TEACHING AND LEARNING IN RURAL CONTEXTS

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ABSTRACT
On the basis of a review of the literature on rural and mountain education, this article focuses on the importance of the rural territory to the specificity of learning and teaching in rural schools globally. The analysis revealed that rural education has specificities that differentiate it from urban education and that, besides its limitations, offer potential advantages for the processes of teaching and learning for primary education. Moreover, analysis of rural education revealed that it faces threats to its identity, despite its potential benefits for students and the rest of local communities — a fact that justifies the need to strengthen rural education in those contexts and the possibility that general education may learn from it.

KEY WORDS
Multigrade; Rural education; Rural student; Rural teacher; Territory.
INTRODUCTION

Most of the explanations for the contextual determinants of education and learning developed since the second half of the 20th century’s focus on the impact of social contexts (Bourdieu & Passeron, 1964, 1970), of public educational policies (Van Zanten, 2001), of organizational institutions, schools, classrooms and teachers (Bressoux, 1994). Since 1990-2000 these explanations have been supplemented by new ones, which stress the importance of the specific territorial context in which education and learning take place, as can be seen in more detail in the first introductory article of the present issue.

What is ‘territory’? In geographical terms ‘territory’ is a part of the Earth’s surface. But the term ‘territory’ has many meanings and reveals a multifactor complexity, besides the one related to the right to ‘earthify’, early conceived by the emperor Justinian. Since its origin the concept has been differentiated from the notions of place, space and environment. From a sociological perspective, different types of territory have been postulated (Champollion, 2010, 2013): prescribed or institutional; lived or of action; dreamed or symbolic; and interiorized. The territory is then related to a human activity of more or less exclusive appropriation, physical and

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psychological control, organization and symbolic assimilation of a portion of the terrestrial surface by a given society to satisfy its needs (Brunet, 2005; Di Meo, 2006). The territory is therefore first and foremost a human construction (Moine, 2006) related not just to natural and social realities but also to socio-political representations (Gumuchian, 2001). Territory thus implies a process of Earth’s humanization-territorialisation (Ferrier, 1998) and can be conceptualized as a system in tension through a social dynamics that connects a reticular space with some actors’ game (Ormaux, 2008). The territory can therefore be defined as constitutive of all human spatiality (Levy & Lussault, 2003), and in any human place we can spot a spatial-affective investment, since it does not exist for a given person without being related to something essential in this person’s life.

Territories have several significant functions. They demarcate viable spaces between groups according to their needs, allowing the sharing of domains by creating limits that institute protective laws and so allow the autonomous existence and development of those groups. Territories also relate characterized spaces to their actors’ actions, projects, representations, knowledge and beliefs (Vanier, 2009). The notion of territoriality (Le Berre, 1992) therefore has a cognitive dimension, in the sense that territory refers to a territorialisation of spirits (Bozonnet, 1992) on the basis of the actors’ construction and appropriation of a contextualized socio-spatial symbolic system. Besides, as political identities, territories exercise power of distribution and monitoring over individuals in their social functions. A power which can nevertheless not free itself from a public policy of inter-territoriality (Vanier, 2009) that aims to extend beyond a closed world of sovereign territories into an inter-territorial world which regulates and gives coherence to the whole. Moreover, territories allow people who cannot appropriate the cosmos to at least extend their terrestrial (and interior) space in its direction. Besides, territories involve a ‘territorial intelligence’ that associates their actors and communities in sharing information, cooperating in comprehending a territory’s structure and dynamics, and collectively regulating (in real time) its development (Bozzano, 2008; Girardot, 2004; Ormaux, 2008). Furthermore, different ‘territorial intelligences’ can be included, as the Réseau Européen d’Intelligence Territoriale (ENTI) illustrates. Finally, territories have an important function in the construction of collec-

2 Concepts have also been considered as territory.
ative identity by triggering the interaction of different dimensions: spatial; institutional; lived; symbolical, and social game of actors (Bonnemaison, Cambely, and Quinty-Bourgeois, 1999). The territory can then be viewed as a socio-spatial system constructed, lived and appropriated by its actors; supported by a collective projection towards a common future; anchored on a patrimonial past; deriving as much from a dream as from a social-cultural life and prescriptions, and generator of identity and symbols.

