts about human self-identity and how they are developed. Mead's (1998) theory of reading the other's intentions or "role-taking" develops the "looking-glass" self and is combined with Susan Harter's (1985) measurement instruments of the pupil's social self-conception in the school localization project (cf., Kvalsund, 1994). The analysis of play as informal social learning during the school day based on children's voices is also analyzed from this theoretical perspective of symbolic interaction (Kvalsund, 1994; Manis & Meltzer 1972). This theoretical discussion and clarification of how to understand the children—the primary actors of the community when it comes to school and education—is presented by specific culture psychological concepts in the research project "School in Sparsely Populated Districts" as well (Berg-Olsen, 2008, pp. 263–283; Johansen, 2009, pp. 31–85). Qualitative research interviews with parents and teachers documents that communities and their schools as places include human actors within culturally structured social units.

Fields IIa and IIb reflect theories of the middle range relevant for the duality of actors and structures (Giddens, 1984), actors developing structures giving possibilities of action and at the same time restricting what persons can do in school and the local community. The school localization project is based on Dahllöf's (1971) frame-factor theory pointing to the fact that social science is historical in principle, that what researchers study has already happened, and that frame condition never influence results directly, but always through processes. Researchers must therefore reconstruct what has happened in their quest to understand by starting with some result or outcome, then asking what frame-conditions have worked

through what interaction processes to produce such results. This implies detailed or thick descriptions and complementary interpretations by means of theoretical concepts such as those suggested by Dahllöf (1971) and Giddens' concepts of *rules of structuration* (norms and frames of interpretation) and *resources of structuration* (allocative/physical and authoritative).[15] In the "School localization" project, researchers apply concepts by analyzing informal learning through play and conditions of informal interaction in classrooms as well as play in the school yard and activities during spare time after school. Researchers captured the structural pattern of actions and activities by applying social network analysis (Scott, 2017; Wellman & Berkowitz, 1988) of who usually cooperated during lessons, played in recesses at school and during spare time, resulting in a typology of social segregation, integration and in the identification of the balance between two mechanisms—the *mechanism of similarities* and the *mechanism of differences*—producing events. In small systems, actors interacted despite of differences in individual characteristics, interests and frame conditions. In the larger system, actors interacted because of similarities. This is illustrated by the differences in how teams and groups were selected and composed and how rules were practiced in ball games such as soccer during recesses. These mechanisms continuously produce events and explain important aspects of the inside, the culture, of schools and communities as to informal and social learning, and help researchers to compare and understand everyday life in smaller (multi-graded) and larger (single-graded) rural schools (Kvalsund, 2017). They illustrate the concept of generative mechanism in critical realism as well.

I analyzed social self-conception by using a typology combining the educational regime (a classroom oriented, individualizing approach compared with a community-oriented, relational one) and larger single-grade versus small multi-grade schools, referring to the segregation-integration (age and gender) profile for each single school (lessons, recesses, and spare time) in the four categories of the typology. In small rural schools with a community-focused, relational orientation, pupils developed a positive social self-conception. The differences were significant and not the result of chance.

I also studied the pupil's life course transitions from primary to lower secondary school. Applying Massey's concept of place in these research projects would have produced large blind spots in important fields of understanding the cultural and human aspects of schooling and community life/life world dimensions. Thus, the concept of local community is clearly more valid than the concept of place.

[15] Giddens (1984) conceives structure out there as virtual, though real only when activated in the actor's mind, describing the process as structuration that is possible also routinized. This differs from the position of critical realism (cf., Danermark et al., 2002), which is based on a concept that the world out there is layered with mechanisms and counter-mechanisms at different levels producing events. Structural forces exist out there independent of the researcher's mind, concepts, and theories. One could think of these forces as parallels to gravitation—a kind of social gravitational forces. Meeting this complexity, we can only speak of probable explanation of events developed by research.

