Study on Supporting School Innovation Across Europe
Case study 6 – Italy

Sicily, Italy

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1. Introduction and context: what, where and why?

1.1. Understanding the selected region: key characteristics

The past few years have shown a considerable decrease in the Italian economy, with an increase in the economic gap between Southern territories and the rest of the country.

It is known that economic growth is strongly linked with the training of qualified human resources, and that this training starts at an early age: experts have long advocated for the great importance of an early education, starting with kindergartens and nursery schools, and following further to primary and secondary education.

OECD data for Italy shows considerable gap in learning between students in the North and Centre of the country and students in the South (Asso et al., 2015, p.73). In the South, and in Sicily in particular, schools face many more obstacles in providing good quality education compared to schools in the North, as evidenced by INVALSI[1] data (Asso et al., 2015 p. 50). Therefore, the focus of this field study is on the Sicilian region (please see Figure 1 below).

Figure 1. Map of Sicily region

Sicilian secondary-school students have the lowest scoring percentage nationwide for INVALSI tests, both in Italian language and Maths. Moreover, there are other indicators of learning pertaining to the functioning and the shape of schools, sourced from ISTAT and INVALSI, which provide further evidence for the gap between the South (Sicily in particular) and the North. For instance, ISTAT shows significantly higher early school leaving rates for the Southern region, compared to the Northern one. Furthermore, the government expenditure on education in Italy (total 4.14% of GDP according to Eurostat (2011) is far lower than the international average. State funds cover about 80% of expenses, including the cost of teachers based on parameters fixed nationwide, while local authorities (Regions, Provinces and Municipalities) cover the costs of canteens, transport and maintenance. Sicily's local authorities provide the lowest funding to schools across all Italian regions.

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[1]INVALSI is a national research institution dedicated to the evaluation of learning. As part of the National Assessment System, it helps form educational policies for the cultural, economic and social growth of the country and promotes the full autonomy of educational institutions.

Furthermore, according to the socio-economic indicators, the Southern region of Italy (incl. Sicily) is much poorer and more disadvantaged (see table 1 below). According to Asso et al (2014), it is characterised by a higher crime rate than in the rest of Italy.

Table 1: Secondary school pupils' individual, family and social environment characteristics: Sicily compared to Italy macro partitions (Asso et al., 2015, p. 104)

Indicators	North (a)	Centre (a)	South (a)	Sicily (a)
Students and Family characteristics				
Foreign student rates overall	12,8 *	11*	3,5	3,6
Pupils from Family with low ESCS (economic socio-cultural status)	35,2*	30,5*	40,5	39,3
Pupils from family with high ESCS	31,1*	36*	26,3	26,7
Structural characteristics of the school				
Average number for class	19,9	19,2	19,8	19
Average number of fixed-term contract teachers overall	19,3*	17,7*	13,9	12,8
Average rates of students with low ESCS scores	34,8*	31,2*	40,7	38,7
Average rates of students with high ESCS scores	30,8*	35,3*	26,1	27,4
Territory characteristics				
Average added value per capita on a provincial level	28,422*	25,843*	15,655	15,27
Average unemployment rate at SLL[2] level	8,3*	11,1*	19,8	20,9
Average activity rate at SLL level	53,8*	51,1*	41,7	39,3

*Note: (a) = significance (<0.001) * of the difference between average rates obtained through t-tests compared to Sicilian students.*

1.2. Getting to know the schools selected for the field study: brief profile

1.2.1. School 1 - Acireale

The Comprehensive School Giovanni XXIII of Acireale is a state school, founded in the 90s by merging the primary school of Aciplatani with the secondary school Giovanni XXIII. In 2012, other school annexes were added to the structure, which is now comprised of five nursery schools (among which a regional kindergarten), five primary schools and one secondary school between the north and the south area of the city.

The socio-economic characteristics of the region, where the schools are located are diverse. While some communities are expanding and offer social-housing facilities, this does not translate into a sense of awareness or belonging. There is little faith in institutions, which in the past have failed to respond to the needs of the local population; this is accompanied by a lack of attention to those in need, as well as to the importance of solidarity and active citizenship. Even though the overall number of foreign pupils is increasing, it still remains rather low compared to other regions.

The Comprehensive School is located on a large area with a diverse socio-cultural and economic context. The socio-economic status of students' families is generally below average. The school is comprised of eight annexes, all located in different areas of the municipality, some of which are rather far from the city centre. These annexes can be located as far as eight kilometres from one another. The school and the local parish along with Agesci scout groups, artisan associations, voluntary work associations, recreational and sports centres, the parents' board "Insieme per la loro vita" (together for their life) are the main centres of gathering and cultural activity.

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[2] Sistemi Locali del Lavoro (Local Work Systems).

Table 2: Population of the School 1

School	Role	Age	Quantity
Nursery school	students	30 months - 6 years old	233
Primary school	students	6-11 years old	327
Secondary school	students	11-14 years old	193
Nursery school	teachers		23
Primary school	teachers		41
Secondary school	teachers		30
Secretaries			5
School operators (janitors)			14
Staff			20

Source: school data.

The school also has a Parent Board, whose statute was approved by the School Board and submitted to the Municipality's office. One of the functions of the Parent Board is to raise funds to support the implementation of the school's strategy.

This school has always been perceived as disadvantaged considering the high unemployment rate of the population of the area, the low level of socio-cultural awareness, and the presence of many students with special learning needs (SEN). Up until three years ago, the rates for students failing a subject and for students dropping out of school were rather high.

In the light of this context, the main objectives of the School 1 are:

▪ promoting active participation, that is the engagement of students, families and external partners as stakeholders in the educational role of schools;
▪ promoting choice awareness, autonomy, and sense of responsibility;
▪ favouring inclusion;
▪ insuring coherence of vision, mission, project, processes, and activities.

In order to reach these goals, the school has decided to adopt active, interactive, and innovative approaches to education, and thus reorganised its timetables, spaces, and educational activities (please see Section 2.1. for further details).

In the last three years the Ministry of Education has evaluated school performances based on INVALSI (Vales), with schools submitting a self-evaluation report (RAV) as well as an improvement plan taking into account satisfaction rates from students and their families (every two years). According to the evaluation results, the school performance improved and is now in line with the national average.

1.2.2. School 2 - Taormina

The Comprehensive School Foscolo of Taormina is made up of 14 schools located in seven Municipalities. It is a state school, and it started operating as 'comprehensive school' in 2012/13.

The socio-economic context is rather diverse, as the school is located in seven different Municipalities (see Annex III) and two areas, with evident and strong differences in income rates, consumer price index, and access to cultural resources, and intercultural relations.

For example, Taormina and its suburb Trappitello, where the schools in object are based, are well renowned touristic localities with high immigration rates. Other towns are in the hills or in the countryside, and have a rural, working class economy with lower immigration rates. In fact, the school welcomes immigrant students coming from disadvantaged areas, such as Eastern Europe, Asia, and North Africa. Students usually come from families where parents are seasonal workers. The school has a protocol for welcoming immigrants to favour their full integration: engagement with families, personalised study plans, and education strategies such as cooperative learning.

Table 3: The population of School 2

School	Role	Age	Quantity
Nursery school	Students	30 months - 6 years old	367
Primary school	Students	6-11 years old	668
Secondary school	Students	11-14 years old	485
Nursery school	Teachers		39
Primary school	Teachers		74
Secondary school	Teachers		67
Secretaries			8
School operators (janitors)			26
Staff vicars and other functions			23 + 14

Source: school data.

The Taormina comprehensive school has a good reputation among the local population; however, it is not well known at the regional level. Nonetheless, the school follows closely the strategies suggested by the Avanguardie Educative platform, and therefore has a reputation as an innovative school at the national level.

