

CHAPTER 7

Elisir and Poison

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MISTAKES AS A SOURCE OF LEARNING

How to use the error in the educational process. “You learn by making mistakes” it’s an old Italian proverb. “A new one could say that by making a mistake, you invent something new” Rodari writes in the *Grammar of the Imagination*. A mistake is a process that generates stories and knowledge. The error belongs to the human means of obtaining the knowledge of reality. When faced with the unexpected and the new, such means proceed by trial and, indeed, error and often this involves mistakes and deviations. Usually in school, an error is a source of frustration for students of all ages and this attitude often leads to a staggering drop in the levels of motivation to study, low self-esteem, and a negative relationship with educational institutions. The proposed tool offers a different and alternative way of considering the “error” turning it into a starting point for new creations and new narratives as well as a positive opportunity to recover the gaps in skills, setting up an educational dialogue supported by a relationship of trust between pupil and teacher. The teaching practice starts from the pedagogy proposed by Gianni Rodari both in the *Grammar of the Imagination* and in his famous *Book of Mistakes*.

ERROR AS A PEDAGOGICAL TOOL

The tradition, however, has distant origins and it has its roots not only in the history of science but also in the history of art. Artists such as Leonardo da Vinci and Andrea Mantegna understood how the ‘stain’, the error and the irregularity were an integral part of their research. We also remember one of the most famous projective tests used in psychological therapy for investigation and introspection, the Rorschach inkblots. The tool works well also with narrative and poetic texts. The experience we are proposing begins precisely with an error contextualized in William Shakespeare’s famous stage story of *Romeo and Juliet*, where the error involves a change in the narrative structure and the final outcome. In the case of a straightforward acting of the piece, the concept of a mistake materializes in the interaction between the boys on stage who must improvise first and then write a new story and a new ending.

THEORETICAL BACKGROUND OF THE TOOL

“It is amazing to see how students can lose part of their fear of making mistakes, which is deeply rooted in them, when they find themselves with a teacher who does not ask them to be right, but just to join him in the search for error: of his as well as their own mistakes” (N. Postman, *Teaching as a subversive activity*, Delacorte Press, 1969). For the teacher it is important to be the object of this proposed practice. During her training, it is necessary for the teacher to come out of the habit of judgment and simply to act as an observer and tutor in the learning process. This tool asks not to go back to your work, to cancel or to re-start the execution. Group work allows for an interaction between the students who decide their pictorial intervention in turn by interacting with their classmates and developing the image proposed by the previous classmate. The setting also plays a fundamental role: in an open and bright space, with large canvases available, each participant is asked to respect the rules of the ‘game’ which include silence (it is much better not to use words), stops cancellation and expect an interaction with the image of the other students without any overlap.

Only after the mid-Twentieth Century did a form of thought begin to emerge that laid the foundations of the Pedagogy of Error thanks to Karl Popper and Henry J. Perkinson’s rereading of Popper’s positions. Feuerstein dedicates a few pages of the Structural Enrichment Program to “errors” with the objective of emphasizing their function as source of conscious critical thinking. It is precisely by identifying the error and its cause that the student learns fundamental strategies of critical analysis. Knowing that you can make a mistake also helps the subject not to fear judgment because she is aware of the fact that knowledge increases through error. The identification of the mistakes, among other things, can be either individual or shared with the group, thus promoting soft skills of relationship, mutual support, and empathy. This tool distances itself from more rigid practices and it is based on creative dynamism, active cooperation, continuous research, on research by trial and error and it constitutes an experience aimed at finding satisfactory solutions to the problems that actual reality constantly presents.

LITERATURE REVIEW

It takes a great imagination to be a great scientist, to imagine things that do not yet exist, to imagine a better world than the one we live in and get to work to build it (Rodari, 1996). Rodari is convinced that imagination has its place in education, he claims the importance of developing creativity and imagination for education. Fantasy helps to uninhibit the mind, to get it out of preconceived patterns.

Nursery rhymes and stories in the name of error: distracted pupils, boring professors, athletes who are not up to date with their spelling ... Often “mistakes – said Gianni Rodari – are not in words, but in things; we must correct the dictates, but above all we must correct the world” (Rodari, 1994). Rodari in his writings takes us into a broken down and disordered linguistic universe, but it is not a text of boring grammatical exercises because the magical Gianni Rodari gives rise to laughter from every oversight, changes the rules of our grammar at stake, opens a dense and very rich dialogue with the readers.

Only after the middle of the twentieth century does a form of pedagogical thought emerge which founded the ‘Pedagogy of error’ thanks to the reinterpretation of Popper offered by Perkinson - consisting of identifying error as a basic element of teaching/learning (Perkinson, 1984). Perkinson also challenges his theory with another one developed by Karl Popper entitled “evolutionary epistemology”. This view holds that the teacher’s job should not be to force pre-determined knowledge (learning goals) into students’ heads but to help them expand and correct their existing knowledge. This alternative view of teaching can be accomplished by using a 3-step model of teaching, consisting of: presentation, critique, and rebuttal (Perkinson, 1993).