However, researchers are faced with the general challenge of applying theory in their research projects. Kvalsund and Hargreaves (2014) have shown how a mass-society perspective derived from Giddens' (1984, 1991) contemporary social theory (diagnosis of contemporary society) ultimately disembeds or deconstructs rural social life and consequently devalues and deconstructs rural life in schools and communities and thus places the researcher in opposition to the rural people and practices under investigation. How researchers conceptualize and construct rural places and schools within these research paradigms can narrow and skew how they then understand rural schools and communities. Thereby, the researchers unknowingly or unintentionally continue to marginalize and disempower rural places, practices, and voices. Critical evaluations, discussions, and reflections on the dominant theories and perspectives in the field need to be judged in relation to their application to research on rural communities and education. Kvalsund and Hargreaves (2014) suggest and discuss the empirically grounded life-course theoretical concepts as an alternative social science theory in leaving footprints of research.

Combining explanatory theory and concepts about actor-structure relations from all four categories of the typology in Fig. 10.3, it becomes clear that the process of deconstructing rural schools and communities must change. The theory and concepts must capture the cultural meaning of inner life of schools and communities.

Closing Remarks

During the early expansive phase of the welfare state, the Norwegian novelist Mykle described decentralization and rural values as a quiet "osmotic coup"—the nation state had made itself porous for decentralization, rural values, and practices. However, the relationship between center and periphery has changed direction during the many years after the late 1980s. The nation state seems porous in new ways—now for urban values and solutions, not least in the field of schooling. Silently and imperceptibly, the changes and school closures trickle in to the local communities as an osmotic counter-coup behind a shelter of specific national reforms. Although researchers have observed both weaker and stronger reactions from parents and local stakeholders (Ertesvåg & Hegvik, 2017; Solstad, 2009), in many cases these responses soon quiet down and the social osmotic stream of closing small rural school continues. I have chosen to describe this stream as "the large, quiet, Norwegian school reform." However, it is not accepted as a reform by other actors in the field, nor by most researchers, bureaucrats, politicians, or political parties. It can be observed as a long series of single cases, a pattern of silent changes outside the political and governmental agenda. This is so even if it is a basic change: a cultural deconstruction of rural schools and communities, implemented with incomplete research-based knowledge. Governmentality within a system perspective has left footprints in the field.

References

Aakvaag, G. C. (2008). *Moderne sosiologisk teori* [Modern sociological theory]. Oslo, Norway: Abstrakt.

Aasbrenn, K. (1989). Uttynningssamfunnet: Det demografiske uttynnede-men ikke avfolkede utkantsamfunn [The thinning-out society: Demographically thinned out, but not depopulated, local communities]. *Tidsskrift for samfunnsforsking, Journal of Social Science Research, 5–6,* 509–519.

Bauman, Z. (1997). *Postmodernity and its discontents*. London, UK: Polity.

Bauman, Z. (1998). *Globalization: The human consequences*. New York, NY: Columbia University Press.

Bauman, Z. (2001). *Community: Seeking safety in an insecure world*. Cambridge, UK: Polity Press.

Beck, U. (2000). *What is globalization?* Cambridge, UK: Polity.

Beck, U., & Beck-Gernsheim, E. (2002). *Individualization: Institutionalized individualism and its social and political consequences*. London, UK: Sage.

Berg-Olsen, A. (2008). *Omsorg eller formål: Rasjonalitet og dilemmaer i fådeltskolen* [Mindfulness or strategic action: Rationality and dilemmas in multi-grade schools] (Doctoral dissertation). Retrieved from http://hdl.handle.net/11250/145830

Bhaskar, R. (1975). *A realist theory of science*. Leeds, UK: Leeds Books.

Bhaskar, R. (1998). Philosophy and scientific realism. In M. Archer, R. Bhaskar, A. Collier, T. Lawson, & A. Norrie (Eds.), *Critical realism: Essential readings* (pp. 16–47). London, UK: Routledge.

