Playing their part:
Small and Rural Schools

A European comparative analysis based on 11 countries of European Schoolnet’s Special Interest Group “Small and Rural Schools”
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In European countries, there is no clear definition of the concept of small and rural schools. Rural areas are generally associated with small or offshore islands and the inner areas of the country. The term rural (widely used at European level), is associated with regions mainly devoted to farming activities and there is no working definition of rural in many of our European education systems.

In European research literature, there are debates as to what a small school is. Harber (1996) reports that at an international level, the small primary schools have fewer than 70 students; and secondary schools (for students 11-16 years old) fewer than 400. Spielhofer, O’Donnell, Benton, Shagen & Shagen (2002) identify a school that has 20 students as “obviously small”, and a school with 200 students as “obviously large”. Arnold (1994) identifies 90 students as the maximum number for a small primary school, with 200 for secondary schools. Hargreaves (2009) agrees with Carter (2003) in regarding as small primary schools (5-11-year-old students) with up to 100, and secondary schools with 600-900 students (Harber, 1996).

In rural and remote areas, it can be argued that the role of the school is as an argument for the stability of the population (Cross, 1996) and a way to fight social vulnerability. Hence, we can agree with Lyson (2005) who proposes that: “Schools in rural communities serve as a symbol of community autonomy, community vitality, community integration, personal control, personal and community tradition, and personal and community identity. Schools are places for sports, theatre, music, and other civic activities […] The capacity to maintain a school is a continuing indicator of a community’s wellbeing.” (p. 49).

Politically, two major issues emerge when considering small and rural schools: the efficiency problem, and the inequality of the provision of education, which are interconnected. The Steering Committee of European Schoolnet1 at its meeting of 5 November 2019 created the small and rural schools Interest Group in order to explore issues of mutual concern related to small schools at European level, since many countries are concerned with this issue. The objectives of this Interest group are to:

- Collect and share different research findings across European countries:
  - Work at the European level on the collection and sharing practices on the use of ICT, to overcome isolation.
  - Collect and share experience on learning practices in multi-age classes.
  - Collect and share experiences on models of school organisation and link with local communities.
  - Consider the opportunity to offer an open community of practices – for all practitioners working in small and rural schools and to create a European network of small rural schools.
  - Offer a capacity-building programme for small and rural schools in Europe.

The final results of this interest group could be to develop a European manifesto for a model of small and rural schooling that could improve the performance and well-being of rural education.

The small and rural schools Interest group is composed of 13 countries (Croatia, Czech Republic, France, Greece, Hungary, Italy, Malta, Poland, Serbia, Sweden, 

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1 European Schoolnet is the network of 34 Ministries of Education in Europe created in 1997 to bring about innovation in teaching and learning to Ministries, schools, teachers and researchers. [www.eun.org](http://www.eun.org). European Schoolnet’s mission is to support ministries of education, schools, teachers and relevant education stakeholders in Europe in the transformation of education processes for 21st century digitalised societies. More particularly, European Schoolnet’s remit is to: (1) identify and test promising innovative practices, (2) share evidence about their impact, and (3) support mainstreaming teaching and learning practices aligned with 21st century standards and expectations for the education of all students. ICT and digitalization are a particular focus of European Schoolnet’s work, because of the critical role they play in terms of designing and implementing future classroom scenarios and supporting new forms of learning both in and out of school.
Slovakia, Spain, Turkey). It is led by European Schoolnet and INDIRE – the National Institute for Documentation, Innovation and Educational Research, which is the Italian Ministry of Education’s oldest research organisation.

The first activity initiated by the small and rural interest group consisted of launching a set of case studies in order to share practices at school level.

Each country identified two schools under the following criteria:

- The vast majority of schools are primary schools (since this is the major focus), but there are also some secondary schools which are classified as small & rural schools due to some specificities and they have developed innovative approaches.
- The choice of the small and rural schools was based first on the innovative approaches developed regarding one or several of the following elements:
  - Leadership and management
  - System innovation comprising, inter alia, parents’ role, collaboration between schools, collaboration with the local community, …
  - Teaching strategies comprising, inter alia, space and time organisation, classroom management, assessment, …
  - ICT as an inclusive tool with a particular focus on remote teaching and distance learning

This publication presents the monographies of all small and rural schools which were interviewed between October 2021 and March 2022. The list of schools interviewed is presented in annex.

The structure of each monograph has the following sections:

- **The context:** This section presents the challenges and opportunities of the area where the school is situated.
- **System and innovation:** This section presents the system of the school as well as its innovative elements.
- **Leadership and management:** This section goes more deeply into analysing the leadership system of the school and its management.
- **Teaching practices and strategies + ICT:** This section talks about the practices and strategies that teachers at the school apply as well as the use of ICT in the classroom.
- **Collaboration and partnership:** This section presents the ability of the school to move outside its walls and communicate/engage with different stakeholders and the extended community.

