## Chapter 1

# School and Farm: a relationship of great educational value

Educational farms are now fairly common in central and northern Italy, and are also developing in southern areas. They are recognized as an excellent opportunity for schools to introduce children to the world of agriculture. Through experiencing direct contact with rural life, they can learn about farming culture and traditions, products and animals. For several years schools—from early infant level to the first year of secondary school—have been organizing school trips to farms to enable pupils to come face-to-face with the life of animals and the production of products which still maintain the fascination and authenticity of artisan work. A farm becomes an "educational laboratory", a context for learning and knowledge which is closely linked to the school's learning process. It is a direct experience which enables children to discover a world—the world of the countryside and agricultural products—which is becoming distant and forgotten, even though there are a large number of farms in Italy and they have made, and continue to make, a significant economic and cultural contribution to the country's growth and development.

Schools today are increasingly city schools, and the four walls of a classroom are far removed from farming life. This means that children and young people no longer have contact with the natural environment surrounding them and do not know much about it. Even if there is a school canteen, there are few opportunities to re-establish the links. Food arrives already precooked and lunch at school is served in plastic or aluminum trays. This indicates a further separation between the rural world and the industrial world, between town and country, between the place where food is produced and where it is consumed.

In addition, there is a strong tendency in present-day society to "use without knowledge or understanding": most of us use a computer without knowing how this mysterious electronic appliance works, we don't know the mechanisms that enable a computer to carry out complex tasks and operations at our command. Similarly, we buy zucchini and tomatoes at the supermarket without knowing how they are grown, how long it takes for a tomato to ripen, what you have to do to ensure it will turn out healthy and good quality.

These considerations apply to many other food products of course. We have lost the concept of "seasonality", as a result of the powerful systems of industrial production which bring to our tables tomatoes, aubergines, peppers and all manner of other foodstuffs at all times of the year. Flavors are also a distant memory. The large-scale food industry has standardized and molded tastes, eliminating differences of flavor. Consumers are no longer able to distinguish between different food products of the same type (for example between an industrial salami and an artisan salami, between an organic vegetable and one which isn't. Furthermore, people are increasingly consuming non-local products grown or raised using non-traditional methods and without the care and attention of a small farmer. We therefore run the risk of losing an extraordinary cultural heritage: genuine traditional farm products, the knowledge of traditional farming methods, the ability to recognize and distinguish farm products from industrial products, the history, habits and customs of rural life which are a fundamental part of our cultural fabric.

Schools therefore have the interesting and challenging task of not allowing traditional farming culture to be forgotten. They can use farms as an outstanding way of enabling young

people to learn about local agricultural realities, providing taste education opportunities to develop greater food awareness, connecting them to work which deserves to be known and promoted among young people.

For their part, farmers working in educational farms need to have the necessary cultural and educational skills to establish a fruitful relationship with the groups of children who come to visit. The farm assumes an important educational and social mission and farmers must have strong personal involvement, a sense of responsibility and significant ability in managing their educational role.

The link between school and farm is of primary importance in the educational development and growth of children for all the reasons listed below: a farm has great educational potential. What features can a farm provide which make it an important laboratory for the education of young people?

The answer can be seen by identifying the methods and educational context of the environment, the activities which can be inspired through a farm visit. They can be summarized in the following ten points.

## 1. **Learning by doing** (promoting practical knowledge as opposed to theoretical knowledge)

In a farm children and young people learn by observing, touching and tasting. Learning is achieved through direct experience, "knowing by doing". This implies active involvement by a child, who learns by coming into close contact, personally discovering the world of nature, agricultural products and farming life. The farm becomes an "open air educational laboratory" where children can obtain knowledge, not in a detached intellectual way, but in a participative immediate way. A farm is not a provider of notions and information but is an intense experience of life which enables children to construct knowledge through experience. Seeing and stroking animals, handling raw materials and making bread, discovering and using tools to cultivate the land, are vividly imprinted in the minds of young people because they are not only described and communicated but are a direct personal experience.