Bhaskar, R., & Danermark, B. (2006). Metatheory, interdisciplinarity and disability research: A critical realist perspective. *Scandinavian Journal of Disability Research, 8,* 278–297. https://doi.org/10.1080/15017410600914329

Bonesrønning, H., & Rattsø, J. (1992). Effektivitetsforskjeller i videregående skole: Analyse av almenfaglig studieretning i 34 skoler [Differences of efficiency in upper secondary schools: Analyzis of the study branch of general education]. *Norsk Økonomisk Tidsskrift, 106,* 211–242. Retrieved from http://samfunnsokonomene.no/wpcontent/uploads/2010/01/nøt_199204.pdf

Bonesrønning, H., & Vaag Iversen, J. M. (2010). *Prestasjonsforskjeller mellom skoler og kommuner: Analyse av nasjonale prøver 2008* [Differences in achievement tests results between schools and municipalities: Analysis of national standardized tests 2008] (SØF rapport nr. 1/2010). Retrieved from http://www.sof.ntnu.no/SOF-R%2001_10.pdf

Borge, L.-E., & Naper, L. R. (2005). *Ressursbruk i grunnopplæringen* [Resource utilisation in basic education] (SØF-rapport nr. 01/06). Retrieved from http://www.sof.ntnu.no/SØF_Rapport_0106.pdf

Borge, L.-E., Nyhus, O. H., & Pettersen, I. (2014). *Effektivitet i kommunale tjenester: Analyser for 2010–2013* [Efficiency in municipality services: Analysis 2010–2013] (SØF-rapport nr. 03/14). Retrieved from http://www.sof.ntnu.no/SOF-R%2003_14.pdf

Brandal, N., Døving, C. A., & Plesner, I. T. (Eds.). (2017). *Nasjonale minoriteter og urfolk i norsk politikk fra 1900 til 2016* [National minorities in Norwegian politics from 1900 to 2016]. Oslo, Norway: Cappelen Damm Akademisk.

Bryson, B. (2012). *At home: A short history of private life*. Oslo, Norway: Gyldendal.

Charmaz, K. (2011). Grounded theory methods in social justice research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (4th ed., pp. 359–380). Thousand Oaks, CA: Sage.

Coleman, J. (1968). The concept of equality of educational opportunity. *Harvard Educational Review, 31*, 7–22. https://doi.org/10.17763/haer.38.1.m3770776577415m2

Corbett, M. (2007). *Learning to leave: The irony of schooling in a coastal community*. Halifax, Canada: Fernwood.

Corbett, M. (2013). What we know and don't know about small schools: A view from Atlantic Canada. *Country School Journal, 1,* 38–52. Retrieved from http://www.countryschooljournal.com/uploads/MichaelCorbett.pdf

Corbett, M. (2015). Rural education: Some sociological provocations for the field. *Australian and International Journal of Rural Education, 25*(3), 9–25. Retrieved from https://journal.spera.asn.au/index.php/AIJRE/article/view/100/74

Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Thousand Oaks, CA: Sage.

Dahllöf, U. (1971). *Ability grouping, content validity, and curriculum process analysis*. New York, NY: Teacher College.

Danermark, B., Ekström, M., Jakobsen, L., & Karlsson, J. C. (2002). *Explaining society: Critical realism in the social sciences*. London, UK: Routledge.

Denscombe, M. (2010). *Ground rules for social research: Guidelines for good practice* (2nd ed.). Maidenhead, UK: Open University Press.

Edvardsen, E. (1981). Skolen som parentes i samfunnet [School as a parenthesis in society]. *Norsk Pedagogisk Tidsskrift, 1981*(7), 283–291.

Edvardsen, E. (1983). Kateteret og det anonyme levebrød [The position of the teacher's desk and the anonymous livelihood]. In K. Skagen & T. Tiller (Eds.), *Perspektiv på lærerarbeid* (pp. 104–119). Oslo, Norway: Aschehoug.

Edvardsen, E. (2004). *Samfunnsaktiv skole: En skole rik på handling* [Community-active school: A school rich in action]. Tromsø, Norway: Oplandske.

Elder Jr., G. H., Johnson, M. K., & Crosnoe, R. (2004). The emergence and development of life course theory. In J. T. Motimer & M. J. Shanahan (Eds.), *Handbook of the life course* (pp. 3–19). New York: Springer. https://doi.org/10.1007/978-0-306-48247-2_1

Engebretsen, E., & Heggen, K. (2012). *Makt på nye måter* [Power in new ways]. Oslo, Norway: Universitetsforlaget.