Schools interact with the territories they belong to, resulting in specific spaces and dynamics (Charlot, 1994) that demand an interdisciplinary approach (Alpe & Fauguet, 2008). The interest in a ‘rural education’ (as well as the one in an ‘urban education’) might therefore be justified by an approach focused on the influence of the territorial context on teaching and learning. Rural education is defined as the kind of education that happens in a rural territorial context (rural context is defined below) although some studies (e.g. Lippman et al., 1996, as cited in Khattri, Riley, and Kane, 1997) define ‘rural’ schools as those in a rural community, a small city or a town of fewer than 50,000 inhabitants that is not a suburb of a large city or (in the specific case of the U.S.A.) part of an Indian reservation. One way or the other, rural education constitutes a significant part of the education system and we find that to really understand rural education we must understand the specific nature of the rural context.

**RURAL CONTEXT**

‘Rural context’ is a context in a geographical area with certain characteristics—other contexts are urban and sub-urban (Khattri et al., 1997). A rural area has been defined (e.g. USA Census Bureau) as a region with a population of less than 2500 (Khattri et al., 1997). Nevertheless, other aspects of a geographical area also seem relevant to its consideration as rural, urban or sub-urban, including the type of employment available in the region and its degree of isolation from an urbanized area (Khattri et al., 1997).

Compared with urban areas, apart from lower population density (a declining demography can be a feature in more remote places), rural areas have a less diversified economy and offer fewer job opportunities (Crockett, Shahan, and Jackson-Newsom, 2000); or, even when there are more employment opportunities, they tend to be mainly in the ‘low-skill’ primary sector—
teaching and learning in rural contexts (Hodgkinson, 1994). Furthermore, there is less specialization, heterogeneity, bureaucratization and environment control through rational planning (Nachtigal, 1982). Many of today’s rural locations suffered economic stagnation that has led to poverty and unemployment (Fitchen, 1995). In addition, in some geographical regions such as southern Europe, rural areas have witnessed a withdrawal of public systems and even face potential desertification. For all these reasons, as has been well characterized by Kelly (2009, p. 2), nowadays rural locations can be ‘(…) places of great loss—of people, natural resources and, often, as a result, any vision of long-term sustainability. In such places, loss as a persistent condition of life is vividly felt.

Besides this general characterization, we should consider that rural contexts are also distinguished by diversity, as rural communities are unique in terms of their values and opportunities (Hardré, Sullivan, and Crowson, 2009). Furthermore, nowadays rural areas reproduce many of the conditions typical of urban contexts—which might imply a change in their culture (e.g. MacTavish & Salomon, 2003). The notion that rural areas are more socially and culturally isolated now seems to derive more from an unfounded social stereotype than from a generalized reality (Alpe & Fauguet, 2008, op. cit). For instance, ICT equipment and its regular use might be better developed in urban peripheries. Some attractive rural areas might also see neo-rural populations settling in them and experience a concomitant urban influence (Champsaur, 1998). Contrary to some established ideas, the rural world can also be a place of innovation (Veillard-Baron, 2008) and we can find many positive aspects in it. Local rural occupational skills such as farming and fishing are typically valued in rural areas (Wondrum, 2004) and family, stability and local roots are rated more highly—in contrast to typical urban appreciation of mobility, acquisition and status (Howley, Harmon, and Leopold, 1996). Rural cultures seem also to offer denser and livelier associative networks and tend to nurture the connection of individuals to the community (Khattri et al., 1997); they are characterized by more solidarity and closer personal relationships, while in urban areas relationships tend to be more impersonal/looser (Nachtigal, 1982). This is consistent with the fact that while in rural areas verbal communication and the recipient of messages are valued, in urban contexts the emphasis is on written memos and message content (Nachtigal, 1982). There is also a significant difference between the sense of time in rural versus urban environments—as Nachtigal (1982) states, in rural areas time is measured by the seasons of the year while in urban ones it is measured...
by the clock. Rural cultures also tend to value a sense of place (Khattri et al., 1997) and in some rural areas we are seeing the advance of a diffuse, more environmentally friendly, tourism (compared with the mass tourism of the 1960s decade). Moreover, in rural areas informal community decision-making mechanisms are more highly rated (Khattri et al., 1997), along with enterprise and self-sufficiency, while in urban areas the tendency is for corporatization and reliance on experts (Nachtigal, 1982); hard work, stewardship, frugality and traditional values are favoured in rural areas, while urban areas have more liberal values (Nachtigal, 1982).

