SMALL SCHOOLS' NOTEBOOKS
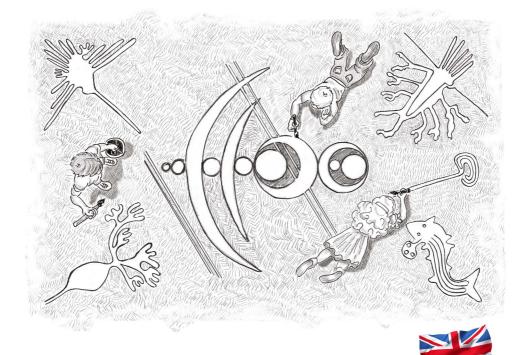
Year 2021 - Notebook N. 4 - Tools

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Writing the territory: pathways of knowledge in small Italian schools

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Stories ☐
Tools ☐
Studies ☐

English version

Writing the territory

The *working library* is an innovative and unique publishing work designed and directed by Mario Lodi.

From 1971 untill 1979 the project was managed by a group of educators: Fiorenzo Alfieri, Francesca Colombo,Tullio De Mauro, Caterina Foschi Pini, Alberto Gianola, Angelica Gianola, Roberto Lanterio, Palmira Maccarini, Luciano Manzuoli, Gioacchino Maviglia and Francesco Tonucci.

The working library was an alternative to the schoolbook. The format should be functional to teacher's activities. They collected 80 issues of "Documents", "Letters", "Guides" and 68 sheets with ideas, activities and practical tips for teachers so as the they can use according to the classroom needs.

A sort of collection of good practices experienced in Italy. A catalogue that teachers, parents and students can use in every social and geographical situation. Learning activities that have a different approach to the traditional lessons and use tools for effective teaching activities. Mario Lodi and his colleagues wished that students' families and teachers know them.

Everybody wants a better school, a warm and scientifically correct place where the students' experience comes first. The working library had this goal.

Cosetta Lodi
President of Casa delle Arti e del Gioco
http://www.casadelleartiedelgioco.it

Contents

After so many years from the *working library*, the idea of creating a better school is still alive. Todays' model of schooling is still a traditional one, which is difficult to remove from the daily practices and belongs to the image of the standard school.

Indire main goal is to give support and highlight teachers' research activity to "learning experiences, classroom organisation and learning environment that foster the students' autonomy so as they can develop permanent competences and skills" (*Indicazioni Nazionali. Nuovi scenari*, 2017).

The tools in Lodi's *working library* were effective because they used a clear and simple language, essential format, a research work that came from teachers' daily activity. The tools contributed to disseminate innovative teaching method based on the active learning and an inclusive and democratic school model.

Documentation and teaching methods offered in the *working library* allowed teachers to practice and experience innovative pedagogy.

The S*mall Schools' Notebooks*, divided into "Stories", "Tools" and "Studies", wishes to pay homage to this experience that is a good practice of research and innovation in schools.

We wish to thank to Mario Lodi's heirs to allow us to use and rethink to the *Working Library*. We also wish to thank to Grandi & Associati which collaborated to the editorial activity and publishing of this volume.

Research team - INDIRE Small Schools
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As an introduction

Schools produce knowledge. And producing it does not simply mean transferring or re-elaborating it. It means wholeheartedly undertaking a research project which allows expansion of known areas and enriches them with new meaning and new information. Schools can be a breeding ground in which each student and each teacher has their own role to play.

Schools produce cultural artefacts, be they objects, shows, events, exhibitions, books, or documentation. A rich and widespread production, often for internal use, which rarely breaches the boundaries of the physical walls of a classroom. And this is perfectly fine, given that this production serves primarily for those who actually created it, and brings meaning to the disciplinary and interdisciplinary work supported by the classes. However, comparisons with the outside world are sometimes a precious driving force for class activities and represent a unique opportunity to re-establish that contact between outside and inside the school which has always been considered an essential condition for proper education. Within this production, Digital Educational Content (DEC) occupies a significant position today, widespread as it is in the schools that produce it spontaneously, sometimes unconsciously, given that digital tools have made collection, transcription, and operations easier and more affordable for everyone. From the layout to the printing and publication of: presentations, albums, films, brochures and more or less original kinds of text.

Schools produce Digital Educational Content and do so in the most varied forms, using different tools and in many ways, more or less complex or elaborate objects. Very frequently, this type of activity is linked to projects, to work pathways aimed at establishing a closer link between the school and the local area, or are an expedient to involve students more in study activities, Giving value to their original thinking, previous knowledge, and personal interests.

Producing DEC often means interrupting classwork, organizing group activities, and assigning specific tasks to each, based on specific needs or interests. It means intervening in lesson plans, in the hourly distribution of activities; it means using learning spaces in a different way and creating synergies between different disciplinary fields. The work to produce DEC therefore helps to transform the classroom into a laboratory in which the roles are reviewed, as well as the usual

hierarchies, where the taste for 'doing well' dominates others: What does the process of producing materials reveal to us about ourselves? To learn from things it is necessary to pay attention to the quality of a fabric or the right way to cook a fish; a well-woven fabric and well-cooked fish enable us to imagine "broader categories of goodness" explains Richard Sennet, underlining the profound cultural value of "doing with our hands", of producing, provided that this "producing" is part of a planning and reflection process.

1. Sennet R. (2008) *L'uomo artigiano.* Milano, Feltrinelli

1. What we mean by Digital Educational Content

"I think that designing and creating Digital Educational Content constitutes a precious opportunity to encourage collaborative activities and the active participation of students (...). Certainly, if the role of the students is active, the realization of DEC brings into play numerous skills by increasing competence and abilities that would otherwise be more difficult to achieve. In my opinion, the acquisition of important skills lies precisely in this; if, on the other hand, it is the teacher who builds the product, this unquestionably has its advantages, but it does not fully develop the possible teaching and training potential". This reflection of Francesca Vogesi, an Italian teacher at the "Don Milani" primary school in San Marcello Pistoiese (PT) in the Tuscan Apennines, immediately clarifies the idea that digital contents, to be considered genuinely "educational", must directly involve the students in their production.

It can happen that teachers produce digital contents only to be used by students in the same way as old paper handouts or notes dictated in class; it is occasionally done simply to fill the gaps in a textbook to look more closely at some specific themes, or to facilitate the acquisition of a concept or some information. Using multiple forms of communication that can present the educational content in an alternative form to the sequential treatment proposed by the pages of a book is an operation which, by leveraging students' motivation, offers them not only words, but also diagrams, images, audio and animations. Nothing objectionable. And yet... the meaning of "educational" really comes to the fore when the accent is placed on a process of constructing digital content that involves the students themselves in a path of conception, planning,

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realization of the educational resource; a slow, thoughtful, thorough, metacognitive process, which, precisely for this reason, represents the true advantage of this activity.

This is the interpretation of "Digital Educational Content" that we have given in the Laboratory of Digital Educational Content and valorization of the territory, in accordance with the indications offered previously by the Avanguardie Educative Movement and contained in the Guidelines of the Integration of Digital Educational Content/Textbooks[2].

Digital Educational Content thus represents an opportunity to offer students a way of working which involves research, teamwork, analysis of sources and the re-elaboration of information. Which implies creativity and technical skills, as well as knowledge of new communication methods, with an opportunity to reflect on the potential beneficiaries of the product: "Involving students personally, guiding them in the creation of a different content than those used normally, allows students to become involved, to build, and have fun, a pathway which can subsequently be transmitted to others," says Giovanna Scambia, a primary school teacher at the "Lipari 1" Comprehensive Institute, which manages schools located in Lipari, Salina, Alicudi, Filicudi, Panarea and Stromboli and which has to deal with four different municipalities. In this process, the role of the teacher acquires different values: it is in fact the students who are "able to propose ideas and solutions, to proceed proactively, guided by stimulating questions and under the teacher's supervision." […] "I have often left room for their decisions at all stages, intervening only to offer guidance and support in some cases where they have expressed uncertainties or unrealizable intentions, without upsetting their approach, but steering them to an examination of alternative solutions" (Giovanna Scambia).

