Learning through Teaching

Abstract  This work is the result of a study undertaken aimed at providing an insight into the way individuals learn through their work in an organization. Twenty interviews were held with 20 managers, each lasting between 8 and 10 hours, in which a total of 282 learning stories were acquired. All those interviewed gave accounts of the learning potential that was acquired when they took on the role of teachers within their organization. Observation, listening and experimentation were the most common processes in facilitating learning during the course of teaching. The great learning potential inherent in teaching would appear to be generated as the result of a particular aspect of the teaching process itself: the encounter with diversity, which on the one hand tends to increase reflexivity while on the other hand tends to break down resistance to change. In this sense, the learning process that emerges during the course of teaching is of an intrinsically social nature, made possible by the investigation of an authentically symmetrical relationship between teacher and pupils in which all the interlocutors are able to contribute to a common goal. Teaching also proved to be an important opportunity for recognizing one’s own ignorance and thereby rendering oneself open to the possibility of learning. The results of this study confirm certain evolutionary trends which are to be found in the current method of planning managerial training: the utilization of internal resources, the use of a dialogic style, the search for a link between work and training, and the use of small groups. The actual narration and exchange of learning stories also provided an opportunity for promoting the learning process in those interviewed. Key Words: lifelong learning; management training; organizational learning; reflexivity; storytelling; teaching

In the last decade, the theme of learning in the working context has generated renewed interest, as evidenced by the emergence of ‘new words’ used to describe the process: lifelong learning (Longworth, 1999; Maehl, 2000), flexible learning (Jacupek and Garrick, 2000), self-directed learning (Arengado et al., 1996), knowledge-creating learning (Nonaka and Takeuchi, 1995, 1996), transformative learning (Mezirow, 2000), implicit learning (Stadler and Freunsch, 1998), reflective learning (Schöen, 1983, 1987; Williamson, 1997), distance learning (Williams et al., 1999). What are the reasons for this interest? Why is it that individuals and organizations ever more frequently ask themselves questions concerning the
means of learning, seeing this process not only as an opportunity but as a necessity?

A possible answer to this question highlights the crisis experienced by a theme complementary to that of learning: teaching. The learning challenge that has been a feature of the world of organizations since the 1990s has demonstrated the inadequacy of traditional teaching methods, highlighting instead the potential for learning present in the workplace, in the duties performed as in relations with others. It has clearly emerged that what is learnt in an institutional training setting represents only a part of the professional and personal competence created and transferred at the workplace (Antonacopoulou, 1999, 2001; Baldwin and Ford, 1988; Dominicé, 2000; Inman and Vernon, 1997; Marsick, 1988; Merriam and Clark, 1993; Noe and Ford, 1992): ‘training cannot be assumed to produce learning, nor is learning always an integral part of training’ (Antonacopoulou, 2001: 331). Thus, while the 1980s literature on learning models in adults focused attention on the direct link with the educational process in the classroom and sought solutions to increase its effectiveness, today many authors consider learning as being an intrinsic aspect of organizational action of any type, underlining the fact that learning is at times destructured, discontinuous and unconscious (Boud and Garrick, 1999; Coffield, 1998; Marsick and O’Neil, 1999).

However, despite its importance, this new awareness is not sufficient. In order to increase the learning potential in (and of) organizations it is necessary to explore the forms that this kind of learning actually takes. This is a highly demanding task, especially in view of the fact that it is a learning process incorporated in daily life, and which is consolidated to the extent that individuals are able to establish links and connections between situations already experienced (Clouzot and Bloch, 1997; Merriam and Caffarella, 1991; Merriam and Yang, 1996). As already pointed out by Merriam in 1993, an important contribution in this sense is provided by field study, particularly the kind of studies with the capacity to follow individual learning processes as they unfold in personal experience every day.

**Aim**

This interest in exploring the learning process within organizations has been translated into the aim of conducting an exploratory study to highlight working experiences of significantly long duration and to recognize the situations that afford a high learning potential.

The purpose of the study was therefore to gather learning experiences during the course of working life within an organization; that is, focusing on the forms (places, times, contents, actors, etc.) that denote situations which are recognized as being rich in learning potential in terms of both quality and quantity.

In relation to this, it must be pointed out that the study has not aimed to analyse either the wider processes of knowledge production, circulation and accumulation, which have been considered in more detail in literature on organizational learning, or to study the basic cognitive mechanisms at work during the learning process itself. Our research aim can be defined as being in close symbiosis with the hypotheses formulated by Watson (2000, 2001a) and Watson and Harris (1999) on managerial learning: hypotheses which lead us to the possibility of
learning managerial competencies both before and after assumption of the managerial position itself. The emergent manager concept proposed by Watson and Harris (1999) seeks to specifically illustrate that there is no precise ‘moment’ in which one becomes a manager. Learning managerial skills continues long after actually being made a manager, as one reviews and alters one’s own method of working within the organization throughout one’s career.

Method

The study has been conducted using a qualitative approach, and has been based on the narrative interview method aimed at gathering learning stories relating to work experiences, involving episodes which have proved themselves particularly significant in terms of the learning potential that has emerged.

The use of the narrative paradigm for research within organizations is today gaining widespread favour in the academic world. This success is the result of the integration of two different trains of thought. On the one hand are those who highlight narration as being the privileged form of one’s own personal construction and expression: among others, McIntyre (1981) talks of the ‘storytelling animal’; Fisher (1984, 1987) states that as ‘homo narrans’ each individual possesses the natural capacity for recognizing the coherence and accuracy of stories; Bruner (1990, 1991) and Pentland (1999) claim that individuals organize their personal experience in the form of stories, and they re-propose the concept of narrative knowledge previously proposed by Lyotard (1979); and Polkinghorne (1988) analyses the production of coherent frames which integrate individual events and create meanings. On the other hand there are those who interpret work organizations as being narrative artefacts, the result of a combination of narratives relating to ‘what’, ‘who’, ‘how’, ‘why’, and so on, formulated and circulated by the organizational actors. For example, work contexts are described by Boje (1995, 2001) as forms of collective storytelling. While Gephart (1993) and Weick (1995) consider stories as being the instruments that give sense to organizational events, Wilkins and Thompson (1991) suggest that narration helps organizational actors to map out their actual working situations.

The convergence of these trains of thought has led to increasing faith in the possibility of acquiring knowledge by gathering together organizational stories (Cortese, 1999). While a story is the most appropriate vehicle for the representation of events within an organization (Czarniawska, 1997a; Van Maanen, 1988) it also contains all those perceptions, opinions, evaluations, and so on that the researcher is interested in discovering by providing an insight into the ‘truth’ of what individuals say about the organization (Czarniawska, 1997b). We can in fact find many authors who have relied on stories in order to explore the various themes relating to work experience within organizations. The most significant studies in the past decade have focused on organizational identity (Czarniawska, 1997b; Humphreys and Brown, 2002), culture (Hansen and Kahnweiler, 1993), leadership (Gabriel, 1997), learning (Watson, 2001a), conflict (Boje, 1995, 1998, 1999, 2001; Brown, 1998), merging (Vaara, 2002), and emotion (Gabriel, 1993, 1995).
In the case of our own study, aimed at tracing the learning experiences acquired during one’s working life, the use of stories has proved advantageous for two different reasons. In the first instance, one of the characteristics of stories (Gabriel, 2000) is the attribution of intentionality (agency) to the protagonist, described as ‘active, purposeful, and conscious [...] capable of being an agent’ (p. 39). The fact that these stories highlight this sense of intentionality has proved important for our study as it has made it possible to gather a greater number of references to the learning theme. In other words, this means recognizing the times when self-directed learning experiences have been acquired during the course of one’s work, thereby avoiding any automatic and exclusive reference to institutional experiences, such as formal classroom training or coaching by superiors. This risk is always present in research on learning: as highlighted by Antonacopoulou (2001, 2002), commenting on the results of a study conducted in the banking sector, those interviewed may tend to declare that ‘you don’t learn on your own’ and that ‘it is the organization that makes you learn’, paying homage to an organizational culture that takes the bond between training and learning for granted.