This ‘rural culture’, composed of patterns of ideas, feelings and values, is assimilated into the identity of individuals (Hardré et al., 2009) and, as is know from general studies on culture, the latter acts as a kind of ‘software’ for the mind (Hofstede, 1991), affecting learning and the learning context (Hofstede, 1986).

In this context and culture, the rural school is an active member of the institutional territorial system—an actor who takes part in the symbiosis between different actors and provides with efficiency and with equity to the social group in the one that is integrated. The disappearance of the rural school presupposes the disappearance of the «feeling of inhabitable people» on the part of the population and also the break with the institutional system and therefore with the organizational dimension and identity of the territory and rural culture (Boix, 2014, p. 90).

The rural school «holds» the individuals and, in consequence, «retains» the collectivity. It is an actor who projects the collective, individual and familiar practices marking symbolic limits of social representation and developing, in turn, a social and educational own, typical and inclusive space that must never be a currency of change to mark a border between the territorial dimension and the social one.

The closing of the rural schools supposes a setback in the own territorial development and in the concept of territory. Nevertheless, in recent years, due to lack of economic and financial resources, many countries of the European Union developed policies of closing (small) rural schools, forgetting that, within the institutional territorial system, their disappearance also implies the eradication of an important part of the social life of the territory.
RURAL VERSUS URBAN SCHOOLS

The results from research that compares urban and rural schools are mixed (Hardré et al. 2009) and studies often lack adequate control variables (e.g. socioeconomic status; parents’ education level) which makes it difficult to be sure if a result can be attributed to the rural context or to a concomitant factor such as poverty (Khattri et al., 1997).

Compared with urban education, rural education is generally seen as more problematic. Schools in the rural context are more likely to be in remote locations, have smaller budgets, fewer technology resources and offer fewer courses, special programmes and extra-curricular activities (Khattri et al., 1997; Schafft & Jackson, 2011; Sipple & Brent, 2008; Williams, 2010). Rural schools also tend to have fewer experienced school psychologists (Clopton & Knesting, 2006).

Nevertheless, research on the effects of the characteristics of rural schools on student outcomes suggests that, after excluding the factor of poverty (which is a risk factor equally for rural and urban students), specific aspects of rural schools seem to act to reduce educational failure (Khattri et al., 1997; Davaillon & Oeuvard, 1998; Alpe, Champollion, & Poirey, 2001-2010; Caro & Rouault, 2011).

For this reason in France, for example, 50% of schools in urban areas became multigrade, as it happens in most rural areas (a few departments such as Drôme already include 75% of these classes) (Champollion, 2013). This is the first reason which had guided the «Observatory of Education and Territories» (OET) to begin comparing rural and urban schools in the departments of Ardèche, Drôme et Rhône from 2014. Another territorial observatory—«Observatory of the South of Marseille» (OQSM)—also works on the same comparative problematic. It was founded by Jean-Luc Fauguet (University of Aix-Marseille) who is also an original member of the OET staff. Furthermore, one international research project led by the University of Barcelona (Roser Boix) has recently identified the main characteristics which could, under some specific conditions, be transferred from rural schools to urban schools (final report I+D+I 2009-2012).

In sum, an argument emerged that we can all learn something important from rural schools of relevance to school reform in other locations (Ballou & Podgursky, 1995) particularly urban ones, where schools based on the ‘industrial model of education’ (more prone to be overcrowded, to use no contextu-
alized learning and to present a detachment from local communities) might increase the risk of student failure (Emmett & McGee, 2013; Enriquez, 2013; Pelavin Research Institute, 1996).

LEARNING IN RURAL SCHOOLS

Research that characterizes learning variations between rural and urban students is scarce and mostly addresses learning achievement, therefore almost neglecting the learning process.

LEARNING ACHIEVEMENT IN RURAL SCHOOLS

Studies that compare rural with non-rural students’ achievement have produced mixed results.