Depending on the location and situation of each small and rural school, some dimensions may be more developed than others. In addition, the monographs are available as a separate publication in English and in the native language of the school.

Rural areas represent a considerable percentage of the total EU area. Due to rapid urbanisation, a result of industrialisation, the population in Europe’s rural areas has not only been drastically reduced but is also ageing, since rural and remote areas have the lowest shares of population in age groups below 50 years old.

The small and rural school Interest Group decided to focus on small schools in rural communities on the basis that these schools offer education to a proportion of the young EU population that simply cannot be neglected.

European Schoolnet and INDIRE would like to thank the Ministries of Education participating in this interest group and for the support they provided by helping us identify the schools that participated in this research.

European Schoolnet and INDIRE would also like to thank the participant schools for their time, commitment, and honesty they exhibited when answering the questionnaires and participating in the follow-up interviews. Without their invaluable input this research would not have been possible. European Schoolnet and INDIRE will continue supporting the participant schools with the creation of a Community of Practice dedicated to the needs of small and rural schools.

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1 INDIRE is the benchmark for educational research in Italy. It develops new teaching models, tests new technology for training courses, and fosters innovation redefining the relationship between space and time of learning and teaching. The Institute boasts consolidated experience in the in-service training of teachers, administrative, technical and auxiliary staff as well as of headmasters, and has been a leading player in some of the most important e-learning experiments in Europe.
Educational research on small and rural schools has highlighted recurring problems across various European countries. One of the dominant features of lower secondary school in rural areas is the low number of students per school (Hargreaves 1996, Boix 2004, Amigunno 2004, Alpe 2006). Other studies (Ovenden-Hope T., Passy R., 2019) describe them as isolated, suffering from remoteness, and offering lower quality education. Moreover, as the OECD report on rural regions confirms: “Rural schools are facing, or will soon face, declining student numbers, bringing consequently smaller schools and class sizes. While small size can bring opportunities, such as a greater teacher focus for each student, many of these schools are isolated from the wider educational community and are operating under capacity. Smaller schools may also offer a more limited educational curriculum.” (OECD, 2021, p. 5).

The research conducted by INDIRE identifies three main pillars as its three main observations lenses: the local context, educational practices with special reference to multi-age classrooms, and the use of ICT. These three pillars were included in a National Manifesto that gave birth to a national network of small and rural schools in Italy.

European Schoolnet’s Special Interest Group launched a survey aimed at identifying the needs of small and rural schools. 13 countries participated in the survey (Croatia, Czech Republic, France, Greece, Hungary, Italy, Malta, Poland, Serbia, Sweden, Slovakia, Spain, Turkey).

The survey confirmed that:

- None of the countries (except Sweden) have systemic actions such as specific training activities for newly hired teachers or in-service training for teachers who work in a rural context.
- Some of the countries have activated initiatives addressed to education/schools in rural areas (France, Spain, Sweden, Poland and Italy).
- Two challenges faced by small and rural schools are (i) managing the multi-age classroom as a means of peer learning; and (ii) using ICT to overcome isolation.
- Most respondents report their interest in the Reflection Group as an opportunity to form a network to exchange teaching practices and train teachers.

Although few countries have developed initiatives to support teachers and students of the small and rural schools, those countries which provided some opportunities oriented their funding for improving teachers and students’ digital competences (Spain, France and Poland) within their national priority policies.

Many interesting requests emerged from almost all the countries involved in the survey. These include: the challenges for teacher training to improve strategies for cooperative distance education; multi-age classroom management; and strengthening the relationship between school and local administration. This report sheds light on subsequent developments in the sample countries, especially following the COVID-19 pandemic.

The Annex to this Executive Summary gives details of the research approach and methodology.
Four dimensions

The report addresses four main dimensions:

- **D1. Leadership and management**, examined in terms of the school’s vision and internal organisation through instrumental figures and organisational bodies such as quality teams, commissions, departments, multi-grade management support figures, and liaison between the school’s various networks.

- **D2. System innovation/alliances**, with the aim of identifying the forms of alliance with the various players in the educating community (collaboration with the family, local authorities and the Third Sector), participation in networks between schools, and the educational content emerging from these forms of collaboration (for example, in-service training projects).

- **D3. Pedagogical/Teaching practices**, with a focus on didactic aspects and classroom management, including space and time and the strategies used for the management of multi-grade classes (if they exist), and also the use of digital content and devices in the classroom.

- **D4. ICT as inclusive tool**: this dimension addresses how ICT is used with reference to Remote Teaching and Distance Learning.

For each dimension, a thematic classification (“codebooks”) has been elaborated based on the responses by schools, identifying common themes and concerns in a structured way.

Dimension 1: Leadership and management in small rural schools

“Leadership and management” is divided into three specific sub-dimensions which serve as units of analysis for the content analysis process: School vision, Team teaching and teamwork, and Organization and management of buildings.