The educational system has always been the instrument for the transmission of values, ideas, and cultural heritage. It therefore assumes a strategic function “teaching to become good thinkers”, stimulating the development of thinking skills and awareness of one’s mental processes. (Feuerstein, 2014). The goal is to create flexible minds, which do not get confused by the new and who know how to be critical and creative with respect to knowledge. The cornerstone of Feuerstein’s work is his in-depth study of his models of “cognitive modifiability” and “instrumental enrichment”.

In the early 21st century, Gaita published an essay that can be read as a novel. In the essay, a psychoanalyst and a musician accompany us with a simple language in evocative territories of our mental functioning: the way in which makes us think about something without being able to say it with words; the mechanisms by which a perfume irresistibly triggers a memory; or the profound patterns by which a fantasy, a landscape or a melody sets our minds in motion (Gaita, 2000).

Later in 2009, Pitruzella developed a survey on creativity born in the field of Arts Therapy, a discipline that was having a growing diffusion in Europe. After a general definition of creativity, the text analyses its importance in the healthy development of the person and its value as a resource in the educational, therapeutic, and social fields. Next, the author proposed a detailed description of

how the creative process works and the possibilities activating, governing, and evaluating it (Pitruzella, 2009). Munari, a great Italian artist known throughout the world for the whimsy and lightness of his creations, demolished the myth of the artist-star once and for all to replace it with the figure of the ‘designer’. Through a compelling analysis of works and themes, conducted with clear and enjoyable drawings and images, Munari provides an extremely comprehensive presentation of design and mental strategies in the design phase. (Munari, 2008).

EXPLANATION OF THE TOOL

Preparing setting (Teacher):

- Open and quiet space
- Canvas, brushes and colours (for example black and yellow)
- Preparation of a starting point with words or images, images + words
- Rules of the activity (silence; change position, not to always draw over the same space of the canvas; Treat the other person’s work as if it were your own)

Activity (Student):

1. Error as a cognitive possibility: group work starting from drawings, signs or words made by teacher
2. Free drawing by each student starting from the existing images, develops its own idea
3. The image continues to transform itself by playing with others signs and marks
4. Embrace / welcome the other person’s idea
5. Add colour that increases the collective dimension of the artistic work
6. Realize the picture at the same time with other groups
7. A sheet becomes the backdrop for Romeo and Juliet
8. Changing the plot: what would happen if... deconstructing and rewriting the story

How to assess the experience: the goal is not to produce the ‘best story’ but to follow the consequences of change. Marks and assessment should be given according to:

- How the change has been chosen: how far and how much has changed the story?
- Have they respected the suggestion, or have they turned into something else?
- Was the group able to accept and follow the change to its consequences?

- Have they been able to close the story and reach a conclusion coherent with the new Turning Point?

The Teacher should monitor each group's work and assess how they work together. Are suggestions taken on board? Is there space for everybody to participate?

In general, in the evaluation of creative skills that also include critical thinking, we use these criteria that we believe to be transversal to all study subjects (macro-skills):

1. Understand and interpret verbal messages, written, iconic-visual texts, rules
2. Identify and summarize essential elements of communication
3. Recognize and interpret reference models
4. Correctly use the expressive tools in the disciplinary field
5. Correctly use artistic techniques for conception and communication
6. Use and be aware of the design methods alone or in a team
7. Qualify your work in a personal way
8. Operate for comparisons with a critical spirit and decision-making autonomy







Expected outcome

Students:

- Increased attention span
- Increase in self-esteem and self-awareness
- Increase of analytical skills
- Increase in problem-solving strategies
- Increased flexibility
- Greater control of behavior
- Knowledge and better management of emotions
- Reduction of impulsiveness
- Increase in vocabulary and verbal speech
- Increase of planning and organization skills

Teacher:

- Acquire new data in the assessment of skills by observing the process and the final assessment interview with the student
- Encourage collaboration with teachers from the team and other disciplines

CONCLUSION

Most of us would have heard and would agree with the sentence ‘we learn by making errors’. Nonetheless, it seems that this is often disregarded in the teaching practice. Classrooms tend to be portrayed as spaces where mistakes are punished, and errors are equal to failure. In this environment, students develop a ‘fear’ of making mistakes which is detrimental to the learning process. ‘Elisir and Poison’ is a pedagogical tool that puts the error as the center of learning. It allows students to understand the importance of making mistakes and most importantly, they are capable of learning by navigating through errors. This innovative pedagogy requires the teacher to challenge his/her bias when it comes to attributing error to underachievement and he/she will have to reconsider the role of assessment. Once the conception of error and assessment are reconsidered by the teacher, *Elisir and Poison* become an optimal tool to promote creativity and collaborative thinking in the classroom.

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