In the second instance, as Watson (2001b) observes, stories tend to bind together a whole sequence of actions and events assuming the form of an ‘ongoing process’, similar to that which characterizes the phenomenon under study. In this context, the use of stories to collect learning experiences helps to facilitate recollection (Tsoukas, 1998): the story acts, in fact, as a container with the capacity to collect the specific procedural nature of the learning experience itself as well as taking into account the vast and highly diversified combination of elements that have contributed to learning itself.

Therefore, to sum up, story analysis has made it possible to:

- gather not only the results but the actual characteristics of the learning process;
- prompt memories of self-directed learning experiences;
- recognize the contextual conditions which have either helped or hindered learning.

These advantages fully justify including the narrative interview among the learning research methods used, such as observation, diaries, and the in-depth interview (Abma, 2003; Brookfield, 1986; Cranton, 1997; Taylor, 2000). In fact, we believe that, in the case of research within organizations aimed at exploring the learning that occurs during work activities, the narrative interview is more practical than observation (a method that is chiefly employed by studies conducted in a formal setting within a restricted temporal dimension: classrooms, workshops, mentoring, etc.), and also better than diaries (which are often neglected due to the modern-day pressures of work, especially the higher the position of the individual within the organization). Furthermore, unlike the in-depth interview, the narrative interview not only facilitates the procedural orientation of thought, thereby allowing the interviewee to recognize both ‘how’ as well as ‘what’ has been learnt, but it also maintains a specific reference to the ‘facts’, thereby giving the researcher an insight into the situation as seen through the eyes of the subject (Denzin and Lincoln, 1994).
The Actors

The research sample was made up of 24 people representing 24 ‘cases’ of learning in the course of their working life in an organization on which analysis could be conducted of how learning occurred. In accordance with the exploratory objectives of the research, these people were identified in order to obtain the maximum heterogeneity in terms of their organization of origin, hierarchical level and sex. More precisely, as shown in Table 1, the people come from four different types of organization and occupy two different hierarchical levels.

The criteria for selection of the interviewees included, on the one hand, at least 20 years of work experience, and on the other it was decided not to include people who were directly involved in teaching activities. This choice is related to the desire of the research group to verify to what extent learning was a possible mode of interpretation of one’s own experience for those to whom learning itself was not a part of their profession.

Among those with these characteristics working within each organization, the names of the people to be interviewed were chosen at random until the pre-set number of 24 was reached. The willingness of these people was then verified both in terms of their desire to contribute to the goals of the research and the possibility of meeting the interviewer four times a month. In the seven cases in which the person was not available, the selection was repeated, trying to keep the heterogeneity of the sample as high as possible.

Finally, it is worth noting that although the stories collected refer to the entire working life in organizations of those interviewed, the research did not intend to trace a historical line. Although past experiences were collected and the interview was divided into a number of meetings in order to facilitate the retrieval of material, the transformation of a variable over time (see Antonacopoulou, 2001) was not kept under control: the focus was more on taking a ‘snapshot’ of the most frequent forms of learning within the selected sample.

Interview Outline

Twenty-four interviews were conducted over a 6-month period, lasting 8–10 hours each. The first four interviews made it possible to define the conceptual field of reference and the input to be used in subsequent interviews, and to harmonize

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<thead>
<tr>
<th>Table 1</th>
<th>Profile of research sample</th>
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<td></td>
<td>White collar/middle management</td>
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<tr>
<td>Private industrial organization</td>
<td>1</td>
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<td>Private services organization</td>
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<td>Public administration</td>
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<td>Public health body</td>
<td>1</td>
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<td>Total</td>
<td>6</td>
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11 13
the working methods of the four researchers, while the other 20 interviews made it possible to create and progressively expand the research database.

Each interview took the form of a preliminary meeting (which in certain cases was by phone) aimed at presenting the research objectives and the definition of the working times and methods, and assessing the person’s cooperative potential, which was subsequently followed up by four working meetings lasting 2–3 hours, at intervals of about one week each (at the interviewee’s working premises), during which the actual study material was collected. The first of these four meetings was dedicated to the definition of the interview’s objectives and the reconstruction of the most significant stages of the interviewee’s professional life, while the second and third meetings focused on the actual recording of the stories. The last meeting concentrated on a series of discussions and assessments of the themes previously covered, starting with a kind of learning ‘balance’ of the professional life of the interviewee.

The outline of the interview was based on a number of stimuli-questions (Figure 1), which facilitated the interviewees’ recollection of learning experiences.

As shown in Figure 1, these questions do not structure the interview as a ‘request–response’ monologue, which would have been adequate for investigating opinions but not for collecting stories about learning, but as a ‘natural conversation’ (Abma, 2003: 227) characterized by dialogue and collaboration (Larson, 1997) in the course of which the most significant episodes of learning experienced at work in organizations gradually rose to the surface of their memory.

During these meetings, the interviewer did not simply play a passive role, limited to recording the statements of the interviewee. On the contrary, although the interviewers tried to avoid influencing the content of the stories in any way, they consciously contributed to building up research material (Gabriel, 2000; Holstein and Gubrium, 1997; Lieblich et al., 1998) by concentrating on supporting the story

![Figure 1 Stimuli-questions used in the different meetings](http://mlq.sagepub.com)

<table>
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<tr>
<th>First meeting</th>
<th>What have the stages of your professional life been? Imagine that you had to write a book (or make a film) on your professional life. What would the main chapters (or scenes) featured in the book (in the film) be?</th>
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<td>Second and third meetings</td>
<td>I would like you to tell me about the main episodes/occurrences in your professional life that strike you as being particularly ‘memorable’ in terms of your own learning, in other words ‘the occasions in which you learnt’? What you have just told me appears to me to be a story, do you think so? Do you think that there could be an apt title for it?</td>
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<td>Fourth meeting</td>
<td>What factors served to facilitate learning? What factors impeded it? What have you learnt about the learning process? What would you have liked to have learnt that you have not learnt? What/how have you unlearnt? What/how have you taught and to whom? What/how much/how have you learnt during training? What would you still like to learn?</td>
</tr>
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(by prompting aimed at focusing, deepening, expanding, etc.), as well as optimizing cooperation, open-mindedness and research for the sake of mutual understanding. In this sense, an attempt was made to express the maximum empathy possible, paying constant attention to the emotions and anxieties that the relationship with the interviewer aroused as the relationship progressed (for example, the worry about disappointing initial expectations, the desire to use appropriate language, the fear that what they were saying was not very significant or would be made public, etc.) and contain them through reassurance (recalling that, for instance, their story was important and comprehensible or that the information would be used anonymously and under pseudonyms).