Ertesvåg, F., & Hegvik, G. K. (2017). 1391 skoler rammet av skoledøden [1391 schools stricken by school death]. *VG*. Retrieved from https://www.vg.no/nyheter/innenriks/i/2aklv/1391-skoler-rammet-av-skoledoeden

Fagerheim, T. (2015). Mirakelet Sogn og Fjordane [The miracle of Sogn and Fjordane]. *Bergens Tidende.*

Foucault, M. (1984a). Space, knowledge and power. In P. Rabinow (Ed.), *The Foucault reader* (pp. 239–256). New York: Pantheon.

Foucault, M. (1984b). What is enlightenment? In P. Rabinow (Ed.), *The Foucault reader* (pp. 32–50). New York: Pantheon.

Foucault, M. (1991). Governmentality. In G. Burchell, C. Gordon, & P. Miller (Eds.), *The Foucault effect: Studies in governmentality* (pp. 87–104). Chicago: University of Chicago Press.

George, L. K. (1993). Sociological perspectives on life transitions. *Annual Review of Sociology, 19*, 353–373. https://doi.org/10.1146/annurev.so.19.080193.002033

Giddens, A. (1984). *The constitution of society: Outline of the theory of structuration*. Berkeley, CA: University of California Press.

Giddens, A. (1991). *Modernity and self-identity: Self and society in the late modern age*. Cambridge, UK: Polity.

Giele, J. Z., & Elder, G. H. (1998). Life course research: Development of a field. In J. Z. Giele & G. H. Elder (Eds.), *Methods of life course research: Qualitative and quantitative approaches* (pp. 5–27). Thousand Oaks, CA: Sage.

Gruenewald, D. A., & Smith, G. A. (Eds.). (2008). *Place-based education in the global age: Local diversity*. New York: Routledge.

Gulson, K. N., & Symes, C. (Eds.). (2007). *Spatial theories of education: Policy and geography matters*. New York: Routledge.

Habermas, J. (1983). *The theory of communicative action: Reason and the rationalization of society*. Cambridge, MA: MIT Press.

Habermas, J. (1985). Questions and counterquestions. In R. J. Bernstein (Ed.), *Habermas and modernity* (pp. 192–216). Cambridge, MA: MIT Press.

Habermas, J. (1989). *Lifeworld and system: A critique of functionalist reason* (T. McCarthy, Trans.). The theory of communicative action: Vol. 2. Boston, MA: Beacon.

Hagestad, G. O., & Uhlenberg, P. (2005). The social separation of old and young: A root of ageism. *Journal of Social Issues, 61*, 343–360. https://doi.org/10.1111/j.1540-4560.2005.00409.x

Hannevig Friestad, L. B. (1990). *Utprøving av en modell for optimal skolestruktur* [Trial of a model for optimal school structure]. Kristiansand: Agder distriktshøgskole.

Hannevig Friestad, L. B., & Johnsen, A. (1992). *Sammenlignbare data i Grunnskolen: Sluttrapport* [Comparable data in primary school: Final report]. Kristiansand: Agder distriktshøgskole.

Hanushek, E. A. (1981). Throwing money at schools. *Journal of Policy Analysis and Management, 1*, 19–41. https://doi.org/10.2307/3324107

Hanushek, E. A. (1989). The impact of differential expenditures on school performance. *Educational Researcher, 18*(4), 45–51. https://doi.org/10.3102/0013189X018004045

Harter, S. (1985). *Self-perception scale for children, grades 3–8*. Denver, CO: University of Denver.

Hernes, G. (1974). Om ulikhetens reproduksjon: Hvilken Rolle spiller skolen? [The reproduction of inequality]. In M. S. Mortensen (Ed.), *I forskningens lys: 32 artikler om norsk forskning i går, i dag, i morgen* (pp. 231–251). Oslo, Norway: Universitetsforlaget.

Hubbard, P., Kitchin, R., Bartley, B., & Fuller, D. (2002). *Thinking geographically: Space, theory and contemporary human geography*. London: Continuum.

Johansen, J.-B. (2009). *Sosialt utviklende prosesser i små og større læringsmiljøer: Sosial kompetanse i fådelt skole* [Processes of social development in smaller and bigger learning environments: Social competence in multi-grade schools]. Vallset, Norway: Oplandske.