The main goal of this school is to motivate students to learn. The school believes that new teaching strategies will encourage higher levels of student engagement and participation. The school is investing in active and interactive activities, such as the Debate and Flipped Classroom and training its staff in innovative approaches to teaching (see Section 2.2 for further details).

2. Two perspectives on the school innovation process: what supports and what limits innovation?

2.1. Acireale

2.1.1. Presenting the innovative approaches practised in the school

Until 2011 the school was not perceived as a safe place, where pupils can get high quality education or personal development. This resulted in a demotivated attitude of students enrolling into school. Furthermore, this demotivation subsequently resulted in difficulties in learning, such as paying attention, taking responsibility, taking on positive roles, and personal commitment.

Following the last school reorganisation in the region of 2012/13, which resulted in an increase of the students' population and in organisational challenges, the teachers and the newly elected principal took the opportunity to work constructively with the new structure.

In 2011, a new principal started managing the comprehensive school Giovanni XXIII of Acireale and, following the first year of monitoring and assessing the situation, suggested introducing innovations in their nursery, primary, and secondary schools.

The new principal, used her previous experience as a teacher and manager in a prestigious school in Biancavilla, such as use of school gardens and yards, administrative excellence in managing self-evaluation, common assessment framework. Moreover, a new vice principal was appointed from Lombardy and contributed to the project with her teaching expertise gained in the North of Italy.

Nursery school: outdoor schooling

The Nursery school, based at the annex San Domenico Savio in Santa Maria delle Grazie, has introduced out-door schooling. In order to do so, it signed a network agreement with schools from Emilia Romagna, Tuscany and Sicily, an agreement on innovation, trial and

research for outdoor schooling, an agreement with Terre di Bo on project management and active research, and an agreement with Manes Asilo nel Bosco Association on creating an outdoor academy. The aim of outdoor education is to favour outdoor learning in direct contact with nature, to stimulate sensory experiences. Outdoor Education draws upon the philosophy, theory, and practices of experiential education and environmental education.

The school has grown a small vegetable garden where the kids can work, and has provided safe areas to do outdoor activities.

Primary school: bag-less school

The primary school in via Firenze has introduced the Scuola Senza Zaino (bag-less school) model to its first, second, and third year grades, and it has joined the international network of Scuola Senza Zaino[3], which is coordinated by the comprehensive school G. Mariti of Fauglia in the Province of Pisa.

Just like many other countries, kids in Italy need to carry a bag to and from school so that they have all their tools and learning equipment with them. The act of carrying instruments to and from home every day is actually quite unusual: employees find their working tools at the workplace, so why would this be different for students? The bag becomes a symbol of inhospitality.

The suggested reorganisation is quite simple, but very concrete. Students in Senza Zaino (SZ) schools only wear a light purse to hold their personal belongings and what they need to write down homework. Furthermore, classrooms and schools are furnished functionally with advanced learning tools. Nevertheless, this measure also holds a symbolic connotation, as school practices change alongside SZ's three core values: responsibility, community, hospitality.

SZ schools are organised so that in the morning kids meet in a circle in the agorà, where they decide the activities for a day. The teacher supervises while they work in pairs or groups to reach their goals. This phase includes practical activities, such as playing with educational toys or using domino to learn to factorise numbers. The teacher supervises and corrects mistakes, and assess the learning outcomes according to objective parameters. This approach is based on the theories of constructivism and of the global curriculum approach.

Secondary school: workshop rooms and flipped classrooms

The school principal and teaching staff at the secondary school in Via Firenze have decided to join Avanguardie Educative (in February 2015) and to implement its ideas: workshop rooms and the Flipped Classroom. They also introduced teaching through scenarios and the 3.0 classroom with tablets for every student, which was sponsored by the regional education fund.

Disciplinary Workshop Rooms is a revolutionary idea, as in Italy students stay all day in one room and teachers move from class to class. There are also chemistry labs where students can usually do some practical activities, and a gym for physical activities, but usually students sit in the same room every day for the entire school year. Disciplinary Workshop Rooms, on the other hand, are organised according to a subject, and they can be refurnished based on a subject taught. Teachers are no longer working in an undifferentiated environment, and can personalise their working space based on their functional teaching needs in terms of furniture arrangement, tools, books, devices, software, etc.

This specialisation of the classroom setting thus results in classrooms being allocated to the teachers rather than to student classes: the teacher always uses the same room, and

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[3] Scuola Senza Zaino is an association funded in Tuscany, Italy in 2002 and it has reached a sizeable number of schools throughout the country.

students go from one classroom to another depending on their schedule. All students are provided with a locker and are responsible for leaving the classrooms clean.

In Flipped Classroom time and self-study activities are reversed or "flipped". In practice, activities can take many forms, but generally involve students preparing for a class by watching a pre-recorded lecture or undertaking assigned reading and activities, followed by the "lecture" time being used for interactive discussion, problem-solving and other activities with a teacher. As such, the role of a teacher shifts from being the "sage on the stage" to the "guide on the side". Advantages of this approach include an increase in interaction between students and teachers and collaborative working between students; an increase in student engagement and a shift from passive listening to active learning. The idea of the flipped classroom was first introduced in 2004 by two teachers of Chemistry in Colorado, Jonathan Bergmann and Aaron Sams (Cecchinato, 2016).

The objective of the principal and teachers involved was to change the difficult learning environment, which emerged due to the school's reputation as 'disadvantaged' and the student challenges.

This was achieved by highlighting good practices, while drawing from innovative approaches at the national level. The first innovations were disciplinary workshop rooms and afternoon hours, aiming to support the learning of students and the motivation of teachers, as well as responding to family organisational needs.

Supporting learning entails implementing actions to prevent boredom arising from a prolonged permanence in one place; to improve concentration by alternating different subjects in specific classrooms; to improve autonomy by managing responsibly the students' movements and the material at their disposal; to engage interest in learning through participation, with the help of new technologic tools for learning (tablets); and to introduce the teaching innovation of the Flipped Classroom.

> "Innovation began with the secondary school's disciplinary workshop rooms, to provide an answer to the kids' tiredness, which was due to staying in one classroom for too long. This, paired with the alternating of different subjects, resulted in difficulties in maintaining focus and interest in following the lecture; whereas now, identifying each classroom as a workshop, the kids are more motivated, as are the teachers, who can personalise their working space. It is true that the professors' common room is no longer there, but every teacher has their own, which is definitely better." (Principal 1)

The vision of change and innovation, together with the AE webinars, motivated teachers and the teaching community. This has resulted in the creation of stimulating spaces for learning, the workshop rooms; in the interaction with more active, responsible, and engaged students; in the cooperation with school operators[4], who saw this as a recognition of their work in making the classrooms clean and welcoming.

Responding to the families' organisational needs resulted in unifying the timetables for primary and secondary school students; this was attained by reducing by five minutes the hourly teaching time for secondary school lectures, so that the students could leave school at 1.40 pm (while primary school students finished school at 1.30). The school also offered afternoon hours, during which different language or thematic workshops are provided as an alternative to the streets and media, and set aside hours for workshops (three workshops of nine weeks each, and a year-long English workshop).

2.1.2. Main enablers for innovations

The INDIRE website section on innovations in education (AE) was a great resource and inspiration for the school. The school adopted two of the objectives proposed by AE

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[4] These are school janitors, through their responsibilities are quite broad and include secretary functions, front office, and safety.