Of course, starting activities of this type means first of all getting involved, reviewing some habits, the certainties of a profession which

of necessity resorts to known routines: "I consider the professionalism of a teacher, even if defined as a 'role', to be in constant movement in ever expanding spaces. This vision arises both from the need to keep the motivation to teach alive in me and from the need to possess knowledge, tools and effective strategies to improve my teaching in order to arouse the interest and raise the level of motivation among the students, allowing them to express their personality as best they can," writes Manuela Cesare from the "G. B. Perasso" primary school of Pontebba (Tarvisio Comprehensive Institute), expressing well what unites the group that participated in the Workshop.

2. Avanguardie Educative http://innovazione.indire.it/ avanguardieeducative/ Guidelines for implementing he idea «Supplementary material: didactical digital content/school books» http://innovazione.indire.it/lib/ tracking/track.php?anonimous= 1&id=1965&gl_ applic=AVANGUARDIE_ EDUCATIVE

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2. Digital Educational Contents in school legislation

A precise definition of "Digital Educational Content" comes from school legislation guidelines on the adoption of textbooks.

In 2013, Italian Law no. 128 laid the foundations for a new practice when adopting textbooks. Indeed, this law introduced a number of new features: the adoption of textbooks was no longer mandatory in schools of all levels within the Italian territory; moreover, the books adopted must be digital, at least in some parts, if not entirely. The law in question was the result of a process, already begun in 2008, which attempted to fully introduce digital technology into Italian classrooms.

Italian Ministerial Decree no. 781 of 27/09/2013 helped to clarify a number of issues related to the adoption of textbooks and especially the use of what are known as "supplementary contents": "resources of a heterogeneous and differentiated nature, selected from time to time by the teacher or identified collaboratively on the basis of the activities carried out, the didactic strategies adopted, the specific issues, needs and opportunities of the individual learning pathways and contexts" which "normally correspond to molecular, highly customizable, learning resources," and "therefore have an integrative or complementary function or one of deepening and personalizing the pathways" (Ministerial Decree no. 781 of 27/09/2013).

The textbook does not always respond to the specific needs of the classes and the topics it proposes for the various disciplines are not always suitable for specific educational programmes. In schools, there is sometimes a need to dedicate more space to particular topics, perhaps

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linked to a specific context, or to experiments conducted by the classes in relation to a disciplinary field or an interdisciplinary pathway.

The decree proposed a new idea of the textbook, which seemed almost like a general backbone to which insights or supplementary contents could be linked: "It is important to note that the distinction between digital textbook and supplementary digital content does not at all imply that they must be two completely separate resources: on the contrary, the digital textbook must also represent a reference framework to which the supplementary digital contents can be linked from time to time, whether the latter are editorial contents supplied with the textbook itself, contents acquired independently, or self-produced" (Ministerial Decree no. 781 of 27/09/2013). There is the book, a sort of "reference framework" and then there are the supplementary contents which can form a part of it, as a "digital" addition, or that can be purchased from other publishers or even sourced online from among the countless resources now available.

But perhaps the most significant novelty introduced by the decree, consisted in the suggestion that schools could produce some contents on their own which would supplement the textbooks, thereby deepening specific aspects of the curriculum: "it is important to note that the field of supplementary digital content includes not only editorial content provided to complement the textbook (even if such content constitutes an important resource), but also content acquired independently, or available online, or produced through teachers' individual or team work, possibly also involving the students" (Ministerial Decree no. 781 of 27/09/2013).

Decree n. 781 thus legitimized the activities of schools, especially primary schools, which for years had avoided the adoption of textbooks and used other volumes to put together their own history and geography book or anthology 'at home'.

This practice, more widespread in the 1980s, came out of a tradition that was only a few decades old. It was inspired by the techniques of Célestin Freinet, a teacher who in the early twentieth century trans-

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formed his classes into 'publishing workshops' in which typography played a role of primary importance. In Freinet's classes, they did not buy textbooks, but other volumes on various subjects which enriched the class or school library; manuals were then produced in the classroom using rudimentary printing tools (the mimeograph) and were the result of thematic research carried out by the students: "my proposal consists in replacing the 3, 5 or 10 books/summaries so often indigestible, as indeed any summary is, with a working technique where the students draw their knowledge from thousands of books, files, records, pre-recorded tapes, not to mention the great book of nature and the social environment from which we ultimately draw our most profound riches...", so wrote Freinet[1], emphasizing the multiplicity of sources to draw on to build a kind of knowledge which, for the students, represented an opportunity to learn to search, to learn to 'read' not only books, but also and above all the physical and social reality which they lived.

Today, digital technology offers new opportunities for 'writing' and publishing texts which make it much easier to put what Freinet theorized into practice. If in the '60s and '70s, the mimeograph offered the opportunity to print several copies of a text for distribution, after conceiving and composing it, today, in addition to text editors which allow the printing of volumes, there are innumerable possibilities to make a text public be it a text, an illustrated book, or a video. The ability to create public attention around the text itself and to 'escape' from the classroom dimension is one of the most stimulating innovations for those who carry out this type of project. In addition, digital technology makes it possible to multiply the forms of representing knowledge, exploring the possibility of producing many texts which resemble professional paper publications, illustrated volumes, videos or presentations, interactive maps, and so on.

In the National Plan for Digital Education, the text which accompanied the application of Law no. 107 (a.k.a. "of the Good School"), we find an entire chapter dedicated to digital educational contents in which

1. Freinet C. (1964). Plus de manuels scolaires! Plus de leçons!. In «L'éducateur», Dossier pédagogique de l'Ecole Moderne n°7 Supplément au numéro 6 du 15 novembre 1964.

tools are envisaged that can facilitate schools in their production process and above all provide them with a space to store their creations: "For this reason, the Plan intends to address the issue of architecture for the production, distribution and use of learning contents, which allow the maximum circulation of intelligence and the best quality of training practices, which effectively resolve the relationship between "formal" and "informal" intellectual production, as well as the need for a balance between opening, sharing and protecting content" (National Plan for Digital Education).

The text in question also contained Production and Usage Guidelines: "It is therefore necessary to provide schools with a guide which clearly distinguishes between the various types of digital resources available, the criteria and possible forms of their use, illustrating – in particular as regards the self-production of content – the methods of selection, production and validation processes as well as the technical characteristics to be respected in order to maximize the quality, effectiveness and re-usability of the contents" (National Plan for Digital Education).

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3. Why should we produce DEC?

Before starting a process to design and produce Digital Educational Content at school, we should ask ourselves why this choice has been made. This is what the teachers did at the training workshop called "Digital Educational Contents and Valorization of the Territory".

"I felt continuous commitment, lively curiosity, a fruitful collaboration and the desire to do better and better; in fact, it was they who proposed continuous re-elaborations of the video footage to obtain a better effect, proving that students can still learn while having fun", writes Daniela Zanghì, who teaches at the Pianoconte primary school on the island of Lipari (ME). The students: they are the ones who propose interventions on the texts, and they do it seriously, without being happy with unsatisfactory results. They enjoy learning.

Motivation is undoubtedly one of the first indicators detected by teachers for the choice to undertake the development of digital educational content with a class. This motivation is often considered to be linked to the use of digital technologies: "It is undeniable that the generations we are dealing with are made up of Digital Natives and therefore building an educational pathway together with them thanks to the use of apps and devices certainly involves knowledge closer to the methods most congenial to them", (Daniela Zanghì). Using new technologies means "speaking their language", approaching their way of communicating:

"Creating DEC allows students to tackle traditional issues with the use of technological means which are now very close to their daily experience", says Andrea Disint, a teacher at the lower secondary school in Forni Avoltri (UD). This is challenging for the teachers, who are forced to deal with the technical skills of their students: "Unquestionably, the creation of

DEC is an experience which demands active involvement on the part of the students; moreover, for the students it is motivating because it allows them to use tools that they know (perhaps better than adults) and is challenging for us teachers, because this is a field in constant evolution", says Cristina Savoia of the primary school of Tarvisio Centrale (UD).