Each interview was tape recorded, totalling over 200 hours of recording time, with the interviewers also taking notes on the various learning stories told by the interviewees and the key passages of the replies to their final questions. These notes proved very valuable during the subsequent meetings between the researchers, making it possible to compare the interview content of each, even without the definitive transcription.

**Analysis of the Material Collected**

The transcription of the 20 interviews generated 1200 pages of narrative, forming the basis of the research data. The database was read in two stages: first, priority was given to the identification of the actual learning stories and their recording, and subsequently analysis was made of the contents of the stories themselves.

In order to identify the stories and extract them from the rest of the spoken material making up the interview, three main types of information were used: the impression gained by the researcher during the course of the interview (and recorded in written notes), sometimes verified with the interviewee at the end of the account (see Figure 1), the presence of verbal signals of the ‘beginning’ and ‘ending’ of the story (for example a phrase such as ‘I will clarify this concept with an example’) and the description of a ‘setting’ or of the ‘figures’ of individuals, which served to introduce the story facilitating its subsequent understanding.

On completion of this phase, the stories identified were analysed on the basis of an ad hoc record sheet consisting of seven fields (Figure 2): as well as providing a database which was both easy to record and consult, this sheet also made it possible to identify the most interesting research elements, in relation to the learning objects (‘what’ is learnt) and learning methods (‘how’ something is learnt) involved. During this story identification and analysis stage, the researcher alternated individual work sessions with group work sessions, in which the work undertaken individually was presented, discussed and appraised.

The comparison of the collection of story sheets was then made according to what was indicated in the field ‘learning method’ and the presence of the most frequent methods was verified.

**Results**

These 20 interviews yielded 282 stories that described episodes in which the subjects were able to learn. The study material was vast and heterogeneous and
the researchers attempted to identify patterns in it by identifying the most common learning processes that emerged. As a whole, eight different modes of learning emerged, which Table 2 presents in the order of the percentage of interviewees who made reference to them through the stories narrated.

Of these, we wish to concentrate on the modes that were not only the most original and unpredictable, but also referred to by 100% of those interviewed: teaching. In this sense, as can be seen from Table 2, to the question ‘What are the occasions on which you learnt?’ all 20 people said, among other answers, ‘I learnt through teaching’. During the fourth interview, one person said:

If I go back over my learning, apart from formal training courses which have certainly marked my career in the company, especially in symbolic terms, I feel that it was the need to guide young members of staff who worked with me over time and to whom I wanted to teach things that have determined the most significant learning and changes in my way of acting. It might seem paradoxical, but I think that I learnt much more than I taught in those periods; in a certain sense, it enabled me to learn without ever stopping at the point I had reached.

We pinpointed 33 learning stories that describe the assumption of a role as teacher (in the broadest sense of instructor, tutor, coach, mentor, expert, etc.) of

<table>
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<th>Mode of learning</th>
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<tr>
<td>Teaching</td>
<td>100</td>
</tr>
<tr>
<td>Experience (attempts/successes/failures)</td>
<td>85</td>
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<tr>
<td>Experience of others</td>
<td>85</td>
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<tr>
<td>Classroom training</td>
<td>75</td>
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<tr>
<td>Help/advice of colleagues</td>
<td>60</td>
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<tr>
<td>Coaching by superiors</td>
<td>45</td>
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<tr>
<td>Reading of books/manuals</td>
<td>35</td>
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<tr>
<td>Participation in reflection/discussion groups</td>
<td>25</td>
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other individuals within the company organization (bosses, colleagues, staff, clients, suppliers, etc.) as an experience with high learning potential.

The teaching process often takes the form of a ‘return to learning’, to the benefit of both the pupil and the teacher. This fact recalls the words used by Kouzes (2000) in describing his own professional and personal development: ‘the best way of learning something is teaching it to somebody else’ (p. 59).

The famous Brazilian pedagogist and educationalist Freire (1970, 1973) also forcefully expressed this idea, in the proposal of a teaching technique in which both the educator and the person being educated, being equally free and critical, are able to learn together while working side by side, thereby becoming conscious of the situation in which they live. In this context, teaching becomes a two-way process, and the classical teacher and pupil roles disappear:

Through dialogue, the teacher-of-the-students and the students-of-the-teacher cease to exist and a new term emerges: teacher-students with student-teachers. The teacher is no longer merely the-one-who-teaches, but one who is him or herself taught in dialogue with the students, who in their turn while being taught also teach. They become jointly responsible for a process in which all grow (Freire, 1970: 53).

The individuals enter into conscious relations that produce something totally new for each one. The origins of this line of intuition go back much further and can be found in the writings of Dewey (1933, 1938), who had already clearly moved away from the position in which the pupil was considered as a ‘container to be filled’, or a ‘tape to be recorded’ through the teacher’s action. The input provided by the teacher must instead be seen as a point of departure that the pupil can use as a launch pad for the development of an individual plan of action, taking into account the contributions from personal experience, taking on forms which the teacher could not have foreseen and which must be perceived by paying attention to what the pupil produces independently. The teacher therefore constitutes the starting point of a process which takes the form of a mutual ‘giving and taking’, in which the teacher gives but is not afraid of taking and, in the same way, the pupil takes but is not afraid of giving.

During our study, this potential was found in relation to different organizational contexts, working operations, means of interaction between teacher and pupil, teacher characteristics and pupil characteristics. In other words, it appears to be a possible feature of most teaching relations if not all of them.

The analysis of 33 stories in which the means of learning had been classified on the record sheet as being ‘learning through teaching’ has enabled the identification of three principal processes which enabled learning by teaching: observation, listening and experimentation (Table 3). Each of these means will be described with the aid of excerpts taken from the stories themselves.

**Observation**

In relation to observation, five stories were collected during which the learning experience of the teacher derived from the possibility of observing the pupil.

I was already the Branch Manager but still responsible for the Credit office, and I had at that time a young man under me called Massimo who we wanted to make the office
I had taught him to compile the list of parameters on the basis of which the system establishes the risk index on which the decision to make a loan is made. Some of these parameters require research, while others are obtained by actually interviewing the client. This is what is called an ‘investigation’, the most delicate aspect because it is important not to irritate the customer by making him feel pressured. The time came for the young man to begin his first customer interview; I recall that this was a farmer who wanted a hundred million lire to double his animal stock. I sat down next to him, waiting for him to proceed as I had shown him when he had observed me. He began the interview on such a gentle and polite note, such as I had never seen before, especially as I tended to be much more direct with my questioning. He asked him how his farm was going, what he expected to be able to earn, if he had already seen others do the same, what his children thought about it . . . all questions which are not actually included in the list but which all help to make him feel at ease and make him feel that his needs and plans are understood. He then launched his attack with more complicated questions concerning the time for paying back the loan, the value of his purchases, etc., and the farmer, whom I remember as being very suspicious, became very explicit in voicing his worries and the risks involved to such an extent that we were able to get him to give up his intention of investing on such a scale. I learnt because I saw a new way of running an ‘investigative’ interview: if you show trust in people, i.e. you let them explain their ideas and you are willing to see things from their point of view, then it is more likely they will then show trust in you and will therefore be more prepared to believe you when you explain your reasons and provide your advice. In other words, although truth can be obtained under interrogation, you will later have, especially with some people, much more difficulty in convincing them. Now I use this style on many occasions. (Story 1)