(creating new learning spaces and re-organising the school's timetable), and decided to introduce three ideas: workshop classrooms, a unified timetable, and the flipped classroom. After this the teachers started working together with the Parents' Board to convert the spaces. The principal coordinated the work on planning the timetable (cutting teaching hours from 60 minutes to 55 minutes to make time for afternoon workshops), and on introducing active teaching methods (Flipped Classroom). Voluntary teachers and the Parents' Board helped to convert the classrooms into workshop rooms by painting the walls and the corridors and upgrading the furniture during summertime. Financial resources were very limited. Sets of Ipads for two full classes were purchased with the support of EU funds for regional development within the National Action Plan.

Teachers underwent a couple of years of online training through webinars, via subscription to the AE.

These are monthly videoconference webinars structured on four planning stages: Plan, Do, Check, Act. The courses are repeating every month. Teachers are also provided with guidelines and an online active community to discuss any issues or find an answer to their questions.

> "Favourable conditions depended on the very fact that the school was seen as the Cinderella of the town, (the poor and neglected sister in the Grimm story tale.) This has contributed to the teaching staff's will to perform well and to prove their professional dignity. Thus, the essential factor was the need to do high quality work and to provide the kids with good solutions. It was about turning what used to be discomfort and resignation into energy for improvement." (Principal 1)

The school buildings were spacious and offered open spaces, however, there is no support from local authorities to take care of school infrastructure.

The principal herself and her staff have defined this innovation process as an ongoing experiment, and mentioned that it will need thorough monitoring to assess its strengths and weaknesses for future maintenance.

2.1.3. Main barriers for innovations

The obstacles to the project are mainly financial, as it is not possible to purchase the furniture and tools necessary to implement its innovations. Moreover, there are no funds to cover the cost of training, which is essential in promoting change. The fact that a part of the school community is less open to new practices, together with the average age of the teaching staff being quite old, also constitutes another obstacle which slows down the whole process.

However, introducing a systemic innovation such as the workshop rooms creates a change which encompasses the whole teaching staff. The new approach encompasses a change in classroom assignments: before the change classrooms used to be assigned to students, whereas now they are assigned to teachers, and student classes circulate from a class to class throughout a day.

Another barrier is a negative perception of this school from outside community. Many associate the aim of inclusion with the lower standards of education quality and therefore view this school as a place for difficult and demotivated students. This image also attracts lots of children with special educational needs to this school.

The school addresses this issue in two ways: firstly, with the aid of support teachers, who are assigned by law to support the teaching staff and help students with learning disabilities. The school also uses active, collaboration-based teaching techniques which favour integration, such as the SZ School.

The new principal is aware that in order to change the community perception it will be necessary to make the vision, mission, and new practices more explicit, deemed to be valuable not only in dealing with critical situations, but also in allowing the full development of all students. It will also be necessary to implement an ongoing process of

observation, in order to obtain concrete data to use in self-evaluation processes, in redrawing the project, and in external communications. These innovative practices are in accordance with the direction of present legislation.

However, in order to implement this idea, it is important that there is a shared vision among all the teaching staff and relevant training opportunities are provided to them (apart from AE webinars).

> "The main obstacle was a resistance from some colleagues, as to adopt a change, teachers need to evaluate their work critically, to accept non-traditional teaching methods." (Teacher)

The City Council Member specialising in Education along with teachers declared that the Region should consider the specific and peculiar needs of different territories when merging schools, instead of being limited by mere numbers.

2.1.4. Main achievements

The main effects of the introduction of innovative approaches to education can be summed up as follows:

- sharing the values that inspired the change with the whole school community;

  > "The main change is the reality of shared principles with the whole community, including students and their families, because it is only through a real sharing of principles that change can be obtained." (Principal 1)

- permanent change to the disciplinary workshop room environment, which also changed the usual practices of teachers and contributed to their overall reflection of the school functioning and teaching process;
- cutting of school hours and subsequent optional curricular activities (foreign language classes, music classes, sports);

  > "Learning from your own experiences is important, because every moment is a moment of reflection. For example, we realised that advanced courses were unsuccessful both for the students and for the teachers, and thus decided to use the hours gained by cutting down the lecture time from 60 minutes to 55 minutes to carry out afternoon workshop projects chosen by the kids." (Principal 1)

- interdisciplinary schedules for class boards in secondary schools;
- the introduction of teaching positions focussing on innovation;

  > "I have organised the functional roles: we have three functional roles for innovation for all degrees of education (one person per degree, for a total of three people)." (Principal 1)

- internal organisation change, as the teaching board meets based on school degrees of education;

  > "From an organisation standpoint, the teaching board now meets divided by degree of education; secondary school class boards are trying to organise differently so as to work with parallel classes to favour interdisciplinary planning." (Principal 1)

- A better learning environment among students.

> "The direct effects on students are a greater calm; there is more silence in the classrooms, the kids are more focused and motivated. These are foreseen changes, but there have a couple of positive surprises, such as the managing of classroom maintenance on behalf of school operators being more sustainable because the kids keep the rooms clean and tidy." (Principal 1)

2.1.5. Sustainability of innovative practices

The project's sustainability relies on various factors. Firstly, the school has a strong leadership (the principal, vice principal, and a number of motivated teachers) with a clear vision. It is also part of national networks, which set a standard for activities and require specific training. Furthermore, the teaching staff is becoming more accepting of innovation, as more and more teachers embrace change.

Moreover, the school is gaining recognition and visibility due to its good practices in the innovation process.

The Ministry and local authorities, however, are not providing the funds to foster and develop its innovations, and the principal has doubts on future feasibility to maintain these innovations.

> "Sometimes I doubt whether I will manage to do that (because of financial resources, the training and ongoing counselling), but I think that I will." (Principal 1)

2.1.6. Monitoring, evaluation, learning loops and planning of innovative approaches

With regards to observation and evaluation, the specific programmes have not yet been implemented, and the school is currently using the national evaluation system (vales). The school introduced these changes only recently, and has thus focussed on planning and introducing innovation, rather than evaluating it. Its leading group is elaborating solutions to monitor and evaluate results. Specifically, it is adopting the CAF method, which the principal used in her previous school. This approach is also the SZ School Association recommended approach for comparative evaluation at the national level.

Furthermore, the teachers who are part of AE are attending a national seminar on tools for evaluation and monitoring.

2.1.7. Stakeholders' engagement

The school works closely with parents and local authorities, but their support is not of financial nature. The new Municipal administration cannot yet provide solutions to the needs of schools, which have been neglected for at least ten years. Therefore, the issues of building and green-space maintenance, heating, transport, communications, furniture, and subsidies remain unresolved. The buildings, furniture, and workshop tools present considerable deficiencies, and there is no Internet connection or wiring in the school buildings.

The City Council Member from Acireale created a WhatsApp group with the mayor, Council Member and School Principals of Acireale to communicate faster.

Concerning relations with Universities, the school communicates with some Universities (Bologna, Bari and Catania) with regard to other innovative approaches for nursery and primary schools, such as the kindergarten in the forest or the bag-less school approaches. On the subject of secondary school innovations, on the other hand, there is no collaboration with Universities. However, the collaboration with AE is still significant, as the platform provides the school with teacher training through webinars, guidelines on innovation, teaching tools, a national network and an online community for good practices, and webinars for principals.

The key actors and organisations are obviously the principal, the teaching staff and the functional roles. The secretary is gradually implementing operational improvements to the old system.

2.1.8. Mainstreaming and transferring innovations

At the moment Acireale comprehensive school is the only one in its regional territory experimenting with these innovative approaches. Other schools from Siracusa and Ragusa are showing interest in understanding this experience. Acireale school has not yet worked on patterns of dissemination, but they have the confidence that these ideas could be easily transferred to other realities.