And again, the emphasis is on the richness of the new tools linking them to the development of new skills: "Creating DEC helps a school develop a creative educational programme which helps students build the skills needed for the 21st century. In this approach, learning not only means acquiring notions, but knowing how to use them. It's a type of teaching that requires a major investment in technology, and this is where IWBs, interactive projectors, digital libraries, AppleTV, tablets, PCs, Macs, iPads, and document cameras come into play", writes Andrea Braga of the Pecorara Primary School in the province of Piacenza.

But technology is not the sole determining factor for student involvement. Technology plays an important role, but certainly not the only one: the "lively curiosity" arising from these activities is linked to the fact that students feel that they are the authors of their own texts, are personally involved in an education that concerns them: "Each student becomes the protagonist of his or her own education. The methodological model of reference is the "research community", in which teachers and students can build a joint research path by swapping notes on the themes and problems identified," writes Maria Stefania Michelacci of the "A. Spallicci" primary school of Premilcuore in the province of Forlì-Cesena. The role of technology fades in comparison with the idea of a fuller, more active participation: "In addition to the use of technology, the communal work of listening, the proposal, the search for materials, interviews with parents and grandparents, the consultation of online materials all played a remarkably interesting role. The enthusiasm, attention and concentration were constant, all the students tried to use their potential to share information and content" (Maria Stefania Michelacci).

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Children interview

"I personally believe it is useful to create DEC because through the laboratory activity, knowledge is gained by students through the creation of products, discovery and appreciation (learning to do), while the use of technologies for the production of digital material becomes the phase in which they can examine, interact with, and review the entire path with which they managed to create a video or presentation", write Angela Teresa Moretti and Monica Raponi of the secondary school of Valfornace (MC), composed of a multi-age class (9 first- and 4 second-year students) and a third middle school year of 12 students.

Engaging in the production of DEC can help to give value to each student's contribution and also teach how to work with others within a functional and productive organization: "In my teaching activities, I try to use as much as possible methods which allow students to learn by collaborating, assuming an active role that is respectful of everyone's potential, thus also appreciating those students who encounter difficulties" (Cristina Savoia).

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The theme of motivation therefore seems to be linked to the idea of "feeling capable", of contributing to a product which is a goal, a common gamble.

Some teachers have underlined that DEC is also an important educational opportunity to encourage openness, to change the dynamics within the school which is too often made up of 'closures': between disciplines, between classes, between the school and its surroundings, between teachers and students, and between teachers and families. "I think that designing and creating digital educational content represents a precious opportunity to encourage the active participation of students and collaborative activities between them and teachers, who, in turn, can, thanks to these tools, share jobs and tasks to produce a more effective and more unitary education", writes Andrea Disint. It is a question of laying aside the pattern of disciplinary subdivisions or rigid timetables, to activate synergies between disciplines, to plan together, first among the teachers, and then with the students themselves.

It also means going beyond this, to open the doors of the school to families and the whole territory: "DEC can involve the entire community of a small branch, from students to teachers, including parents and school associates. The creation of such a product allows the classes to work together, from the first to the third years, cooperating and interacting" (Andrea Disint). Thanks to the ease with which the contents can be made public, "the results of the activities are easily accessible and shared externally" (Andrea Disint).

Finally, creating DEC is a way to "keep track" of the pathway of knowledge dealt with and an incentive to get used to being systematic in the collection and archiving of material, and in the documentation of activities: "I also believe that designing and implementing DECs is functional to ensuring documentation of the activities carried out, of which traces are often lost, to share them with colleagues and have them available for exchanges of good practices" (Andrea Disint).

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4. Giving value to the territory

Many of the DECs produced focus on the surrounding territory: local history and traditions, stories and anecdotes, geographical aspects, art and culture, and the economy. In fact, standard textbooks never look at the details of minor and marginal places like the villages where small schools are located. This history must be discovered and told by drawing on other sources, whether written or oral, by observing and studying the territory, and gathering information from first-hand sources.

"The promotion of a sense of belonging to one's own territory and the recovery of one's own cultural identity as a "horizon" and "frame" of the whole activity have been substantiated by faces, places, stories, anecdotes and artefacts" writes Antonella Barreca, a teacher at the lower secondary school of Geraci Siculo, in the province of Palermo, in the Madonie mountains. Producing Digital Educational Content whose theme is local culinary traditions was the task undertaken by her class, a second year one at a lower secondary school: 15 students in all. A small school, with only one course of homogeneous classes, but an extremely specific physiognomy given that it welcomes students from various local communities: including students in difficulty, and unaccompanied non-EU minors. Antonella, a teacher of Italian, has realized that the students no longer have thorough knowledge of the area where they live. They inhabit the territories without really knowing them, they are bearers of a globalized culture which luckily takes them far away, creates bridges with the outside world, but sometimes affects the deep roots which bind them to a land, not offering them the opportunity to full participate in what happens in front of their eyes. They "act out behaviour" and "live some rituals" in a rather unconscious way, without knowing the

deeper meanings which are still guarded by their grandparents, or the elderly. This immaterial culture which they breathe in their own village does not see them as leading players. The teacher imagines suggesting that the students work on typical local recipes, in a pathway in which: "The foods must be investigated not for what they are, but for what they represent". Ricotta cheese, "*agniddruzzi pasquali*", "*cavadduzza and palummeddi*", stretched-curd cheeses used in the parade called "*A Carvaccata di Vistiamara*" (The Shepherds' Ride), *Sarafineddi and Pizzicantì* "*will be the subject of research to arrive at the original meaning of these dishes, which are still very widespread. "Little has been written on these topics ... this is information to be discovered," and so the teacher organizes a pathway which consists of "retrieving information by drawing on the oral culture, the stories of grandparents and relatives," first and then "inserting the information collected into the socioeconomic cultural context of the village (...). An opportunity, an expedient, to carry out research relating to the cultural and social substratum of a territory". She decided to use video to present the final work. The students will be engaged in this activity throughout the second term, within the hours to study Italian. "The main tool of the research to be conducted was the interview, so, since I don't live in Geraci, it was necessary to involve the parents in a way which guided the students towards people who could constitute 'authentic sources' from whom they could draw information. Starting from this involvement, which gradually expanded to the network of relatives, friends and acquaintances, the pathway was structured in a context which 'escaped' from the school, taking root in the much wider community" (Antonella Barreca).*

Deepening knowledge of the territory is the line along which the teachers at other schools who participated in the workshop move. Five of them chose to start an in-depth study on the legends of the villages that host them. Almost every town or village, no matter how small it is, is linked to its own legend, a story that has been handed down over the centuries and which explains the etymology of the names, or the presence of natu-

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ral elements, etc... Premilcuore, for example, is "a small village of about 800 inhabitants on the Tuscan-Romagnolo Apennines, in the province of Forlì-Cesena, within the National Park of the Casentinesi Forests – Monte Falterona and Campigna". The economy is based mainly on tourism, a nature tourism (trails, mountain bikes, rivers) and religious (the Way of Assisi). The school is the only meeting place for students: "There are 28 primary school students, divided into 3 full-time classes. Of the three groups, two are multi-age classes. In the various class groups are several foreign students, in particular from Morocco and Romania, but also from Poland, Albania, Cuba, and Iraq", The fourth fifth year multi-age class made up of thirteen students, eight fifth- and five fourth-year students, mostly males, worked "on the legend of our village, which recounts the deeds of a noble Roman soldier". This story is linked, among other things, to the fifth-year history programme. "Initially, the students were invited to ask parents, grandparents, and acquaintances for information on the village legend, transcribing the information collected on a sheet to be analysed at school. The various versions were read and compared, then the more complete ones were picked out. We proceeded to produce one story which contained all the essential information. Each student then created a graphic representation of various passages or characters from the legend. Since, in the various stories, various connections with other topics arose (mythology, temples…), the students produced small research projects to contextualize and better explain the content of the legend" (Maria Stefania Michelacci).