**Theme: School vision**

European small and rural schools have developed clear and articulated educational visions. As confirmed by research, the presence of a clear vision can inspire the behaviour of students, teachers and even families. Most of the visions focus on the concept of *caring and differentiation*. The majority of the schools have as a main goal to ensure students’ equal opportunities and respecting everyone’s potential so that no-one is left behind.

In these visions, the idea of taking care is exemplified in the attention paid:

- To developing each individual as a whole, embracing not only cognitive, but also physical, social, emotional and moral dimensions;
- To the weakest and most fragile students, as well as to the needs of the community through solidarity actions;
- To students with special needs, developing didactical tools and environments suitable for everyone;
- To differentiated teaching practice tailored to meet individual needs.

Some “caring and differentiation visions” place emphasis on the concept of *solidarity*, others to inclusion or to *differentiated instruction*.

The second most reported type of school vision is that of the *school for life*: in these schools, the main goal is to prepare students for an uncertain future, for a complex and constantly changing world, and for knowledge and skills that cannot yet be predicted.

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4 The Annex to this Executive Summary gives details of the research approach and methodology.
All the schools mention the 21st century skills as their guiding competence framework for their educational planning.

Many schools, and Italian and Maltese schools in particular, share a vision of developing strong alliances with the community around. The thematic code for this is community school: creating a network of alliances helps to realise a rich learning environment and to strengthen the sense of belonging to the community.

Three other visions are common to European small and rural schools:

1. Schools as pleasant places to live;
2. Digital schools;
3. Eco schools.

As to the first of these, schools are committed to offer comfortable environments for the educational community, with furnishings designed to be functional for educational activities and promote positive relations among people.

Schools must be also well equipped in technologies. To sustain small and rural schools and combat isolation, technologies must be accessible also in deprived areas. Also, technologies alone are not sufficient: they must be implemented with active teaching methodologies.

Schools also recognise the growing need for people to improve and develop their knowledge of sustainable behaviours. School can also share a vision of encouraging the environmental awareness in the community so as to prioritise the needs of all life forms and of the planet.

Theme: Team teaching and teamwork

The schools surveyed have reported different forms of team organization and the attribution of roles and responsibilities.

In small schools there are groups of pedagogical guides who support the organization and implementation of the curriculum, as well as teaching assistants for children with difficulties whose role is that of mediator and consultant able to dialogue with families and teachers.

Schools report how the organization of teachers into teams provides support for specific grades and school levels as well as disciplinary cooperation and the exchange of good practice. Teams also intervene regarding the needs of teachers by proposing professional development paths and, where there are teams dedicated to quality, guidelines for better implementation of the curriculum.

Team organization often includes the assignment of specific responsibilities (e.g., contact person for online environments or for dispersed/satellite buildings), who become part of the decision-making processes and the school management group. Special committees set up at the beginning of the school year can guide the growth of the school on strategic issues and provide a focus for identifying opportunities for the professional development for teachers.

This attention to professional development leads schools to organise themselves to access different training opportunities. In addition to internal initiatives organised by the school, teachers can in some cases benefit from funding for external courses, which in some cases may require some form of co-financing. The coordination of in-service teacher training may be at central ministerial level and mandatory for teachers to exercise their profession.

In isolated geographical areas, teachers’ working hours may be organised so as to be able to work in the most distant locations. In some cases, the possibility for teachers to rotate between various locations and classes has been formalised through swapping models or by prefiguring groups of peripatetic teachers specialised in certain disciplines.

In some regions there are also complementary teachers, often local professionals, who enrich the curriculum at various levels, including multi-level classes that can require periods of differentiation and remediation.

5 The twelve 21st Century skills are: Critical thinking, Creativity, Collaboration, Communication, Information literacy, Media literacy, Technology literacy, Flexibility, Leadership, Initiative, Productivity, Social skills
Theme: Organization and management of buildings

All over Europe, small and rural schools are affected by school size and by the sparse buildings which in many cases are located very far from the main cities or very far from each other. Almost none of the countries investigated has special legislation to support small and rural schools in solving these issues. They, nevertheless, have to comply with the exigencies of their national educational systems.

The management of the school building(s) is a major topic for those interviewed for this report. Many of the schools manage one satellite school building or one main school building associated with some satellite school buildings nearby the school. The use of satellite school buildings requires the school’s leader to cope with different issues related to school timetable and transportation. Dispersed school buildings have impacts on the educational offer and facilities (e.g. availability of digital devices, spaces for lab or library, etc.) which might have to be quite different from building to building.

One of the best-known issues faced by small and rural schools is the risk of cultural isolation and low achievement rates. This phenomenon is quite common among rural schools and its solution depends on many aspects related to the local administration. Due to their isolated location, teachers and students are farther away from cultural centres such as libraries, museums, theatres, sports centres and the like than their urban counterparts.

A further key issue a school leader has to face in a small school is school building management. Due to the very low number of students enrolled and dispersed across various buildings, each school may not be equipped with digital devices or teaching tools of the same standard, and in many cases the building needs refurbishing.