> "In my opinion, everything can be transferred as we do not have anything more than anyone else. Sometimes I doubt if I will manage to do it (because of financial resources for training and consulting), but I think that I will." (Principal 1)

The school is not working on patterns of dissemination yet, as its experience with innovation techniques is still in its early stages. However, there are efforts in publicising AE initiatives in the media. Representatives of Acireale school are offered to host the workshop for the dissemination of the results of this research, which will take place in April. Furthermore, the AE platform is a good tool for spreading innovation and building capacity of schools across the country to experiment.

2.2. Taormina

2.2.1. Presenting the innovative approaches practised in the school

The Comprehensive School in Taormina decided to introduce the Debate method in two of its complexes (Taormina and Trappitello), involving secondary and primary school students.

The Debate method is a teaching approach, which facilitates the development of life skills, cooperative learning and peer education. It consists of two teams of students advocating their stance while acknowledging the opposition's arguments, planning counter-arguments and refuting arguments with a logical line of thought. The topic can be chosen by the teacher or by the students, and it usually is non-disciplinary. Students lead a formal debate, according to the specific rules and in a certain period of time. At the end of the discussion the teacher, or a third group of students, evaluates the teams' performance and identifies the winner of the debate.

This approach to teaching is carried out differently depending on the level of schooling. In primary schools, it is not constrained to a single subject so much as it stimulates students to learn through critical thinking, discussion, and respect of schedules. However, it can sometimes be strictly disciplinary. Within the middle school programme, on the other hand, it is more discipline-based (i.e. "fractions or decimal figures?"), but it can also have a multidisciplinary connotation (as it happens, for example, when dealing with the topic of immigration).

Evaluation is based on the whole process of research, analysis of sources and data, and presentation in the context of the debate. It also considers the role of the individual within a group. This, however, does not always translate into a mark, even though middle school pupils expect to be evaluated.

Debate reinforces and enhances knowledge of a general topic, engages students in the learning process, and verifies that the students can analyse, incorporate, and apply the literature to various situations. It also heightens the students' organisation and listening skills, and boosts confidence in dealing with challenging issues.

The activity of considering evidence in different ways and under different conditions helps students develop and promote critical thinking skills. Hence, Debate pushes students

beyond memorisation and the superficial application of theories, techniques, and evidence; it actively integrates and applies classroom materials to an array of situations and circumstances.

In autumn 2015, a Taormina teacher went to an Indire (Ministry of Education) seminar in Lucca (Tuscany, North of Italy). The seminar hosted 100 teachers and dealt with school improvement. The seminar of Avanguardie Educative illustrated innovative teaching strategies, and the teacher thought that the Flipped Classroom and the Debate approaches in particular would be beneficial to her school in Sicily. She discussed this with the school principal and they decided to propose these two educational strategies to all the teachers in the school (about 200 teachers). They agreed and the principal applied for the adoption of the Debate strategy in December 2015. Avanguardie Educative offered four webinar trainings on Debate, Flipped Classroom, and workshops.

Thus, three secondary school classes in Taormina, two secondary school classes in Trappitello, and two primary school classes in Trappitello started using Debate in the classroom, and run a debate each month.

The main reason to start with Debate was the idea of connecting different classes from different complexes within the same comprehensive school.

> "We started with the idea of connecting groups of students because of the large area in which the Comprehensive School operates, but we did not succeed last year; hopefully we will manage this year, with online Debate between the different complexes or even other schools. Therefore, the main problem is the school being located on a vast area, which results in uneven academic performances. The second problem is that we cannot fall behind in this changing society, we must keep up to date." (School Teacher 3)

Introducing Debate did not take a lot of resources, because the teachers were trained by Avanguardie Educative and then they worked on their own, without material or financial support.

On the other hand, six teachers who had received flipped classroom training, tried to introduce this technique to their courses and provided online links to extra material on the Edmodo platform. Their students, however, had serious difficulties in accessing the material online, and this year the teachers are providing them with the material directly.

2.2.2. Main enablers for innovations

For the process of change, the aspects of special relevance are listed as follows.

Firstly, the presence in the school of a proactive teacher, who promotes innovation and attended an INDIRE training course for school improvement in Lucca, had a huge influence. Thus, she learned about AE and its approaches to teaching. She thought that ideas such as Debate and Flipped Classroom would answer the needs of her school, for example, Debate would favour the collaboration between distant annexes. Thus, upon her return, she suggested this idea with enthusiasm, and the principal accepted to take on this project.

Support from the principal was important in introducing and sustaining change. She had been recently appointed responsible for a school with 14 annexes, and she was worried about the uneven profiles of the different annexes. She also wanted to promote the collaboration among the teaching staff operating in different annexes to create unity. Thought that Debate would be effective to that purpose, as it allowed different classes in different annexes to discuss the same topics.

The school principal also ensures a coherence of vision among the different annexes by circulating daily among them. She also has a team of four assistants with specific roles and duties, as well as 11 annex managers who take care of staff presence, organise substitutions, etc.

Teacher training was carried out through AE. The platform provides teachers with webinars specific to the innovative approaches. The webinar on Debate was taken by 50 teachers and the techniques was later adopted by 15 of them.

> Lastly, Avanguardie Educative itself was an enabler of innovation, as it allowed the school to be a part of a national network, to discover other innovative realities nationwide, and to find advice on Debate from other schools which had already adopted this technique. The Trappitello school networked with the school of Recanati, for instance, which is in Abruzzo. "The sensibility of some teachers, the will to bring about change, the professionalism of the teaching staff. Of course, there must be someone who advocates for the idea with enthusiasm, with the support of the principal. Clearly, the other two factors are Avanguardie Educative and the national network of people calling for innovation." (School Teacher 3)

> "A lot of teachers, by using the Indire platform and witnessing the experiences of others, felt the need to try and see what results we could achieve here."

2.2.3. Main barriers for innovations

The main obstacle is teachers' attitude towards being involved in a change of paradigm. Moreover, while ICT is used both in Debate as means of a research and in Flipped Classroom to upload study material, many teachers struggle to easily update the practices, as in Italy teachers are relatively old and experience difficulties in using ICT in their classes.

> "The age of teachers is the main challenge; some teachers do not see new technologies as innovative educational tools, and are fixated on the idea of learning on books." (Principal 1)

Furthermore, there are also some technical obstacles to the introduction of innovative teaching methods, due to the lack of wireless connection.

> "Sometimes as you proceed you come across something you had not foreseen. We started from the idea of using tablets in the classroom and grouping desks four by four, but realised we had no internet connection." (School Teacher 3)

Despite the difficulties, almost 50 teachers belonging to the same comprehensive school were trained by Avanguardie Educative, and almost 15 of them tried to introduce Debate in their classes. Debate is done once a week by splitting the class into teams; Debate between different classes or schools happens once every three months. This school year more teachers are trying to introduce Debate, and experience the challenge of connecting with schools in other cities and regions. To run Debate between two schools, a school needs to have an internet connection, and teachers need to have basic ICT literacy skills. Not many schools meet these preconditions.

2.2.4. Main achievements

The innovative approach has some positive effects on teachers and students. Teachers, students and parents are very satisfied with this teaching method.

> "First of all, it opens the minds of teachers, who become more aware of the benefits of new technologies and less diffident. If encouraged, they

tend to become acquainted with these new practices and follow them. This favours the sharing of knowledge among the teaching community as it allows for the development of interest and curiosity (but there are still few … of us). Hence there is a dissemination of these innovative practices, and other teachers are made aware of them." (Principal)

Teachers report that everyone is involved in the innovative approach. Parents noticed a great participation from their children and said that they were ready for this change, that they meet on Saturday mornings and afternoons to study together and prepare their counterarguments for the debate. They have developed an attitude towards research and are more interested in the world around them.