I was teaching a colleague, who was quite new to the office, how to receive visitors: these are rather particular people for whom recognition is very important. It was at the time that L.B. who was a very particular kind of person, came to us frequently, very demanding and also very easily offended. This colleague and I were in the office, I was trying the help her, in that when somebody came in and I realized that my colleague had not recognized them, I tried to intervene by saying ‘good day Mr . . . go ahead and see my colleague’ in order to avoid her the embarrassment of having to ask their name. On that occasion, Ms L.B. entered, and I was unfortunately on the phone at the time, and my colleague had the bright idea of asking her name. L.B. reacted by making a big scene. The negotiations also went badly and we were unable to make a deal. I learnt that relations are built up slowly and are destroyed easily, a mere oversight, distraction or misunderstanding may ruin everything. After this I have always tried to meticulously follow up the handling of all relations, as the effort required in trying to remedy something that has gone wrong is much greater than the effort required beforehand to ensure it goes right. (Story 2)
In certain cases the pupil has put into practice precisely what the teacher had
told him, providing the teacher with an opportunity of mirroring himself, and
seeing himself at work, as if it were in fact actually him. In other cases, the pupil
acted differently from the teacher, in that he did not follow the input of the
teacher exactly. The teacher was thereby provided with an opportunity to compare
himself with a different model to his own, with which he was not familiar and
therefore new: a model which, whether it was successful or not, allowed him to
assess his own professional behaviour.

In the first story, the pupil conducted his interview with the client in a highly
innovative manner compared to the input of the teacher, and his success (in the
realistic reduction in the loan sum requested) convinced the teacher to recognize
the limitations of the effectiveness of his own interview style. In the second story
the pupil committed the error which was most feared by the teacher and the
consequence (the failure of the deal with the customer) was so unpleasant as to
compel the teacher to review her own approach to negotiation situations, and
to further perfect the attention given to detail to avoid any kind of error.

There are then cases in which the learning process occurred when the teacher
was observed by the pupil.

I was the tutor of a group of newly qualified staff. We used to meet up twice a week:
once on Mondays for a briefing on the techniques to be experimented during the
course of the week, and the second time on Fridays in order to discuss how it went. The
most extraordinary things happened on Fridays: they would talk of all the difficulties
encountered, in the application of protocols, and they asked me to try myself and
provide a demonstration of what they should have done. I remember the time when they
asked me to check the application of a catheter cannula on a patient with an infection.
We tried it on a dummy. One of them stopped me. They said that I rotated the cannula,
I replied ‘no I don’t rotate it’. No manual mentions rotating it. They asked me to repeat
it again, slowly, I tried not to rotate but I did in fact rotate it. Although no treatment
procedure manual mentions rotating it, they were right. I was doing things differently to
the manual. I realized at that time that part of my manual ability depended on rotation
during insertion . . . something which I had never been taught and which I did not teach
others. (Story 3)

In total, the learning of the teacher benefitted from pupil observation on six
occasions. In four cases, the pupil noted an error on the part of the teacher, which
in some ways modified their own actions. But two stories, one of which is given
above, describe situations in which pupil feedback allowed the teacher to ‘reclaim’
elements of his own professional practice (such as the rotation of the cannula
during insertion in story 3), which had become so automatic as to escape any kind
of check, and which therefore missed the opportunity of being transmitted or
shared during teaching. The fact of acting differently to the rules laid down in the
manual shows how in the course of acting everyone gradually adapts and rewrites
their ‘own’ manual, progressively and unconsciously differentiating themselves
from the ‘original’ manual: teaching is the occasion to review this ‘internal
manual’, which would otherwise remain hidden and inaccessible even to its
author. In short, observation by the pupil may make it possible for the teacher to
acquire full awareness of his own professional practice, as the pupil is able to note
any discrepancies or oversight that makes what the teachers says different to what
he actually does.
Ten experiences of learning from observing benefited from the possibility given to the teacher to observe himself.

I found myself with a young employee, Paolo, to whom I had to teach all the management control procedures. The job consisted in entering each accounting item, both in terms of revenue and expenditure, into the correct category. As there were over 200 categories to bear in mind, it was not possible to refer to the manual each time. When we started, I immediately made a point of saying that speed is of the essence and that it is necessary to combine both precision and speed. After making about 20 data entries I stopped, he had not asked me anything, but it was I who began to have a whole series of doubts, doubts on the correctness of the categories that I used for entering a certain figure . . . I went in search of the manual, we read the specifications together. Everything was correct, the problem did not lie here. The problem concerned other categories that I used in the following days, which I realized that out of habit I tended to group together under a single category thereby losing out on finer detail. I wanted to convey the feeling that in the work of the controller it is not possible to be too sure of oneself, and that one shouldn’t be embarrassed to look something up in the manual. The fact that I myself consulted the manual for the first time in many years was the result of the fact that I had seen myself from the outside and recognized my own superficiality. After this I became more meticulous, and I accepted the fact that it is not always possible to remember everything. (Story 4)

On such occasions, the teaching commitment provided a stimulus for recollecting and reorganizing one’s own knowledge, which ended up in the recalling of that which, although known, had been forgotten through lack of use. In the same way, certain stories illustrate the possibility of recalling from memory certain elements which one did not realize were known because they were in fact ‘over used’, in that they had become part of the unconscious routines which guide actions: this can be termed tacit knowledge (Eraut, 2000; Hastsopoulos and Hastsopoulos, 1999; Lam, 2000; Sternberg and Horvath, 1999; Willingham and Goedert, 1999). It is no accident that literature on organizational learning and knowledge management includes the concept of knowledge-creating learning (Nonaka and Takeuchi, 1991, 1995, 1996), with the objective of differentiating between tacit knowledge and explicit knowledge and of highlighting how the passage from the first to the second constitutes an important form of learning for organizations. Explicit knowledge is characterized, in fact, by the fact that it can be codified, communicated and transferred, and thus be independent of the individual: this is, in other words, fully fledged ‘organizational’ knowledge.

In the stories collected, this possibility of ‘looking at’ one’s own knowledge is sometimes linked to a feeling of inadequacy: in the case of the story described, for example, the interviewee recognized his own superficiality in the simplification of filing categories, and therefore the need to be more precise and to make use of operational manuals when memory proved insufficient. In other words, the need to acquire full awareness in relation to the ‘discipline’ to be taught provides an opportunity to consider those details that had in some way become buried under routine, thereby recovering the possibility for control and change of the procedures on which one’s activities are based.

The motivation for ‘returning to one’s books’ is particularly evident on those occasions when observation led to the realization that one’s own knowledge was in some ways obsolete. In such cases the (bitter) realization of not having all the
necessary resources to meet the knowledge requirements of the pupil prompts the search for further notions by consulting an external source (reading materials, a colleague, a specialist, etc.). It is for this reason that observation of oneself was related to reading documents on two occasions. One interviewee told us:

This happened when I had to act as a tutor of a new employee in the field [...]. I needed to relate my work experience, and as I needed to rationalize and theorize it, I obviously attempted to go into more detail [...] in order to explain it. This led me to go into certain aspects and to return to the ‘sacred’ manuals in order to refresh my memory on some of the many procedures that had come into use, or which had been modified, and which I had previously ignored, relying solely on my experience. (Story 5)

Listening

Listening, in the sense of listening to the pupil, has also proved an important aspect in various experiences during which the teacher benefited significantly in terms of learning potential.