Reflection

Small European schools distinguish themselves by a school vision aimed at guaranteeing equal opportunities and access to training courses for all, even for the most isolated students. This vision entails the need to intervene through effective forms of managing the particular groups being taught: this includes, on the one hand, monitoring the quality of the courses and the skills of the teachers and, on the other hand, identifying highly innovative solutions (such as peripatetic teachers) which guarantee all classes due access to the curriculum. The distance of various teaching locations from the central establishment also requires school managers to secure equitable access to technologies and digital solutions.

Dimension 2: System Innovation – Alliances for innovation in the school system

The “System Innovation” dimension is divided into three specific areas: Parents’ role, Collaboration with the families, and Collaboration with the local community.

Theme: Parents’ role

Parents often play a very active role in small and rural schools, for example through parents’ associations that support schools in organizing events and giving financial support when needed.

Families are also involved in curricular activities: they can lead workshops or lessons on specific topics in collaboration with teachers. The benefits include sharing of knowledge between parents (practitioners) and teachers and increased engagement of the students during the lessons.

Theme: Collaboration between schools

Many schools are part of school networks.
These include networks aimed at developing curricula concerned with sustainability, knowledge of biodiversity and well-being.

A further aspect of collaboration between small and rural schools is the sharing of resources, especially the sharing of teachers or of educational materials. Sharing of teachers makes it possible to overcome difficulties or weaknesses in teaching provision such as the lack of language teachers. One interesting innovation is the use of the peripatetic teachers, where a group of teachers specialised in Arts, Drama, Music, Physical Education, and Science spend 1 or 2 days in each school in the area.

National networks have a particular value for isolated schools, in several respects: (1) for schools, in helping them expanding their technological equipment or to work within groups sharing common values; (2) for teachers, as an incentive towards more effective teaching and innovation in their teaching; (3) for students, by encouraging them to be more creative, strengthen their self-esteem, and develop life skills.

International networks seem to be less developed in small schools: reports from schools did not highlight the same benefits or values as with the national networks. However, some experiences with European programmes (eTwinning, Erasmus+) underlined the importance for schools to strengthen teachers’ digital competences and to overcome organizational barriers (e.g. different school timetables). The European School Education Platform can support these efforts.

**Theme: Collaboration with local community**

Small and rural schools seem to enjoy close collaboration with the local community. They care for the community and strive to offer cultural services otherwise not available, for example access to libraries. There are cases of school libraries opened to the community, and the local community often supports the school with its own library services by mounting curricular initiatives or projects or, in some cases, by opening a municipal library within school buildings.

Close community relationships are also important in building connections for students so they can benefit from work experience and traineeship opportunities.

In most cases the local community offers financial support to schools, providing extra funding (e.g. for meals or for renovating or reconstructing buildings), organizing activities for students, or supporting the participation of the school in international projects such as Erasmus+.

**Reflection**

In relation to “System Innovation”, European small and rural schools demonstrate a high degree of participation in national networks and confirm that there are multiple benefits from belonging to some kind of alliance for both students and teachers and the school as a whole.

These networks – as confirmed in the relevant research – are environments for exchange, development and cooperation and a vehicle for equitable and continuously improving education. These benefits in fact contribute to “social capital”, understood as the sum of resources gained through social relations and networking. In short, networks:

- Can be drivers of change in education and are a strong tool for the dissemination of innovative educational practices among headmasters and teachers from different schools;
- Help overcome the isolation of schools and educators by providing opportunities for organised professional exchange, development and enrichment; they offer isolated schools new ways of connecting with like-minded institutions and individuals and provide a vehicle through which to engage with a wider audience;
- Provide an effective approach to support groups of schools rather than individual schools;
- Provide support structures for strategic development and facilitate greater political strength from collaboration.
On the other hand, participation in international networks is desired by schools but is often considered difficult. Schools would welcome greater support, in particular on digital competences. Cooperation between schools with small and remote classes can be very helpful in gaining access to knowledge from other schools that face the same issues and challenges and can act as mentors.

**Dimension 3: Pedagogical practices / Teaching practices**

The “Pedagogical Practices/Teaching Practices” dimension is divided into two parts: “Space and Time Organisation” and “Classroom Management”.

**Theme: Space and Time Organisation**

The European small and rural schools that participated in this research reported varying approaches to the design and use of learning space and time.

In terms of flexibility, classroom settings are varied so as to accommodate different pedagogical activities, particularly those mainly based on collaborative learning and small groups, reflecting students’ needs including catering for multi-age classes where necessary.

School zoning – of both indoor and outdoor space – is also an approach that has allowed some schools to experiment flexibly with the space available. Most schools use outdoor space such as the playground or spaces in the local neighbourhood such as the local library.

So as to use learning space effectively for longer periods of time and to differentiate learning activities, it may also be necessary to modify the organisation of school time. Only in one case did a school adopt a common timetable to maximise the scope for teaching activity.