A 'partner' of the Premilcuore school is the primary school of San Marcello Pistoiese. In particular, its third-year class, made up of seventeen students, eight males and nine females, a homogeneous class, very lively and very exuberant. They too worked on a local legend, that of Lake Scaffaiolo: "I started by presenting the activities to be carried out to the class. On the basis of the ideas and suggestions provided, the students were able to formulate their suggestions and proposals to achieve the

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indicated objectives in the most efficient way", writes the teacher, Francesca. "The legend was presented, one of the best-known in the area, in our case that of Lake Scaffaiolo, a place known and frequented by many citizens and families, both in winter and summer. The students were invited to ask parents, grandparents and acquaintances for information on the legend, and then to transcribe the facts collected onto a sheet to compare them at school. Subsequently, the class was divided into two/three groups to draft any discovered versions. Each group then created a graphic representation of the legend. All the material produced was digitally reworked to obtain an effective and attractive final presentation, always using Padlet" (Francesca Vogesi). The methodology was the same and the teachers worked hand-in-hand, remotely, encouraging the students to prepare for a future meeting with distant colleagues.

On the other hand, it was the legend of Agane Crinilde that was the subject of the work designed by Manuela Cesare with the third– and fourth-year multi-age class consisting of twelve students from the "G. B. Perasso" primary school of Pontebba (Tarvisio Comprehensive Institute) (UD).

Not a legend, but a real character. The famous painter Pellizza da Volpedo was the leitmotif of a pathway created by the school of Casalnoceto (AL), which is located near Volpedo, his home. The school is small: twenty-five students divided into two multi-age classes (first– / second– / third– and fourth– / fifth-years). The teachers Daniela Stella and Maria Stefania Porpiglia work at the "G. Bidone" primary school, in a fourth– / fifth-year multi-age class made up of seven fourth-year students and five fifth-year students, for a total of twelve students. A composite class, which includes three students who live in the family groups of the "Paolo VI Centre" in Casalnoceto. "The idea was born of illustrating and deepening knowledge on the life and works of the pointillist painter Giuseppe Pellizza, our compatriot. In fact, the municipality of Casalnoceto is only a few kilometres from Volpedo, the

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painter's birthplace" (Daniela Stella, Maria Stefania Porpiglia). "Walking with Pellizza" was a structured learning unit, with the aim of introducing students to the pathway through reproductions of Pellizza's works, positioned in the places where they were painted. "For the students, the course was an opportunity to try their hand at a reality task and engage in multidisciplinary activities which allowed them to understand the unity of knowledge and understanding. They put their skills on the line to juggle with a new situation". The students of the fourth– / fifth-year class of the Primary School of Casalnoceto of the Viguzzolo Comprehensive Institute in the province of Alessandria created QR codes for panels on the painter Pellizza, an activity which fascinated them and was also appreciated by the "Pellizza" association who decided to reuse these panels and position them around the town of Volpedo.

Then there is the primary school of Tarvisio Centrale, a small school on the border with Austria and Slovenia "a full-time school, but not a classic one: curricular subjects are taught in the mornings from Monday to Friday from 8.00am to 1.00pm and in two weekly re-entries on Tuesdays and Thursdays; workshop activities are held on Monday, Wednesday and Friday afternoon re-entries. In the school are 3 classes plus a multi-age class. It is attended by fifty-four students (thirteen in the first year, five in the second, eleven in the third, fourteen in the fourth and eleven in the fifth)", says Cristina Savoia. To make the organization of the activities more functional, the teachers proposed a multi-age class (second–/third-year), different from the RSO recommendations (first–/ second-year).

The fourth-year class, with the collaboration for the graphics of the students of the second/third-year multiage class, worked on Monte Cacciatore: "In my school every year an interdisciplinary pathway is designed with the aim of developing the sense of belonging to a community and a multilingual territory (speaking Italian, German, Slovenian, and Friulian) which is abounding in environmental, historical, ethno-

graphic and cultural peculiarities, and deepening the knowledge of a characteristic aspect: this year the chosen topic was knowledge of some mountains of the Tarvisio area". In the beginning, the activities did not envisage production of DEC: "To be honest, the pathway created in the classroom, initially, was not designed for the creation of digital educational content: the documentation method chosen was the creation of a laptop", wrote the teacher, who devoted a lot of time to this work between research activities carried out by the students and drawing up of the interviews which the students pretend to carry out with the mountain itself, personified and willing to chat. The same work also led the students to discover a legend: "during the research phase for material on Monte Cacciatore, we came across an ancient legend born with the aim of explaining the origin of the name. So we thought of using this to produce a radio play in Friulian as part of the 'Paths' project to protect minority languages". The legend was read to the students and translated into Friulian by one of the teachers: a way to regain contact with a language which the students are forgetting. "At this point, the students suggested transforming the radio play into a video (...) we involved the students of the second and third multi-age class and asked them to represent the legend in images. Also in this case, the students participated in the making of the video by designing and inserting photographs of their drawings in iMovie" (Cristina Savoia).
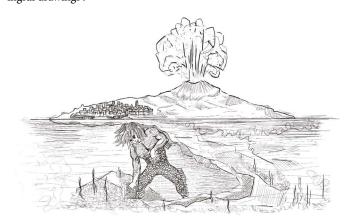
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Radio drama: children narrate the legend of Monte Cacciatore

More legends, this time in Sicily. The legend of Peix Nicolau was the subject of the work of a fourth class, made up of nine students. Professor Giovanna Scambia writes "I chose to work on local legends, and then focus the activity on that of Peix Nicolau (...). Peix Nicolau, called 'the fish man' for his love for the sea, according to legend, sacrificed his existence on earth to live in the depths of the ocean, where he still supports the north-eastern column of Sicily, one of the three that supports the island, which showed signs of subsidence. Ever since then, Peix Nicolau has been there, ensuring the stability of the island, but when he gets tired and is forced to change shoulder, the population feels an earthquake – which can be more or less intense; but for Peix Nicolau, the island would have sunk into the depths of the sea some time ago". An evocative legend which intrigues the students, in addition to activities undertaken on earthquakes, eternal threats to the land they inhabit. "The project not only allowed the students to recover and valorize a legend of local tradition, but it was also the starting point for an in-depth work involving other disciplines: local history, with its seismic and volcanic events, which have generated fear and, in some cases, changed the life of the population (the volcanic earthquake of 1930, for example, depopulated

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the island of Stromboli and triggered a real and unprecedented emigration phenomenon). Some seismic events, both of tectonic and volcanic origin, were examined from historical, geographic and scientific points of view: the great earthquake of 1908, and the earthquake of 1978, which caused a lot of damage and a victim in Lipari, and the numerous, small tremors which are felt in the Aeolian territory almost daily".

Daniela Zanghì also works in parallel with her fourth-/ fifth-year multiage class in Pianoconte, a group made up of thirteen pupils, three girls and ten students. The school includes several branches scattered around the island of Lipari and partly on the island of Vulcano: "The number of pupils varies according to the inhabited area, if central there are more students, fewer if in mountain neighbourhoods. Thanks to the collaboration of my colleagues, I was able to design an interdisciplinary pathway which embraces almost all disciplines (...). I decided to get the students to act out a song that narrates the exploits of Peix Nicolau and, thanks to the collaboration of the teacher Angela, an expert in dialect, the students recited it in the Aeolian dialect, representing it with meaningful drawings".