#### 2. Learning the methods (development of interdisciplinary knowledge)

The emphasis here is on skills which are not specific to a particular discipline (its content, concepts and theories) but contribute to the overall growth of a child's skills (being able to observe, analyze, compare etc.). This means, for example, that a child visiting a farm does not only learn scientific and biological concepts about animals (how a cow reproduces, the length of the gestation period etc.) but learns about the learning process (learns to observe, analyze the anatomical parts, compare them with other animals, etc.). The experience in a farm increasingly focuses not so much on content ("what") but on the process ("how"). The centre of the learning process moves from knowledge to skills, from content and rules to methods and processes.

Learning at a farm means learning how to analyze, criticize, communicate, connect and create knowledge. Through a direct experience, a child develops an ability to construct knowledge inductively, starting from practical experience—the particular—and ending up with generalized knowledge.

### **3.** Experiencing emotion (focus on emotional-affective dimension)

A farm offers an opportunity for strong emotional experience. Close contact with animals, activities carried out in a natural environment, involvement in practical productive work (making bread, polenta etc) are all opportunities to discover and experience emotion, feelings and

sensations. The richness of the environment and the powerful stimuli at a farm offer significant opportunities to develop the emotional and affective dimension in a child compared to the school context. Noticing the "vibrations in your heart", i.e. what you feel during an experience, is a crucial dimension in a child's growth and a significant catalyst for learning. An experience accompanied by strong feelings and emotions is not forgotten but becomes part of the person who has experienced it.

#### 4. Learning to be and work in a group (focus on relational dimension)

Farm activities do not only facilitate contact with agriculture and nature, but due to the way they occur, offer opportunities to develop socialization, and learn to function and work in a group. In farms aware of the educational dimension, most activities involve discussion and work in small groups. Children are invited to take decisions together, undertake activities that require the cooperative collaboration of other children, to effectively coordinate their work and achieve a practical result (for example making a product). The relational dimension, the interpersonal relationship between children, is thus a fundamental aspect of the farm experience and an opportunity to develop psychosocial competence.

### 5. Playing and having fun (focus on ludic dimension)

Play is (and has to be) an important aspect of educational activities. Children and young people learn by playing, by enjoying themselves. Play is another facilitator of learning: children learn if they enjoy what they are doing, they don't get bored but are engrossed and involved. Fun drives motivation and is therefore a fundamental part of the learning process. Educational farms have for some time been making efforts to include a ludic dimension in their activities in order to involve and interest young people: only if the farm is associated with pleasant feelings is it possible to stimulate an enjoyable learning experience and create a passion for farming work and life in the country. A farm is then a "ludic laboratory", a place where you can learn by having fun.

#### **6.** Researching and discovering (developing research and discovery skills)

A farm is an unusual environment, rich in stimuli which can promote research activities and the satisfaction of discovery. In a farm, children and young people can become researchers: they collect observations, continually ask questions, compare their hypotheses and explanations about the life of plants and animals with the direct experience of the farm, they collect data and ask new questions, carry out experiments by handling agricultural products. Observation, experimentation and questions lead children through an educational process of discovering new knowledge and new emotions. A farm can therefore also offer opportunities to carry out "research in the field", and children can experience what it is like to be scientists in a natural laboratory.

#### 7. **Developing the senses** (boosting sensory abilities)

Sounds, aromas, odors and flavors constantly impact the sensory awareness of children involved in farm activities, and enable them to recover and develop their perceptive ability, which is being impoverished and ignored by life in the city. A farm's taste education workshops and activities to develop sensory abilities are excellent ways of refining the five senses. Participants learn through the use of the senses to recognize food products, distinguish traditional farm products from industrial ones, and can explore new flavors and aromas with increased awareness.