"First of all, a greater interest in coursework, active students who are starting to develop research activity to reply to an opponent's points; thus, a greater elasticity in learning, more cohesive groups (measured through observation and not yet mandatory grid), the passionate advocating of one's ideas.

"We noticed that our kids are more involved and interested, even in their daily lives: they ask more questions and are becoming more aware." (Parent)

"At home we observe them: our children meet punctually to study together without us suggesting it." (Parent)

"Students are more motivated, but we have not yet seen improvement in academic performance." (Principal)

2.2.5. Sustainability of innovative practices

The school principal, teachers, parents and students consider all presented innovations sustainable. The school principal highlights that this innovative approach is the most widely spread and implemented by teachers, and it seems to be effective in enticing students, who are more used to new technologies than their teachers.
Debate is a sustainable teaching method, because it only requires good teacher training. If teachers accept the challenge of shifting from teacher-centred education, where the lecture is the only teaching method, to student-centred education, where the students play an active role, the new educational methods will be accepted and sustainable.

2.2.6. Monitoring, evaluation, learning loops and planning of innovative approaches

In the Taormina school there is a committee in charge of the monitoring of all the educational and management aspects. They have also created evaluation tools for internal self-evaluation.
In Italy all schools have to submit a self-evaluation report (RAV) reflecting school results, students' results in standardised tests, achievement in core competences and long-term results. The evaluation process also includes analysis of the achievement of the school's interim (process) objectives, specific thematic areas, and goals for improvement. Both Debate and Flipped Classroom are listed in the school's RAV as key process objectives.

"We have a committee whose role is to observe all school aspects both from a teaching and from an organisational perspective. We are creating tables and internal evaluation tools, because an evaluation based on sole perception would not allow us to grasp the full impact of innovation." (Principal 2)

There are also many internal committees analysing the different aspects of school life and sharing them with the teaching board.

The school has monitored this experimentation in the beginning and at the end of the experience. This was done by administering a questionnaire to all the teachers who attended the AE webinar training. The questionnaire monitored and assessed the outcome both in terms of quantity (i.e. how many teachers finished the course; how many actually introduced the approach) and in terms of quality. All data is kept in the administrative school's sector.

> "We had ongoing observation and final evaluation at the end of activities, and both the model and registered data (online survey) have been submitted to the secretary. We have not yet followed all the school's activities (e.g., debate classrooms), but we will try to do that in the future." (Teacher 3)

Teaching board meetings, which are held monthly and attended by all 200 teachers, are also a place to discuss innovations in educations. The teacher who introduced the Debate method says that she would prefer it if the meetings allowed more time for the discussion on educational innovations. This is actually listed as one of the school's 16 objectives for future improvement.

2.2.7. Stakeholders' engagement

The main stakeholders participating in the Taormina school life are teachers, students, and parents. School and parents' representatives meet once a month and parents' representatives have the task of communicating with all other parents with regards to educational innovations.

The Municipality is not yet involved in the experiment, which causes challenges in the implementation of specific innovations (the lack of Wi-Fi, for instance, is a barrier to all models relying on ICT).

> "I don't think we can do without local authorities (but we still haven't managed to establish a connection). We rely exclusively on internal resources." (Principal 2)

The key actors of innovation processes are the school principal, who must be open to the educational innovation; the teaching staff, who is trained and willing to run the innovative approach; teacher leaders (a group of teachers who were assigned extra responsibilities for innovations depending on their expertise); and the group in charge of internal evaluation at the Taormina school.

2.2.8. Mainstreaming and transferring innovations

As the innovative approach was introduced in the Taormina school only last year, there are no formal requests for consultations coming from other schools in the region. In the past four years, as previously stated, the comprehensive school has merged with other two schools, and thus the principal and teaching staff are trying to even out the teaching practices within the different annexes, and use the school website to promote the introduced innovations. Communication with other schools in the region happens on a more informal basis during general teachers' meetings, conferences, and events.

Other schools in the region know that Taormina has adopted Avanguardie Educative's approaches, as it is stated in the school's website.

> "The schools were inspired by the leading schools on the platform available to those who join this educational path. The schools in our

area know that we joined Avanguardie Educative ... we have not received requests ... we posted the AE logo to the school website, but we have not advertised our results much. Let's say there is an informal network of innovative people." (School Teacher 3)

AE as a platform offers online webinars for teacher training, an online community for good practices, webinars for principals, guidelines, teaching material, and a national network. In in the case of Acireale school, however, AE has taken a special interest in the school, and the Director of AE is personally visiting the school.

Overall, the school innovations are easily transferrable, as they are based on scientifically proven teaching practices. For instance, debate methodology is very easy to transfer to other contexts and schools, as it does not require specific resources.

"I don't think there's anything hard to repeat, everything we do can be done in other schools; of course, every school acts according to its capacity, but all models are replicable and transferable so as to actually create a community following good practices." (Principal 2)

"The innovations we have introduced tend to disrupt the idea of a lecture in the traditional sense. They aim to promote the building of knowledge through research, confrontation, self- evaluation, and the critical analysis of the educational paths. These processes form the basis for the academic paths expected in high schools, and are thus clearly transferable to other school levels." (School teacher 3)

3. Innovation in schools: lessons learned and policy pointers

3.1. Understanding the barriers: what hinders the school innovation process?

The analysis of the two Sicilian schools indicates a few obstacles to innovation: some of these pertain to all Italian schools, while others apply specifically to the schools of the field study.

The first one refers to the incomplete implementation of the law on school autonomy following the failed actualisation of the Law Decree 275/99. The fact that the Italian government changed along with alternate policies and lines of action posed an obstacle to the creation of a clear framework for school autonomy. Principals, for example, are not free to choose their own teaching staff or to make decisions regarding school furniture and facilities, as they fall under the control of Municipalities and Provinces. Thus, if Municipalities are not willing to support innovations, for instance by having internet lines installed, then schools cannot introduce teaching methods which rely on this technology, such as the flipped classroom.

"The fact that principals have the same responsibilities of managers of a small, medium or large business, and cannot choose their own teaching staff nor be permitted to voice an opinion on school facilities, as they are property of local authorities creates a serious barrier for promotion of innovation in the region." (Stakeholder 1)

The second factor is the turnover of teachers and principals, which negatively affects the continuity of innovative processes.

For instance, 15 teachers from the Taormina school had been trained on the flipped classroom approach. However, the following school year some of these teachers were transferred to other schools and could not complete the piloting of the measure in the Taormina school. While these teachers tried to bring innovation to their new schools, this was only possible in selected cases as it relied on the school's attitude towards change and school leaders' support. The successful introduction of the new approach was possible only when the school was already familiar with a similar innovative technique.

> "I was working at an AE school, one of the leading schools which introduced innovation practices, (more specifically it introduced Debate in the primary school). This approach was assigned to a teacher of the primary school, who this year has been transferred to a different school. What does this mean, then, in terms of this innovation?" (Stakeholder 1)

The third obstacle is the role of principals, who are usually seen as the managers of a business, concerned with bureaucracy, rather than as education leaders.

> "The most interesting thing would be to recover the educational function of principals, because the past few years have seen principals in the role of business managers, concerned mostly with bureaucracy and union issues." (Stakeholder 1)

The fourth element refers to school sizes and distances between schools, and specifically the merger of multiple schools. This phenomenon forces schools with different teaching approaches to work in unison as part of the same institution. In Taormina, for example, the principal had difficulties in communicating about innovation within the comprehensive school, despite the fact the teaching staff was well organised.

> "This comprehensive school already acts as a network of schools. Thus, actions such as educational activities, trials, etc., while being advertised on the school's website, are not always as widespread as we would like them to be." (Stakeholder 3)

The fifth factor is resistance to change, which is often the result of the lack of teacher training combined with the aging teaching staff, who can have more difficulties in adjusting to new approaches and methods. Since in the past training was not mandatory, teachers chose traditional teaching approaches, and now they have difficulties following innovations.