Nicoletta was working with us organizing a convention. I was teaching Nicoletta how to plan a screen projection system, we had video camera links to film the speaker and the halls, with a server for live access to the network, with portable computers for the presentations of the speakers and an overhead projector for the speeches not transferred onto file. Correct planning is essential to prevent the risk of interference between input data, as the projection system has a single parallel port through which the various links are connected. Nicoletta asked me why we hadn’t thought about reducing the input sources to two instead of four: the server for network access and the speaker’s presentations, the video-camera for filming the speaker and the projection of the speeches not transferred onto file. Why don’t we do this? There is no reason why, we have never thought about it, we have always worried about solving the problem relating to source interference, rather than the more fundamental matter of reducing it. This is a situation in which I learnt two things: the need to plan according to the principles of simplicity and economy [...] The second thing being to allow people to think about the solution to problems on their own, even to those problems for which I already have a solution, because even if their solution proves better than mine once out of a hundred times, I don’t see why I should ignore the chance. (Story 6)

I was employed in the department following the travel agency bookings which are entered in our database. Every spring, a large number of young employees who required training arrived and I was the tutor for the new arrivals that year. There was a man called Mauro, and we didn’t get on from the start. He said that the work was absurd, that as we were in the year 2000 each agency should have been able to directly enter our database and enter their own bookings via the internet. We had naturally considered this option but the IT systems management had rejected this idea, being afraid of the risk of the database being violated, even though certain competitors were already doing it. The conflict was continuous, he called me the ‘dinosaur’, claiming that I was frozen in the stone age, and that I preferred doing this by hand rather than automate it. His colleagues gave him the cold shoulder because they feared for their jobs, and being replaced by the internet, but he used this isolation to his advantage claiming that he was the only one with the courage to go against his bosses, thereby showing himself to be even harder. I also tried to avoid him, but when I was up against him face to face, I realized that he was right. I tried to make him see that companies work at a different pace and that it was impossible to change everything at once. Obviously nothing
changed in that year, only the year after did part of the booking operation go onto the internet, proving highly popular with the agencies and saving everybody time and money. After four months of the eight of his contract, Mauro gave in his notice; everyone breathed a sigh of relief and so did I. But he was right, the change was feasible, but we as a company are very conservative, a kind of state-controlled body, and highly provincial in nature, we were always afraid of biting off more than we could chew, and consequently always arrived late. (Story 7)

The eight occasions on which the teacher’s learning was triggered after listening to the pupil are characterized by the emergence of a true ‘learning pair (or group)’, linked to the desire to use the experience acquired as an opportunity for comparison and feedback on the method of conducting professional operations. This is the case in the story of the young trainee Nicoletta who proposed a new solution to the problem of multimedia links for the conference, resulting in a situation in which both became committed to the search for maximum simplicity.

In other cases, listening did not generate any kind of change, but made it possible to become aware of certain ways of being and doing that are so ingrained as to be almost unconscious. It is on these occasions in particular that listening has proved most difficult: especially in those cases in which the pupil voiced problematic issues, thereby raising doubts, fears or anxiety about one’s own professional competence, personal attitudes or values. This was the case in the relations between the young Mauro and his tutor, who found himself the target for accusations, although at a later stage recognized as legitimate, relating to his own personal means of interpreting his own managerial role within the organization.

Experimentation

On four occasions the teaching commitment stimulated the teacher to experiment with an alternative working method. This experience not only proved significant in terms of individual learning, but often led to innovation for the entire organizational unit to which he or she belonged.

Following the merger, which occurred during the Christmas period, the entire agency procedure for control operation data entry changed . . . they first gave the manuals and the connections to the new system to us Directors to try out and then teach our Vice-Directors. But my Vice-Director has a lot of problems with computers and the new procedures were ‘devised at a high level’, so I asked myself whether it would not be possible to simplify them. I re-did the data entry windows creating connections between the ‘official’ windows and the new ones, using a much simpler reference system and eliminating any repeat operations. This transformation was so successful that I asked a colleague at the central Agency to try it as well, and he was very enthusiastic and wanted it immediately. Now all eight local agencies use it . . . thanks to my computer illiterate Vice-Director everyone now works more rationally. I also realized that we often expect too much of inter-personal relations, expecting more than they can give us. Not everybody has equal ability, it is as if one were a Ferrari and one a Cinquecento: why demand the same things of a Cinquecento as we would of a Ferrari? We sometimes ask too much of others, as if they had four gears available and you press them to use a fifth. In many cases there is no fifth gear. I therefore realized that the best thing is not to insist, and try instead to be simpler ourselves. It is as if we talked a different language to
someone who doesn’t know it, no amount of shouting or banging of fists will help. (Story 8)

As this story on the simplification of the data input interface demonstrates, the most relevant aspect was not the actual acknowledgement of one’s own inadequacy in the use of the interface, but rather the realization that the interface itself failed to meet the needs of the users due to its intrinsic complexity. The simplification shows how individual learning was immediately transferred to the organization itself, and was at the same time an opportunity to recognize the professional limitations of staff and to rethink one’s own approach to doing things.

Summary

An analysis of Table 3 shows how it is possible to distinguish between learning methods which tend to give priority to the acquisition of knowledge from an external source and means of learning identified in terms of the creation/discovery knowledge (Engestroem, 1999; Fruin, 1999; Lei et al., 1999). In the first set, consisting of 19 occasions in which the teacher observed the pupil, was observed by the pupil or listened to the pupil, the teaching source is external to the subject, while in the second set of the 14 occasions on which the teacher observed himself, or experimented with an alternative method, the source may be described as being internal. In this sense, it is significant how the teaching experience made it possible to activate both methods. In other words, the teaching situation appears to provide a high potential for learning, as it not only serves to bring two or more individuals into interaction (i.e. activating exchange and comparison), but also provides an opportunity for the initiation of an inner dialogue, in the form of the exploration and recovery of the elements on which one’s own working approach is based.

In this sense, ‘dealing with’ learning, even if it was someone else’s learning, was the occasion for the interviewees to acquire greater awareness of the learning process itself: this awareness made them not only better prepared for their role as teachers, but also enabled them to transfer to themselves (to their own way of learning) the discoveries that gradually emerged, in the end nourishing the ability to learn to learn (Claxton, 1999; Looy et al., 2000).

Interpretation

These considerations, which all back up the conviction that teaching is an experience with a learning potential, do not however explain why learning actually takes place. If we abandon a purely descriptive viewpoint and look at things from the point of view of interpretation, we shall now seek to answer the question ‘Why is it that learning occurs through teaching?’ The hypothesis we propose takes three aspects into account: teaching is a moment of interaction with the difference that, on the one hand, it increases reflexivity, and on the other it tends to break down the resistance to change, while at the same time increasing awareness of ‘not knowing’.
Teaching Means Encountering Diversity

Many stories about learning from teaching highlight the importance of teaching itself, in terms of the opportunities it provides for encountering diversity. Of those examined, stories 1, 2, 6, 7 and 8 certainly confirm this.

But what is the diversity that generates learning? And based on what kind of process?

By examining the broader body of narrative material collected, consisting of the 33 different stories, it is possible to identify two main types of diversity against which the subjects measured themselves during the course of learning experiences through teaching:

- the *interpersonal diversity*, based on the intrinsic unique nature of each individual, which in turn takes the form of differences in terms of competency, attitude, sensitivity, culture, role, status, power, etc. This is the ‘distance from oneself’, perceived in relation to individuals with whom acquaintance is made within the organization (bosses, colleagues, collaborators, clients, suppliers, etc.);
- the *cultural diversity* existing in the macro and micro working environment, which takes the form of a series of strategies, procedures, rules, customs, rites, ceremonies and values which have been built up and ingrained in each specific collective environment.