#### **8. Expressing oneself** (developing expressive abilities)

A farm visit provides an opportunity to "suspend" the structures of school social relations and facilitate new types of behavior and expression. Removing children from the school classroom and introducing them to the different environment of the farm can change their behavior and social reactions. The way they express themselves can also be maintained and prompted by specific activities which encourage them to express their personality and creativity through the use of agricultural products or performing traditional farming work. Experiences of this type might include making straw baskets or scarecrows, creating sculptures with foodstuffs. The farm then becomes a "laboratory for creativity and expression".

## **9. Knowing about traditional farming culture** (communicating habits, customs and traditions)

The rural environment is not only work and production but a complete cultural world. Repairing the rupture between town and country also means helping children to discover the stories and lifestyles of past generations which traditional farmers have fortunately conserved. A visit to a farm then becomes an encounter with the civilization of our forebears: it is an opportunity to discover stories, sayings, proverbs and traditions marking the seasons, the stages of harvest, knowledge of traditional farming work. Many farms have set up small museums containing tools and documents testifying the historical development of rural farming life: these collections of treasures from the past (agricultural equipment, furnishings, photographs, stories) offer an educational journey of discovery and an opportunity to recover our cultural roots.

### 10. Reviewing the experience (developing awareness)

Children's experience of a farm visit is limited and localized. It takes place within a specific time period (usually 3-4 hours, one day at the most). It thus has a beginning and an end and takes place in an environment very different to a school classroom. This means that before the farm visit, teachers can do preparatory work at school in order to find out the children's expectations and provide the class with a certain amount of preliminary information about the visit.

There is then an opportunity to review the experience in class. When the children return to school, the teacher can get them to think about the feelings and emotions they experienced, check what they learned and use the farm visit as a stimulus for more structured teaching work over a period of time.

The farm is thus an important context for experience and learning which complements educational work in class. It enables the application of approaches and methods inspired by the educational philosophy of 'active education'.

The contribution to modern pedagogy by exponents of what is known as "active education" has been of significant scientific and cultural importance, but unfortunately it has not been widely adopted in Italian schools.

The term "active education" highlights the fundamental characteristic of this approach: it is child-centered and the child plays an active part in learning. To this basic principle, active education adds some additional principles which are considered crucial for educational success.

• *Promotion of doing*: you only learn what you do in practice. Theoretical knowledge must therefore always be linked to practical experience, a 'hands-on' situation where a child can actually touch and "learn by doing and experimenting".

- The importance of motivation: it is necessary to start with practical needs, the interests and personal inclinations of the child, their emotional needs. This is the only way you can elicit interest and stimulate the desire to know.
- The importance of the environment: the natural environment is a powerful stimulus for learning. It is a context which facilitates and stimulates doing, research, and experimenting. It provides opportunities to know through experience.
- *The importance of the social dimension*: socializing is a primary need for a child. Every educational act must therefore satisfy this crucial requirement.
- *Anti-authoritarianism*: the adult should not dominate the child, but should only accompany and facilitate the child's growth and learning development.
- Anti-intellectualism: proponents of active education criticize traditional schooling as it only focuses on the transmission of cultural content, the acquisition of theoretical notions and concepts, and the "book" rather than practical experience.

Of course not all contemporary pedagogy agrees with this approach. We can note, for example, the significant influence of philosopher and pedagogist Giovanni Gentile on the Italian educational system, from compulsory schooling through to university, and the emphasis there still is on theoretical and intellectual knowledge as opposed to direct practical experience.

The cultural and pedagogic origins of active education lie in "experimental pedagogy" and the significant contribution made by American educationalist John Dewey. He emphasized the importance of democratic education based on experience and induction: you start from the particular (a specific situation) before moving to the general (a theoretical explanation). At the beginning of the 20th century similar ideas were proposed by various prominent educationalists in Italy and Europe, such as Maria Montessori (1870-1952), Ovide Decroly (1871-1932), and Edouard Claparède (1873-1940). Progressive pedagogical ideas and new psychological discoveries inspired them to set out a new conception of the child and infancy.