Effective space utilisation is also a useful tool in allowing schools to pursue inclusion. This is not only as a result of having digital devices for students of different ages and abilities but also because of approaches such as peer tutoring and projects designed by teachers but supervised by older students.

**Theme: Classroom management**

As far as the classroom management is concerned, European small and rural schools adopt different approaches to classroom management. However, the research investigation points to standard (i.e. traditional) approaches to teaching activities).

Most schools are using digital tools and devices for the improvement of students’ digital competences and for keeping in contact with other European students participating in eTwinning and Erasmus+ projects.

Much research on the most challenging aspects of small and rural schools highlights the challenges of maintaining the quality of the educational offering and curriculum when using multi-age classrooms: this can strongly affect the quality and content of the teaching.

Most of the schools investigated follow their National Curriculum, those that have multi-age classrooms adopt different approaches to the curriculum and thereby face challenges in managing the classroom with students of different ages. The research points to increased teacher fatigue which can affect the quality of educational offer and teachers in multi-age classes report that they have to work harder than their colleagues in standard classes.

However, this approach to the curriculum offers small classrooms the opportunity to experiment and test the effectiveness of tailored educational activities. Such diversification entails “material fatigue” that increases according to the number of student levels in the multi-grade class and the number of teaching materials used in the classroom and for individual study at home. Indeed, teachers complain about the lack of resources, worksheets and textbooks designed specifically for teaching in non-standard classes.
especially for independent learning. Overall, with the multi-age classroom, there is greater complexity in organising daily work time and in curricular planning. To successfully teach in mixed-age contexts, experienced school networking and eTwinning classrooms could help teachers by sharing specific pedagogical practices such as grouping and differentiation practices, family and community participation, and rethinking educational spaces.

Reflection

As far as the “Pedagogical Practices/Teaching Practices” dimension is concerned, the general approaches of European small and rural schools are based on collaborative learning and small group organisation thanks to the flexibility of space utilisation in and around their buildings, reflecting their non-standard school sizes.

School zoning, for example, indicates how small European schools are transitioning towards innovation in school learning spaces and experimenting with outdoor learning settings, albeit in a low percentage of cases.

In terms of classroom management, the small and rural schools are on a par with European schools generally as regards using ICT for inclusion, overcoming isolation, and communications with other schools in their national context. Very few schools report on experimenting with different curricula for use in multi-age classrooms, since this may require specific additional training for the teachers involved.

Dimension 4: ICT as inclusive tool

The “ICT as an Inclusive Tool” dimension is divided into two specific aspects: “Remote teaching” and “Distance Learning”.

Theme: Remote teaching

Throughout recent emergency situations when online education became compulsory, small schools have responded by setting up virtual environments supported by Ministries of Education, ensuring that the most vulnerable pupils had the equipment needed and could access enhanced classrooms for specific subjects.

Schools provided themselves with remote teaching environments and tools that fostered instructional differentiation by age and level. This was considered an effective way of working to ensure educational inclusion of children suffering hardship, including health emergencies or problems intrinsic in isolated territories, such as adequate transport to and from school.

The remote teaching experience allowed schools to overcome situations of class group isolation while also enabling them to ensure educational continuity in cases of major vulnerability caused by health issues or environmental difficulties in peripheral areas. These remote classroom settings in some cases included the presence of an adult (“the hands and eyes” of the teacher) who helps students become familiar with their class and encourages efficient distribution of materials and good levels of class participation.

Despite the impermanence of remote teaching, many schools reported an improvement in students’ sense of independence and persistence. At the same time, they document some positive approaches to encourage parental participation through sharing educational materials (e.g. photos and videos) used in students’ daily teaching.

Themes: Distance learning

Distance learning may be the main choice in temporary emergency situations, but it does lead to more widespread student isolation, especially for those who live in “highly disconnected” areas. Also,
students suffer in the absence of the face-to-face social interaction which needs to be nurtured and maintained in order to build effective class groups and the trust dynamic amongst peers. On the other hand, schools have reported that distance teaching promotes the development of self-regulation in learning and greater independence of the student.

Distance education has fostered the development of extended forms of learning. eClasses have become one of the standard forms of education and have found greater acceptance in schools that have already experienced network twinning and teacher mobility focused on the use of ICTs. Twinning and networking experiences foster an extensive planning that helps the school in re-connecting with the external environment and renewing its curricular provision. Digital spaces have also resulted in increased family participation and awareness of what was accomplished in the school day.

Distance education has enabled the implementation of forms of extended and digital schools that can assist and support students by means of specific aids and materials while maintaining some direct in-person teaching. Creating repositories of digital teaching scenarios can help in greater integration of the curriculum and in the planning of lessons and preparation of online activities.

**Reflection**

The thematic areas explored as part of the dimension “ICT as an inclusive tool” help provide the educational and scientific community with an understanding of practices within small and rural schools and provide a basis for examining sustainable and replicable solutions at European level. Experiments with remote teaching in emergency situations can help build replicable educational scenarios for wider application, particularly for home-school settings supported with additional educators to support the teacher in the classroom. Distance learning can be part of the regular school curriculum and foster educational equity, especially in scenarios of home schooling or where environmental or other disasters severely affect digital access. Local, national and European networks can exploit and benefit from repositories of educational digital scenarios: they provide great opportunities for curriculum dissemination and integration to underpin teacher training and increase curriculum digitization.
General conclusion

Rural development is a major topic in the agenda of European Institutions and in national policy-making. One of the main concerns of policy makers is to reduce the educational gap between urban and rural schools and, with it, educational inequality. Academic research on small and rural schools has tended to focus on learning and teaching in unusual or atypical conditions, in rural vs. urban settings, or in small vs. large schools; on location-related and location-conscious education; and on the community active school and environmental sustainability.

The thematic analysis (codebook) employed in this first phase of research on the experiences of small and rural schools in the EU provides the educational and scientific community with a broad and accurate understanding of the practices implemented, nationally and internationally.

The reflections made on the four specific dimensions investigated allow us to identify the challenges that small schools must face but also the opportunities that the European networking dimension can offer for schools and for their enhancement.

Challenges

Although rural schools typically suffer from a lack of resources, they often benefit from stronger community engagement. Research has shown that rural schools have greater levels of parent participation in extracurricular activities. Further challenges are faced due to inadequate infrastructure and a shortage of quality teachers, which the initial survey (of 13 sample countries) expressed in terms of “teacher training needs” in relation to multi-age classrooms, and of designing a “Teaching strategy to improve cooperative distance education and strengthen the local curriculum”.

Opportunities

At the same time rural schools are experienced as good places for innovation and research and development into teaching and learning practices. Their small teaching teams are accustomed to working in multiple and flexible ways that promote innovation and creativity. As small schools are closely bound into their physical and socio-cultural situations, they are also good starting points for innovation in terms of:

- experimenting with innovative pedagogy that takes account of the global competences curriculum;
- widening the educator profile through multi-agency approaches to projects, collaboration among experts, and supporting hybrid learning environments, such as small and rural schools as a learning hub (as suggested in the OECD “Back to the future of education” (2020) report).

- promoting networks as one way to scale profound change, which is the type of change required for system transformation. School networks – connecting the physical dimension of schools with the digital dimension – can be used as a means of coping with the phenomenon of closures caused by low student numbers and depopulation. Small schools can contribute to social and economic sustainability in locality life (e.g. by encouraging younger families to stay or move into these communities), providing a focus for social cohesion and growing relationships.
Concluding recommendations

The research undertaken in this comparative study confirms the important role and contribution of small and rural schools and the need to support their development. It opens up new scenarios for European small and rural schools. The discussions of school organisation and pedagogical approaches in facing challenges such as class size, geographical isolation and parental involvement led the research team to identify some potential actions for different stakeholders to highlight the specificity of small schools and support their activities with tailored actions which support their development and protect them from closure.

Our recommendations are addressed to a range of different stakeholders such as policy-makers, school leaders, teachers and local administration.

Stakeholder partnership

We underline the importance of partnership, networking and collaborative practice for supporting school improvement in remote schools: this could be strengthened by offering teachers an open community of practice for all practitioners. The interviews conducted with small and rural schools in 11 countries have revealed different approaches within the three research pillars investigated, namely:

- Sharing practices on the use of educational technologies to overcome isolation
- Sharing experiences of learning practices in multi-age classes
- Sharing experiences on models of school organisation and links with the local community.

It is important to offer the entire population of small and rural schools in Europe a community in which any schools and teachers can exchange experience of their respective practices.

Such a collaboration space could potentially be supported as part of the European School Education Platform under the Erasmus+ programme, which has already created specific learning groups in this area.

Policy-makers

We encourage the European Commission through its Erasmus+ programme to create specific action lines for supporting the development of innovative approaches for small and rural schools in Europe in the various areas identified in this research report.

We invite ministries of education to create and support a network of small and rural schools, teachers, and ambassadors, which could animate and support the community of practice which should be developed.

Support should be given to developing additional research areas regarding small and rural schools. Current research has extended to investigating more closely the impact of multi-age pedagogy on learning outcomes and also student capacity for developing autonomy in their learning practices. Also, research programmes have not been able to examine the transition between primary school and lower secondary school, where some adaptations may be necessary to facilitate the transition of students from small and rural schools into more traditional school environments.

This research report – conducted under the umbrella of the Small and Rural Schools Interest Group – should be considered as a first step towards a more ambitious programme which should be decided at ministry of education level.

An overriding consideration should be the implications of educational inequality for school improvement and the need to provide relevant, contextual and focused support to schools that are educationally isolated.