The legend of Colapesce

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The school of Silvana Pinna belongs to another island, Sardinia; with her students, she carried out a research on bread: "Sardinian *carasau bread (...) made in a way that it lasts", bread which, "represents us and is part of the experience of the students, and the families in which this bread is still made. Producing digital educational content means carrying out research, and designing and creating a digital text with your class, which might be, for example, an e-book made using a simple PowerPoint, a video, or a blog, a text that is the product, the final result of a long process of study on a chosen theme".*

We shall conclude this brief review with the words of Annalisa Barbarito of the lower secondary school in Forni di Sopra (UD). Thirty-one students in all, engaged in the construction of a map which allowed them to represent and "take possession" of a territory still little known to them: "To strengthen the identity and knowledge of the area, an interactive map was created capable of accommodating all the historical, artistic and cultural characteristics of the Forni di Sopra area. Each level chosen was the result of a year of work based on a search for external experts and direct and indirect sources. Once the sources had been chosen and analysed, the students added them to the interactive map".

5. Building knowledge

We have seen how the research conducted by the classes does not only draw on books (often there are no publications that deal with the topics to be investigated), but uses different sources, oral testimonies as well as material sources that can be found in private homes or in local museums. The research carried out by the students is often first-hand, which makes it possible to find unpublished information; from the intertwining sometimes new knowledge arises: which is what happened with the "Easter *agniddruzzi" which have already mentioned. Here is the text written by the teacher Antonella Barreca who tells how the research into these cookies allowed the students in her class to make an interesting discovery: "Easter lambs are a typical Easter cake in the shape of a lamb covered with sugar icing and painted with small flowers. It is assumed that between 1600 and 1700 the typical 'Easter agniddruzzi' were already being made in the ancient Benedictine monastery active in Geraci since 1498, and then in the other female convents. This biscuit in its extreme simplicity, linked to 'poor' ingredients, is full of immensely powerful symbols and meanings which capture the core of the Christian religion. In fact, the biscuit takes the shape of a lamb with its legs tied two by two and then crossed under the body ready to be placed on the altar and sacrificed. This position of the lamb, with its belly resting on the sacrificial altar, has led over time to transform the shape closer to an Easter dove (the eyes and tail of the bird are painted), however, the artifact was born with the specific intention of recalling the lamb* – Christ who frees the world from death and sin. Precisely for this reason, this biscuit is distributed to all the brotherhoods on the evening of Holy Thursday after celebrating the Last Supper and the washing of the feet in which the memorial of the institution of the Eucharist is performed.
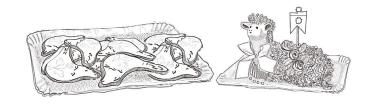
Another aspect is the playful-sacral one, namely, as the paschal object given to small children who had not yet received their first commun-

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ion, first to play with, but then to eat, in memory of Christ who becomes the food of salvation for all. This confectionery tradition is unique to the Madonie and is present only in Geraci Siculo. Starting from the 1800s, the preparation of the biscuit left the purely ecclesiastical sphere and was also consolidated within the family, especially among the families of shepherds". The story can be reconstructed through documentation and interviews, but some points are unclear… "The students who dealt with the" Easter *agniddruzzi "encountered a not insignificant issue. These biscuits, although called lambs, are in the shape of doves. To understand this contradiction, the students turned to Professor Vincenzo Piccione, a highly cultured man from the village who, in 1982, re-founded the venerable local public library and opened the newspaper library, the Cultural Animation Centre, the section of the Municipal Historical Archive and the Ethno-anthropological Museum of the Madonie. Among the numerous unpublished writings of Professor Piccione is a work entitled "The 'Easter Lambs' of Geraci: sacred-devotional ethno-confectionery". The contribution made by Professor Piccione to our work has been truly precious and interesting". It was thanks to conversing with this expert professor that the students discovered the reason for what appeared to them as a contradiction between the name of the biscuits and their shape.*

All the reflections raised during the research phase, and the discoveries made converged in the video and its script: "The meanings underlying the preparation of this biscuit are so many that during the shooting, for reasons of time, we were forced to leave some of them out. And in this regard, I was extremely impressed by L.'s decisive attitude when he said to me: "Professor, we can't remove this". The same attitude and the same conviction that L. (but I would say that the same consideration applies to all his classmates) showed in the video when he presents the "agniddruzzi", sign of a comprehension which, after being built, has firmly settled in his personal store of knowledge".

Children rediscover ancient culinary traditions: the Easter lamb-shaped cake

This aspect of the discovery, of the authentic construction of knowledge that books do not contain is one of the most important aspects of this work which, in the teachers' opinion, serves more to consolidate "traditional" skills, rather than just fostering the development of digital competence (without detracting from this): "As I did in this experimentation in the classroom, however, I believe that we cannot help but create content in the traditional format, students must be able to search, not only on the Internet, for information, news, content, both on written texts and through direct with possible interlocutors, in my case parents, grandparents and acquaintances. This allows you to elaborate, re-elaborate and reflect on what has been learned and then only subsequently summarize it, make it captivating, seductive and meaningful thanks to digital presentation tools" (Andrea Disint).

One way, we said, to truly build knowledge, through continuous and constant comparison with others: "The student participates personally in the construction of knowledge, formulates his own hypotheses and controls the consequences, designs and experiments, discusses and makes a case for his or her choices, learns to collect data and compare them. The use of technological tools also opens up the possibility of simultaneous interaction between different users (even distant ones) and this facilitates forms of learning linked to the comparison between similar ones, that is, a modality remarkably close to the communicative characteristics of students and the social networks" (Maria Stefania Michelacci).

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Acquiring knowledge, therefore, while developing transversal skills such as those of taking a stance, elaborating complex texts, and arguing: "Ultimately, I believe that the use of digital tools is useful to stimulate discussion with others on what we are and on specific contents, and also helps to significantly increase the ability to argue, students feel stimulated to delve deeper into certain topics and keenly employ their energies to propose them and make them understandable to their interlocutors (...). Obviously, the activities aimed at the development of linguistic skills, of oral and written language which is consolidated thanks to the reading practised on a great variety of texts and for different purposes. In this case, the practice of reading and speaking was proposed as a moment for socialization and discussion of learning content, but also as a moment for independent individual research" (Francesca Vogesi).

6. Reinterpreting the curriculum

This activity of producing digital educational content also means intervening in the curriculum. The textbook always represents a particular interpretation of a subject. It presupposes an authorial bias which assigns different weights to the topics and makes important selections on the topics to be addressed with the students. Of course, the book is the authoritative guarantee of a succession and a progressive treatment of the disciplinary themes, but it can rarely satisfy the specific needs of a class, with its particular demands, with its particular questions.

Furthermore, textbooks reflect the rigid disciplinary sectorization of the school and are not open to accepting a more complete idea of knowledge understood as an interweaving of knowledge. It is difficult to find interdisciplinary suggestions within them that are able to offer students a holistic approach to knowledge.

Producing Digital Educational Content therefore means integrating the shortcomings of a generalist book, whose contents do not take into account specific knowledge pathways, perhaps centred on aspects linked to a specific territory, from local history to aspects linked to traditions, to economy, to the culture of the place where the school is located.

Producing DEC can therefore mean reconnecting knowledge belonging to different disciplinary fields, within dependable training courses. "Our colleague who teaches Italian-History-Geography-Art & Image dealt with the explanation, study and representation of the legend; our mathematics-science colleague edited some in-depth readings on the seabed and volcanoes; a retired colleague who has remained in very close contact with the school, oversaw the adaptation of the dialect; the colleague from the Lipari 1 Institute took care of the narrative aspect

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and the creation of a Padlet board; I took care of the aspects more closely linked to technology": teamwork, in this activity, led by Daniela Zanghì, as in many others that were presented.

Creating DEC also means taking into account the voice of the students, their diversity, the contributions that each of them can make in defining content. "Digital educational content lends itself to this form of expression: building one's knowledge through flexible forms of fruition and production of knowledge, beginning from an essential starting point: what "already exists", at the level of knowledge and skills, in each student, to then develop and expand these", writes Benedetta Costa, a primary school teacher in Samone (TN), in Trentino, underlining an important idea: that we should begin from what the students know; thus making room for what is defined as an "emerging curriculum".