Some studies report that students in rural areas tend to have poorer school success rates (Lichter, Roscigno, & Condron, 2003) and that dropout rates in remote rural schools can be much higher (National Center for Educational Statistics, 2001, as cited in Hardré et al., 2009) and occur earlier (Gándara, Gutiérrez, and O’Hara, 2001). As a matter of fact, there is evidence of the existence of various risk factors for learning achievement in the context of rural schools. Apart from those already mentioned (i.e. remote location; smaller budgets; fewer technology resources; fewer courses, special programmes and extracurricular activities offered; fewer experienced school psychologists) rural schools involve families with lower education levels, more socioeconomic problems (Flora, Flora, & Fey, 2003; Khattri et al., 1997) and lower expectations of student achievement (Harmon & Weeks, 2002). Other achievement risk factors can be related to the students’ learning process itself (see Emotions and Motivation in the subsection Learning process in rural schools).

However, a study by Campbell and collaborators (1996, as cited in Khattri et al., 1997) reported contrary findings: that the performance of rural students was as good as or better than that of urban students, with the performance of both groups being lower than that of sub-urban students. An analysis by Reeves and Bylund (2005) found that the performance of rural elementary students might be better. This could be due to there being a smaller proportion of rural students in high poverty schools since, at least in some countries (e.g. U.S.A.), poverty may be more concentrated in city centres (Khattri et al.,
1997) and poor rural families may be employed (Summers, 1995, as cited in Khattri et al., 1997). Other studies indicate that the dropout rate is lower for rural students but more definitive (Sherman, 1992, as cited in Khattri et al., 1997) and that rural high school completion is higher but college aspiration is lower (Snyder et al., 1996, as cited in Khattri et al., 1997). It is also relevant to mention that rural students are less exposed to certain specific risk factors for school failure, such as belonging to ethnic minorities (Sherman, 1992), substance abuse (Tompkins & Deloney, 1994, as cited in Khattri et al., 1997) and truancy (Lippman et al., 1996, as cited in Khattri et al., 1997).

Other studies on the effects of the characteristics of rural school on student outcomes suggests that, after excluding the factor of poverty (which is a risk factor for rural and urban students), specific aspects of rural schools seem to act to reduce educational failure (Khattri et al., 1997). Some American studies imply that student achievement in poor rural contexts is better than that of students in poor urban areas (NAEP, 1992, as cited in Khattri et al., 1997) and a study by Gjelten (1982, as cited in Khattri et al., 1997) reports that students from economically stable rural areas perform better in achievement tests. Some aspects of the students' learning process also seem to stay in tune with the notion that rural students are at an advantage (see ‘Learning process in rural schools’ in the next subsection).

**Learning process in rural schools**

Research on the specificities of the learning process in rural schools (i.e. the complex psychological path of learning, involving a myriad of interconnected variables like emotions, academic self-concept, motivation or learning style) is still scarce.

Concerning the emotions involved in learning, some authors believe that because rural students are more confronted with possible contrasting messages from the school and their local communities (e.g. valuing urban workplace skills versus local occupational skills; valuing mobility and acquisition and status versus family, stability and local roots) they might experience emotional and personal conflict (DeYoung et al., 1995, Faircloth, 2009, as cited in Hardré et al., 2009); this might act as a factor of resistance to school (Corbett, 2007). Compared with urban students, rural students seem to experience greater conflict between educational goals and their family connections, a condition associated with lower educational aspirations and delay of post-sec-
ondary education (Hektner, 1995). Exposure to externally-defined goals and expectations might stimulate promising rural students to out-migrate (Flora et al., 2003) and to not return or to return if they fail because the goals they sought lacked authenticity (Crocket et al. 2000).

Regarding academic self-concept, a study with rural students from the third through the seventh grade found that they harboured above-average feelings of academic self-competence (Yang & Fetsch, 2007), leading the authors to conclude that rural lie still has a protective function for the academic self-concept of students.