School leaders

All teachers and school actors within small and rural schools should be offered opportunities for professional development through a capacity-building programme, enabling practitioners to benefit from the experience of others in a connectivist way. This capacity-building
programme could also integrate the results of this research study and investigate in greater detail the various issues identified in this document.

We recommend the development of a European manifesto for a model of small and rural schooling to support improving the performance and well-being of rural education.

**Teachers**

Self-evidently, we recommend across all the above actions an unerring focus on teachers, in particular enhancing their opportunities for:

- Sharing practices, developing and accessing tool kits and teaching materials that can give advice and support for work in small and rural schools
- Participation in national and international networks.
The international research carried out in Italy by INDIRE on small and rural schools (Mangione & Cannella, 2021; Mangione et al., 2021) has made it possible to closely observe educational contexts in which different solutions have been experimented to face issues arising from organisational and teaching forms that differ from the schemes in standard schools. Following a phenomenological-transformative approach, the research conducted over the years, based on case studies, has found that small schools share the theme of resilience and resistance to closure found in the literature (Corbett & Tinkham, 2014).

Small schools show innovative system solutions based on structured forms of alliance between school and territory (Cannella, Chipa & Mangione, 2021), which give rise to schools as community centres (OECD, 2020; UNESCO, 2021) in which we see services combating school drop-out and educational poverty as well as forms of schooling in which outdoor spaces and third-party cultural spaces constitute extended classrooms for experiential learning.

The theoretical framework and the survey submitted to the 13 countries showed that small and rural schools in Europe are faced with similar problems and that these challenging scenarios can be – as in the case of the Italian schools observed in the context of the INDIRE Small Schools Movement – real drivers in changing the dominant school form of autonomy.

The information gathered in the initial survey made it possible to design a documentation protocol to delve into cases capable of framing challenges and opportunities for the small and rural school in Europe. To carry through this comparative research, European Schoolnet and INDIRE identified a group of 19 small schools from the following 11 countries: Croatia (2), Czech Republic (2), France (2), Hungary (2), Italy (2), Malta (2), Serbia (2), Spain (2), Greece (1), Poland (1), Sweden (1), which assisted in investigating the current practice in the most isolated situations.

To further finalise this research, a case study format was designed and structured around four dimensions:

- **System innovation**, with the aim of bringing out the forms of alliance with the various players in the educating community (collaboration with the family, local authorities and the Third Sector), participation in networks between schools and the educational content emerging from these forms of collaboration (for example, in-service training projects).

- **Leadership and management**, investigated in terms of the school’s vision and internal organisation through instrumental figures and organisational bodies such as quality teams, commissions, departments, multi-grade management support figures and liaison between the school’s various plexuses.

- **Teaching strategies**, with a focus on didactic aspects and classroom management including space and time and the strategies used for the management of multi-grade classes if they exist, the use of digital content and devices in the classroom.

- **ICT as inclusive tool** (sub-dimensions: Remote teaching, Distance Learning). This dimension asks to describe how ICT is used with reference to Remote Teaching and Distance Learning.

The case study form was sent to 24 small European schools located in isolated localities and which, with respect to the four survey dimensions, were identified as significant by the Ministries of Education of the 13 European countries belonging to the European Schoolnet network. These are schools from the
following 11 countries: Croatia (2), Czech Republic (2), France (2), Hungary (2), Italy (2), Malta (2), Serbia (2), Spain (2), Greece (1), Poland (1), Sweden (1).

For each dimension, sub-dimensions were identified, i.e. the starting units of thematic analysis that guided the qualitative investigation of the text. For the System Innovation dimension, three sub-dimensions were identified (Parental Role; School Collaboration; Community Collaboration). Each sub-dimension was broken down into questions, with a total of 10 questions. The dimension of Leadership and management was broken down into three sub-dimensions (School vision; Organisation of the teaching and working team; Organisation and management of the plexuses) and related questions, totalling 8 questions. The dimension Teaching Strategies dimension was broken down into four sub-dimensions with a total of 6 questions (Space and time organisation, Classroom Management, Digital Content & Curricula, Assessment), while the ICT as inclusive tool dimension into two sub-dimensions (Remote teaching, Distance Learning) accompanied by 6 questions.

Each European school involved in the sample completed the documentation sheet supervised by the head teacher and a contact person identified by him/her. Both then took part in a semi-structured remote video-interview, aimed at delving into those sub-dimensions that emerged from the documentation sheet as needing in-depth study, either because they were unclear or because they were significant and therefore needed to be examined in greater detail. On the basis of the documentation form and the video interview, a report was produced for each school institution with the aim of highlighting the organisational and system solutions capable of innovating the grammar of the standard school.

Analysis of the phenomenon

Investigation work based on the analysis of the phenomena made it possible to return the first reports for individual educational cases (in the format of monographs), by means of a collection of narrative cards and semi-structured video interviews with teachers and managers of the selected schools. The reports of 19 small European schools have been analysed (see Table 1).