Karlberg-Granlund, G. (2009). *Att förstå det stora i det lilla: Byskolan som pedagogik, kultur och struktur* [Understanding the big in the small: Village schools as education, culture and structure] (Doctoral dissertation). Retrieved from http://urn.fi/URN:ISBN:978-951-765-458-6

Karlsen, G. (1993). Desentralisering som styringsstrategi i norsk Grunnskole [Decentralization as a management strategy of Norwegian primary school]. *Norsk Pedagogisk Tidsskrift, 1993*(1), 7–16.

Karlsen, G. E. (1991). *Desentralisert skoleutvikling: En utdanningspolitisk studie av norsk grunnskole med vekt på 70- og 80-tallet* [Decentralized school development: An education policy study of Norwegian elementary school with emphasis on the 70s and 80s]. (Doctoral dissertation). Retrieved from http://los.rokkan.uib.no/DiaInfo.cfm?info=1236

Kvalsund, R. (1991). *På metodologiske krossvegar* [On methodological crossroads] (Research report 9122). Volda, Norway: Volda University College.

Kvalsund, R. (1994). *Elevrelasjonar og uformell læring: Samanliknande kasusstudiar av fådelte og fulldelte bygdeskular* [Pupil relations and informal learning: Comparative case studies of multi-graded and single graded rural schools] (Doctoral dissertation). Volda, Norway: Volda University College.

Kvalsund, R. (2000). The transitions from primary to secondary level in smaller and larger rural schools in Norway: Comparing differences in context and social meaning. *International Journal of Educational Research, 33,* 401–423. https://doi.org/10.1016/S0883-0355(00)00025-2

Kvalsund, R. (2004a). Schools as environments for social learning-shaping mechanisms? Comparisons of smaller and larger rural schools in Norway. *Scandinavian Journal of Educational Research, 48,* 347–371. https://doi.org/10.1080/0031383042000545771

Kvalsund, R. (2004b). *School and local community: Dimensions of change: A review of Norwegian research* (Research report no. 58). Volda, Norway: Volda University College.

Kvalsund, R. (2009). Centralized decentralization or decentralized centralization? A review of newer Norwegian research on schools and their communities. *International Journal of Educational Research, 48,* 89–99. https://doi.org/10.1016/j.ijer.2009.02.006

Kvalsund, R. (2014). Om skulestorleik og sosial læring—skrift i sand? [On school size and social learning—writing in sand?]. *Vest Telemark Blad, 2014,* 12–13.

Kvalsund, R. (2017). Social learning in Norwegian classrooms and schools: Educational research in perspective. In R. Maclean (Ed.), *Life in schools and classrooms: Past, present and future* (pp. 21–55). Singapore, Singapore: Springer. https://doi.org/10.1007/978-981-10-3654-5_3

Kvalsund, R., & Hargreaves, L. (2009). Reviews of research in rural schools and their communities: Analytical perspectives and a new agenda (special issue). *International Review of Educational Research, 48,* 140–149. https://doi.org/10.1016/j.ijer.2009.02.002

Kvalsund, R., & Hargreaves, L. (2014). Theory as the source of 'research footprint' in rural settings. In S. White & M. Corbett (Eds.), *Doing educational research in rural settings: Methodological issues, international perspectives and practical solutions* (pp. 41–57). London: Routledge.

Kvalsund, R., & Lauglo, J. (1994). Skolen i lokalsamfunnet og lokal skoleutvikling: Nyare norsk og nordisk forsking [The school in the local community and local school development: Newer Norwegian and Nordic research]. In J. Lauglo (Ed.), *Norsk forskning om utdanning: Perspektiver og veivalg* (pp. 142–217). Oslo, Norway: Ad Notam Gyldendal.

Kvalsund, R., Løvik, P., & Myklebust, J. O. (1992). *The location of rural schools: Some economic, educational and sociological perspectives* (Report no. 9201). Volda, Norway: Møre Research.

Langfeldt, G. (2015). *Skolens kvalitet skapes lokalt: Presentasjon av funn fra forskningsprosjektet "lærende regioner"* [The quality of schools is created locally: Presentation of results of the research project "learning regions"]. Bergen, Norway: Fagbokforlaget.

Layder, D. (1993). *New strategies in social research*. Cambridge, UK: Polity.