Regarding motivation to learn, some studies report that in rural contexts students tend to have lower levels of motivation, which constitutes a risk factor for learning achievement (Lichter et al., 2003). As Hardré and collaborators (2009) state, in the rural context, where job opportunities are fewer, students’ perceptions of the instrumentality/value of what they are learning in school might be more fragile for subjects perceived as less relevant to rural professions (e.g. algebra). Several studies also suggest that rural students are notable for regarding the support from teachers and the context that they create as the strongest factor in their motivation (Hardré et al. 2009; Hardré & Reeve, 2003; Hardré & Sullivan, 2008), a fact probably related to the typical special bond between rural teachers and their students (Ballou & Podgursky, 1995—see section on ‘Teaching and context of learning in rural schools’).

Finally, we should mention differences in learning style (i.e. individual preferred mode of learning) since at least one study suggests that rural and urban students differ in terms of this variable. Cox and collaborators (1988) administered the Secondary Learning Styles Inventory to a large sample of rural and urban high school 9th-12th grade students. They found that rural students tended to score significantly higher in serious, analytical learner characteristics (i.e. rational-careful-logical-reflective-associative thinking in new-difficult topics) and in some active, practical learner characteristics (i.e. learning through practice-experience). The authors interpret these findings as suggesting that rural students tend to show more interest in and engagement with the educational process than their urban counterparts. We should point out that as rural students are frequently organized in multigrade groups (i.e. students in different grade levels, thus preventing teachers from attending to the whole class at the same time) they are likely to be encouraged to use their initiative and use reciprocal teaching and so become agents in their education and
learning. These findings are partly consistent with the results of another study (Dolly & Katz, 1987) that investigated the impact of different types of instructional activities on rural elementary students’ achievement in nutrition learning. These authors found that the less teachers approached teaching in a traditional way (i.e. routine lectures; display of information; classroom discussion) the higher the learning achievement (i.e. knowledge, attitude and behaviours about nutrition). Nevertheless, this study did not find a significant impact on learning achievement from the use of non-traditional teaching (i.e. practical activities; study visits). When compared with urban students, rural students questioned by Cox and collaborators (1988) also scored higher, although not by as much, in some observation-centred learner characteristics (i.e. learning by observation), some concrete, detail, fact-oriented learner characteristics (i.e. detail analysis) and some passive learner characteristics (i.e. listening in class; and orientation to the present).

TEACHING AND CONTEXT OF LEARNING IN RURAL SCHOOLS

The context where rural students’ learning occurs exhibits a number of specific characteristics that create both potential negative and potential positive conditions for learning.

Starting with the potential negative conditions, in rural areas with a scattered population, students might have to travel long distances to attend school, a fact that constrains their lives and increases dropout probability (Fox, 1996, as cited in Khattri et al., 1997). As a matter of fact, schools in rural areas are seldom grouped (even when geography allows it) in inter-communitarian structures: in some cases each community has a school for only one cycle; more rarely there is only one multi-cycle school for several communities. One way or the other this imposes student mobility between communities. Rural schools often have small budgets, which affects the resources schools can provide to students (Hedges, Laine, & Greenwald, 1994), they offer students a smaller number of courses, college preparatory courses, special programmes (Ballou & Podgursky, 1995) and extracurricular activities (Lippman et al., 1996, as cited in Khattri et al., 1997) and have lower technological implementation since they often lack the relevant infrastructure and resources (Howley & Howley, 1995).
As mentioned by Harmon and Weeks (2002), referring specifically to the rural learning context in the third world, lack of school supplies might mechanize teaching and make teachers rely more on rote learning.

Moreover, despite the challenges of teaching in rural settings rural schools tend to benefit from fewer experienced and highly trained teachers (Khattri et al., 1997). This might be considered especially problematic since the small number of students typically attending most rural schools means that teaching in this context tends to require a teacher to give classes in multiple subject areas and to multigrade groups (Colangelo, Assouline, & New, 1999).

These teachers are also more likely to find themselves in cultural conflict with the local community’s values and therefore see a rise in truancy (Harmon & Weeks, 2002). Regardless of the specificity of the rural context, many rural schools seem to use a non contextualized/bureaucratized mode of education, not sensitive to the local culture. As Corbett (2007) showed in Learning to leave: the irony of schooling in a coastal community, this might contribute to the depopulation of rural areas by instilling values in rural students that are opposed to local ones.

But despite the existence of potentially negative conditions for learning, rural education also offers potentially positive conditions that have been seen as ‘shielding students against educational failure’ (Khattri et al., 1997).