In fact the impact of the innovatory educational ideas proposed by these authors remained marginal, particularly in Italy: they were not implemented or adequately recognized by schools of the time, also because the advent of fascism promoted an authoritarian approach to education. Diffusion of these new ways of thinking about education tended to be limited and confined to a small number of schools. There were exceptions however, such as the Montessori method, which had a significant effect on educational reforms in infant schools (creches, kindergartens) and is still widely practised today.

After the Second World War, Carleton Washburne (1889-1968), a follower and friend of Dewey, was given the job (by the Americans) to "de-fascistize" the Italian school curriculum. But he only had minimal success. In the revived democratic spirit and pedagogic innovation of the post-war period, the work of Celestin Freinet (1896-1966) was promoted during the 1950s and 1960s. Italian supporters of his approach formed the Cooperative Education Movement (MCE - Movimento di Cooperazione Educativa) in 1956. Freinet was particularly famous for his "popular education" in France starting in the 1920s when he was schoolmaster in a small village in the French Maritime Alps.

The distinctive features of Freinet's approach compared to other types of active education, was his support for "popular education" for the lower classes. While teaching students belonging to poorer classes he realized that a school-workshop, where people could experience real social situations and carry out creative activities, gave much better results than traditional teaching. Methods developed by Freinet included:

• *free texts*, written by pupils according to their experiences;

- *printing facilities at school*, which enabled students to publish their writings and feel their thoughts were equally deserving of respect as those of an adult;
- cooperative documentation, which replaced the same textbook for everyone;
- *interschool correspondence*, where Freinet's pupils interacted with the experiences of other schools<sup>1</sup>.

The "school at a farm" educational experience is consistent with the enquiring and reflective approach undertaken by active education. Many of its initiatives, developed at the beginning of the 20th century, involved a school garden and agricultural work was regarded as a powerful educational tool. Contact with nature, assuming responsibility by looking after flowers, plants and animals, were considered important ways of promoting children's independence.

Supporting and developing an alliance between schools and educational farms is therefore a highly educational objective but farmers and teachers need to have a shared long-term commitment. However this is often difficult to achieve when farm visits are occasional and sporadic. Usually each class arranges one or at the most two visits a year. In these cases the visit is seen as a school excursion or fun outing rather than a real structured educational activity aiming to promote growth and learning. It is not intended to question the enjoyment of a day in the country and the significant efforts made by teachers and farmers to ensure it is an educational experience, but it should be stressed that these types of initiative are often too limited to have an effective impact on children's learning and knowledge. We are all aware of the bureaucratic and organizational difficulties of a school trip for both teachers and schools promoting these activities. A school focusing on children's growth and well-being, committed to continuously improving education and teaching methods, cannot put institutional requirements before the primary task of educating and helping children to learn. We can only hope that given the potential benefits of school activities in the country, the relationship between schools and farms will be further strengthened and farms will become a natural complement and boost to the educational work done in the classroom

<sup>&</sup>lt;sup>1</sup> Active education and educational work based on pupil projects are central to Freinet's approach. See his *L'Éducation du travail* and *Naissance d' une pédagogie popolaire* for a detailed description; English language material is limited but the following have been recently published: *Celestin Freinet* by Victor Acker, Greenwood Press (2000) and *The French Educator Celestin Freinet* (1896-1966): An Inquiry into How His Ideas Shaped Education, by Victor Acker, Lexington Books (2007).

## Chapter 2

## Educational activities on a farm

If you tell me, I forget.
If you show me, I remember.
If you involve me, I understand.
Confucius

If we want to understand how educational activities fit into a farm context we need to consider the crucial role played by the "school". By constructing the following reference grid we can examine what the terms mean and how they interact with each other.

Farm	Activity
School	Teaching

**Teaching** includes all the actions aiming to transmit knowledge and promote student learning. It therefore specifically involves the teacher's work and methodologies used.