Designing a product, be it a video or an e-book, researching facts, comparing them, taking photos and writing texts, looking for music or producing it first-hand means tackling a series of different activities that favour inclusion, to the extent that they allow a redistribution of roles, giving value to the contribution of each, far from the canonical school activities, and the same for all: "I strongly believe in teamwork, in co-construction, in the valorization of differences and in encouraging each student to find their own way to express themselves and feel important", Benedetta writes.

"The operations envisaged by such a project can contemplate the development of skills that are difficult to find in traditional teaching, and do not relegate disadvantaged students (in this case an SLD) to second-row positions", says Andrea, who tells us how creating DEC means imagining a varied pathway which includes different activities and provides for the assignment of roles based on the students' specific needs and interests. So that everyone can make their own contribution: "Furthermore, in my opinion, the creation of DEC allows students to increase the motivation for commitment, pushing them to do their best"

(Andrea Disint). "Doing one's best" here means learning to exercise "mastery", the taste for doing things well, which represents one of the peculiar characteristics of the best artisan culture[2].

2. Sennet, R. (2008). *L'uomo artigiano.* Milano, Feltrinelli

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7. Care of a new language

In the production work emerges the care that the students place in the realization of the product. A care applied to an area that is still little known, that of new kinds of text. In fact, the students approach a new form of expression, recouping the attention to details that usually belongs to their relationship with written texts. "In the various texts some words considered by the students to be particularly significant have been 'linked'. All the material produced was digitally re-elaborated to obtain an effective and attractive final presentation, using Padlet. This digital tool, remarkably simple and of immediate application, was used by the students with my support, and we appreciated its many possible functions, from the various formats available, to the possibility of inserting texts, photographs, scanned drawings (…). The resulting product is quite simple, but the students and I are immensely proud of it. The activity was carried out in a 'new' class for me (they have been working with me only since this year), not very used to using technology at school, therefore also digitizing all the material produced, saving it in various folders, and then inserting it on the Padlet board. It was however a 'great job' (Maria Stefania Michelacci).

A great job, carried out with patience and care: "My experience is that the realization of this DEC valorized the work of the individual students, not as such, but I would say as a person, drawing on his or her resources, passions, and knowledge, those learned outside the school, which are structured in an area of everyone's experience, perhaps far from those generally dealt with in lecture-based teaching, but capable of motivating participation in school work with better results". Antonella writes, and then tells us about her students, keenly involved in the activity: "during the school period C. goes to the countryside as soon as he can, and in the summer he gets up at five in the morning to help his grandfather and uncle look after the animals. The urgency of wanting an answer can be read as the request for confirmation of the valid contribution that the pupil had understood he could bring to the work. And with what pride he showed his companions a copper "*u faciliddu*", *used in the past by shepherds to eat Ricotta cheese! On the other hand, the work lent itself to ensuring that S. could also make his small but special contribution, which he was so happy with when we showed the video. Therefore, I can say that improving self-esteem is also a reason to design this type of content*" (Antonella Barreca).

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8. Building bridges

"In my opinion, the typical isolation of small villages inevitably affects people: the technology we have at our disposal simultaneously represents both a means of development and a social risk. So I believe that at school we teachers have the opportunity and also the duty of educational action aimed at promoting greater awareness and responsibility". writes Rosanna Compassi, a teacher at the primary school of Moggio Udinese, highlighting how much technology can also represent yet another reason for isolation for the inhabitants of small towns and villages, especially for students. The school thus has the task of showing a usage which serves, if anything, to "build bridges" between distant territories, to foster communication rather than encourage alienation in front of a screen.

Digital text is easily made public and easily shared remotely. The new tools thus make it possible to effortlessly establish distant relationships which are also a way to share materials and texts: "Another important part of the activity was that of sharing products with the students of the third grade of the Don Milani Primary School in San Marcello Pistoiese. The students saw their motivation increase, they enthusiastically spent their energies in researching data and developing activities, because they were aware that their peers were doing the same thing in a school different from theirs and far from their surroundings. The enthusiasm of the students turned out to be so high that everyone expressed a desire to get to know their classmates from the other school, repeatedly asking them to organize an educational trip to their school", says Maria Stefania Michelacci.

Her colleague, Francesca, organized a presentation for the "twin" class which involved the students: "A first commitment was to present, briefly, to the partner school, its reference territory using Padlet. The

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classes shared their respective presentations. We then proceeded with the introduction of the type of story called 'Legend' making the students reflect on the meaning of the word. Each student was given a Post-it note on which to write the answer to the question "Legend for me is…" (Francesca Vogesi).

The students finally decided to actually meet, perhaps in front of that lake they had long heard about: "Since we're in fifth grade and we're big, we can organize a trip to that lake!!" "I really want to see if this legend is true, so, Miss, we have to go there now!!" "Don't play jokes, Miss, so that we have to go to middle school, and you go to see the lake with the 'little ones', because we did the work, not them!!" (Maria Stefania Michelacci)

Also the lower secondary school of Forni Avoltri, part of the Comeglians CI, in upper Carnia, ("a tiny branch, a class, and a multi-age class for a total of twelve students, ten females and two males. Over the years this branch, also known as '*Scuolamagia*', has built itself a bit of a reputation due to its small size but also to the many activities that take place there, often in synergy with the entire village community") has built a bridge with the school of Marettimo, "an even more marginal and peripheral situation". The students worked together remotely by participating in a kind of "graphic game" proposed by the teacher Andrea Disint: "The proposed DEC dealt with geographic issues (with a comparison between two landscapes at the antipodes) and concentrated, from a technical point of view, on a work carried out through the creation and subsequent processing of photographs taken by the students. (…) At the origin of this DEC are some very particular photographic shots from Turkey. The images created by the young artist Uğur Gallenkuş (@ugurgallen on Instagram) enjoyed a brief period of fame between the end of 2018 and the beginning of 2019, becoming, as they say, a 'viral' product of the Web. All Gallenkuş does is to juxtapose two images that are apparently dissimilar in every way, to compose a single picture in which a few elements, sometimes only one,

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bring coherence. The aim is often to create a short-circuit between places on the planet that experience opposite circumstances (peace / war, wealth / poverty, freedom / oppression ...) in search of common denominators that apparently cancel out the differences (human relationships, play, food …). With my students, I investigated the possibility of creating images with the Gallenkuş technique that would blend the landscape of Upper Carnia with the Mediterranean one of Marettimo. The challenge was to create a locality named "Fornettimo", a mountain island. Technically, the final product of the educational activities was a photo gallery. A way to reflect on diversity that becomes value, in a creative confrontation" (Andrea Disint).

A very small school complex… "a school created out of magic"

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9. What and how to produce The work phases

But in how many and what kind of forms can DEC appear? When we evoke it, in fact, each of us has a different product in mind, a "genre", we could say, that does not have precisely definable characteristics. Let us simply try to draw up a list of the possible "forms" that such digital content can take:

- it can be a simple presentation, a PowerPoint (or made with other similar software) which traces the phases of a job or collects information in sequence on a specific topic;
- it can take the form of a comic, perhaps made using the many open tools that the Web makes available today;
- it can take the form of an e-book, a digital book in all respects, perhaps made with e-pub software, an illustrated book with links, subdivided and organized in an index on the most varied of topics;
- it can take the form of a trailer, a short video, designed to show a message or information in a summary form;
- it can be a longer and more complex video, a short documentary, like a television report;
- an interactive timeline that places a series of information in diachronic development;
- it can contain quizzes and questions as a Learning Object;
- a map can be an interactive, "navigable" image that allows interception of a series of facts located in a space or organized synchronously; a bulletin board like Padlet;
- a proper website with a navigable structure, or a blog made up of posts and comments.

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Schools can use a lot of imagination in this and each product can be seen as "educational" if it follows a design and is made with that care to which reference was made above; if it follows a precise methodology in its design and development.

As for the carrying out of the design and construction work, we must admit that it is difficult to establish a rigid succession of phases, a defined methodology that can be faithfully applied to different contexts. We always like to underline that each situation has its own peculiar characteristics, and the educational work must be adapted to the contexts and be moulded according to the needs and resources of each class group. However, it is possible to identify a series of constants that recur in the succession of work phases that have been described by the teachers.