First of all, rural schools tend to be smaller due to isolation and the lower population density of rural communities (Henke et al. 1996, as cited in Khattri et al., 1997) a condition that some studies found beneficial (Howley, 1994) by facilitating teachers’ knowledge of their pupils and a closer relationship with them (Harmon & Weeks, 2002). Indeed, teaching in the rural context has been characterized as involving a special teacher-student connection, based on interpersonal relatedness, less typical in large schools (Ballou & Poldgursky, 1995; Hardré, 2007). This is a powerful tool in motivating students to learn (Hardré et al., 2009).

It has also been suggested (Harmon & Weeks, 2002) that several education ‘best practices’ have their origin, due to necessity, in the context of rural schools: cooperative learning; peer tutoring; interdisciplinary studies; multigrade teaching (i.e. teaching groups with students from different grade levels, thereby preventing teachers from attending simultaneously to all students, demands more autonomy from them). In addition, rural schools have

3 The multigrade classroom is shaped by children of different ages, interests and needs; it is a clear example of diversity inside diversity.
a higher tendency to promote learning beyond the context of the classroom (Khattri et al., 1997) and to use the surrounding community as a curricular resource, due to a greater intimacy with it (Avery, 2013; Stern, 1994, as cited in Khattri et al., 1997; Shamah & MacTavish, 2009). Relevant to this is a study on high performing rural schools (Barley & Beesley, 2007) that found the following ensemble of perceived factors for success (by principals, teachers parents and community members): strong connection between the school and its community; clear goals; high academic expectations; aligned curriculum, instruction and assessment; and use of student data.

As a matter of fact, rural schools tend to have a close link to their communities in the form of a more active interaction with local governance, business and social organizations, families and other rural schools (Theobald & Nachtigal, 1995). For example, it is known that rural schools tend to involve the parents more in students’ education (Sun et al., 1994, as cited in Khattri et al., 1997). This link with the community is also probably the main reason why rural schools can significantly help to consolidate local cultures (Avery, 2013; Faircloth & Tippeconnic, 2010).

The rural school, in general, receives the support of the community. Kearns, Lewis, McCreanor and Witten (2009), describe the existence of a reciprocal agreement on which the community rests to the school and the activities organized by the school are supported by the community. The inhabitants of the rural territory are in the habit of contributing with time, money and effort in the construction of their community and school; this way, the force that contributes the share capital of the school remains emphasized by the confidence and reciprocity of interests of the community to which it belongs.

CONCLUSION

The process of teaching and learning in a rural environment has a specificity that results from the very nature of the rural territory, which influences schools, teachers, students and families in very particular ways.

Despite the possible and inevitable problems of rural education (largely due to isolation and lack of resources), the overall conclusions of the research indicate that rural schools have features that offer potential advantages in terms of teaching practices. These include cooperative learning, peer coaching, interdisciplinary studies, multigrade teaching, and contextualised teaching.
Advantages for student learning include more independence because of the multigrade classes, and successful outcomes for them in the rural environment.

The main problems faced by rural schools are threats to their survival and identity thanks to the depopulation of rural areas, policy measures to cut spending on schools with few students, and the urbanisation of rural areas. Furthermore, despite geographical specificities, rural students might be particularly exposed to certain risks like failure and dropout, illiteracy and unfinished studies. Nonetheless, rural education does have potential benefits. In fact, rural schools might tend to feature practices in keeping with a more open view of education. For instance, to invest more in the local contextualisation of education (by using locally sourced materials and content related to the local environment), in multi-level classes, in interdisciplinary education and in the development of meaningful relations with the local community. Such practices seem to be linked with some positive results, with particular emphasis on the fact that the success level of rural students may be the same as, or even higher than, that of their urban counterparts, while certain rural areas improve in terms of sustainability and become less isolated and better developed.

Generally speaking, the analysis of rural education suggests that rural schools should be strengthened, paying heed to their importance to the sustainability of the rural world; they should be allowed to consolidate their identity and exploit their beneficial potential in the rural context and the learning process. Furthermore, certain features of rural schools can help with the critical analysis and improvement of education practices in other contexts, particularly the urban one.

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