Aside from this initial and partial classification of the differences, it is also revealing to point out that encounters with diversity do not lead to any kind of learning per se. For learning to actually take place, the individual must have covered a route marked by two steps.

The first step implies that the initial diversity, almost always considered as a destabilizing factor, has to be recognized as being a useful resource for improvement: a transition from the *discovery of diversity*, which sometimes appears forcefully and on other occasions reveals itself in a more gradual manner, to the *appreciation of diversity*, as a potential source of professional enhancement. During this passage, diversity changes from being ‘perceived’ to ‘appreciated’.

The second step is characterized by a radical ‘de-centralization’ of the individual: from a position of recognizing the *diversity of the other*, in which he or she assumes the role of ‘reference point’ from which to measure the outside world, to a stage of recognizing his or her own diversity, that is, *difference from the other*.

This dual level of understanding involves an important meta-learning process in which one understands that ‘the other is different from me because I am different from him or her’, in other words one succeeds in stepping back and observing oneself through the eyes of others.

As shown, this route is without doubt demanding both at a cognitive level and—especially—at an emotional level, which is part of the game of attraction/repulsion that occurs when observing everything that is different from us or which differs from our own behavioural models as present in the stories. The protagonists of these stories are themselves fully aware of the difficulty involved, and attribute an important value in terms of professional growth to the subsequent learning process.
Teaching Means Reflecting

Teaching activities, thanks to the encounter with diversity, also provide the people involved with an important stimulus for reflection; that is, the process of attributing sense to information (on themselves, on others, on the world) that emerges during the course of their experiences (Reynolds, 1997, 1998). Without reflection, this information would not be integrated in the representations and patterns built up by the individuals themselves, and would therefore not bring any alterations to their ways of thinking and acting (Boud and Walker, 1991).

The reflection that emerged during the course of the teaching experience can be regarded not so much as reflection-in-action as defined by Schön (1983), in the form of ‘conversation’ with one’s own action during its course, but rather as a reflection-on-action as defined by Williamson (1997) in the form of a ‘study’ of one’s own action that occurs after its conclusion, and which involves the appraisal not only of the results obtained but the means by which these results are achieved.

This type of reflection is found at various levels. Using (based on the observations of Hindmarsh, 1993) indicated by Reynolds’ model (1998) and in line with the research theme which resulted in the in-depth study of critical thought (Holland, 1999), these stories highlight the emergence of reflection not only in terms of the technical rationality through which the individual improves personal control of the environment (story 3 and story 4), but also a practical reflection which takes into account the values and the assumptions involved in the action (story 1, story 2 and story 6) as well as a critical reflection with the capacity to challenge the things which were previously taken for granted in a particular social or institutional context (story 7 and story 8).

These latter cases, in which ‘common sense’ (seen as the way of thinking adopted by the majority and therefore very difficult to question) was overcome, represent the starting point of a critical thinking dimension which many authors (Argyris and Schön, 1996; Holland, 1999; Marsick, 1988) consider as being essential for achieving radical change and not only of an incremental type: rejection of the most common stereotypes, transformation of the working routine, and extension of the categories that describe reality.

The literature provides different reasons that help to understand the added value provided by the teaching experience in increasing the potential for individual reflection. Direct contact with the pupil:

- **suspends action**, in that it shifts the focus of attention from ‘doing’ to ‘thinking’ and from ‘thinking’ to ‘communicating’, increasing the amount of energy available for learning (Williamson, 1997);
- **provides exposure to non-programmable problems**, forcing individuals to develop strategies which have still to be coded in the manuals, instruction booklets and organizational regulations (Reed and Antony, 1992);
- **has a social nature**, as it does not merely involve the exercising of individual thought, but puts into practice a process of dialogue and discussion (Wilson, 1994);
- **redefines power relations**, making it possible to pose questions, to make contradictions and to assess the thinking of the other party: ‘the non-hierarchical structure allows for the participant to support and confront, to learn from others and to contribute in turn to others’ learning’ (Reynolds, 1998: 196).
Precisely this support aspect mentioned by Reynolds (1998) is linked to a further potential factor in teaching: the controlling function able to mitigate the emotional fatigue of the implementation of different levels of reflection.

*Teaching Means Controlling One’s Emotion through Relations*

Raelin (2001) has underlined how reflection has a greater capacity to produce change the more it takes the form of public reflection based on dialogue, rather than private reflection based on introspection. Private reflection sometimes runs the risk of ignoring what has happened in order to distance oneself from the negative emotions that have been generated during the course of the action, while public reflection has the advantage of making it possible to recognize one’s own emotions in others and therefore to engage in a mutual support process, which thereby reduces the danger of emotions, while also breaking down the resistance that hinders analysis of the facts and the discovery of the links between events. In other words, the very fact that reflection is public makes it possible to keep attention focused on concrete experience: on the data that have emerged from the action (what has been planned, observed and experimented first hand or by others), which is useful for re-planning the action itself.

The last link between teaching and reflection therefore relates to the more subjective emotional dimension. We believe that the teaching situation, both due to the fact that it is a form of social relation, and because it is explicitly effected in order to generate learning, permits a limitation of the emotional ambivalence (attraction, seduction, pleasure and desire on the one hand and unrest, anxiety, fear and bewilderment on the other) normally associated with reflection and thereby with learning (Antonacopoulou and Gabriel, 2001). The teaching situation therefore reduces the strength of defence mechanisms, making way for change.

Certain authors have attempted to identify the emotions which come into play during the course of reflection: Brookfield (1994) in particular has identified five prevailing experiences: a sense of *betrayal* (‘I am not worthy of learning especially if learning means knowing that I don’t know’), *cultural suicide* (‘I will be different from my colleagues and will therefore be isolated’), *loss of innocence* (‘I no longer blindly believe in the power of reason’), *suspension* (‘I do not know how to replace the lost certainties’) and *need to belong* (‘I feel better if I can talk to someone’).

Reading the collection of stories, it is clear that such feelings are greatly minimized: negative emotions such as anger and fear are rare (story 2 and story 7), and even in cases in which the pupil appears to revolutionize the teacher’s way of thinking, it is the emotions of surprise and gratitude which prevail (story 1, story 3, story 4 and story 6). In other words, the subjects seem to tolerate this ‘lack of knowledge’, ‘being different’, ‘being unable to count on rationality’ and ‘loss of certainty’, and recognize the reassurance derived from the ‘sense of belonging’ to a pair (or small group) whose common objective is learning.

In the experiences described by Brookfield (1994) it is above all the sense of suspension that appears less threatening for the players in the stories collected who found themselves working as teachers. In other words, the fact of being in a teaching situation (even if the teaching took place in the working environment
and not in a training classroom) seems to have offered them a greater capacity to live with uncertainty in order to reach a different representation of reality.

In this sense, the teaching relationship, culturally defined as a place in which it is possible to produce change (Taylor, 1997), may increase the capacity of individuals to free resources in favour of thought and to ‘make a productive use of our emotional energy’ (Raelin, 2001: 21). It is possible to recognize this activation of inner forces as one of the reasons for the fact that in some of the learning stories gathered (story 4, story 7), a sensation of self-esteem and self-effectiveness has emerged (Maddux, 1999; Neck et al., 1999; Shea and Howell, 2000), which has further supported the investment made in the learning opportunities.

It is clear that the information on which our thoughts here are based is extremely limited: it is indeed true that during the collection of the stories we did not focus specifically on analysing the emotions of the people involved (asking them how they felt at those times) as had happened instead in other research whose primary goal had been to explore this dimension (see for instance Gabriel, 1993). However, this seems to us a possible area for further significant analysis. Can the teaching relationship really facilitate reciprocal learning between teacher and pupil because it represents a place that contains ambivalence and development of the negative emotions that are associated with learning? Or—as we shall discuss below—is it precisely the emotions that teaching arouses that can drive the actors to define role expectations that tend to favour conservation and confirmation rather than critical reflection and change (Currie and Knights, 2003)?

If future research gave an even partly affirmative answer to these questions, it would certainly be important to run further checks on how it is possible to foster and promote this potential present in teaching, analysing both the dimension of requirements of a subjective nature (for instance, the capacity to measure oneself against those who are different, discussed by Reynolds and Trehan, 2003) and that of the modes of the training method (for example, the use of pupils’ experience through the collection and discussion of personal cases, as proposed by Abma, 2003). It is likely, as underlined by Reynolds and Trehan themselves (2003) that it is precisely the particular features that the ‘learning community’ assumes (the characteristics of its actors, processes and the contexts in which it takes place) that represent the conditions capable of influencing the emotional dynamics that teaching arouses.

Does Knowing that We Don’t Know Help Learning?

Another reason that makes teaching a high learning potential process relates to the feeling of ignorance that the teacher experienced in many of the stories (story 4, story 5). As Socrates acknowledged, it is the brilliant philosopher, more than his pupil, who knows that he does not know. While the teacher organizes what he knows to prepare to teach it, he begins to recognize an ‘empty space’ in his representation of reality; those questions without answers, those unasked questions, answers that are wrong, imprecise or obsolete. This space is required in order to absorb new knowledge, for which there would otherwise be no room. Being conscious of ignorance is a precondition to learning, and we must point out that ignorance in itself is not sufficient, but there must be an awareness of this
ignorance. Without awareness, the ‘empty space’ exists, but not the ‘demand’ (the receptiveness, the will, the desire) to fill it. The teacher learns as, being aware of his ignorance, he or she wills him or herself to learn and initiates an active knowledge search.

This consideration is however not new in literature on managerial learning. Nystrom and Starbuck (1984), and more recently Antonacopoulou and Gabriel (2001), have all previously highlighted the role of ignorance as a precondition to learning within organizational contexts: ‘anxiety may generate hope, motivating an individual to explore the possibility of fulfilling intrinsic (e.g. satisfying curiosity, pursuing something of interest) and extrinsic values (e.g. promotion and reward, contributing to corporate objectives)’ (Antonacopoulou and Gabriel, 2001: 444).

In this context we wish to point out that our study has shown that it was precisely this possibility of assuming the role of teacher that prompted and fostered the awareness of ignorance in the managers we interviewed. Teaching therefore signifies assessing one’s own learning and one’s own method of learning. In this sense, the ‘involvement’ in teaching provides the subjects with an opportunity to acquire a greater understanding of the learning process: an understanding that both helped to prepare them for their own teaching role, and allowed them to transfer to themselves (and their method of learning) all the new discoveries, thereby helping them to learn how to learn (Claxton, 1999; Looy et al., 2000). This fact is further confirmed by the four stories in which learning was helped by teaching, but which did not result in the broadening of personal skills, but rather served to transform the learning method in terms of an increased ability for the monitoring and supervision of the learning process itself; this can be said to be a meta-cognitive level (Hertzog and Hultsch, 2000; Kelement, 2000; Kuhn, 2000).

When Teaching Does Not Help Learning

With the observations we have made so far, we certainly do not want to convey the idea that a direct bond between the experiences of teaching and learning can be taken for granted. Our research has highlighted how teaching is an activity with high learning potential: one can learn through teaching, but this does not always happen. Numerous studies have, in fact, been published that demonstrate how teaching can represent an obstacle to learning (Currie and Knights, 2003; Grey et al., 1996; McMaster, 1996; Reynolds, 1999, 2000).

Currie and Knights (2003) underline, for example, how the situation of teaching can be represented collusively by those involved as an occasion for the transfer of knowledge and skills from the teacher to the pupil. Thanks to their authority and competence, the teachers control the process and can establish what is right and what is wrong, while the pupil remains a passive spectator of what happens and is simply called on to ‘learn by heart’ what is presented by the teacher in order to be able to ‘pull it out’ when required (Ebel, 1969; Freire, 1970).

Both teacher and pupil can draw psychological benefit from a similar definition of the teaching situation: the teacher has a shelter from the risk of being questioned by the pupil or coming into conflict with colleagues if he or she were to change opinion because of the influence exercised by a pupil; on the other
hand, the pupil attributes ‘enlightened superiority’ to the teacher (Currie and Knights, 2003: 40), shirking responsibility, and becomes convinced that certified and therefore unquestionable knowledge is offered.

It is evident that a teaching relationship based on this premise is unlikely to produce learning for the teacher, who, on the contrary, will be able to use it for reassuring confirmation of what he or she believes.

For this learning to occur, McMaster (1996) states that the teacher must ensure that for each input provided, a cycle of free interaction between pupils is allowed to take place. In the same way, if it is the pupil who makes the proposal, it will be the teacher and other pupils who will contribute. In brief, everyone asks questions and there is the chance to tackle themes suggested by anyone: this encourages the pupils as much as the teacher to develop their critical awareness, leading them to adopt new ways of thinking and thus of acting. As McMaster (1996) points out, teaching that neglects dialogue and bases itself exclusively on one-way teacher-to-pupil communication can be an obstacle to learning, as shown by the experience of the pupils who accuse their teachers of being unable to listen to and understand them. This is a style already criticized by Dewey (1933), who rejected ‘containers to fill’ or ‘tape to be recorded’ as metaphors to describe teaching.

In brief, it must be recognized that the situation of teaching may facilitate but at the same time hinder learning, in other words produce exactly the opposite result to the one highlighted by our research. What variables can favour one rather than the other outcome? Bearing in mind the stories collected, we feel we can identify at least three aspects that had a positive impact in supporting the learning potential intrinsic to teaching:

- the desire to use all one’s experiences as occasions for enriching and refreshing one’s own vision of the reality in which one lives and one’s strategies of action;
- the possibility of working in an organization in which error and change of opinion are not considered negatively but appreciated;
- the limitation of the number of pupils: working in pairs or with a small group of pupils reduces the level of anxiety in the teaching situation.

As can be seen, these aspects are positioned on three different levels: individual (the general values and attitudes that guide one’s way of being), organizational (the culture that typifies one’s work environment) and managerial (the real ways in which training is designed in a given organizational context). These are undoubtedly only some of the variables that influence the meaning that teaching assumes in a given organization. However, what we want to underline is the importance of being concerned in every specific situation to check on what level it is possible to intervene on to ensure the highest probability that teaching is also a learning opportunity for the teacher.

**Conclusion**

The main result of the study may be summarized in the formula ‘one learns by teaching’: a means of learning which does not, however, have its origins in either the wider formula of learning from experience or that of learning from mistakes
(Knasel et al., 2000). Unlike learning through experience, learning through teaching involves the presence of a ‘third element’ (the pupil) who intervenes in the relationship between oneself and one’s own way of being and of acting within the organization: a ‘component’ which contributes to the construction of learning itself, being able to activate the processes of observation, listening or experimentation previously described. Unlike learning by mistakes, learning through teaching makes it possible not only to focus on and transform the actions which have not given the expected result but also—and above all—those that have become so automatic that they escape all conscious control.