What the teachers told us can be summed up as follows:

- **Present the activity and share its goals and objectives** to be achieved. It is especially important that the students have a clear understanding of the task to be performed and the final goal to be achieved. It is also important to have a rough idea of the type of product you intend to make, perhaps inspired by something you have seen.
- **Organization of the activities to be carried out:** division of the class into small groups, assignment of roles within the groups, identification of timeframes, and deadline for the final paper.
- **Identification and presentation of the software** to be used for the final paper.
- **Preselection** of some **resources** to be used and provided to students, by the teacher (advisable, but not obligatory).
- **Delivery of materials to groups** (it is advisable, when working with classes that are still inexperienced, to accompany the documents with some guiding questions to help the students orient themselves).
- **Study** and **research** activities on the chosen topics (group or individual activity).

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- Phase of **reading, documentation, selection** of information.
- **Collection and archiving** of selected materials (analysis of different sources).
- **Re-elaboration** phase.
- **Review** by the teacher.
- **Final correction** of the papers by the students.
- **Text design.** Definition of the layout and interfaces, organization, arrangement and elaboration of the materials collected.
- **Script of the texts** (possibly a storyboard).
- **Assembly.**
- **Publication.**
- **Presentation** to the class of the documents produced by each group.
- **Evaluation** and **review.**

As an example, we report some indications of the teachers of the Laboratory who have described the phases of their activity with the class. Let us begin with the detailed description that Cristina Savoia of the primary school of Tarvisio Centrale (UD) gave us about the pathway taken for the DEC on Monte Cacciatore.

First phase

This is the pathway that I followed personally from start to finish, organizing the work phases in different ways: some activities were carried out with the whole class (large group), others in groups of four or five students (small groups). Because the latter were more functional, they could be subdivided into smaller pairs or groups. I started the pathway in January with a circle time activity to share its objectives with the students and, therefore, let them choose the mountain to work on. I thought they would have chosen one of the mountains that can be seen from the windows of our school but, instead, the choice fell on Monte Cacciatore: i think this is because they were very affected by the deaths of three hikers in December in two accidents which occurred just a few days apart. One of the victims was the father of a little girl they knew. At this point, still in the large group,

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we established the work phases and the documentation method: the majority would have liked to collect the results of their research, by building a laptop. It was immediately clear to them too that the project, which we were willing to start, would involve various disciplines and, therefore, they asked for the collaboration of the history, geography and Friulian teacher and the science teacher. Being an interdisciplinary project, the students were involved in two pathways which took place in parallel: during the 'Learning-to-learn' workshop, the students deepened their knowledge of Monte Cacciatore from historical-geographical-environmental-naturalistic points of view, instead, during their Friulian lessons they analysed the legend, which explains the origin of the name".

Second and third phases

At first, the students, divided into three groups, were able to give free rein to their curiosity by asking a series of questions on the object of study; subsequently the three groups compared what had been elaborated to verify if there were common questions, similar questions, questions of little interest and then, to perform a first screening. The next step was to rank the questions according to meaning.

Also in the large group, we moved on to formulate hypotheses on where we could find the answers to our questions. Some students suggested consulting books in the library, others asking for help from the C.A.I. or the Forestry Carabinieri (within the class there are two students whose parents serve the Forestry, Environmental and Agri-food Units Command), some others proposed going to the Tourist Office, others to interview their grandparents or some next-door neighbours. Only in the very last instance did someone suggest using the Internet.

Fourth and fifth phases

To complete the information found by individual students, we did a search on the Internet together and this was also useful to start a reflec-

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tion that not everything we read on the Web has a scientific basis. Then the activities continued in small groups, formed on the basis of the topics of interest: the members of each group had to identify the questions of relevance and choose, from among the materials available, those of use to find the answer.

Sixth and seventh phases

At this point, it was a matter of reading and analysing the materials available to search for the information to answer their curiosity. In this phase of the work i left the three groups the freedom to organize themselves as they saw fit: in the first group they decided to subdivide the questions and seek the answers individually; instead, in the second, they decided to divide the questions but to carry out analysis of the material in pairs; finally, in the third, they preferred to complete this phase by collaborating all four together. At first, my task was to support the students in case of difficulties in identifying the answer and in maintaining constant attention and participation on the task and, eventually, to help them overcome any conflicts that might arise within the couples or the group; later on to correct their answers. A further problem arose during the research work: we did not have all the information we needed to answer all the questions. So the students proposed a new search on the Internet, but without success and so, reluctantly, they eliminated these questions.

The next step was to present the work done to the other groups: in this way, the other students could also find out the answers they had not analysed and thus have an overall picture of the topic of study.

Eighth stage

(...) in the large group we started designing the digital educational content. From the confrontation, the idea emerged of carrying out an interview with Monte Cacciatore simulating a press conference.

At this point it was a question of constructing the interview script,

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giving a logical order to the questions and preparing the images: the photos of the 'journalists' and those of the places, flora and fauna mentioned in the answers. Once everything was ready, we recorded the audio file and based on it we gave a chronological order to the images that we uploaded to iMovie, making a simple movie.

Another example relating to the process of creating DEC on the legend of Peix Nicolau:

"Initially, I explained the conformation of the Sicily region and presented to the students the seismic and volcanic events of the last centuries. Later on, we examined some legends and myths about Sicily, and then we focused on the legend of Peix Nicolau, of which the students found several versions in texts and on sites. The students analysed the story, with particular attention to the characters and motivation, then they reworked it and divided it into sequences, capturing the essential elements. At this point, the students' attention shifted to the territory. Starting from the assumption that a legend always refers to a real event, the students formulated hypotheses on the birth of the Peix Nicolau legend and identified the real elements: the instability of the Sicilian territory, the causes and the consequences. The students, therefore, analysed and then reworked some simple informative texts: historical - to indicate the seismic events examined, geographical - to describe the type of territory, scientific - to illustrate why and how earthquakes originate, whether of tectonic or volcanic origin, also by including some illustrations".

And here we summarize the phases of another work. Obviously, as anticipated, each activity has its own specific educational intent, such as this one which was oriented towards the construction of DEC made up of numbers, the numbers of the Italian regions in a comparison:

"1. phase of explanation and sharing of the project with the students; 2. constitution of working groups; 3. identification by the working groups of the possible issues to be represented in figures; 4. collection of the themes identified by the groups and choice of common themes to

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represent; 5. internet search of data and transcription into tables; 6. data collection of the geographical aspects in sharing with the fourth-fifth years; 7. creation of collective table; 8. creation of graphics; 9. creation of DEC, interactive maps; 10. cploading the work on the branch's site in the space dedicated to the 3rd year (future 4th); 11. presentation of research and products to the branch. This is a summary of the work phases elaborated by the students. Here is our working methodology: we divided ourselves into groups; each group wrote a list of possible topics to research, we read these and decided which ones to work on. Each group was assigned a region on which to collect data and once collected, we compared them by drawing graphs. After making all the graphs, we created an interactive map where you can see them all. The choice of themes was made by the students according to their interests and imagination in order to make the task authentic and original. Divided into three groups, they produced a list of the issues which we then compared, deciding together the possible ones to investigate. As regards the data on geographical aspects, it was decided to work in collaboration with the fourth-fifth year multi-age class. During the year, the multi-age class carried out an important geography project on the regions of Italy, creating various DECs (PowerPoints and maps) and therefore wanted to take advantage of their work to find the data we needed for our project" (Benedetta Costa).