Lidensjø, B., & Lundgren, U. P. (2000). *Utbildningsreformer och politisk styrning* [Educational reforms and political management]. Stockholm: HLS.

Madsen, O. J. (2014). *The therapeutic turn: How psychology altered Western culture*. London: Routledge.

Manis, J. G., & Meltzer, B. N. (1972). *Symbolic interactionism*. London: Allyn and Bacon.

Massey, D. (1991). A global sense of place. *Marxism Today, 38,* 24–29. Retrieved from http://banmarchive.org.uk/collections/mt/pdf/91_06_24.pdf

Massey, D. (1994). *Space, place and gender*. Cambridge, UK: Polity.

Massey, D. (1995). The conceptualization of place. In D. Massey & P. Jess (Eds.), *A place in the world? Places, cultures and globalization* (pp. 46–61). Oxford, UK: Oxford University Press.

Massey, D. (2005). *For space*. London: Sage.

Mead, G. H. (1998). Bevissthet og symbolformidla interaksjon [Awareness and symbolic interaction]. In S. Vaage (Ed.), *Å ta andres perspektiv: Grunnlag for sosialisering og identitet: George Herbert Mead i utvalg* (pp. 113–140). Oslo, Norway: Abstrakt.

Melheim, K. (2011). *Oppvekstsenter: Barnehage og skule hand i hand* [Growing-up centers: School and kindergarten hand in hand]. Sogndal, Norway: LUFS.

Melheim, K. (2015). *Er Sogn og Fjordane eit paradoks?* [Is Sogn og Fjordane County a paradox?]. Retrieved from https://forskning.no/meninger/kronikk/2015/11/er-sogn-og-fjordane-eit-paradoks

Meyer, H.-D., & Benavot, A. (Eds.). (2013). *PISA, power, and policy: The emergence of global educational governance*. Oxford, UK: Symposium.

Myklebust, J. O., Kvalsund, R., Løvik, P., & Hagen, P. (1992). *Krinsar i krise? Skulemønster i Bygde-Noreg* [School districts in crisis? School pattern in rural Norway] (Report no. 9219). Volda, Norway: Møreforskning.

Nordal, T. (2014). *Tokke kommune: skolestruktur og elevens sosiale utvikling og læring.* [Tokke municipality: school structure and the pupil social development and learning] (Unpublished manuscript).

Popper, K. (1989). *Conjectures and refutations: The growth of scientific knowledge*. London: Routledge.

Rogoff, B. (2003). *The cultural nature of human development*. Oxford, UK: Oxford University Press.

Rogoff, B., Paradise, R., Arauz, R. M., Correa-Chávez, M., & Angelillo, C. (2003). Firsthand learning through intent participation. *Annual Review of Psychology, 54*, 175–203. https://doi.org/10.1146/annurev.psych.54.101601.145118

Rokkan, S. (1987). *Stat, nasjon, klasse: Essays i politisk sosiologi* [State, nation and social class: Essays in political sociology]. Oslo, Norway: Universitetsforlaget.