> "The main obstacle was a resistance from some colleagues, because (to adopt change) teachers need to evaluate their work critically, to change their teaching methods to a non-traditional one." (Stakeholder 5)

3.2. Spotting the supporters: what facilitates the school innovation process?

Despite the aforementioned barriers to change, there are also factors which favour the introduction of innovations in schools.

The starting point for any innovation is understanding the issues linked with pupils' learning and well-being. Therefore, the first factor is the realisation that students were not interested or engaged with the teaching format or the proposed activities and teachers needed to change their methods. This was backed by hard data resulting from

INVALSI tests (as mentioned before, these tests serve the purpose of understanding the general level of knowledge gained by students year by year across the country): the tests showed lower rates compared to the national average, and a higher number of drop-outs.

This awareness resulted in the need to understand the causes of these problems and find innovative solutions.

The second enabler is proactive educational management, which refers back to the role of principals. In fact, education-oriented principals favour innovation: they understand their school's context and needs and anticipate goals and solutions, especially regarding teaching policies, staff management, family participation, and the engagement with the outside context. Unfortunately, Italian legislation does not mandate specific training for principals: according to Art 181 Law 107/2015, principals have to undergo initial training on school integration, specifically for the social inclusion of students with disabilities, but they are not expected to undergo any further training. AE, however, provides principals with specific webinars on proactive management and school innovation.

The principal at Acireale is indeed an example of proactive management, as she took advantage of in-house resources (such as the vice principal coming from the North of Italy with experience on workshop classrooms and new timetables), suggested actions to improve the teaching policies by joining innovative school networks (among which outdoor education, Scuole Senza Zaino and Avanguardie Educative). She promoted cooperation among teachers and engaged with parents, who painted the classrooms, built wooden chairs for the agora in the SZ school, and painted the teaching yards.

The third key enabler is the openness of the school to its community and other schools, that is reaching outside the school system to find interesting solutions provided by school networks or national and international platforms. This refers in particular to the Outdoor Education, Scuola Senza Zaino, and Avanguardie Educative networks.

> "There definitely is a tendency to reaching out at an international level …
> all principals are dealing with European and American realities. TEAL, for instance, is an idea coming from America: a school in Mantova was inspired by the university model of Boston's MIT, and has adapted the concept to our national context and to a lower level of education … These schools are trying to listen and to research; that's the term I would use: schools need to do research. This is one of the key concepts which need to pass … Law Berlinguer of 2011 deals with research autonomy, and the role of teachers and of principals is constrained by so much bureaucracy that it can sometimes be hard to remember the importance of research." (Stakeholder 1)

The fourth factor is the need for change. For example, in the secondary school of Acireale there was a group of teachers motivated to respond to students' needs and introduce change. When the new, proactive principal started working there, this motivation was channelled and it brought about a significant change, which helped spearhead innovation to the other annexes.

> "It is their need and determination to change that makes the schools within the AE network different from the others: they are determined to improve students' learning experiences and manage to overcome existing barriers. So, I would say that it is their tendency, their motivation and will to change, and also their creative thinking." (Stakeholder 1)

The fifth factor relies on identifying good practices both in-house and outside the schools. Good practices can provide alternative solutions carried out in similar contexts, and thus hold a stronger descriptive power than the theoretical models on which they are based. In Italy, AE is a great resource, which was used by both schools examined in this field study. The two Sicilian schools, in fact, identified good practices (workshop classrooms, flipped classroom, and Debate) on the Ministry of Education INDIRE platform, and decided to introduce them.

The sixth element is teacher training. Both schools selected teaching methods on the AE platform, joined AE, and were then provided with teacher training for the selected methods. This was carried out through supervised monthly webinars. Training allows teachers to understand new teaching methods, and to gain the skills necessary to introduce new education strategies.

The seventh factor come from adding value to teachers' status and increasing attractiveness of the teaching profession.

> "School staff needs to feel more valued by the government, as this would be reflected in the way they are perceived by the public." (Stakeholder 2)

The eight factor which pertains to both schools, is that innovations are tried within the whole annex, and not only on one class. In Acireale, the whole secondary school was provided with workshop classrooms; SZ school is being tried in first, second, and third year classes of the primary school; and the nursery school is implementing outdoor education in all classes. The school in Taormina is also trying to spread innovation among multiple classes with the work of multiple teachers.

3.3. Reflecting on the transferability of school innovations into the local contexts and their sustainability

All innovations introduced in the two Sicilian schools can be easily transferred to local, national and international contexts. Workshop classrooms, Flipped Classroom, and Debate do not have any additional cost, as they do not require particular tools, but rather informational and managerial changes.

Informational transfers rely on the effective communication of good practices: teachers who introduce these methods should communicate with their colleagues through a platform such as AE or through workshops, seminars and conventions. Teacher training is necessary to understand the principles on which these education approaches are based. There is the risk of a superficial and merely formal participation in innovation.

All these innovations focus on student-centred education, and aim to override traditional teacher-centred education. Teaching is linked with new ways of thinking about space and time.

> "There are policies which favour a dynamic approach: for example, in innovation processes in education (I am talking about AE) you can see that adopting a student-centred approach (with techniques such as the Flipped Classroom, Debate, etc.) and maintaining it over time, has a positive impact on learning; if you make the change from traditional teaching to teaching through competences, then the hourly schedule feels like a constraint, because it is not enough to properly engage students with group activities. This is why AE schools found a solution to this project by adjusting their timetables. If someone is, for instance, doing the Flipped Classroom in the morning, then it is going to be structured differently than a lecture: you'll have a brainstorming

session, then a division in groups, possibly followed by some individual learning, and then we go back to discussing; but at that point the traditional arrangement of a classroom feels inadequate. These are barriers, but when one changes the teaching approach they can see how traditional systems fall short." (Stakeholder1)

3.4. Policy pointers

- *Policy pointer 1:* school policy should support school autonomy giving schools enough space and flexibility in focusing on research, on the creation of local networks (between schools, national and international authorities, associations, and organisations), and on student-centred education. The Government should grant a common cultural and educational structure nationwide; a standard level of quality for education facilities so as to maintain an overall level of knowledge throughout the country.
- *Policy pointer 2:* School policy must grant stable resources in terms of funds, technology, personnel and structure, so that innovations in education can be implemented in schools. In order to innovate, schools must be provided with adequate tools and facilities to sustain the introduction of innovative teaching methods.
- *Policy pointer 3:* Adding value to the role of principals as education leaders rather than managerial leaders is important. An education leader should be concerned with teaching processes, with stimulating and supporting student-centred education, and with the general welfare of students and teachers. This could be achieved by assigning the bureaucratic load of school principals to general managers.
- *Policy pointer 4:* Teacher training must be mandatory and constant over time. It should be carried out evenly through the school year as well as through the teachers' career. Teachers should be trained on new teaching strategies and on new communication and relational approaches with students and colleagues.
- *Policy pointer 5:* Schools and wider school community should actively encourage the introduction of innovations in whole schools instead of focussing on a single class or teacher, though pilots can be conducted on a smaller scale first. This helps to embed innovation into the school culture and ensure its continuity by engaging the whole school community into innovative processes.
- *Policy pointer 6:* Political stability is crucial for the continuity of innovation. Therefore, education vision should not be dependents on the discourses of different political parties in power, but should be aligned across political parties as a strategic vision for the development of Italian society.
- *Policy pointer 7:* Continuous support to organisations such as Avanguardie Educative, identifying innovative education objectives and teaching methods and the best practices at a national level is crucial. Providing schools with a platform to connect, offering free online training through webinars; and allowing for the dissemination of good practices proved to be important strategies for mainstreaming innovations.
- *Policy pointer 8:* Encouraging staff (principals, teachers, administration) and students exchange programmes among schools at the national and international level, to promote awareness of different realities and to create synergy and cooperation is key.