In some cases, great value is attributed to sharing, to discussing the work done, starting from the planning phase implemented by the teachers and ending with the students' work. This is the report from Elena Mattiussi of the primary school of Ospedaletto, a fraction of Gemona del Friuli (UD): "Phases of the project: 1. the teachers of the participating classes agree on the activity plan via webinar; 2. presentation of the activity/project in each class; 3. each class, through brainstorming or other methods, identifies the significant elements of the territory that they intend to present to the other classes; 4. each class organizes the list

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into categories (for example environmental and natural, architectural, cultural, historical, etc.) and represents them on a map or scheme; 5. a virtual class is opened on Edmodo in which the classes are participants (not individual students) and after a first phase of presentation of each participant/class, the categories of images to be shared are agreed; 6. the students, either in small groups or individually, take photographs and captions are created in class: title, place, brief description; 7. all the classes participating in the project post them on Edmodo to make discussion possible; 8. with Google My Maps it is possible to create a map of all the Small School locations with their images. An evolving map which can also be supplemented later; 9. presentation of the works by each class during videoconferences/webinars; 10. discussion within the classes of the activity carried out and any requests for clarification or insights in a virtual classroom or additional webinar; 11. common final questionnaires aimed at students of all classes, agreed between the teachers, for self-evaluation of their work and degree of satisfaction with the activity".

The work phases include direct experiences and they often start from: "Through the use of suitable software, the students searched for information on plants, maps, topographic maps and satellite images that allowed us to build the pathway to cross the locations associated with Giuseppe Pellizza da Volpedo, viewing some selected works, until reaching the artist's studio. We made contact with the Pellizza di Volpedo Association. A guide accompanied us during our walk in order to deepen our knowledge of the painter and the pointillist technique. On May 15th, we took an artistic-naturalistic walk into the countryside around Volpedo; the students guided us along a route from Casalnoceto to Volpedo, after putting together an itinerary using suitable software, and we discovered the places where Pellizza painted. For each panel viewed, the students wrote simple captions to give information about the work to be associated as text to be read through a QR code to be generated, saved and shared. The Italian colleague followed the part of writing the captions,

while I, as a technology teacher, explained the structure of the QR code; together we then assembled the two parts by linking text and QR code."

Student participation is central at every stage, the teacher is a kind of 'director', as Antonella tells us: "I took care of the 'direction', but they chose which aspects to investigate, which images to insert, they met the people from whom to learn information, they listened to their stories, they took photos, they consulted texts, selected documents, they drew, they went in search of objects that could fit into the story. And, when a message from one of my students arrived on WhatsApp at 4.38 one afternoon, sending me a photo and writing to me: "Sir, just in case this was okay", I understood, in addition to the fact that I need to continue working on the syntax structure of Italian, that some pedagogical-didactic reflections shared in Bobbio were beginning to find their conclusion within the planned pathway" (Antonella Barreca).

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10. Tools

The story we proposed reflects all the depth of the design and production of digital educational content. A work made up of activities which the school knows well and which belong to the customs of many classes. Technology, therefore, has its role to play, an important role, and it is necessary to know of some software to use if necessary, depending on the needs of the project. We are indicating, for usefulness, a series of tools that may prove useful during the realization of DEC, aware that this list is not exhaustive and could change very quickly:

- Interactive timeline:
  https://timeline.knightlab.com
  http://www.frisechronos.fr
  https://www.tiki-toki.com
  https://www.preceden.com
  https://www.timetoast.com

- Digital bulletin board:
  www.padlet.com

- Interactive quizzes:
  https://getkahoot.com/
  www.socrative.com
  http://quizizz.com/

- Create an online lesson:
  https://www.tes.com/lessons?redirect-bs=1
  http://www.raiscuola.rai.it/

- Interactive image:
  www.thinglink.com

Web application photo editing

IPiccy: extremely easy to use online service that allows you to edit all major digital photo formats using a wide range of tools (e.g. cropping, resizing, etc.) and filters that can be applied with a click or a little more.

http://ipiccy.com/

http://www.web-experiments.org/2012/10/29/modificare-foto-on-line-ipiccy

Pixlr: web service for editing images that has a user interface virtually identical to that of Photoshop.

https://pixlr.com/

https://www.html.it/articoli/pixlr-alternativa-gratuita-e-online-a-photoshop/

Google Photos: web service which, in addition to offering a photo and video storage service, also features some basic photo editing tools. These tools include some basic adjustments, such as brightness, vignetting and colour (there is also automatic balancing, which is highly effective), some colour filters and a system for cropping / rotating photos.

https://photos.google.com/?hl=it

https://support.google.com/photos/?hl=it#topic=6128857

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Audio editing software

Audacity: this is open-source software which allows users to record, edit, mix, add effects, analyse and convert any audio file.

https://sourceforge.net/projects/audacity/#recdown

http://manual.audacityteam.org/man/tutorials.html

AVS Audio Editor: record audio from various sources (microphone and other sound card inputs). Edit recorded audio files, apply effects and save in all major formats.

http://www.avs4you.com/it/AVS-Audio-Editor.aspx

http://www.avs4you.com/it/Guides/audio.aspx

Moo0 Voice Recorder: start recording immediately when the REC button is pressed with default settings. You can choose the folder where to save the recording from the microphone, whether to save mp3 or wav files, whether to cut the pieces where there is silence and whether to record the sound of the computer, only that coming from the microphone or both.

http://www.moo0.com/?top=http://www.moo0.com/software/VoiceRecorder/

Software for recording webcam video

Windows Movie Maker: video editing app produced by Microsoft that also allows you to record video from the webcam EULA

https://sourceforge.net/projects/audacity/#recdown

http://www.01net.it/creare-filmati-con-webcam-e-windowsmovie-maker/

Quick time/iMovie/Photo

Boot (Mac): apple app to shoot a movie with the iSight of the Mac

https://support.apple.com/kb/DL837?locale=it_IT

http://it.wikihow.com/

Debut Video Capture: free software that allows you to capture videos from your webcam, digital camera or any other USB device.

Free http://www.nchsoftware.com/capture/

Video editing software (photos, videos, sound)

Windows Movie Maker: video editing programme produced by Microsoft that allows you to edit, edit and apply special effects to videos.

http://windows.microsoft.com/it-it/windows/moviemaker

http://windows.microsoft.com/it-it/windows-vista/getting-started-with-windows-movie-maker

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Premiere: professional video editing software made available by Adobe.

http://www.adobe.com/it/products/premiere.html

https://helpx.adobe.com/it/premiere-pro.html

Apple iMovie: mac world video editing application. Ideal for creating home montages but also includes advanced features for obtaining excellent quality movies.

http://www.apple.com/it/mac/imovie/

https://www.apple.com/it/support/mac-apps/imovie/

Final Cut: professional video editing app from Apple.

http://www.apple.com/it/final-cut-pro/

http://www.usarefinalcut.com/fcpx-articoli/

Videopad: video editing application available for Windows, Mac.

http://www.nchsoftware.com/videopad/it/index.html

http://www.nchsoftware.com/videopad/it/tutorial.html

Online video editing apps

Wevideo:

online video editing service that allows you to create videos with photos with animations, background music, audio (the free version allows you to create videos of just 2 minutes).

https://www.wevideo.com/

https://www.wevideo.com/support

Adobe spark video:

online service for video editing that allows you to create video with photos with animations, background music, audio.

https://spark.adobe.com/about/video

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This, on the other hand, is a sort of collective text, born from a reflection of the Laboratory group, a synthesis that attempted to list the reasons why a teacher embarks on a pathway of this type: we have called it the "Bobbio Manifesto".

Why design and produce digital educational content in small schools?
Because we like to test ourselves. We like to "be in the making"
To create opportunities that encourage collaboration between colleagues
To break down the classroom wall, to let students of different ages work together
To learn how to work cooperatively
To do a teaching oriented to the development of skills
To bring out skills that generally "do not count"
To increase the motivation to study in students
To enhance the work of students who encounter difficulties
To enhance the multiplicity of intelligences
To give value to the design method
Because the training courses are more effective if they are oriented towards the construction of a product
To give equal importance to the product and the process
To develop synthesis and assimilation skills of specific languages
To train students in a critical and conscious use of new digital tools
For a new relationship with the error: if you are wrong you can correct yourself

This applies equally to small schools and every other kind of school.

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