Chapter 11
A Multilevel View of Small Schools: Changing Systems in Baden-Württemberg and Vorarlberg

Caroline Kramer

Introduction

Small schools have recently been of particular interest for education-geographical studies for at least two reasons. First, this school type is typical in rural and peripheral regions and tends to differ from more urban regions in respect to demographics as well as economical and social conditions and developments. In times of shrinking populations, these areas are usually more affected by contraction processes. Second, *mixed-graded teaching* is and has been a form of teaching often turned to in small schools. Mixed-graded teaching groups pupils of more than one age group in one classroom and involves teaching methods including group work, mixed-age teaching or cross-age learning, and progressive educational approaches (e.g., *Montessori schools*, see Chap. 12 by Raggl, in this volume).[1]

The debate on whether or not a decentralized school location network with small schools is "better" than a centralized network with larger schools is to this day strongly influenced by education policy paradigms, which are quick to prompt ideological debates. In finding answers to these questions, I will turn to results discussed in the international literature as well as to results from my own research. My starting point is a reflection on small schools in their respective contexts and a discussion of relevant aspects of "making school."

The theoretical basis for this paper is Giddens' structuration theory (Giddens, 1984), according to which structure and action are mutually dependent dualities.

[1] It is not possible to go into more detail in regard to the different pedagogical teaching concepts in mixed-age classes in this article. Deeper insights can be found in Raggl (2018), Raggl, Smit, and Kerle (2015), Hyry-Beihammer and Hascher (2015), Sigswoth and Solstadt (2001, 2005), and Høgmo and Solstadt (1978).

C. Kramer (✉)
Institute of Geography and Geoecology, Karlsruhe Institute of Technology, Karlsruhe, Germany
e-mail: caroline.kramer@kit.edu

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Accordingly, the structure of the education system and the nature of the school location network render possible or impossible actors' access to and participation in education. Conversely, various actors create the aforementioned structures of the system via school planning, traffic planning, assignment of teachers, organizing school routines, and so forth. On the one hand, structures are thus the result of prior actions; on the other, they form the basis for current and future actions. Space and spatial structures must therefore be understood as produced and/or constructed.

However, agents' actions are not determined by subjective components alone; their decision autonomy is also shaped by the temporal, spatial, and social contexts in which they find themselves.[2] Hägerstrand takes this position with his constraint approach (Hägerstrand, 1975), albeit lending more importance to macro-structures than Giddens does. Hägerstrand argues that constraints are (re-)produced by everyday actions and frame the context in which actions take place, not in a deterministic sense but in a probabilistic one. The following remarks on "school-making"—taking up and making reference to Werlen's (1997) concept of "geography-making"—are made with those definitions in mind.

With the following (Section "Changes in small school location networks in rural areas from an educational research perspective"), I would like to outline the German and international discussion concerning small schools and mixed-graded teaching. My temporal focus is on the recent past, beginning after World War II; my spatial focus is on European countries, in particular on Germany. Unlike countries of the global north, in countries of the global south mixed-graded teaching is a common phenomenon due to an infrastructure that is less dense and in which longer school commutes are the norm (Sigsworth & Solstad, 2001). Because the conditions and contexts of those countries differ significantly from the European ones, I will not address their situation here. They must be analyzed in a separate study.

In section "School paradigms and their arguments," I will introduce the two opposing schooling paradigms, decentralized versus centralized school location networks, and these will serve as poles between which the discussion will be held and empirical findings will be sorted. At one end lies the concept of small mixed-graded teaching in a decentralized school location network; on the other end are large schools with single-graded classes in a centralized school location network. Because (educational) policy paradigms serve as reference points when evaluating empirical developments and scientific findings, I will pay special attention to them here. Despite the fact that they are rarely found in a "pristine" form when it comes to planning, they are well suited to be used in a heuristic sense in order to help to structure the discussion (cf., Smit, Hyry-Beihammer, & Raggl, 2015, p. 98).

In section "A multilevel view on small schools," I adopt a multilevel perspective and correlate the subject areas and arguments brought forward in section "School paradigms and their arguments." This novel approach allows me to identify the connections between the different subject areas and the different scale levels and to

[2] This frame setting is not be understood in a deterministic sense, but as possibility through which a wide range of activities become possible without, however, being independent from the respective contexts.

reveal the manifold institutional and spatial networks that small schools are embedded in. The constellations and networks small schools find themselves in are decisive when it comes to deciding on whether they have a future or not.

This approach allows me to address a number of different factors that influence the making of school, including societal processes, structures, and systems as well as groups of actors and individuals, by presenting the layers one by one. I will then relate my own empirical studies to each layer (Section "Positioning the empirical findings in this multilevel view") and offer exemplary connections between the layers (Section "Zooming in on the interconnectedness of the regional levels: A case study"). Finally, I hope to demonstrate how the new perceptions gained through this geographical multilevel approach can contribute to a comprehensive view on the making of small schools (conclusions in section "Conclusion: the multilevel view and the making of small schools").

Changes in Small School Location Networks in Rural Areas from an Educational Research Perspective

Historically, small schools and mixed-graded teaching have been the characteristic schooling form in rural areas. In the early twentieth century, however, proponents of progressive educational movements questioned the same-age class principal, which lead to pedagogical and school policy controversies in numerous countries, including Germany, England and Switzerland (Fickermann, Weishaupt, & Zedler, 1998b, pp. 9–16). Small schools in rural areas have attracted the interest of the academic world ever since World War II, leading to studies with school policy, organizational, economical, sociological or nation-state focuses. In European countries, these studies seem to follow a certain cycle, as they are typically commissioned when there are plans for small schools and/or schools in rural areas to either be closed or reopened. The following section is dedicated to the different German scientific discussions, after which I will connect the different phases to international studies.

Immediately after World War II, there was a debate in West Germany on what is known as *Landschulen* or country schools. This debate lasted until the late 1940s, with most participants argueing in favor of individual village schools and against any kind of centralization (Diederich, 1967, p. 129). The debate shifted in the early 1950s, and more and more contributors to pedagogical magazines began to support the concept of centralization. What is striking in this debate, which is still ongoing today, is that an author's educational policy and/or ideological mindset would lead him or her to see basically all features that characterize small schools as either a clear advantage or disadvantage. I will further elaborate on the arguments brought forward in section "School paradigms and their arguments." The country school debate culminated in the late 1950s when West Germany's *Deutscher Ausschuss für das Erziehungs- und Bildungswesen* (German Committee for Education) strongly advocated that classes in secondary schools should be grouped according to age

levels, whereas classes in primary schools could cover more than one age level (Fickermann et al., 1998b, pp. 10–11). The majority of the very small schools in rural areas were parochial or denominational schools whose church sponsors defended them vehemently. In the late 1960s, most West-German states (*Länder*) had decreed that Christian *Gemeinschaftsschulen* were regular schools, resulting in the merger of many very small schools in a community. During the first phase, however, only very few villages were left without any primary school at all. In the wake of a strong centralization push in West Germany in the 1960s and 1970s, the situation in most Länder changed and the number of primary schools plummeted to 50–60% of the original number. In Baden-Württemberg, for instance, the number of schools lay at 4079 in 1965; this number had dropped to 2350 by 1982 (Kramer, 1993, p. 115). The decisions to centralize school location networks are made in the *Länder* capitals, where decision-makers typically tend to neglect regional and local interests as well as language and ethnic minorities (cf., Meusburger, 2016).

The expansion of road networks in rural areas improved the commute with school busses to central schools located in villages, C level centers (*Kleinzentren*) and towns or B level centers (*Mittelzentren*). The centralization process made mixed-graded teaching virtually obsolete in West-German regular schools (for more detailed information, see Fickermann et al., 1998b, pp. 8–14). The reasons for this centralization wave are for the most part either economical or pedagogical. The former line of argument includes aspects such as the higher efficiency of larger schools, the too high costs, the upkeep of small schools imposes upon communities, and the more effective employment of teaching staff; the latter line of argument includes aspects such as the possibility of a better educated teaching staff and the chance to teach children more effectively in forms. In section "School paradigms and their arguments," I will elaborate on these arguments in more detail.

In the German Democratic Republic (GDR), the country school debate was similar and yet different. The arguments brought forward were the same as in West Germany but augmented by the sociopolitical aspects that dominated the debate. In 1947, for instance, an article in *Die Neue Schule* (the new school) argued that single-form village schools with their homeland notions were not fit for a modern society. The authors pointed out how the Nazi regime had exploited the notion of *Heimat* (homeland) in its fascist interpretation as "blood and soil" in small schools to further their "cause" (Dräger, 1947, p. 119). The magazine's editors went on to demand a German democratic *Einheitsschule* (a one-tier school system instead of the three-tier school system typical of West Germany) in place of village schools catering mainly to agricultural needs, which would help to overcome the "tear between cities and rural areas" (editors of the magazine *Die Neue Schule*, 1947, p. 121, translated by the author).

The centralization measures put in place in the Soviet-occupied zone led to a two-third reduction of single-form primary schools by the late 1940s. Due to these developments, later generations in both German states would find mixed-age classes a strange thought. After unification, the reintroduction of mixed-age classes in small schools in the eastern part of Germany proved rather difficult due the stigmatization of small schools in the GDR (Fickermann et al., 1998b, pp. 13–14). What is

remarkable about the waves of centralization and school closure in the 1960s and 1970s is that the number of pupils continuously rose in those decades. It thus seems more than plausible to conclude that a range of reasons other than demographic developments are the driving forces behind concentrating school location networks. I will go into more detail when discussing the two paradigms in section "School paradigms and their arguments."

Starting in the mid 1970s, but even more so in the 1980s, the large centralization waves in both Germanys were followed by arguments in favor of small schools and mixed-graded teaching. The debate, which led to small schools regaining social acceptance, drew for one on pedagogical reasons, for example, the advantages of learning in small groups and pedagogical aspects (cf., Hopf, 1993; Luksch, 1986), and for another on reasons of educational planning, such as securing the location of schools with declining numbers of pupils (cf., Meusburger, 1978; Weishaupt, 1981a). A sound indicator of the turned tides in West-Germany's school development policies can be seen in the program introduced by Baden-Württemberg's Ministry for Culture and Sports in 1986, characterized as "re-establishing close-to-home primary schools" (Ministerium für Kultus und Sport Baden-Württemberg, 1986, p. 1). Over the course of the country school reforms in the 1970s, 851 Baden-Württemberg communities had closed primary schools; by 1986, the Ministry had identified 119 locations with the potential to be included in the reopening program, as they had at least 40 primary-school-aged children who could be taught in two mixed-graded groups. Once again, I must point out that the reestablishment program was initiated during a time when a population growth was not be expected, therefore excluding demographic developments as a cause for concentration and/or expansion phases; an observation that applies to more than Baden-Württemberg (Kramer, 1993).

The public and scientific discussions on small schools first started again in West Germany and picked up in East Germany after unification. In the 1990s, those in charge of schools on the territory of the former GDR, or the new *Länder* as they were called after reunification, were especially keen to reintroduce mixed-graded classes as a means of saving the schools from closure due to the dramatic decline in birth rates (Fickermann, Weishaupt, & Zedler, 1997; Fickermann et al. 1998b; Sandfuchs, Stange, & Kost, 1997). The debate has been generating more political interest in the western part of Germany since the consequences of demographic changes have also reached this region.

In the following paragraphs, I will elaborate on the developments of school location networks in a number of different European countries with a particular focus on rural areas as well as on relevant scientific discussions. In Nordic countries, the tradition of small schools reaches far back in history, owing to the low population densities in the peripheral regions. That notwithstanding, recent decades have seen phases of school closings there too. The Finnish developments will serve as a reference, as they are typical and well documented, when analyzing the situation in other countries.

By the late 1960s, Finland had already experienced a first wave of primary school closings, which coincided with demographic processes (the end of the baby boomers starting school) and infrastructure improvements, but also with paradigm changes

that led to favoring large schools and disfavoring teaching in mixed-graded classes. The latter argument today is no longer reflected in academic debates. This Finnish centralization process is comparable to the ones in both German states in the 1960s and in other Nordic countries (for Norway: Kvalsund, 2009; Sigsworth & Solstad, 2005; for Sweden: Åberg-Bengtsson, 2009). Similar processes can be made out for a number of East European countries as well, motivated by reasons similar to the ones brought forward in the GDR, such as Hungary (Forray & Kozma, 1998; see Chap. 6 by Gyuris) or the Czech Republic (see Chap. 7 by Kučerová et al.). Section "School paradigms and their arguments" is dedicated to those driving forces in more detail.

In an attempt to offer equal educational opportunities for everyone in Finland, the school system was reformed in the late 1970s (Autti & Hyry-Beihammer, 2014, p. 4). The school location network remained fairly stable until the early 1990s, when a wave of school closures began in 1992. These closures were closely connected to the economic crisis that set in after the collapse of the Soviet Union and rooted in economic constraints resulting thereof. The Finnish national government began decentralizing decision-making powers and withdrew from funding small schools. The communities were often either not in a position or unwilling to take over the funding responsibilities, thus leading to the wave of closures (Autti & Hyry-Beihammer, 2014, p. 4).

Similar developments in the 1990s characterize the Swedish process of decentralization and the shift of decision-making powers from the national to the local level. Despite the fact that the Swedish welfare state went through a crisis in the 1990s, funding for schools in rural areas was ensured through the national budget (Åberg-Bengtsson, 2009, p. 102).

Scientific literature has focused on different aspects of these developments. In the 1990s, Niemi and Piri (1998, p. 81) cautioned against the ramifications of closing schools for economic reasons and warned against longer school commutes, which in Northern Finland already amount to an average 70 km one way. Eleven years later, Kalaoja and Pietarinen (2009) stressed the risk that children might become estranged from their life worlds by commuting to central school locations (p. 111). They also emphasized the importance of schools as meeting points and centers for social and cultural activities—an argument that also grew in importance in German literature in the 1980s and 1990s (Kramer, 1993; Meusburger, 1989; Schorb, 1981; Weishaupt, 1981a, 1981b).[3] A lively debate on small schools was being waged in German-speaking countries in this period because—as mentioned above—small schools were being re-opened in Baden-Württemberg small schools (Kramer, 1993), while many were being closed in eastern Germany. In 1998, Fickermann, Weishaupt, and Zedler (1998a) published a reader that took stock of small school literature in Europe and discussed the different phases of expansion and concentration.

In 2009, the *International Journal of Education Research* published a special issue on small schools. Its contributors focused on how and with which questions,

[3] In the late 1970s and early 1980s, other countries also began stressing the advantages of small schools, for example, Switzerland (Poglia & Strittmatter, 1983), the Netherlands (Lem & Veenmann, 1984) or the USA (Sher, 1981; Sher & Dunne, 1977).

theories and methods educational science had been analyzing the meaning of schools for communities, villages or village districts in Nordic countries, England and Scotland. During this phase, special attention was given to three areas of interest. The researchers of the first area investigate the relationship between schools and the places they are located in (e.g., Kvalsund & Hargreaves, 2009); those of the second dedicate themselves to the metalevel and the perspectives from which small schools are studied and which theoretical concepts and which methods are employed (Hargreaves, Kvalsund, & Galton, 2009; see Chap. 10 by Kvalsund; Kvalsund & Hargreaves, 2009); those of the third ask what an agenda on studies on the relationship between schools and the places they are located in could look like.[4]

Newer studies on small schools in Finland center on the meaning small schools have for local residents and how local communities handle their closure, especially after the centralization waves mentioned above. In their 2014 study, Autti and Hyry-Beihammer conclude that although schools in rural regions of Finland are valued as social capital, they often are taken for granted. Their true value often only begins to become obvious when the threat of closure looms, which is often too late, because the decision to close the school has already been reached and all efforts to fight for keeping it open are thus in vain (Autti & Hyry-Beihammer, 2014, p. 12). For the first time since the country school debates, the authors of newer studies are increasingly shifting their perspectives to questions of educational science and pedagogy. An explicit focus is now being laid on how teaching in mixed-graded teaching settings is practiced, what differences can be made out in curricula, how student groups are formed, how subjects are organized, and how peer tutoring and differentiating take place (e.g., Hyry-Beihammer & Hascher, 2015; Raggl, 2011, 2015, see Chap. 12 by Raggl).

Research projects such as the international project on “Schools in the Alpine Region” (Müller, Keller, Kerle, Raggl, & Steiner, 2011; Raggl et al., 2015) make it clear that although demographic changes often trigger scientific studies on small schools and mixed-graded teaching, this schooling type is more than a mere workaround in times of declining pupil numbers. Instead, their pedagogical concepts can serve as a role model for modernizing lessons in large schools. An example is a large Rheintal primary school in Vorarlberg where mixed-graded teaching is currently being tested.

In this contribution, I will develop a multilevel view on small schools in order to highlight that on certain scale levels, such as the *Länder* level, proponents often bring forward demographical and economical reasons to favorably support a paradigm. At the same time, however, when turning to the local level, different aspects need to be taken into account, such as those relevant to the community or village districts. When studying the spatial scale levels, it is therefore of great importance to keep these arguments and intentions in mind, as this will assist in understanding how the relevant actors operated during the different phases of closure and (re)opening and to develop strategies for future planning phases.

[4] When referring to Kvalsund and Hargreaves’ (2009, p. 143) theoretical bases of research on small rural schools and their communities, the theoretical approach used here falls into the category of middle-range theories (Categories IIa und IIb).

School Paradigms and Their Arguments

As mentioned before, the discussions on small schools in rural areas typically follow one of two paradigms. The first paradigm is centered around large central schools that teach same-age forms and that serves as a basis for centralizing school location networks. The other paradigm is centered around small schools close to home whose staff teaches in mixed-graded classes and that serve as a basis for decentralizing school location networks. The arguments turned to in both cases mainly focus on the same topics but differ in how they are represented and assessed (cf., Kramer, 1993, pp. 8–16). In section "A multilevel view on small schools," I will present the respective arguments according to their spatial scale in order to uncover the underlying spatial interconnectedness of the discussion.

For the most part, the arguments brought for and against small schools teaching mixed-aged classes in European countries mirror those in Germany. What should be kept in mind, however, is that the arguments used in the early phases of the rural school debate differed between the Federal Republic of Germany and the German Democratic Republic (GDR).

The 1950s and 1960s brought societal and structural changes to both Germanies, such as the industrialization and modernization after World War II. The inhabitants experienced the effects on many different levels, most strongly in the rurals areas that were then characteristic for both Germanies, but also in the regions surrounding cities. Immediately after the war, both agricultural sectors declined signficantly in size and importance and the migration from rural to urban areas grew substantially. In the 1960s and 1970s, mass motorization and suburbanization lead to massive changes in West Germany's settlement patterns in the municipal hinterlands. One of the consequences was that originally rural communities grew into being large residential communities, and a demand for what then was considered to be modern schools—in other words, schools that offered a large range of subjects, specialized teachers, and so forth—arose. Next to these general "modernization arguments," the GDR also invoked sociopolitical arguments against small country schools that resulted from socialistic education ideals and pedagogical mandates (cf., section "School paradigms and their arguments"). According to the Soviet Mjenikow education system as a form or form schedule system (Forray & Kozma, 1998, p. 313), peasant children can only develop into young workers when taught in large, central schools, which is why they were pulled out of their parental environment (cf., Forray & Kozma, 1998, p. 310). In Socialist states, school planning is an explicit and integral part of the state's sociopolitical reorganization, for example, in Hungary (Forray & Kozma, 1998; see Chap. 6 by Gyuris) or the Czech Republic (see Chap. 7 by Kučerová et al.).

During that period, most European countries interpreted the structural and societal changes in rural areas as "progress" that finally reached "backward" villages. Progress was understood as rural areas realigning themselves to urban standards and lifestyles and, among other things, freeing the population from rural limitedness and control. Especially in Western Europe, control often referred to the control churches held over the population; up until the 1960s, parochial or denominational

schools were still the norm in some places and ensured that children were taught in either Protestant or Catholic schools.[5] During those times, these types of school were organized as single-form schools and for many, especially those against small schools, were the epitome of backwardness. In 1970, Geissler argued for same-age forms as he saw them as an expression of urban middle-class society. He was furthermore of the opinion that this organizational type better allows for meritocratic principles to be asserted than in single-form schools, which he assigned conserving power. This was a time in which there was overall consensus amongst experts and in the public discussion that upward mobility for children from educationally alienated backgrounds could only be made possible by teaching them in same-age forms.

When in April of 1985 Gerhard Mayer-Vorfelder, then Baden-Würtemberg's Minister of Cultural Affairs and a member of the Christian Democrats, established the initiative to re-institute elementary schools close to home, the overall sentiment had shifted back to stressing the many advantages of small schools, among them pedagogical ones but also in relation to the infrastructural role they play for the local communities.

The discussion between advocates and adversaries of small schools and their respective assessments of the pedagocial advantages and disadvantages continues to be intense. I would now like to take a closer look at the different lines of arguments.

The rural school discussion carried out in the 1950s and 1960s demanded that a rural pedagogic must exist in its own right (Diederich, 1967, p. 129), in which a holistic approach to teaching children should take preference over a mere schooling approach and in which the curriculum should take the children's rural lifeworld into account. The assumption is that this goal can best be reached in small schools with mixed-graded classes (to a degree mirrowing family life), holistic lessons, and the teaching principle of form. On the other hand, small-school adversaries deem this position as conservative or even reactionary and instead favor urban, large, "modern" schools whose teachers adopt a scientific approach to the various disciplines and where pupils are taught by specialist subject teachers. These adversaries have argued that aligning rural schools with modern urban standards would enhance educational justice and provide "better" schools.

Mixed-graded teaching is a typical feature of small schools[6] with a number of advantages that I have already mentioned in earlier discussions. One such advantage is what is known as the "helper system," in which children help each other and add to their own learning experiences. This in turn makes the children more self-sufficient and puts them in a more family-style teaching atmosphere, reducing the times they need to change class rooms, fewer repetitions as well as them recognizing heterogeneity (Raggl, 2011, p. 261). In the last few years, these advantages have

[5] In the German states of Lower Saxony and Northrhine-Westphalia confessional schools exist to this day.

[6] The different teaching methods in mixed-graded classes, for example, each grade level is taught separately, project oriented workclasses, mixed-graded learning, and so forth, cannot be elaborated on here. For more information, see Raggl et al. (2015).

been combined with specific profiles, for example, Montessori pedagogy (see Chap. 12 by Raggl), and thus the potentials of mixed-graded learning are being exploited in new ways and on deeper levels. Studies show that children attending small schools appreciate going to school more often than children visiting schools in which they are taught in same-age forms (Åberg-Bengtsson, 2009, p. 5; see Chap. 12 by Raggl).

Small school adversaries, however, doubt that children in mixed-graded forms are truly able to help each other. Instead, they worry that good pupils will be under-challenged, weaker pupils will be overchallenged, and the level of knowledge dissemination remain lower than necessary. They go on to point out that there are only few pupils that can help other pupils, that the children meet fewer other children, and that they have no other choice but to get along with their one teacher and with a small number of other children—in other words, that they are "at the mercy" of those individuals. Although such adverse situations undoubtedly may occur, very few studies have so far reported such incidences. Mixed-graded teaching poses its own challenges for teachers and in most cases during the early phases of teaching mixed-graded forms preparation times can be very intense and require teachers to prepare themselves for this type of teaching during their own university education.

A key aspect when discussing the pros and cons of small schools is the question of academic achievement, typically measured against national standards—that is, the standards developed for urban schools. A key indicator for an elementary school's "success" are performance tests and the number of children advancing to secondary schools, especially to grammar schools (Freytag, Jahnke, & Kramer, 2015, p. 50). In the 1960s, the advancement rates of small school pupils from mixed-graded forms in rural areas to grammar schools were low in comparison to those in urban schools with same-age forms. This circumstance was often blamed on the organizational school structures. Fippinger (1967) and Aurin (1968) showed that pupils from small schools with mixed-graded classes performed significantly less well than pupils from same-age forms. What is neglected most in this debate is that the parents' social structures, the support they can give, their aspiration levels, and work environment are not comparable to the situations found in cities. What weighs even more is the role spatial environments play when it comes to visiting grammar schools. In 1967, Peisert summarized the different dimensions of educational disadvantages in the artifical character of the "Catholic working-class girl from the country side," who could typically be found in regions with lower educational levels, for example, with a high share of people working in the agricultural sector and poor traffic connections. This could mean that children needed to help on the family farm, the school commute was too difficult, the schools were underfinanced and understaffed, and so forth. Conversely, Meusburger (1974) could convincingly show that children from remote regions and very small schools advanced to grammar schools when their parents supported them. However, concerns that children attending small schools with mixed-graded forms are less well prepared for grammar school persist to this day. This can especially be found in parents who themselves only attended same-age forms or whose local schools so far have been offering same-age form teaching (Kramer, 1993, p. 200). Pedagogical arguments of alleg-

edly poorer performing small schools are often brought forward when school closings are initialized; their true motivation, however, being economical in nature. The current debate in Baden-Württemberg is a case in point (cf., section "A multilevel view on small schools"). The authors of recent studies from a number of different European countries found no systematic correlations between small schools and poor performances (Åberg-Bengtsson, 2009; Galton & Patrick, 1993; Hyry-Beihammer & Hascher, 2015; Oeuvrard, 1990; Sigswoth & Solstadt, 2001; Veenmann, 1995).

Another line of arguments are the demographic developments, especially the numbers of pupils and teachers. One might expect that these developments would be considered "hard facts" and should not be discussed in the section of paradigms. The way they are assessed and treated, however, strongly depends on the paradigms under which small versus large schools are discussed. Those responsible in the school system can adjust the operating numbers (minimum and maximum numbers of forms and schools, number of pupils per form, minimum and maximum teaching loads, additional assignments and pay for head teachers, etc.). In Vorarlberg during the last few decades the benchmarks for small and smallest schools were repeatedly adjusted in the School Organization Act to omit closures of this type of school (Müller, 2011, pp. 190–192). The clear commitment of Vorarlberg's state government to "saving small schools for the sake of avoiding long school commutes and for strengthening rural structures in close cooperation with local communities" (Amt der Vorarlberger Landesregierung, 2005, p. 73, translated by the author) demonstrates the influence of paradigms on how demographic developments are perceived. The developments in Baden-Württemberg, on the other hand, point in another direction: Phases during which small schools are closed correspond to phases with growing numbers of pupils, and phases during which small schools are reopened correspond to phases with stagnating or decreasing numbers of pupils (Kramer, 1993, p. 116).

Analysis of the development of numbers of teachers reveals distinct cycles that lead to either a shortage or surplus of teachers. These developments are connected, for example, to how many people take up pedagogical studies, high or low birth rates, and so forth. In most European countries, small schools in rural areas suffer from a shortage of teachers (Kalaoja & Pietarinen, 2009, p. 114; Lind & Stjernström, 2015, p. 11). There are a number of different options for dealing with these supply and demand fluctuations, including granting financial incentive schemes such as additional pay for head teacher tasks or pointing out attractive housing options in rural areas. Educational authorities can allow teachers to apply to specific schools instead of delegating them to schools that are not their choice, and they can allow schools to pick the teachers they would like to see in their teaching staff instead of having them transfered to their school. These means of teacher allocation leads to a higher degree of satisfaction and commitment to the schools the teachers teach in.

Another means for making rural schools more attractive for teachers and for counteracting teacher shortages in rural areas is to include teaching mixed-graded forms into teachers' study curricula as well as to point out that teachers have more leeway when teaching in small schools, that they can count on good support sys-

tems, and that they can expect to be sent to many advanced trainings courses. In cases in which personnel policies are handled on the national level, such as under austerity measures, regional conditions are often not met appropriately and can produce counterproductive results. A case in point is the situation in Vorarlberg, which borders Switzerland and competes with the higher wages paid in that country.

These two cases show how handling demographic developments, in other words, the development of numbers of pupils and teachers, are influenced and shaped by the different paradigms and that actors in the school system have plenty of manoeuvring room in how they react to these developments.

The difficulties of recruiting teaching staff and head teachers for small schools in rural areas is not limited to phases of teacher shortages, but results consistently from the special demands that need to be met by teachers. Younger teachers are especially reluctant to apply to small rural schools. Those who are in favor of small rural schools point out the liberties teachers have in how they teach, the immediateness between teacher and pupils and their families, an atmosphere of familiarity in small schools, and often also a degree of nearness to the community at large. However, rural head teachers need to expect to be more involved in administrative jobs, and parents and the rural population in general expect strong involvement in the social and cultural life of the community the small school is part of. Both advocates for and adversaries of small schools point out that "rural idylls" are rare. Quite a number of teachers complain that preparing for classes is very time consuming, that they suffer from a feeling of isolation, and that they have difficulty finding the right balance between closeness and distance to the local population (Raggl, 2010, p. 5; 2018).

An answer to those problems can be seen in the increasing professionalization of teaching and creating a spatial distance between workplace and home. More and more teachers no longer live in the community they teach in, and they consequently are less engaged in activities outside school, which also means that their function as local cultural contributors has become limited (cf., Engeli, 2015, pp. 36, 43–47; Poglia & Strittmatter, 1983; Raggl & Smit, 2015, p. 19). An important factor in small schools is the networks teachers find themselves in, for example, *ARGE Kleinschulen*, a network of small schools in Vorarlberg, where teachers meet on a regular basis to share their experiences and to develop new teaching materials (see Chap. 12 by Raggl).

Another important aspect when discussing the pros and cons of small schools is the importance a school has for the community it is in and the regional identity of both the children and the parents. I already pointed out that schools play an important role in sustaining vibrant communities while discussing the school closures of the 1950s and 1960s. For one, a school serves as a first institution in which children are socialized and is a meeting place for children, parents, and other village residents; for another, the structure itself serves as a place where social and cultural activities find a "home." This function is heavily dependent on relevant actors contributing to communal life—in other words, on teaching staff, pupils, parents, and people in general carrying communal responsibility. This argument for maintaining a small school was often weakened by the transfer of teaching staff that had been assigned to a small school against their will and that consequently did not contribute

to communal life. The contributions necessary from the village side include the upkeep and equipment of the building for it to actually be a central communal meeting point. Well-kept and functional spaces, such as a kindergarten, school, public library, gymnasium, and meeting rooms for local clubs all under one roof, provide for a vivid meeting place and leads residents of all ages to identify with "their" school in "their village." This interlacing effect has been documented for a number of different regions, such as the Alps (Kramer, 1993; Steiner et al., 2011, pp. 104–105), Sweden (Åberg-Bengtsson, 2009, p. 105), and Nordic countries as a whole (Lind & Stjernström, 2015), as well as for Australia (Kilpatrick, Johns, Mulford, Falk, & Prescott, 2002). Interviewed villagers typically express that "the school ... is experienced as the village's centre" and that it is "a stronghold of cultural life" (Steiner et al., 2011, p. 104, quotes translated by the author). Children who visit schools in other districts often find it difficult to meet with classmates after school or to go to the same clubs. This in turn leads to weaker connections to their home town, because their afterschool activities take place somewhere else and they also need to spend more time commuting, either on public transportation or by being ferried back and forth in "Mama's taxi." Consequently, these students are unable to experience their way to school as a learning opportunity holding manifold lessons.

Steiner et al. (2011, p. 80) point out the importance of widening the scope of adolescents' life worlds and including the different types of places where they learn and are educated: formal places (schools), nonformal places (clubs, scouts), and informal places (media, peer groups, family). It is especially before this backdrop that the living and everyday worlds and with that the residential and school community cannot be valued high enough. When viewing the social and identity-establishing capital of a village as a mixture of *bridging* and *bonding* (Putnam, 2000), bridging can lead to a strong local identity and contribute to a sense of social cohesion, in other words, a sense of *we*. Bonding within a group, however, can also foster a strong sense of *us* versus *them* and dissociate locals from newcomers and neighboring villages. Steiner et al. (2011, pp. 87, 127) found evidence for these developments in villages with small schools in the Alps.

Those opposing small schools argue that these environments are too tightly knit, not differentiated enough, and sometimes even exuding constriction. Too narrow scopes for developments, downscaled offers, poor local infrastructure—taken together, these could all turn into unfavorable circumstances for residents of small villages and small school pupils.

Although this list of themes and arguments used by the different camps is by no means complete, it does convey how many different aspects are brought forward and need to be considered when assessing small schools. When reviewing the list, it becomes clear that both arguments for and against are typically two sides of the same coin. Which side is presented is to a degree dependent on local circumstances, yet the main determining factors seem to be the paradigm or ideology favored by those bringing forward the argument.

The following section is dedicated to the spatial scale levels on which the paradigms and subsequent arguments are employed.

A Multilevel View on Small Schools

To identify the factors influencing decisions on the network of school locations, it is necessary to point out a few processes on the macrolevel, because they also exude an influence on small schools. One of these processes is the far-reaching economical, societal, and cultural changes owed to globalization (Fig. 11.1, Level I). Modern information and communication technologies quickly spread globalization to the farthest corners of the world, and urbanization or metropolitan processes not only lead to ever more people living in (large) cities, but also to considering urban life as the norm and thus the normative standard situation. However, numerous studies on the development of schools have shown that this type of normative reference to urban school situations and the educational standards do not do justice to the diversity of the living and school conditions in other regions (Corbett, 2007; see Chap. 10 by Kvalsund; Kvalsund & Heargraves, 2009; Sigswoth & Solstadt, 2005).

The next level, the society level (Fig. 11.1, Level II), picks up on the consequences of those findings and poses the following questions: Which societal values are seen as goals for a "good" education? How far does the pendulum swing between the extremes of (a) an integral education embedded into a local lifeworld and (b) an orientation towards knowledge in special, professional fields aiming at providing the best possible education and fit for an (international) labor market? Which roles do family and role models play, for example, single or double income households, and what kinds of demands and requirements result thereof in respect to schools,

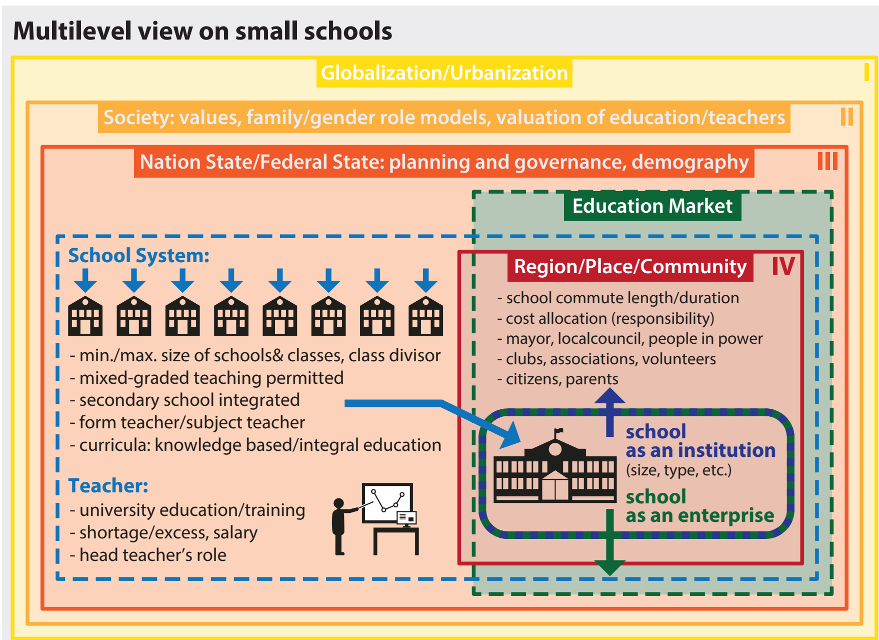

Fig. 11.1 Multilevel view on small schools. Source: Design by author

preschools, and all-day care for children? How dominant is the nuclear family concept with stay-at-home moms when it comes to accepting certain types of school programs? In which esteem are teachers generally held? What is their social status in society? Are they perceived as partners when it comes to educating?

In Germany, the next smaller scale level on which the education system is governed is the federal state level (Fig. 11.1, Level III). It is there that central goals are decided on and set, for example, guidelines for regional developments such as sustainability and equal living conditions as well as social structures. Education goals set for Baden-Württemberg in 2002 included, for instance, that "the different education facilities are to be further developed and adapted in such a way that all regions provide a comprehensive range of secondary and further education and that these facilities are within an acceptable distance" (Wirtschaftsministerium Baden-Württemberg, 2002, p. 35). The guidelines' authors also stressed that the development of rural areas must take "reasonable proximity" of educational and general supply infrastructure to places of residence into account (Wirtschaftsministerium Baden-Württemberg, 2002, p. 19). Descriptions such as "acceptable distance" and "reasonable proximity" indicate that there is plenty of leeway when planning school locations.

On this level and on the regional level—not delineated here—demographic factors play a large role. Especially when it comes to enlarging or keeping up primary schools, demographics are of importance when economic factors such as profitability and resource allocation per pupil are considered. These purely bureaucratic and economically motivated questions concerning efficiency reduce education facilities to producing maximum output, in other words, graduation degrees, with the least possible effort and costs. However, if education facilities are expected to contribute to the development of rural (and urban) areas, to furthering spatial identity and to ensuring that rural areas maintain a long-term appeal as attractive places to live and work in, limiting the way education facilities are viewed to a mere economic efficiency perspective is inept.

Still, the 2018 school development plans for Baden-Württemberg are shaped primarily by efficiency principles. The preamble of Baden-Württemberg's CDU Education Secretary on regional school development plans puts efficiency arguments first and only delineates the advantages of large schools. Then and now, policy-makers have turned to efficiency arguments when centralization phases have been/are rung in and in order to implement political and ideological paradigms (Fig. 11.2).

It is worth mentioning, however, that the assessment of these allegedly "hard" facts leaves far more leeway for political decisions than publicly admitted. The school developments in the study areas of Baden-Württemberg and Vorarlberg show this very clearly. The demographic and school location networks seldom developed congruently. Instead, other factors have been much more decisive, such as planning policy, ideological reasons, or austerity programs (Kramer, 1993, pp. 230–232). The holistic approach taken in Vorarlberg is a good example to show that the importance of small schools extends far beyond reducing them to mere questions of economic efficiency.

The school system itself provides many levers and they can be adjusted when it comes to deciding on enlarging, maintaining or closing a school, thus impacting the

Baden-Württemberg's education infrastructure continues to face developmental challenges. One of them is the need to adapt to changing societal conditions, in particular changing demographics and changes in school choices.

Regional school developments' most important goal is to ensure that all pupils have access to schools that cater to their respective aptitudes and skills within a reasonable distance. At the same time, it is in the interest of all those concerned to ensure long-term strong performance and efficient school locations, especially in rural areas.

The goal is to establish schools that due to their size offer very good pedagogical conditions and that can be sustained long term. Larger schools can offer more diverse facultative subjects than smaller schools. Staffing shortages, for instance due to sick leaves, can be compensated for better in larger than in smaller schools.

Fig. 11.2 Baden-Württemberg's education infrastructure. Source: Ministerium für Kultur, Jugend und Sport Baden-Württemberg 2018, translated by author

network of school locations. This is the level where decision-makers execute school-site planning, settle the minimum and maximum number of pupils per class, and decide whether mixed-graded teaching is to be introduced or secondary schools are to be integrated, where they determined how the secondary school system is to be conceived and whether the principal of the class teacher or subject teacher is the predominant model, and it is on this level that the curriculum is fixed. In Germany, this is also the level on which the education and hiring of teachers is decided on, where teacher shortages or surpluses are generated, where school management's salaries and discretionary competencies are set. When all these decisions are made on a regional instead of on a state-wide level, they tend to be a far better fit to the needs of individual communities and schools. What has not proven to be a successful path, however, is granting the local level responsibilities without also granting financial means. Finland and France are examples in point, where local communities were left without the means to implement the decisions they have made (Autti & Hyry-Beihammer, 2014, p. 4; see Chap. 5 by Giband).

School sites with their regional specifications form the local scale level (Fig. 11.1, Level IV). Typically, the first aspect to be touched on is how long the commute to school is. In most countries, policy-makers consider an hour for both ways the maximum acceptable time to reach a primary school; in peripheral Finnish regions, however, commutes may add up to 3 h (Meri, 2010, p. 79) and seasonal variations must be allowed for. This is also the level on which it is decided if and whether a municipality, as the authority responsible for schools, is willing and has the ability to provide for the expenses related to the upkeep of the building and the material and medial equipment of the outfit. In Germany, the next higher regional level (the *Landkreis* or county), is responsible for providing for the transportation of pupils, which can lead to conflicts of interest when it comes to deciding for or against a school site by those responsible on the different levels. Typically, the final decision for or against a particular school is a political one reached on the municipal level,

where mayors, local councils, and other people in powerful positions have a substantial influence on the outcome. The timing of local and mayoral elections, the assertion power of individual public and prominent figures, parental representatives, various clubs, and volunteers forming sponsor groups for a school all contribute to the making of school. In cases in which one of the actors questions a school site, saving that site is heavily dependent on the leeway the different actors have and whether they are willing to make use of it or not, as well as to what degree the school is "embedded" in the community.

The educational system, however, is not only a field in which public actors and parts of state and federal infrastructure are active; increasingly, private actors following commercial interests are joining this set of actors. This in turn means that the education market and schools are turning into enterprises that court "customers," compete with other companies, and are subject to market-based laws. In many countries, the educational market is a quick-growing one, and in numerous places today they already must be reckoned with as serious competition and moreover leading to a selection of pupils (see Raggl, 2012, 2018).

What I would like to focus on here is the specific local setting of place and school. By far most of the small schools we are talking about here are located in peripheral rural regions, which are often sparsely populated and are confronted with a shrinking population. Very often, the communities themselves are small or they, by way of incorporation, have become local districts in larger units. That notwithstanding they can be outfitted to significantly varying degrees and can range from agricultural villages in economically less strong regions, internationally renown winter sports locations to communities situated in attractive landscapes with a large number of secondary residences, attracting amenity migration of elderly. Consequently, the importance of school sites is not uniform to all those rural areas. To what extent schools as institutions (cf., Kilpatrick et al., 2002) influence local settings, whether they prompt economical or identity-establishing impulses, serve as a community hub or function as an arena for local politics and resource for the community's development depends on a number of factors located on the level of the community itself and the local actors. When trying to save a school site, a very successful measure is to open the school's facilities for other uses and to position school buildings as a delivery point for other services. This then decides which type of school (Kalaoja & Pietarinen, 2009) the school in question belongs to. In the following I will provide examples for this process and go into further detail.

In order to determine the school types, we need to take a closer look at the schools themselves (Fig. 11.3, zooming in Level IV of Fig. 11.1). Both the design and the possible uses of the school building are important factors in a school's "action setting." In many regions, schools are used for a multitude of purposes: During the first part of the day, they serve as schools and kindergartens; in the afternoons, they are places to help pupils with their homework; in the evenings, they are used for sports and leisure activities; and on the weekends, they serve as places for various members of various clubs to congregate. School buildings are also often home to libraries, host activities for senior citizens, and many other things. The wide range of activities school buildings are used for not only makes economical

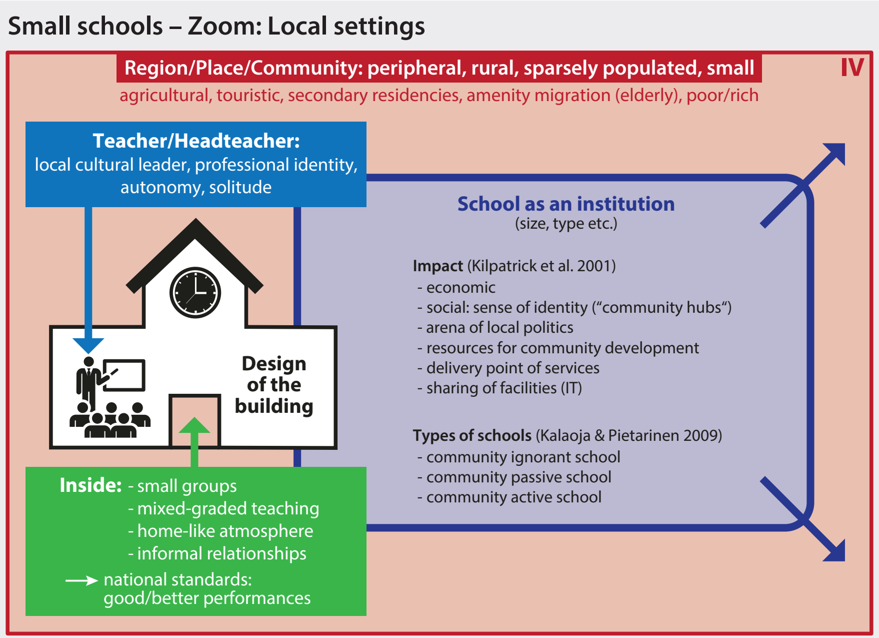

Fig. 11.3 Small schools—Zoom: Local settings. Source: Design by author

sense but also contributes to schools and their actors being integral parts of the communities they belong to.

Aside from the community level, the individuals active in the schools exercise an important influence on the role a school plays in its local context, namely the pupils, the teaching staff and head teacher, and the parents (e.g., Bechtold, 2011; Raggl, 2018).

The organizational conditions of a school also encroach on everyday school life, in other words, small mixed-graded study groups, a homelike atmosphere, and informal relationships composing positive aspects of small schools. Newer performance tests show that children schooled in such schools fare better or much better than children visiting large schools; having said that, however, the tests themselves can be questioned.

On the other hand, the framework conditions of smaller schools can also have their downsides, for example, when the local setting is poorly outfitted, the only teacher does not or cannot feel responsible for the school they teach at, or those responsible from the community side do not support the school. Small schools are particularly vulnerable to situations like these and they in turn can quickly lead to poor learning conditions. Decisive factors for the success of a small school and securing its long-term existence are the teaching staff and the head teacher. Small schools hinge on how the teachers were educated, their selection (degree of wanting to teach at a small school), autonomy, experience, dedication, and most of all the esteem in which the local community holds them. On the one hand, teaching staff is

faced with numerous challenges; on the other, many welcome the special opportunities small schools have to offer (Raggl, 2011).

The next section is dedicated to assessing how well this multilevel view is suited to describing and analyzing the development of school location networks.

Positioning the Empirical Findings in This Multilevel View

My next steps are directed at integrating my own empirical studies on small schools in Germany's south-western state of Baden-Württemberg and in Austria's westernmost state of Vorarlberg into a multilevel view. What I am about to present are the findings on how the location networks of primary schools in rural areas have developed in the study areas I first observed 25 years ago. In 1991 and in connection with my PhD thesis (Kramer, 1993), I began studying small schools in Baden-Württemberg and Vorarlberg by means of quantitative questionnaires and expert interviews, and in 2016, I returned to the study areas to follow up on the developments. By means of statistical analyses and expert interviews and by taking a multilevel view, I set out to determine which factors on which scale level have had the most deciding effects. Two opposing concepts can be distinguished: (a) centralization, in other words, few large schools and (b) decentralization, in other words, numerous small schools.

Both countries have peripheral and sparsely inhabited regions in which small schools have a longstanding tradition. An important difference between both study areas is that the conditions for the routes to schools, especially during the wintertime, can be rather difficult due to the high alpine geographic location of Vorarlberg's Montafon and Arlberg regions; in comparison, the routes in the low mountain range of Baden-Württemberg are only mildly affected in the winter months. In the mid-1970s, due to the baby-boom period, the number of pupils continuously rose in both countries and in the 1960s and 1970s there was a lively discussion on what is called *Landschulen* in German, or "country schools" in English. The proponents of two general education policy concepts faced off, one group favoring "small schools close to home," the other favoring "central, large schools" (Kramer, 1993, p. 4).

Despite the fact that the number of pupils in Baden-Württemberg kept increasing in the 1960s and 1970s, many schools were closed down: Between 1965 and 1985, a total of 1739 schools were closed; at the end of this wave of centralization, only 57% of the original number of schools remained (Kramer, 1993, p. 115). Among the small schools closed were many confessional schools, their smallness mainly resulting from the fact that Catholic and Protestant children were schooled in separate schools. Soon after the wave of closures, the number of pupils began to decrease and in 1986, the then Minister of Education and Culture announced the "re-introduction of primary schools close to home" and opened 119 new (mostly formerly closed) primary schools (Kramer, 1993, p. 121). Those measures were accompanied by a huge media response. Today, and again before the backdrop of demographic changes, a new phase of concentrating primary schools by closing down schools in peripheral

regions has once again begun (Fig. 11.2). Between 1991 and 2015, the overall number of pupils in Baden-Württemberg decreased; 229 primary schools were closed and 209 were opened (Bauer, 2016, p. 118). The closed schools were mainly located in the *Land*'s southwest, which has more rural and less densely populated municipalities. Often, the school branches closed had less than 64 pupils and did not offer secondary education. The newly opened primary schools are for the most part located in the densely populated Upper Rhine Rift, for example in the university cities of Freiburg and Heidelberg as well as in Stuttgart, and half of the newly opened schools are public schools (Bauer, 2016, p. 93). Because the alterations in the school location network only partly correspond with the development of pupils, the demographic developments cannot be seen as the determining factor. Instead, driving factors in Baden-Württemberg are school-policy developments that shape the school location network, such as the introduction of common schools or processes of privatization.

In Vorarlberg in the 1950s and 1960s, 24 schools were closed. The decision-makers reasoned that the street conditions had improved considerably, thus allowing for pupils to better reach schools not quite so close to home. Even though more small schools were closed during the following years, these amounted to no more than seven in a 20-year time period, reducing their number from 63 in 1966 to 56 in 1986 (Kramer, 1993, p. 76). Overall, Vorarlberg's school location network has remained rather stable, especially when compared to Baden-Württemberg's development, and has been far less subjected to significant changes. Even though one certainly must take the difficult school routes during the winter season into account, I would not attribute the different developments to that factor alone. Some schools have recently been closed in Vorarlberg, but only very few. When comparing those regions, it quickly becomes evident that the demographic developments alone cannot explain the very different developmental paths the school location networks have taken. Instead, it is worthwhile to turn to the typical bundle of processes and discourses on the various scale levels that accompany phases of centralization and decentralization. In order to reveal how the different scale levels are interconnected, I now would like to return to the multilevel view to uncover the discourse and process bundles typical for each phase.

A typical phase during which the centralization guiding principal favoring large schools and same-age school classes dominated can be found in the 1960s and 1970s in Baden-Württemberg (Fig. 11.4). The guiding principal of country schools replaced the paradigm of modern, large schools and greater specific differentiation. There was a strong determination to once and for all give up one-room schools, a type of school held responsible for keeping Catholic working-class girls from obtaining access to a higher education (Fig. 11.4, Level II). Small-school adversaries were often education politicians who came from an urban background and generally blamed small schools for the low rate of children going on to higher secondary schools, without taking regional and social factors into account. The guiding principal of large, modern schools served as the blueprint for the school-system level itself: A comparatively high minimum number of pupils per class was meant to guarantee that children were taught in same-age classes, reformers devised three types of centralized secondary schools, and the subject teacher principal took the lead, with a clear focus on a subject knowledge curriculum (Fig. 11.4, Level III). At

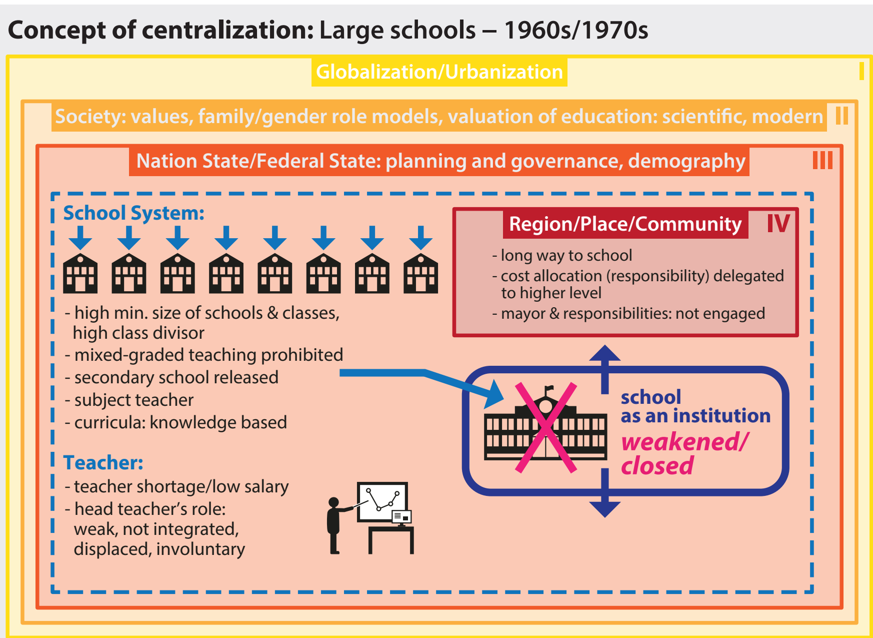

Fig. 11.4 Concept of centralization: Large schools—1960s/1970s. Source: Design by author

the same time, there was a shortage of teachers, which served as an additional argument for school closure—a development many communities are now confronted with once again. Furthermore, the salary for head teachers has been and still is rather unattractive at small schools compared to larger schools, because the administrative workload is higher in small schools. In addition, the peripheral regions often prove unattractive for fledgling teachers. In cases in which young, inexperienced teachers are placed in schools in distant regions and put to "a trial by fire" against their will, they most likely will have trouble finding their bearings. Consequently, those actors in favor of closing schools are served additional reasons for realizing their plans. Arguments along those lines can be insinuated in connection with closing schools in both study areas.

After schools are closed, pupils' commutes to school typically become much longer and the students become dependent on using different means of transportation (Fig. 11.4, Level IV). Aside from the fact that the longer commutes to and from school mean that children are away from home longer, that they have to get up earlier, and that they are exposed to more risks on their way to school, they spend a lot of time in places other than where they are from and where they are socialized. Additionally, when participating in sports clubs and in extracurricular activities, it is not so easy for them to spend time with their schoolmates.

In Germany, the *Landkreis* takes on commuting expenses, school authorities (the municipality) are responsible for the expenses of school upkeep, and the *Land* pays for the teaching staff. Because the costs are defrayed through distribution between

different levels, it remains unclear whether centralizing schools actually leads to savings. In cases in which the local actors are not committed to their small school and favor spending their funds on other projects in the municipality, a school closure can often be considered a done deal (Fig. 11.4, Level IV). Although just-described bundle of factors need not always be present in that exhaustive melange for a school to be closed, they can be viewed as a typical scenario within the centralization process.

Typical bundles of influential factors are also evident in the phase during which a decentralization trend favored small local schools (Fig. 11.5). In the 1980s in Baden-Württemberg, this trend set in and was known under the name *Wiedereinrichtung wohnortnaher Grundschulen*, or "re-opening of primary schools close to residence" (Ministerium für Kultus und Sport Baden-Württemberg, 1986, p. 1, translated by the author). Proponents of this approach place a high value on an integral education appropriate for children (Fig. 11.5, Level II). On the planning level, authorities place top priority on providing for a school infrastructure close to home and set the specifications in the school system so as to enable decentralized school facilities: This means a minimum number of pupils for both schools and school classes as well as the opportunity to facilitate mixed-graded teaching, the teacher-principal form, and an integral, project-oriented curriculum (Fig. 11.5, Level III). The teaching staff is specifically instructed in teaching this particular type of lesson, and it is worth noting that there are plenty of interested teachers willing to take on positions as teacher or head teachers in small schools. The success of

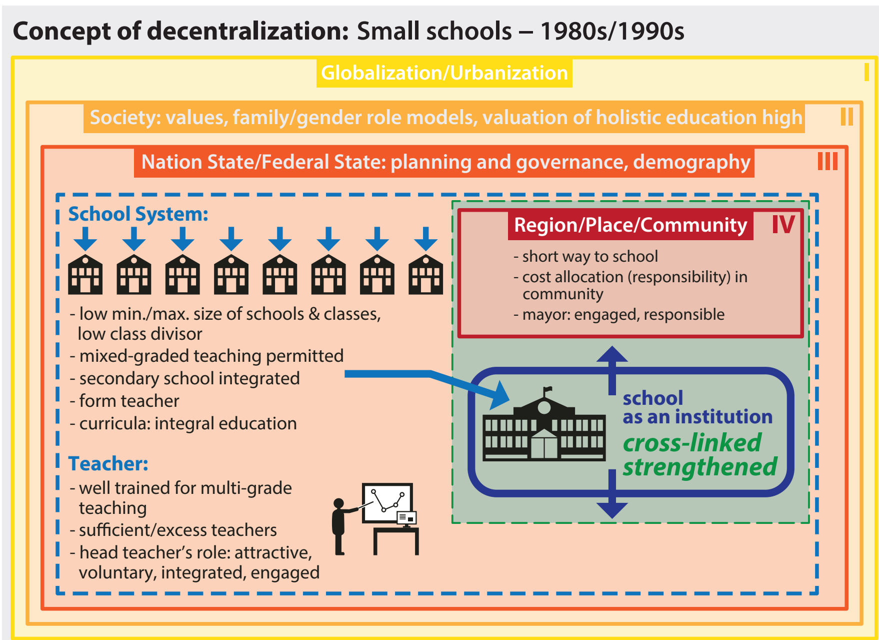

Fig. 11.5 Concept of decentralization: small schools—1980s/1990s. Source: Design by author

small schools clearly depends on the willingness and readiness of the teaching staff to shoulder more than just the usual professional obligations in small communities. Schools that are quickly reached, well anchored in the community, as well as financially and ideationally secured are sure to fulfil the above-mentioned function of a *community hub* (Fig. 11.5, Level IV).

These antagonistic guiding principals on school location networks in rural areas are the result of different assessment criteria on the different scale levels. At times, however, actors are known to combine criteria from the different sets of guiding principles. With the following case studies, I will explicate how situations of that kind present themselves and how a multilevel approach can facilitate their empirical study.

Zooming in on the Interconnectedness of the Regional Levels: A Case Study

Twenty-five years ago, I surveyed both study regions and focused on the school system as a whole and on the situation of schools in detail, covering 13 municipalities with 29 schools in Vorarlberg and seven municipalities with nine schools in Baden-Württemberg overall (Kramer, 1993). One of my goals was to identify the factors influencing decisions and developments on the different scale levels. Through expert interviews and quantitative questionnaires, I assessed the attitudes of actors on both the municipal and school level towards small schools. Those results now serve as the initial basis for this current study.

My most important result is the discovery of two distinct paradigms or “camps” of those in favor of and opposed to small schools among both the surveyed local population and teaching staff. In short, “knowing means loving,” because only those who never had any experience with small one-room schools were sceptical of this type of school. This difference explains the varying attitudes found in both study regions: Vorarlberg has a longstanding tradition of small schools, they are held in high esteem and are paired with the experience of to-the-point education. The situation in Baden-Württemberg is different: Beginning in the mid-1980s, implementers of the state-wide program “Reopening of Primary Schools Close to Home” tried to counteract the modernistic guiding principal and centralization approach by introducing a new “old” concept. Interdependencies between the different levels became especially apparent, and are still in effect today, when mutually exclusive concepts are targeted and one becomes more dominant than the other.

This can be explained with the example of Niedereschach-Kappel, a small village district school in Baden-Württemberg (Fig. 11.6). The local school there was reopened in the late 1980s under the aforementioned program. Two expert interviews with the former mayor of this municipality and the current head teacher give insights in the complex interrelationships and the different lines of argumentation.

In early 1986, the mayor (the community’s political representative) and the population (the community’s individuals) of Niedereschach-Kappel learned through a press release from the *Land* government (at the federal state or *Länder* level) that

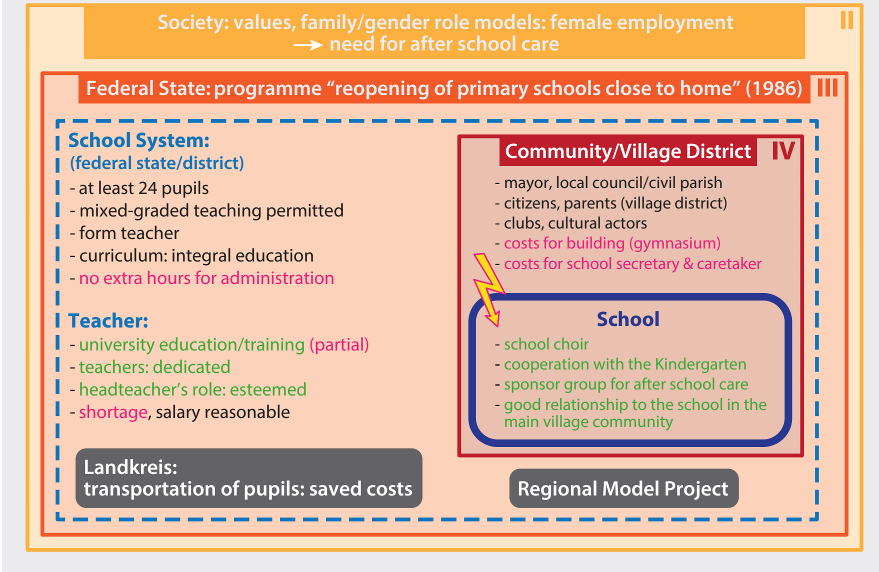

Fig. 11.6 Case Study: Niedereschach-Kappel (2016). Source: Design by author

their shuttered small district school in Kappel was scheduled to reopen in 1987. Although the parents in Kappel (the level of village district individuals) were totally smitten with the idea, the mayor saw himself confronted with numerous problems. After the school building (at the local council level) had been closed down, it had been remodelled to accommodate sport clubs (level village district cultural actors). Refitting the gymnasium to meet the new standards (i.e., separate toilets und changing rooms for each sex) would occasion costs for structural measures. Another problem that needed to be solved was finding a new location for the clubs of sorts quickly and yet another was to hire a school secretary and a caretaker. Although the change would reduce the costs of commuting, this savings would go to the *Landkreis* Schwarzwald-Baar and not to the community of Niedereschach. The assignment and hiring of a teacher fell to the *Länder* level, but at the level of the district government (or: *Regierungsbezirk*) the school's council decided not to allot additional hours to the head teacher for administrative tasks.

A good 25 years later, the school is still in operation and the head teacher and two additional teachers instruct 34 pupils in total. The very dedicated head teacher is from a neighboring community and does not live in the community the school is located in (Fig. 11.1, Level III). Two of the three teachers work fulltime, which makes lesson planning fairly simple. One of the teachers directs the school choir (school and culture, at the community level). Recruiting young teaching staff for

this region, which is done through central federal offices, is proving difficult. The two schools in the main village of Niedereschach and the village district of Kappel have a very good relationship, and care-intensive children are sent to the small school in Kappel, which is organized in a less complex manner (Fig. 11.6, Level IV). In return, the school staff in Niedereschach take in children with a stronger need for afterschool care.

Kappel's head teacher has also managed to integrate the school into a regional model project, which, among other things, provides the institution with additional teacher hours. Very important measures were the promotion of a close connection between the school and the kindergarten through a kindergarten association (*Kindergartenverein*) and the establishment of a sponsor group (*Förderverein*) for afterschool care (societal level: An increase in female employment increased the need for day-care, Fig. 11.6, Level I). The founding of the sponsor group with its volunteers and interconnectedness with local clubs (sports and music) was an especially important signal, which in turn made the municipality willing to provide additional funding for afterschool care (Fig. 11.6, Level IV). The facilities are highly utilized throughout the week by the kindergarten, the school, and various clubs. But all that not withstanding, the school's preservation is in question because a cost-intensive renovation of the school building and the multipurpose hall, which is part of the complex, is necessary. In 2018, it is unclear whether the new mayor and local council (at the civil parish level) are prepared to invest the 3.3 million euros necessary for the facility's upkeep in the village district of Kappel, because they do not need to budget for the pupils' commute (at the *Landkreis* level).

When authorities at the *Land* level initiated the re-opening of this small district school in the 1980s (Fig. 11.6, Level III), the municipality endured the plan's implementation. Now, the preservation of the small district school is once again being discussed at the municipal level (Fig. 11.6, Level IV). The number of pupils for the next coming years is stable and all teachers are still on duty, yet as soon as the municipal level is confronted with financial problems, such as staffing problems at the state level, the school's future existence will be at risk. Most likely, the school can then only be saved if a very well-connected sponsor group manages to exude political and social pressure on the actors' level. This example makes it more than clear just how fragile small schools in rural areas are and how easily they can be caught up between all the different interests on the varying levels involved.

A school's interconnectedness as part of a community's social and cultural life can serve as an excellent ground for its preservation. The example of Niedereschach-Kappel shows how a school can constitute a "hub" to influence its preservation. The second important component is the actors in the schools, that is, the head teacher and the teaching staff whose commitment and dedication are critical in building a network. Studies on small schools, for example, in alpine regions (Raggl et al., 2015), clearly show that even though actors' roles have changed over time and they often do not live in the community where their school is located, they nonetheless act as cultural instigators and are part of the village activities.

Conclusion: The Multilevel View and the Making of Small Schools

The multilevel view offers the possibility to combine geographical approaches with educational sciences findings and to analytically untangle the different interests and conflicts of interest that encircle the pros and cons of small schools. By applying this approach it is possible to better identify the lines along which the debates on small schools run, to have build a sounder ground on which to stand that will not falter quickly. The strains on small schools are manifold: demographic changes in respect to both pupils and teaching staff, financial shortages from the authorities responsible for schools, and altered societal and school-policy guiding principals. In Baden-Württemberg, a new, ideological heated debate has set in and is forming a new guiding principal that revolves around what is known as *Gemeinschaftsschulen* (comprehensive schools).

One advantage of looking at rural small schools through a magnifying glass is that what happens in these institutions shows itself in a rather undiluted manner: Which people are active in which positions and roles, which expectations and goals come together, and how they reciprocally affect one another. It immediately becomes evident how much local communities are shaped by schools and how they too shape the communities they are located in when stepping back to look at the manifold usages of the school buildings and the numerous activities that take place, once the "action settings" that evolve there are discerned and how they in turn influence the actions of those concerned, once the ideas and concepts developed there are carried over the walls and out of the schoolyards into society and the world at large.

Researchers are also increasingly calling for rural education to put more emphasis on practicing place-consciousness and place-connected education and to include indigenous knowledge and a place-based pedagogy—in other words, to develop an education for rurality. This guiding principal serves as an alternative plan to the modernistic guiding principal, whose proponents understand rural places as backwaters and which stands in stark contrast to the dominant "successful" urban or suburban guiding principal in the school system. The alternative plan constitutes an antipole to the frequently advocated position that success is only possible in the city and that successful pupils sooner or later will (have to) leave their rural communities (Corbett, 2007, in his book "Learning to Leave," 2013). This poses the question of how much difference between rural and suburban or urban schools is desirable, necessary, and useful, and at which point inequality turns into inequity. Without a doubt, the making of small schools is an eclectic and responsible process that, together with all relevant actors, must be a crucial part of spatial planning. One main goal should be that pupils in rural schools of the future "learn to stay."

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