Annex I: A short review of the field work

1st Interview programme (with national/regional/local stakeholders)	
Interview 1	
Name and surname of interviewer:	Lotti Antonella
Position and represented organisation of interviewee:	ADISCUOLA
Type of interview:	Skype
Date of interview:	25 September 2016
Place of interview:	Genova/Palermo
Duration of interview:	58 minutes
Interview recorded:	Yes
Interview 2	
Name and surname of interviewer:	Lotti Antonella
Position and represented organisation of interviewee:	Inspector, School principal, USR Ministry of Education, Regional Headquarter in Sicily
Type of interview:	Skype
Date of interview:	29 September 2016
Place of interview:	Bologna/Palermo
Duration of interview:	40 minutes
Interview recorded:	Yes
Interview 3	
Name and surname of interviewer:	Lotti Antonella
Position and represented organisation of interviewee:	INDIRE
Type of interview:	Skype
Date of interview:	27 September 2016
Place of interview:	Genova/Florence
Duration of interview:	1 hour and 3 minutes
Interview recorded:	Yes
Interview 4	
Name and surname of interviewer:	Lotti Antonella
Position and represented organisation of interviewee:	President, ANDIS, Sicily Association of school principals
Type of interview:	Skype
Date of interview:	30 September 2016
Place of interview:	Bologna/Palermo
Duration of interview:	60
Interview recorded:	Yes
2nd Interview programme (with school leaders)	
Interview 1	
Name and surname of interviewer:	Lotti Antonella
Position of interviewee:	School principal in Acireale
Type of interview:	Face-to-face
Date of interview:	28 October 2016
Place of interview:	Acireale, School principal's room
Duration of interview:	1 hour
Interview recorded:	Yes

Interview 2	
Name and surname of interviewer:	Lotti Antonella
Position of interviewee:	Teacher in Acireale
Type of interview:	Face-to-face
Date of interview:	28 October 2016
Place of interview:	Acireale, School principal's room
Duration of interview:	40 minutes
Interview recorded:	Yes
Interview 3	
Name and surname of interviewer:	Lotti Antonella
Position of interviewee:	Teacher in Acireale
Type of interview:	Face-to-face
Date of interview:	28 October 2016
Place of interview:	Acireale, School principal's room
Duration of interview:	45 minutes
Interview recorded:	Yes
Interview 4	
Name and surname of interviewer:	Lotti Antonella
Position of interviewee:	School principal of Taormina school
Type of interview:	Face-to-face
Date of interview:	31 October 2016
Place of interview:	Taormina, School principal's room
Duration of interview:	45 minutes
Interview recorded:	Yes
Interview 5	
Name and surname of interviewer:	Lotti Antonella
Position of interviewee:	Teacher in Taormina
Type of interview:	Face-to-face
Date of interview:	31 October 2016
Place of interview:	Taormina, school library
Duration of interview:	60 minutes
Interview recorded:	Yes
Focus group discussion with school community in Acireale	
Name and surname of facilitator(s):	Lotti Antonella
Participants:	Participant 1: vice-school principal Participant 2: teacher Participant 3: teacher Participant 4: vice-president school Council Participant 5: president of Parents Committee Participant 6: facilitator of Outdoor education Participant 7: teacher Participant 8: teacher
Date of focus group:	28 October 2016
Place of focus group:	Acireale, school principal's room
Duration of focus group:	60 minutes
Recorded:	Yes
Key topics discussed:	Topic 1: Innovative approach recently implemented in the school community

	Topic 2: School communities' engagement Topic 3: Main enablers and barriers for this innovation Topic 4: Main effects of this innovation Topic 5: Monitoring, evaluation and planning of innovative approach Topic 6: Environment around the school community

Focus group discussion with school community in Taormina	
Name and surname of facilitator(s):	Lotti Antonella
Participants:	Participant 1: teacher. Digital facilitator, flipped classroom. Participant 2: parent Participant 3: parent Participant 4: teacher, Debat Participant 5: Flipped Classroom and Debat Participant 6: parent Participant 7: parent Participant 8: teacher, Edmodo Participant 9: teacher
Date of focus group:	31 October 2016
Place of focus group:	Taormina
Duration of focus group:	60 minutes
Recorded:	Yes
Key topics discussed:	Topic 1: Innovative approach recently implemented in the school community Topic 2: School communities' engagement Topic 3: Main enablers and barriers for this innovation Topic 4: Main effects of this innovation Topic 5: Monitoring, evaluation and planning of innovative approach Topic 6: Environment around the school community

School visit to observe workshops disciplinary rooms and flipped classroom in Acireale	
Name and surname of visitor(s):	Lotti Antonella
Date of a visit:	28 October 2016
Place of a visit:	Acireale, school Giovanni XXIII
Duration of a visit:	3 hours
Photos/other visuals attached:	Yes. Please specify which: Transformed room

School visit to observe debates in Taormina	
Name and surname of visitor(s):	Lotti Antonella
Date of a visit:	31 October 2016
Place of a visit:	Taormina school and Trappitello school
Duration of a visit:	4 hours
Photos/other visuals attached:	Yes. Please specify which: debates in three different rooms

The Workshop with schools and other stakeholders	
Name and surname of the workshop facilitator(s):	Lotti Antonella
Number of participants and their represented organisations:	Total number of participants: 30 Represented organisations: 10 Organisation 1: The Ministry of Education – Regional

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	School Office of Palermo Organisation 2: Taormina school Organisation 3: Acireale school Organisation 4: Biancavilla school Organisation 5: Randazzo school Organisation 6: Francavilla di Sicilia school Organisation 7: Santa Teresa di Riva school Organisation 8: Ramacca school Organisation 9: City council of Acireale Organisation 10: City council of Ramacca
Date of the workshop:	April 21st, 2017
Place of the workshop:	Comprehensive school Giovanni XXIII, Acireale
Duration of the workshop:	6 h 15 min
Recorded:	Yes
Key topics discussed:	After the visits and presentation of results of national and international research participants discussed the following questions: 1. What are your comments on research results? 2. Have you tried to introduce education innovations in your context? 3. What obstacles did you come across? 4. What factors helped you? 5. How can innovation be promoted at a council and regional level?