Aside from this consideration, we would now like to back up the appeal made by Merriam (1993) mentioned in the introduction, and highlight certain operative indications aimed at supporting and aiding the learning of individuals who work in organizations. These indications, which we break down into the five points summarized in Figure 3, emerge both from the results of the study and from the working method used to achieve them.

In our opinion, the results of the study illustrate, first, the importance of always taking into account the possible learning advantage for all those involved in the training process. Therefore, the more the training programmes within organizations make use of internal resources (managers, professionals, etc.) for teaching, whether they be in the form of instructors, tutors, experts, coaches, mentors, consultants, and so on (Beech and Brockbank, 1999; Darwin, 2000; Hicks and Peterson, 1999; Kilburg, 2000; Schwiebert, 2000), the greater the possibility of taking advantage of the teaching benefits arising from the training process both for the pupil and for the teacher him or herself.

However, to obtain this advantage it is important that the teaching process does not take the form of simple exertion of influence through authority, but instead, as stated by Dewey (1938) and Freire (1970, 1973), takes the form of a dialogue in which each of the parties is considered the provider of questions and answers that can contribute to mutual learning and change. In this sense, the style in which training is conducted (inside and outside the classroom, with internal and external teachers, with individuals or in groups) will be more effective the more a genuine dialogue is created, capable of ensuring that all points of view are heard. This is the second indication that emerged from the research, recalling what was said by Currie and Knights (2003), according to whom learning is more effective when

**Figure 3** Indications to promote learning in organizations

<table>
<thead>
<tr>
<th>INDICATIONS FROM RESEARCH RESULTS</th>
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<tr>
<td>1. ENHANCE INTERNAL RESOURCES</td>
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<tr>
<td>2. USE A DIALOGUE STYLE</td>
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<tr>
<td>3. WEAVE TOGETHER CLASSROOM TRAINING AND WORK</td>
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<tr>
<td>4. USE SMALL GROUPS</td>
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<th>INDICATIONS FROM THE RESEARCH METHOD</th>
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<tr>
<td>5. EXCHANGE LEARNING STORIES</td>
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the student is acknowledged as a ‘resource for learning’ (p. 45), as in this case ‘a
discursive position is adopted where both teachers and students develop their
knowledge and understanding of management through dialogue and debate’
(p. 32).

The studies of Antonacopoulou (1999, 2001, 2002) on the factors that allow
training to foster learning also provide food for thought in this direction. In
addition to the factors that refer to the objectives of training (for example, ‘to
provide not only knowledge and skills relevant for current work’, ‘to help
to recognize the values of the organization and expected standards of per-
formance’, ‘to promote security, self-esteem, awareness of oneself’) the author also
underlines the importance of the factors that refer to the training method,
recalling in particular the need to avoid transforming training into a ‘“back to
school” experience’ (Antonacopoulou, 1999: 25) that ‘provides limited scope for
questioning and experimentation’ (Antonacopoulou, 2001: 337).

Third, the study has shown that most of the experiences recognized as being
learning occasions did not occur inside the training classrooms but rather in the
workplace, an indication that confirms the hypotheses formulated by Dominicé
(2000), Inman and Vernon (1997), Marsick (1988), and Merriam and Clark
(1993) mentioned in the introduction. However, it is a finding that does not
diminish our faith in classroom training; rather, it makes us less naive in
considering the classroom as a context in which learning and change occur
automatically. To achieve learning results and change in the classroom it is
necessary to bring work into the classroom: to help the participants clarify to
themselves and others what is considered to be significant and what is considered
will not be useful at work. In the same way, it is also important to bring the classroom
to the workplace, using instruments that foster reflection even when the classroom
stage is concluded (for example, tutor sessions, logbook, workshops, team work).

All this will be more effective the more the training investment is able to
promote the three aspects which would appear to be the basis for learning
through teaching that emerged from the study: encounter with difference,
reflection on action and emotional containment. The use of the small group would
therefore appear to be a fourth guideline which may contribute to boosting the
potential for learning present in organizational working practices: ‘without
the medium of relationships, reflection can be impotent and hollow, lacking the
genuine discourse necessary for thoughtful and in-depth behavioral change’
(Raelin, 2001: 15). Pedlar (1994) had, in fact, already highlighted the value of the
small group when—using the words of Freire (1970)—he talked of a ‘community
of learning’, capable of activating critical reflection processes, thanks also to the
establishment of a culture that allows individuals to express uncertainties and
desire for change, thereby avoiding the over-use of the auto- and hetero-
confirmation process of previously used understanding and action schemes
(Taylor, 1997).

Therefore, in order to stimulate the learning process it is important to avoid
creating contexts in which the sole legitimate interlocutor is the external teacher,
in which communication is one-way only, and in which reflection does not take
into account one’s own working methods and in which the individual loses sight of
the presence of others. In contrast, the most effective training method today
would appear to be that which makes use of internal resources, that activates a
circular communication process of authentic dialogue, is profoundly linked to concrete activities, and assumes a collective character.

On considering the working methods used in the study, another indication emerged in relation to training. During the course of the study we were surprised by the pleasure these individuals declared at the end of the interview on recalling the learning experience; pleasure that was in many cases enhanced by the feeling of having ‘learnt again’, through this very process of looking back in search of the most important and significant learning elements. One of the interviewees made the following comment at the end of the interview:

It has been difficult, very difficult, because at the beginning it appeared that I had learnt nothing, indeed it appeared that it was impossible to recount everything that I had learnt ( . . . ), but then, telling the story, one episode led to another. I therefore talked about things that I had completely forgotten during the first meeting, things which I had forgotten that I had learnt, which I have now re-learnt and which I can use in my own professional activity. (Story 9)

In terms of etymology, narration (from ‘gnarus’: one who knows, who is aware) is the equivalent to ‘knowledge production’. From this viewpoint, the recounting of stories aloud in front of a third person, intent on bringing out and stimulating the memory of facts and persons, provided an almost unique opportunity for the re-appropriation of the learning experience matured during the work life, and which had in some cases been forgotten. In other words, as Brady (1990) suggests, this ‘remembering’ process took the form of the ‘re-construction of the body’ of one’s own learning which the succession of experiences had in some way ‘dismembered’.

The appropriate use of learning stories within training programmes (Roth and Kleiner, 1998) could therefore prove an effective working method for the re-evaluation of past learning experiences, serving to fuel both the individual ‘memory’ and the organizational ‘memory’ for use in future programming. The use of stories must not in any way be limited to individualized training experiences (coaching, mentoring, counselling). The sharing of stories would, in fact, appear to be particularly important: Watson (2001b) proposes a training method aimed at the construction of negotiated narratives, starting from dialogue and discussion between the participants and the teacher. This involves putting together the stories of the participants and the management teachers relating to various work experiences, using academic concepts and theories where appropriate, in order to identify every possible ‘story behind the stories’ which may contain general rules that can be applied in managerial practice.

In the end, this would mean embracing an authentic logic of lifelong learning: the search for a learning process that not only lasts throughout the course of one’s lifetime, but which also serves to create a circular link between past and future, in which everything that has been learnt is actually ‘present’ in the individual.

References


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