**Activity** contrasts with the authoritarian idea of teaching and social life. There has been a focus on pupil activity in Italy, particularly since the 1960s, along with strong criticism of how schools and social organizations function. It supports the idea that education should aim to promote the expression of abilities, emotions and student culture; things which traditional education tends to stifle.

This is part of a long pedagogical and philosophical tradition represented by names such as Comenius, Pestalozzi, Rousseau, and more recently, Freinet, Steiner, Montessori, Dewey, and Freire: these thinkers and educationalists have proposed models which put the child and the child's development at the center of school education.

Here student activity is not considered in opposition to teaching and the school environment. On the contrary, in the 1960s and 1970s, based on work by teachers such as Albino Bernardini<sup>2</sup> and organizations involved with MCE (the Cooperative Education Movement) or

<sup>&</sup>lt;sup>2</sup> Albino Bernardini, born in 1917, is well-known as a writer as well as for his work as an elementary school teacher. His best known books on educational issues are *Un anno a Pietralata*, (A Year in Pietralata) set in a neighborhood of Rome, which was made into the successful film *Diario di un maestro* (Diary of a Teacher) and *La bacchetta di Lula* (Lula's Cane) in which he describes his experiences as an elementary school teacher in Lula on the island of Sardinia, where the children would come to class bringing a cane with which the teacher could punish them. His

CeMEA (the Centre for Active Education Methods), there was increasing acceptance of activity-based education in the school environment. Later these initiatives became less common in schools and almost exclusively limited to drama.

In Italian schools nowadays people do not speak of these models apart from instances involving expressive activities; people prefer to talk of "active teaching", referring to methods which aim to secure pupil involvement and participation in the teaching-learning process.

When we now speak of organizing and coordinating activities we may think of young people in tourist villages or at special events who encourage people to play games so they are involved and have fun. In a professional area, particularly in a social and educational context, it tends to see itself as a liberating form of education, aiming to promote the release of expressive, social and cultural capacities which are repressed in everyday relations. It has redefined its scope over the years and we can now define it as a set of activities based on the three concepts of "encouraging expression, encouraging action and encouraging enjoyment"<sup>3</sup>.

"Encouraging expression" has always been one of the aims of these types of activity.

"Encouraging action" means that the focus is not the coordinator (unlike activities in a tourist village) but the participant. The coordinator must be able to promote activity, direct action, and facilitate self-directed behavior.

Finally, "encouraging enjoyment" refers to the play aspect (as dislocation, a change to rules and boundaries, the possibility of exploring alternative dimensions), and also to pleasure, which we consider is a fundamental component in facilitating learning.

**Educational activities** therefore comprise a range of possibilities which may seem to be contradictory. In fact they are not. There is a continuum connecting activity and teaching, and the teacher can devise actions focused more towards learning or more towards expression.



The time (duration) and context (School or Farm) are two factors which determine how far you can move along the axis.

We know that educational and learning objectives can only be achieved through long-term programs. To learn it is necessary to discover, know and assimilate. So we cannot expect significant learning to occur in short-term programs. A one day visit to a farm can help children to "discover", it can help to "raise awareness", to "confirm" and "explore", but it cannot enable learning to be long-lasting and significant if it is not included in a context providing continuity. This context must be a proper program involving sessions at school alternating with time at a farm: opportunities to explore and develop understanding, discovery activities and activities to consolidate learning.

stories for children and young adults are also very popular. His complete works are available at http://www.albertobernardini.it

<sup>&</sup>lt;sup>3</sup> Cf. G. Contessa, *L'animazione*, CittàStudi, Milano, 1996, pp. 58-63.

**School** is traditionally the institution where education takes place. It is a "space" intentionally designed to be separate from the environments of everyday life and work, where thinking and the transmission of culture is promoted. A school's separation from everyday life is an important factor enabling it to carry out its function. However, its isolation, use of authoritarian and repressive teaching methodologies, and separation from pupils' practical life experiences, led to the creation, particularly from the end of the 19th century, to movements that tried to find a new synthesis between school and life. Farms, the countryside and agricultural work have been among the most important reference models for education (particularly between the late 19th and early 20th century).