Sayer, A. (2010). *Method in social science: A realist approach* (2nd ed.). London: Routledge.
Schafft, K. A., & Jackson, A. Y. (Eds.). (2010). *Rural education for the twenty-first century: Identity, place, and community in a globalizing world*. University Park, PA: Pennsylvania State University.
Scott, J. (2017). *Social network analysis*. London: Sage.
Sigsworth, A., & Solstad, K. J. (Eds.). (2005). *Small rural schools: A small inquiry.* Høgskolen i Nesnas skriftserie: Vol. 64. Nesna, Norway: Nesna University College.
Slagstad, R. (1998). *De nasjonale strateger* [The national strategists]. Oslo, Norway: Pax.
Smith, W. C. (2016). An introduction to the global testing culture. In W. C. Smith (Ed.), *The global testing culture: Shaping education policy, perceptions, and practice* (pp. 7–23). Oxford, UK: Symposium Books.
Smith, W. C. (Ed.). (2017). *The global testing culture: Shaping education policy, perceptions, and practice* (pp. 7–23). Oxford, UK: Symposium Books.
Söderlund, G., Vangsnes, Ø. A., Tønnesen, B. (2015). At skulen er liten, garanterer ikkje at han er god [A school's small size is no guarantee of quality]. *Bergens Tidene*. Retrieved from https://forskning.no/meninger/kronikk/2015/09/skulen-er-liten-garanterer-ikkje-den-er-god
Solstad, K. J. (1978). *Riksskole i utkantstrøk* [Urban school in rural districts]. Tromsø, Norway: Universitetsforlaget.
Solstad, K. J. (1994). *Equity at risk: Schooling and change in Norway* (Doctoral dissertation). Oslo, Norway: University of Oslo.
Solstad, K. J. (2009). *Bygdeskolen i velstands-Noreg: Om endringar i skolestrukturen i spreittbygde kommunar i perioden 1980–2005* [Rural school in prosperity Norway: On changes in school structure in sparsely populated municipalities during the years of 1980–2005]. Vallset, Norway: Oplandske.
Solstad, K. J. (2016). Nedlegging av skular*:* grunnar og konsekvensar [Closing schools: reasons and consequences]. *Bedre skole, 3,* 28–32. Retrieved from https://www2.utdanningsforbundet.no/upload/Tidsskrifter/Bedre%20Skole/BS_3_2016/7724-BedreSkole-0316-Solstad.pdf
Solstad, K. J., & Andræ Thelin, A. (2006). *Skolen og distrikta: Samspel eller konflikt?* [School and the districts: Cooperation or conflict?]. Bergen, Norway: Fagbokforlaget.
Solstad, K. J., & Kvalsund, R. (2010). Smått: ikkje lenger godt? [Small: No longer beautiful?]. *Klassekampen*. Retrieved from https://www.utdanningsnytt.no/debatt/2010/november/smatt%2D%2Dikkje-lenger-godt/
Solstad, K. J., Leka, W., & Sigsworth, A. (2012). *Reaching out: The place of small multi-grade schools in developing countries: The case of Ethiopia*. Addis Ababa, Ethiopia: Image Printers.
Solstad, K. J., & Solstad, M. (2015). *Meir skyss—mindre helse? Skulesentralisering i eit helseperspektiv* [More bussing—less health? A health perspective on school centralization] (NF-Report 7/2015). Retrieved from http://www.nordlandsforskning.no/getfile.php/139581-1452068834/Dokumenter/Rapporter/2015/Rapport_7_2015.pdf
Sørli, K. (2016). Bosetting, flytting og regional utvikling [Settling down, migration and regional development]. In I. Frønes & L. Kjølsrød (Eds.), *Det norske samfunn* (pp. 36–60). The Norwegian Society: Vol. 1. Oslo, Norway: Gyldendal akademisk.
Sørli, K., Aure, M., & Langset, B. (2012). H*vorfor flytte? Hvorfor bli boende? Bo-og flyttemotiver de første årene på 2000-tallet* [Why migrate? Why stay? Motives of migration the first years after 2000] (NIBR-report 2012:22). Oslo, Norway: Norsk institutt for by-og regionforskning.
Stake, R. E. (2005). Qualitative case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed., pp. 443–466). Thousand Oaks, CA: Sage.
Telhaug, A. O., & Mediås, O. A. (2003). *Grunnskolen som nasjonsbygger: Fra statspietisme til nyliberalisme* [Primary school as nation builder: From statepietism to new liberalism]. Oslo, Norway: Abstrakt.

Tiller, P. O. (1989). *Hverandre: En bok om barneforskning* [Each other: A book on child research]. Oslo, Norway: Universitetsforlaget.

Wainer, H., & Zwerling, H. L. (2006). Evidence that smaller schools do not improve student achievement. *Phi Delta Kappan, 88*, 300–303. https://doi.org/10.1177/003172170608800411

Wellmen, B., & Berkowitz, S. D. (Eds.). (1988). *Social structures: A network approach*. Cambridge, MA: Cambridge University Press.

Wessel, T., & Barstad, A. (2016). Urbanisering og urbanisme [Urbanization and urbanism]. In I. Frønes & L. Kjølsrød (Eds.), *Det norske samfunn* (pp. 61–86). The Norwegian Society: Vol. 1. Oslo, Norway: Gyldendal akademisk.

Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage.