Rural Location and Academic Success—Remarks on Research, Contextualisation and Methodology

Unn-Doris K. Bæck

Department of Education, University of Tromsø - Arctic University of Norway, Tromsø, Norway

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In this article the focus is on the relationship between rural location and education outcomes, a field that has not received enough attention either by educational authorities or by educational researchers. Main goals are to argue for an increased focus on rural education and for the need for contextualisation of educational research in general. Research on issues such as school size, local adaption, population composition, parental involvement and rural approaches to learning are presented in order to map significant areas in rural education research. Perspectives focusing on compositional and contextual effects explaining spatial variations in academic success are highlighted. In addition, an outline of some methodological consequences following from the latter goal is provided.

**Keywords:** rural education, education outcomes, contextualisation, rural, place, space

**Background: Why Focus on Rural Education?**

Place matters in educational outcomes, and the variability of educational performance of rural students is a recurring theme in educational research worldwide (Green & Corbett, 2013).

However, it may often seem as location is regarded irrelevant in educational research since a differentiation between rural and urban schools is often missing. Hargreaves, Kvalsund, and Galton (2009) suggest that the urban setting is being taken for granted as the norm. Butler and Hamnetta (2007) claim that debates in education have a strong urban dimension and that “geography of education” primarily entails issues related to education in urban or suburban settings. Urbanity seems to be the random location, to be presupposed when nothing else is stated.

In this article the aim is to show that rural location is significant for understanding educational phenomena and issues connected to learning, development and knowledge. The concept of location will relate primarily to geographic location—however, as will be elaborated on in the paragraphs to follow, geographic location in itself has to do with a lot more than simply geography. In order to grasp geographic location’s significance for educational issues, we need to take into consideration structural, social and cultural processes related to place. Also, introducing the perspective of location implies that it is not just the place-specific attributes themselves that are important. Following Logan (2012), analyses of place-level data become spatial when they introduce the relative locations of places as a major...
consideration. Spatial thinking has to do with where things are or where they happen and especially about where they are in relation to others, Logan claims. The issue of spatial differences in educational outcomes ultimately touches upon the question of equity in education and how we can ensure homogenous educational quality across regions. This demands systematic knowledge on what kind of conditions and variables that are significant for explaining regional differences, including factors internal and external to school itself (Aarkrog & Bang, 2012).

Regional Differences—Well Documented, Less Researched

The focus on geographic location and education is justified through research and statistics documenting regional differences on a number of measures on academic success and at different levels of the educational system, for example in Canada (Alasia, 2003; Bowlby, 2005), Norway (Falch & Nyhus, 2009; Vibe, Frøseth, Hovdhaugen, & Markussen, 2012), the United States (Hardré & Hennessey, 2010; Rumberger, 2011) and Australia (Alston, 2005). A rural/urban categorisation may make up for a lot of this variation. In primary education, this is shown in for example standardised national test scores, and in secondary education this is shown in for example dropout rates.

Despite this, issues related to education in rural areas have been given relatively little attention by educational authorities and also have not been investigated thoroughly by educational researchers. One can say that regional differences in academic success are well documented, but less researched. The national evaluation of the latest educational reform of 2006 in Norway, the Knowledge Promotion Reform, may serve as an example. While several of the evaluation projects document considerable regional differences, the analyses do not attempt to provide sufficient contextualisation of the results given (for example in Falch & Nyhus, 2009; Vibe et al., 2012). The same is true in other national settings. Åberg-Bengtsson (2009) shows that in Sweden more elaborate studies explicitly directed towards rural education and small rural schools are quite rare. Based on a review of research on rural schools in British and Nordic countries, Hargreaves et al. (2009) claim that despite the fact that a high proportion of the children live in rural areas and attend rural schools, educational and social welfare provision in rural areas often remains a low national priority. Barley and Beesley (2007) claim that research studies relevant to rural education and its particular context and challenges have always been sparse in North-America, and Arnold, Newman, Gaddy, and Dean (2005) point out the same. Hardré (2008) shows that while over 30% of US schools are in rural communities, less than 6% of research conducted in schools has included rural schools.

Research relevant for the rural education research field, does not necessarily go under the label of rural education at all, or does not have rural issues as an explicit research problem. This is especially true for larger quantitative register based studies focusing on different forms of educational outcomes (for example in the earlier mentioned studies by Falch and Nyhus (2009) and Vibe et al. (2012)). Variables that have to do with regional variation or rural versus urban categorisations are often included as control variables in statistical analyses, but findings connected to these variables are often not commented upon, as they are not the main focus of the analysis or the study at hand. Even so, these studies are important contributions to the rural education research field as they represent another type of methodology than the ones typically dominant within rural research, often relying on qualitative research designs.
In the following paragraphs research contributions focusing specifically on education in rural areas and/or differentiate between schooling in rural and urban locations will be quoted, limited to research relevant for the question of education outcomes. The discussion is structured through outlining a distinction between compositional and contextual effects. These are two perspectives that may help clarify spatial variations in academic success.

The Rural/Urban Distinction

The concept of rural is not as straightforward as it may seem. The “rural” is not fixed—rather it is complex, contested and constructed. There are multiple definitions of “rural” and “rurality” in official documents, in statistics and in research. Even though statistical definitions may often be a good enough starting point for developing research designs that involves rural/urban distinctions, other intakes are also needed. These have to do with the “rural” as socially constructed, as meaning developed in interaction between different actors, or the cultural dimensions of “rural” (Hargreaves et al., 2009). Leading theorists on space, such as Lefebre (1991) and Massey (2005), claim that ontologically space is social and real, that spaces are social relations stretched out, and that space is socially produced (Robertson, 2010). This implies that spaces are dynamic, changing and temporal. According to Howley, Theobald, and Howley (2005, p. 1) the rural in rural is not most significantly the boundary around it, but the meanings inherent in rural lives, wherever lived.

The multiple definitions of “rural” complicate international comparisons, and also make it difficult to compare findings from different studies set in different rural settings by different researchers. However, this is a problem that is impossible to resolve and researchers must find their own ways of comparing and relating to other research findings. Contextualisation, as it will be argued is crucial in educational research, therefore it also becomes important for researchers in their discussions of their own findings in relation to other studies.

Compositional and Contextual Effects—and the Interplay Between Them

Spatial variations in academic success can be interpreted in different ways, the main question being why behaviour varies according to where it takes place. One answer emphasises that regional variation is related to differences in the characteristics of those living there. That is, we talk about compositional effects that may arise from varying distributions of individual characteristics in different locations, which may influence academic success. If this is the case, places characterised by a more homogenous composition in for example educational level will have smaller variances in educational attainment, implying that similar types of people would have similar academic performances no matter where they live. If this is true, place in itself has no significance other than as a physical structure where people live. However, quantitative studies have shown that after controlling for variables such as parents’ educational level and socioeconomic status (SES), location has an independent significant effect on academic success, which suggests that place is something more than a physical structure.

Spatial aggregations of specific distributions of individual characteristics may have an effect on how individual characteristics are played out in different settings. Ethnic characteristics, for example, may exert influence differently depending on whether the ethnic identity in question is in a minority or a majority position vis-à-vis other ethnic groups within the geographic location.
SES may exert influence differently depending on the social class composition of the specific location, and may explain some spatial variation since parents’ educational level is lower in rural areas. One of the mechanisms through which this relationship works, is parents’ direct involvement in the education of their children and their interaction with school. Parents with high educational backgrounds are more involved in their children’s education (e.g., Bæck, 2009, 2010a) and this involvement helps to improve students’ grades, attendance and well-being in school (Catsambis, 2001; Epstein & Sanders, 2000; Sheldon & Epstein, 2005). However, an aggregated compositional effect of SES can also be anticipated, in the sense that highly educated parents may function as pressure groups, influencing schools’ focus on quality, which may benefit all students, even the most disadvantaged ones. This may again disfavour education outcomes of students living in rural areas where fewer parents have this kind of educational background. Furthermore, findings from Bæck (2010a, 2010b) show that rural school parents are more inclined to participate in formal bodies in school, suggesting a kind of “closeness” to school that could be a result of the position of the school building as a hub for community activities in rural areas, as described by Kalaoja and Pietarinen (2009). Bæck also found, however, that rural school teachers expressed more need for institutional support in home–school cooperation, suggesting that the same “closeness” poses certain challenges for the teachers.

Space may not affect all groups of individuals in the same way, and the interplay between individual characteristics and the contexts these are played out in, needs to be addressed. In the sense that rural location represents a form of limitation when it comes to educational trajectories and outcomes, this limitation may play out differently according to the resources possessed by groups of students. It may be reasonable to expect that low SES students with limited cultural, social and/or economic capital may be more affected by rural location than their middle class counterparts. High SES students may have the possibility to transcend the limitations posed by location through the resources they possess or have access to through their position in privileged social groups. Location, then, will have less of an influence on high SES students. This means that the interplay between location and social group attributes must be taken into consideration, and compositional and contextual effects need to be considered simultaneously. Also, the variations within groups may be larger for some social groups than for others. Regardless of context, high SES students’ educational experiences may be more homogenous, since they possess capital that overrides the influence of location. Hence, the educational experiences of one social group may vary more or less than the variation of another groups’ educational experiences, and this means that taking heterogeneity within rurality into consideration is important.

Also, being a disadvantaged student in an affluent area with many students from privileged homes and with very involved and resourceful parents, may be more of a handicap than being disadvantaged in a setting with many other disadvantaged students. In other words, similar individual attributes may have different effects in different settings. As pointed out by Duncan, Jones, and Moon (1998), we therefore need to move beyond separating contextual and compositional effects in simple overall terms and take interaction between the two into consideration. This highlights how space interacts in complex ways with individual attributes and social processes, and thus how the impact of space is variable. In fact, spatial distribution of a population’s social characteristics may in itself be a richer way to represent the somewhat amorphous idea of context. In addition, interpretations that centre purely on the individual may over-emphasise the individual as the primary analytic entity (atomistic fallacy), consequently overlooking or misinterpreting effects that can better be
understood at the level of schools, classrooms, local communities or regions. Contextual interpretations however directs attention to the characteristics of the location itself, as something that exists above and beyond the composition of its inhabitants’ characteristics.

Place as Opportunity Structure

Interpreting places as entities that provide individual, structural and cultural conditions for action and choices, turns attention towards the spatial patterning of the educational system and of work opportunities. The term opportunity structure, first developed by Cloward and Ohlin (1960) in their analyses of the formation of delinquent gangs, may serve as an intake to this. Different places constitute different opportunity structures. That is, they provide different conditions and barriers that directly and indirectly provide certain opportunities for individuals, and close others off. This may affect student motivation and choices. For educational choices several factors related to the opportunity structure may be relevant, such as geographic closeness to educational institutions and range of study programmes. In addition, local or regional labour markets constitute a structure that the young will evaluate their possibilities in relation to. Opportunity structure thus has to do with the context where choices are being made. Students located in different geographic settings may have different motivations behind their choices, simply because the reality outside of the school building looks different. There are other alternatives to school in areas with less knowledge demanding labour markets, than in areas where the majority of work places demand formal qualifications.

A focus on opportunity structure also makes it necessary to interpret empirical findings in relation to the present economic context and instability. How does economic context impact local policies and individual school motivation and choices, reflecting specific opportunity structures? Political decisions at the local level may have a direct and concrete impact on opportunity structures through issues such as resource allocations, school closures and amalgamations. Spatial population composition is relevant for school related factors through its potential to exert political influence. Bonesrønning, Iversen, and Pettersen (2012) have studied municipal and county variations in the relationship between governance, management and academic performance in Norway. They focused on among other things populations’ composition in terms of educational level, resource allocation to the educational system, resource allocations to special needs education, and implementation of new municipal management systems. They suggest that regional differences in test scores can be explained by differences in governance and management structures within the educational sector. This effect is mediated by the population’s educational level through their choice of governance and management as decided through municipal elections. Thus, population distribution may be central in order to understand regional variation in academic success since it creates a context where educational action is played out. There is still a need to investigate whether a rural/urban distinction is relevant in this regard.

Local presence of educational institutions is in itself part of an opportunity structure that forms young people’s perceptions of possible and probable educational routes. Even though school size does not affect the quality of education, students’ academic achievements, or their social development and well-being (Åberg-Bengtsson, 2009; Hargreaves et al., 2009; Jones & Ezeife, 2011), small, rural schools often find themselves under the threat of closure. The small, rural school is in itself becoming a rare phenomenon, due to school closures and amalgamations, happening primarily on the grounds of financial unsustainability and decreasing
student populations (Kalaoja & Pietarinen, 2009; Knickle, 2014). As a result, a large number of young people living in rural areas have to travel long distances to go to school. We know little about the effect this may have on education outcomes or school motivation. Also, we know little about what effect school closures may have on individual local communities.

Opportunity Structure and Supra-Local Influences

Rural youth’s education and work preferences are affected not only by local or national political decisions. Supra-local influences such as school and social media are also central—and increasingly so, as emphasised by Bæck (2004, 2012). In her studies of education, work and place preferences among youth, she found that young people, irrespective of location, held similar evaluation schemes for what constituted a “good home place”, and these were dominated by elements characteristic of an urban life-style (conceptualised by Bæck as an urban ethos). This disfavoured rural youth, since the possibilities to meet such preferences would be slimmer than in urban areas. Thus, while residing in rural or urban areas did not seem to affect preferences connected to work, education and place of residence, the opportunities to live out these preferences, however, did vary by location. Svensson (2006) reports similar findings from a study in a small town in Sweden, documenting that across social groups and gender young people felt that it would be easier to achieve values that they considered important in a big city than in a more rural setting.

Young people’s interpretations of their opportunities to live out their preferences may in turn influence their motivations to learn, their beliefs about their own abilities and their learning strategies. Rural youth may be placed in a sort of double blind, especially those with less resources at hand, because while they share the dreams, hopes and preferences of their urban counterparts, it will be more difficult for them to have their dreams or expectations fulfilled, without relocating—and many of them will not have the means to do so. In addition, the educational system itself, makes it difficult to envision a future in rurality since, it prepares them for lives outside of rural communities, as pointed out by Corbett (2007a).

Rural Approaches to Learning

Compositional and contextual effects and the interaction between them, as outlined earlier, are related to rural students’ approaches to learning, including such issues as their motivations to learn, their beliefs about their own abilities and their learning strategies. A main argument in studies of rural students’ school experiences is that since the identities of rural students are anchored in local communities, and thus often in primary industries, they possess other forms of cultural and social capital from that valued by school (Corbett, 2007a; Edvardsen, 1998, 2011; Karlsen, 1996). In Corbett’s analyses of the relationship between school and local community in a fishing village in rural Nova Scotia, he finds that local community values may differ from and even conflict with school-based values and goals framed on a national, rather than local models (Corbett, 2007a). Similar findings have been documented for indigenous and other minority students in different parts of the world (e.g., Ericsson & Larsen, 2000; Hidalgo, Bright, Siu, Swap, & Epstein, 1995; McGregor, 2013; Neeganagwedgin, 2013; Nystad, 2007). For instance, Nystad (2007) has shown that the wants and needs of Sámi parents and the knowledge schools provide are not concurrent, and that the result is often that Sámi students, and especially boys, choose not to pursue formal education.
Like all learning, school motivation is an essentially social process. Through interaction with others and relating to the physical and symbolic structures of society, individuals become parts of cultural settings, and the cultural background of the child is therefore crucial for processes connected to motivation and learning (Bæck, 2011; Guile & Young, 2003; Pollard, 2004). The sociocultural perspective draws attention to the role of space in social relations and in development of different forms of capital important for education. Learning is never detached from who one is, where one is, or whom one is with; it never takes place in a social vacuum but must always be understood as a product of social processes where actors play consequential interpretive roles to constructing reality (Bæck, 2011).

**Place and School Motivation**

Place and space have constituted central frames of reference for the formation of identity for a number of scholars (Corbett, 2007a; Edvardsen, 2011; Greenwood, 2009; Hoëm, 2010). Participation in the institutions of local communities contributes to a sense of local belonging, which shapes value schemes and orientations towards the future, and thus school motivation. Since these value schemes may be different from the ones presupposed by the school, the specific local identity patterns can make the encounters between the educational system and the rural school children challenging—described as a kind of cultural collision. The tension between the culture held by the rural young and the expectations they face in school, may for some lead them to reject everything the educational system has to offer, as shown by Corbett (2007a) and also by Willis (1977) in his classic ethnographic study of “the lads” from a working-class environment in England in the 1970s. By rejecting the educational system these young people miss out on the opportunities that educational qualifications can provide.

The sociocultural perspective can be particularly salient for indigenous students since the disconnect between the social practices of schooling and individuals’ cultural resources may be more profound. This is pointed out by Middleton, Dupuis, and Tang (2013) who emphasise that understanding school motivation in indigenous students requires considering how their participation in school is situated within a cultural context, including the beliefs and values around schooling and the classroom instructional practices that enact cultural norms (also Battiste, 2013).

The sociocultural perspective actualises questions of local adaption in curricula and teaching methods, which is highly relevant from a rural education perspective since local adaption has the potential to create some space in order to cater to specific rural conditions. However, central demands and obligations for realisation of learning goals serve to limit the space for local adaptations (Hodgson, Rønning, & Tomlinson, 2012). Hence, in practice the local manoeuvring room of school owners and schools is rather limited. In practice, schools in general largely adhere to the centrally given frames and thus to a lesser degree will take location into consideration, which means that the contents of education will be very similar independent of location. This coincides with an idea of equity in education in the sense that children should get access to the same kind of knowledge irrespective of place of residence. However, this strategy fails to acknowledge that students may enter the educational system with different location specific baggage, meaning that their points of reference may provide very different starting points for their school careers. Also, this strategy fails to take into consideration that the education system potentially can have a role when
it comes to qualifying students for life within rural communities, and not just serve as the main institution providing lessons in the business of “learning to leave” (Corbett, 2007a).

**Gender and Space**

In terms of academic outcomes, girls perform better than boys in school, and girls more often choose higher education (Funnell, 2008; Morris, 2012). This is true in urban as well as rural areas. Rural use of space differs from urban use of space. Also, rural use of space is more gendered through the gendered activities that take place in rural environments (as shown by, for example, Corbett, 2007b; Ní Laoire & Fielding, 2006; Waara, 1996). This is relevant in order to understand gendered differences in educational choices and success. Boys are tied closer to the local communities through the activities they take part in, which gives them another kind of school motivation and approach to formal learning. In a study of a small community in north Sweden, Waara (1996) found that while boys took part in locally based activities such as hunting, fishing and outdoor life, girls’ activities were mainly indoor activities and less attached to the local community and the local culture. This had to do with the fact that boys and girls had different resources at their disposal, and the local conditions seemed to reflect the needs of the boys. According to Waara (1996), integration implies learning specific rules of conduct in a variety of different areas. The splitting up of the leisure sector implies that the youngsters are forced to relate to the range of available activities in different ways. This asymmetrical condition leads to a learning process that further reinforces social conventions attached to gender and contributes to a feeling of being inside or outside the local. According to Härnsten et al. (referred to in Åberg-Bengtsson, 2009; Härnsten et al., 2005) gender differences in academic achievement in favour of girls are in part due to the hierarchical and distinctive masculine cultural features of rural societies. While girls engage in schoolwork and plan for the future, boys live their lives here and now. In their study from Ireland, Ní Laoire and Fielding (2006) claim that young men are more likely to appropriate (or be admitted to) public spaces, and that this social dynamic is reinforced by the male dominance of local labour markets. Even though women and girls are present and visible on the public arenas (as teachers, public employees, in volunteer work or political work in the communities, etc.), the activities girls take part in are less attached to place and can be viewed as supra-local activities. Corbett (2007a) emphasises that local opportunities are often gender specific and more restricted for women. He claims that even though the economics that supported traditional industries have changed dramatically, gendered work and social patterns have been slower to change.

**Methodological Remarks**

Even though the main tendency in international research findings (as quoted earlier) is that geographic variation in academic success disadvantages rural students, this picture is not completely one-sided. As pointed out by several researchers, rural communities are also different among themselves (Hardré & Hennessey, 2010; Howley et al., 2005; McTavish & Salamon, 2003; Vibe et al., 2012) and it is therefore important to balance sameness and uniqueness (Coladarci, 2007; Hardré, 2007; Hardré & Hennessey, 2010). In a study of upper secondary education in Norway, for example, Vibe et al. (2012) show that two sparsely populated counties with small populations are located at each end of the attainment scale. This example highlights the importance of exploring variations within rurality.
Contextualisation is often insufficient in empirical educational analyses, even when geographic differences are explicit parts of the research questions investigated. This is confirmed by Stapel and DeYoung (2011) and Coladarci (2007) who point out that educational researchers often fail to describe the rural context of research. Far too often it remains unclear whether the researcher has discovered a rural phenomenon or, instead, a phenomenon that is observed incidentally in a rural setting. Stapel and DeYoung (2011) also point out the need for more quantitative studies within this field, studies that define an academic measure as the primary dependent variable and research that accounts for the influence of place upon the primary unit of analysis (place conscious analysis). In addition, Arnold et al. (2005) emphasise that studies employing a comparative research design are grossly underrepresented in rural education research, and that most studies are not able to draw causal inferences. In their view rural education research is therefore, weakly positioned to evaluate the causes of different student outcomes and the efficacy of interventions.

In empirical research, connecting macro and micro levels is one way of accounting for the effect of space at different levels of analysis. This approach calls for a dynamic understanding of rurality. Following among others Donehower, Hogg, and Schell (2012) and Green and Corbett (2013), rurality should be understood not only demographically and geographically but culturally as well. Thus, rurality is not static, but has to do with constructions that vary across time and space. Also, rural places develop unevenly. While some have a positive development in terms of economy, labour market and stable or growing populations, other places are what among others Matanle and Sato (2010) refer to as shrinking. Such developments will influence students’ academic motivations.

This means that we need to investigate the behaviour that resides inside what Wolf and Hoople (2006) refer to as “the black boxes” of the analyses. For example, when a relationship between family characteristics and academic success is established, we need to investigate what actually goes on inside the black box of the family that causes academic success, that has to do with the motivations, interpretations and the values of actors. These are elements that are crucial in order to understand what triggers individual action, and under which social, cultural or structural conditions motivations are activated.

By acknowledging the existence of compositional and contextual effects, it becomes clear that rural education studies are often associated with processes operating at more than one level. Multilevel analyses, comparative in nature, focusing on different locations, and that includes quantitative as well as qualitative and case study methods would therefore be a promising methodological design. The approach realises an understanding of action as related to individual, aggregated individual (compositional) and contextual factors, and aims to move between the individual, family, classroom, school, local community, municipal and national levels, and also look at the interactions between these. Multilevel analysis may provide further insights into the contextual structure of rurality. It is a suitable approach for taking into account social contexts as well as the agency of individual respondents (Gall, Gall, & Borg, 2007). Gall et al. (2007) point out that in studies of academic outcome, the largest contributions to achievement outcomes are usually determined by the student and the teacher. At the same time, they maintain, the social context provided by the pupils in the classroom and the organisational context provided by the school, as well as the social context defined by the neighbourhood and the governance and management structure provided by the municipalities or at the national level, may also have important influences. Variables defined at each of these levels of analysis should be included as explanatory variables. Also, accounting for interaction effects is crucial, for example, when population composition...
affects the learning environments in classrooms (many students with high SES may contribute to a better learning environment for all students).

Another important approach is to open up the black boxes of the classroom, school and family by focusing on the motivations, interpretations and values of actors. This requires a kind of insight that can only be obtained from case study work at the local level. A mixed methods approach where multilevel quantitative analyses of individual level and aggregated data are informed by qualitative sociological case studies, and where the designs are sensitive to the different levels of analysis and of the interactions between these, would therefore be crucial.

Conclusion

Rural education as a research field cannot and should not be treated as a research field of the past. The idea of urbanity as the random location, taken for granted as the norm in educational research, does a huge disfavour to the many girls and boys growing up under other circumstances, and who live their lives in rural settings, experiencing rural schools, small ones or large ones—and who, in part because of their location, become underperforming students. Contextualisation in and of educational research may increase the awareness of spatiality as a central variable in order to understand educational attainment, careers and experiences. Focusing on the intersections between location and other factors such as social class, ethnicity and gender is challenging, but necessary, in order to gain the sound, systematic research based knowledge needed for interventions in this field.

Disclosure Statement

No potential conflict of interest was reported by the author.

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