We can mention the movement promoting "open air schools", which developed in the early 20th century with lessons held outside a school classroom, preferably in the country and in the open air; Rudolf Steiner's Waldorf schools which attached great educational importance to performing manual activities, including agricultural work; the schools founded by P. Geheeb in Odenwald, Germany or the Scuola Rinnovata Pizzigoni in Italy.

Some of these (the Steiner schools, the Odenwald Schule and the Pizzigoni) are still going strong and are important examples of different ways of organizing school education.

A **Farm** is a complex of places and activities dedicated to family and community life, agricultural work, livestock and the transmission of an age-old culture linked to the environment and local area.

As far as educational activities are concerned, a farm and the activities it performs can be analyzed in terms of:

- content:
- context;
- method.

A farm seen as educational *content* is the easiest aspect to understand and the one usually considered. It means that the farm's educational activities focus on the crops, animals, agricultural work, products, farming culture and nature. Basically everything you find on a farm.

Considering a farm as educational *context* prompts us to consider the differences between offering educational experiences in a school classroom and finding them outside in the open air or on a farm. There are obviously many differences: from environmental ones (such as the perception of space, climate or light) to the different environmental complexity. A school classroom is a specialized environment for teaching, it is simplified and protected. A farm is a specialized environment for agriculture, it is complex and risky. This presents advantages and disadvantages. For example, it is completely different for a class to look after a school garden within a school environment and to do the same thing within a farm environment.

At the most complex end of the spectrum, we can regard the farm as a method. As mentioned above, some schools following "active" educational approaches have used agriculture and agricultural work as a means of developing educational activities and promoting subject learning (mathematics, geography, biology, etc.).

Some of the principles of a farm considered as a *method* are: the role of work and practical experience in learning, attention paid to times and rhythms, both at a personal level and connected to nature and the agricultural calendar.

Educational activities focusing on these aspects particularly involve handling or transforming products (where the focus is on the work, precision, learning by imitation), looking after animals (where the focus is on relations, listening, respect), activities involving the recognition and harvesting of products (where the focus is again on attention, precision, and

ability to discriminate), taste education activities (where the focus is on developing sensory abilities, discriminatory powers, and immersion in the culture of which the foodstuffs are an expression).

Different combinations of these four elements (School, Farm, Activity and Teaching) enable farm activities to be characterized in different ways. Depending on whether there is more or less expression or teaching, the experience resembles a school trip or an immersion in agricultural life to a greater or lesser extent.

To ensure that educational activities are truly educational and are not weakened, it is important that a series of principles are maintained. As we have seen, they are principles that have guided both active education and the development of activity-based approaches. They include:

- creating situations which encourage participants to be active: because you learn better when you are actively involved rather than just listen;
- promoting the discovery by participants of their own personal ideas: because things that are learned are valued differently by each individual and different ideas can be a source of learning for everyone;
- encouraging variety and the exploration of differences: the aim of education is not to standardize but to develop each person's capacities and to promote benefits for everyone through sharing. In other words: monocultures are also damaging in education. Biodiversity is an asset in nature, cultural diversity is an asset in education;
- mistakes are not to be avoided but to be welcomed: learning not to be afraid of making mistakes is important for growth, for risking alternative courses of action, for understanding that mistakes are not destructive but an essential part of experience; this is also important for developing self-confidence.
- promoting evaluation and self-evaluation: in a collaborative climate it is possible and important to evaluate and monitor one's progress and that of one's classmates;
- respect: you learn when you do not feel under pressure, when you feel that your desires, time requirements, needs and limits are respected;
- acceptance: when you feel accepted and are working in a group where people help each other, you learn better;
- *enjoyment*: being involved in enjoyable activities stimulates involvement and participation. You learn more when you enjoy what you are doing.