To complete the final reports, INDIRE researchers worked with a heuristic view, exercising an epoché with respect to previous knowledge and relating only to the Italian context (Mortari, 2010). The content analysis was carried out based on some of the survey dimensions in the narrative sheets.

Starting from the monographs, and using a qualitative text analysis method, INDIRE researchers worked on a restricted and selected sample. This analysis made it possible to obtain exemplary knowledge that can support and guide interventions in the survey context.

<table>
<thead>
<tr>
<th>Country</th>
<th>Small/Rural School #1</th>
<th>Small/Rural School #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Croatia</td>
<td>Osnovna škola Tordinci</td>
<td>Osnovna škola Braće Radić, Bračević</td>
</tr>
<tr>
<td>Malta</td>
<td>Gozo College Ta’ Sannat Primary and Special Unit</td>
<td>Zebbug Primary School</td>
</tr>
<tr>
<td>Italy</td>
<td>I.O. Bobbio</td>
<td>I.C. del Vergante, Invorio</td>
</tr>
<tr>
<td>France</td>
<td>Freney-d’Oisans</td>
<td>La Balme school, Rencurel</td>
</tr>
<tr>
<td>Spain</td>
<td>CEIP Encarnación Ruiz Porras</td>
<td>CEIP Doña Mencía de Velasco</td>
</tr>
<tr>
<td>Greece</td>
<td>Primary School of Konitsa</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>Egri Kemény Ferenc Sports Primary School</td>
<td>Nagyiván Primary School of Kossuth Lajos Secondary Grammar School</td>
</tr>
<tr>
<td>Poland</td>
<td>Publiczna Szkoła Podstawowa w jetowej</td>
<td></td>
</tr>
<tr>
<td>Serbia</td>
<td>Mladost Primary School</td>
<td>Petro Kuzmjak school</td>
</tr>
<tr>
<td>Sweden</td>
<td>Lycksele School</td>
<td></td>
</tr>
<tr>
<td>Czech Republic</td>
<td>ZŠ a MŠ Luková</td>
<td>Primary school in Přimda</td>
</tr>
</tbody>
</table>
Content analysis is a technique used to make valid and replicable inferences about the meaning of texts, images or other signifiers that are grouped into categories. As for the research presented here, such inferences may derive from a top-down approach, where the units of analysis are defined a priori, in order to then examine the material and define a valid codebook capable of enabling a replicable coding of the material into content categories, on which the appropriate analyses can then be carried out. The research work was characterised by three macro-phases.

Step 1:
With reference to the Leadership and management dimension, the starting units of analysis were as follows:
- School vision.
- Organisation of the teaching and work team.
- Organisation and management of several plexuses of the same school.

With reference to the System innovation dimension, the starting units of analysis were, instead, the following:
- Collaboration with families and parents’ associations.
- Collaboration between schools/network schools.
- Collaboration with the local community.

With reference to the Teaching practices dimension, the starting units of analysis were, instead, the following:
- Space and time organisation.
- Classroom management.

With reference to the ICT as inclusive tool dimension, the starting units of analysis were as follows:
- Remote teaching.
- Distance learning.

Step 2:
In this step, the codes identified were organised and grouped into more general themes. With reference to the theories of Schilling (2006), INDIRE researchers worked by reformulating the categories or subsuming the old ones into larger classes. It was useful to name the texts each time within the most abstract category among those surveyed, until the coding becomes so generic as to be saturated.

Step 3:
Finally, the themes and their related codes were used to create the codebook (i.e. the set of codes and their related definitions). “The existence of such a tool is a necessary requirement for a content analysis based on human coding to be reliable.” (Lucidi et al., 2008, p. 97). The codebook can be understood as a manual in which the assignment criteria of texts to categories are explained (Neuendorf, 2002). The codebook contains at least four elements: the theme, the explanation of the category (code), the definition (to clarify the meaning of the category in the context of the qualitative analysis carried out, indicating its fundamental and distinctive characteristics), examples of texts that are, in some way, the prototypes of the category itself.
References


BOIX R. 1995 Estratégias y recursos didácticos en la escuela rural, Barcelona, Institut de Ciències de l’Educació-Universitat de Barcelona, Graó Editorial


Gjelten, T., A Typology of Rural School Settings, Summary of presentation prepared for the Rural Education Seminar, United States Department of Education (Washington, DC May 3-5, 1982).


Harris, A., Spillane, J., Distributed leadership through the looking glass, in “Management in education”, 22(1), 2008, pp. 31-34.


Leithwood K., Harris A., Hopkins D. (2008), Seven strong claims about successful school leadership, in School leadership and management, 28, 1, pp. 27-42.


Moreno A., Delivering Quality Education and Health Care to All Preparing Regions for Demographic Change OECD 2021


Mangione, G.R.J., Cannella, G. (2020), Small School, Smart Schools: Distance Education in Remoteness Conditions, in “Technology, Knowledge and Learning”, 1-21, 2020 (ISSN 2211-1662), Springer Nature SharedIt Initiative.