Annex II: Photos from the two schools

Map of Taormina

Map of Acireale

An example of Bag-Less School structure (Esempio di pianta della classe Senza Zaino)
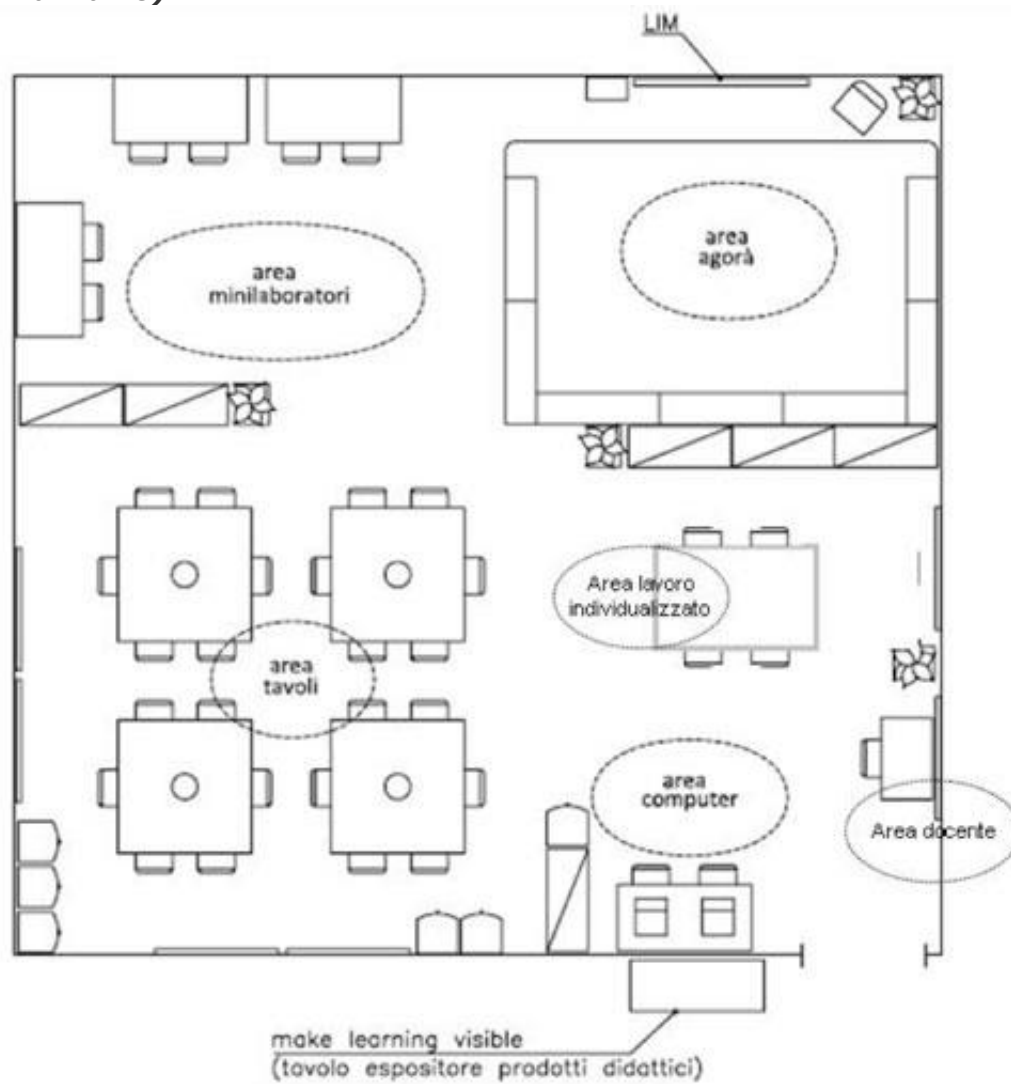
Annex III: Key characteristics of Italian education system

Italian school legislation is based on four main elements.

1 - Autonomy: the status quo of school practices is a result of changes in legislation granting school more autonomy. At the end of the 90s the Italian government approved the law on school autonomy, with the aim of decentralising power and giving it back to local authorities to respond better to regional and/or local needs. This resulted in the institutionalisation of schools and their direct collaboration with local authorities (Municipalities, Provinces, Regions, etc.). In this context, schools were able to design and implement their own particular study programmes and no longer needed to adhere to a common national study programme. This in turn led to the creation of INVALSI tests, which assess the levels of knowledge nationwide.

In 2007, the Ministry of Education has issued official guidelines on standard levels of education and knowledge for every year of schooling. This change, however, has not produced even results across regions, and present-day reality is a mixture of the past programmes and the new guidelines. This explains the inherent difficulties in introducing and implementing changes in teaching.

2 - School size (that is the minimum number of students per school): in 2012 the Italian government passed a law stating that every school should have a minimum of 700 students, thus forcing the merger of nursery, primary and secondary schools into so-called comprehensive schools[5]. While legislation initially included a maximum number of students, this was later abrogated and now there is no maximum limit to school sizes.

Principals had to manage ever more complex situations due to the number of teachers and students, with additional geographical difficulties as merged institutions often comprised schools from vast territories.

3 - Role of principals: with the aforementioned law on the school autonomy, the role of the principals shifted too, with managerial tasks prevailing over teaching-oriented activities. However, this change has produced unresolved issues in terms of autonomy and school size (Petrolino 2012; Sestito 2014; Asso, Azzolina, and Pavolina 2015). School leadership is influenced by the interaction with the external context (families and local authorities) in which the school operates, as well as by its internal structure and organisation system.

School management can be reactive, average, or proactive (Asso et al., p.135). While reactive management is typically conservative in its approach, proactive principals anticipate educational objectives and solutions. They promote initiatives for a better teaching environment; encourage cooperation among the teaching staff, carry out initiatives to develop student skills, foster parental involvement and strengthen the school's network.

4 - Teacher training: teacher continuing training (Continuing Professional Development CPD) has also seen a shift in its structure and implementation along the lines of school legislation: starting from the central management (from the Ministry), it then fell under local jurisdictions (of the single school or of a network of schools), thus going from a strictly structured format to a loosely regulated implementation (art. 26 and 29 of Contratto di Lavoro 2006-2009).

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[5] These schools (which include a nursery, a primary, and a secondary school) are called comprehensive schools. Different schools that comprise the comprehensive school are often called 'annexes'.

This has resulted in teachers Continuing Professional Development on a purely voluntary basis, which was uneven and often arbitrary. To improve the situation the government has established some general criteria for teacher training in 2015: schools must include teacher training in their POF[6] for 2016-17; MIUR[7] must provide a frame of reference[8]; the Ministry distributes funds (however, in most cases the financing is happening on ad hoc basis).

Apart from the 4 main characteristics mentioned, there are a number of local and national initiatives to improve the quality of education. One of such initiatives is Avanguardie Educative (AE)[9], which represents a model for identifying good practices, providing teachers with peer-to-peer training, and creating networks at the national level. Within just two years of being operational, AE has caused a revolution in the framework of Italian innovations in education. In 2014 there were only 22 schools using innovative approaches, whereas in 2017 there are over 500.

Avanguardie Educative identifies and selects good practices. The goals of the programme are:
1. to shift from the paradigm of teacher centred education into student centred education model;
2. to enhance all the opportunities given by ICT in teaching, learning and assessment;
3. to change and to create new spaces where students may learn in flexible environments;
4. to schedule time at school in a flexible way. It should be overcome the discipline based curriculum, a timetable where there are one-hour unit dedicated to a single discipline. It should be enhanced a curriculum planned by interdisciplinary modules or by learning unit;
5. to introduce a competency based education, so that students have to acquire competences and not only content and abstract knowledge;
6. to invest in "human capital". Teachers should facilitate active learning and should consider the change as a resource. Teachers should also identify resources in the community and create partnerships with local associations, enterprises and informal agencies to enrich the educational offer to their students;
7. to promote a sustainable and transferable innovation.

The programme also proposed 12 strategies to achieve the goals stated above:

SPACES
1. workshop and lab classrooms;
2. flexible spaces (classroom 3.0);
3. indoor/outdoor schooling;
TEACHING
4. teaching through scenarios;
5. failing with credits;
6. Debate;
7. spaced learning;
8. TEAL (Technologies for active learning);
9. CDD (Digital learning content)/text book integration;
10. ICT Lab;
TIME
11. school calendar concentration;
12. Flipped Classroom.

AE also helps schools with the implementation of the above-mentioned strategies through webinars, guidelines, teaching material, residential seminars, and access to online community.

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[6] Piano dell'Offerta Formativa: teaching programme.
[7] Ministry of Education
[8] The Ministry of Education's National Standards, which set the level of competence to be obtained by students at the end of each school year
[9] This platform was created by INDIRE, the Institute for Innovation in Education by Ministry of Education in 2014.

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