



Cap sur l'école inclusive
en Europe



Resource sheet

The School of Multiple Intelligences: diversify to improve

Section D/Training module

1/ Finding

The complexity of the contemporary world and the different educational needs of pupils require to the inclusive school the development of new strategies and modes of intervention in the form of personalization of training proposals. The context I wish to consider is the educational one, in particular, I want to analyze the specificity of the educational needs of each pupil.

2/ Execution - demonstration

This contribution intends to demonstrate that through the theory of multiple intelligences it is possible to achieve a good level of school inclusion thanks to the different forms of intelligence, as well as postulated by Gardner and, consequently, the different ways of learning of each student.

This theory allows to focus the attention on differences in learning processes and to consider diversity as a resource.

The theory of multiple intelligence is thus an effective tool for recognizing students' potentialities, diversifying training activities and securing everybody opportunities of success.

To demonstrate this, I will outline the essential lines of MIT by considering the nine forms of intelligence proposed by Gardner.

I will then highlight the implications of the MIT from a didactics point of view by referring to their real applications in the class, ie to differentiated and diversified activities for all pupils, and finally I will talk about the development of alternative teaching strategies and process, using diversified methods for testing and controlling.

3/ Context

The context I will deal with is the educational one, in particular I wish to analyze the specificity of the educational needs of each pupil.

What is important, therefore, is the role of the school and of every other educational agency to guide the potentiality of each learner and to stimulate its creative use.

Howard Gardner and the Multiple Intelligence Theory

Intelligence is the ability to understand the world in which we live and to solve the environmental, social and cultural problems that we have to face at any time in our life. Until the first half of the 20th century, it was thought that intelligence was a monolithic, common and measurable ability in everybody, through standards and tests of scientific value, too.

According to the American psychologist H. Gardner, there is not only one type of intelligence but a multiplicity of forms, that is, biological potentials present since birth that in each human being have a particular combination of levels of development, making it unique in its intellectual profile.

The evolution of each intelligence and the achievement of more or less degrees is partially conditioned by genetic factors, but also depends on the learning opportunities offered by a particular cultural context. For this reason, it is not enough to identify personal inclinations, you need to exercise them, otherwise they will remain in the embryonic state.

The pluralistic concept of intelligence represents an important turning point compared to the past theories, especially for the pedagogical implications that ensue.

In contrast to the traditional theory and based on his criteria, Gardner identified eight distinct types of intelligence (intellectual skills).

- Linguistic Intelligence: it is, together with the logical-mathematical one, the most stimulated intelligence at school. It is the ability to use the language to verbalize and understand.
- Logical-Mathematical Intelligence: implies a skill in creating categories, reasoning, comparing, and solving problems.
- Musical intelligence: "think in music", understand, create and communicate through melody and rhythm.
- Space Intelligence: ability to visualize and create mental images; is encouraged by the use of pictures and colors.
- Kinesthetic intelligence: competence in using the body to solve a problem or create something; skills in manual works.
- Interpersonal intelligence: ability to understand and relate to other people; is stimulated by activities that need to share, compare, cooperate.
- Intrapersonal intelligence: introspective ability and competence in understanding their own moods, their way of being and acting.
- Naturalistic intelligence: it shows affinity with the natural world (ability to understand, discern and classify its elements) and in contact with it, we are at ease.

Implications and didactic-educational applications of the MI theory

Each of our students carries their intellectual profile and uses intelligence in different combinations in everyday life. However, according to Gardner, public education and schooling in the Western world are limiting and have primarily promoted two types of intelligence: the linguistic and the logical-mathematical one. The others are often neglected, neither stimulated nor developed in the classroom. So students with a strong linguistic and / or logical-mathematical intelligence will be those who will get good results easily.

The others, on the contrary, even if "equipped" with other types of intelligence, will have to do more efforts and will encounter greater difficulties.

The multiple intelligence theory is helpful to the teacher to create activities that consider the different types of intelligence, even for those students usually less stimulated, to help them transferring the teachings. According to Gardner, offering teaching approaches that move along the spectrum of the eight intelligences in different contexts, the teacher might be able to motivate and stimulate a greater number of students, engaging them in activities that enable them to put into practice and exploit their skills.

Teaching would be more active and concrete and could allow the students to discover and explore their personal way of learning.

Teaching with these modes would allow the teacher to better know the strengths and weaknesses of students, to change his teaching practice to create new learning opportunities and bring as many students as possible to achieving the goals set.

In relation to what the School Reform suggested (especially in the field of differentiation) and to the new context of the teaching of school subjects in Secondary School (Scuola Media), the theory of multiple

intelligence and its practical applications could be a valid working tool and an effective allied to propose a diversified type of teaching to our pupils.

The problem of all students, often, is not to have a clear awareness of their cognitive processes and what their personal relationship with knowledge is.

Gardner led us to reflect on the role that every intelligence has in relation to knowledge: in a complex world such as the actual one, developing a relationship with knowledge based on the use of more intelligences, could promote education to the cognitive transitivity, that is to switch from one knowledge to another in a fluid and immediate way.

In the light of what has been said, it is clear that we as teachers can not demand that knowledge is proposed, driven, uniquely stimulated, based on patterns based just on frontal transmission. And we certainly can not think of promote knowledge and awareness of one's own learning styles and cognitive processes in our students by privileging a single channel.

We must start with the knowledge of the features and development of the different intelligences proposed by Gardner and their valorisation.

For a long time, in the educational environment, individual differences were considered to be of little importance, each student was treated like the others.

The Gardnerian approach is based on a diametrically opposed approach, that is, what is called Student-Centred Education, centered on the pupil, which seeks to know each pupil as much as possible, then it creates and uses a way of teaching that can help everyone learn as much as possible in the ways, times, rhythms, and styles that are congenial to him.

The didactic approach is therefore aimed at enhancing the different potentialities of each student, identifiable through systematic observation and conducted with scientifically validated criteria and tools, but substantially different from the traditional intelligence tests.

Therefore, a school taking care to the needs of pupils in difficulty should be able to adapt to pupils' differences by modifying ways and methods, strategies, times, tools, styles and activities, according to Gardner's statement.

The implications of Gardner's Multiple Intelligence Theory, on the basis of Innovation and Learning Applications, are different and concern many fields of the Teaching / Learning process and different areas of Special Teaching. However, in this report, I will highlight mainly three of them: the use of differentiated and diversified activities, the development of alternative teaching strategies and methodologies, and the creation of different ways for testing, evaluation and feedback from teacher.

Curricular Differentiated Activities

The differentiation of curricular activities, including movement, art and image, music, contact with nature, manipulation, introspection, interaction, involves pupils in a more active way. It's easy to see their participation in activities with enthusiasm, attention, and more willingness to learn when these skills are put in place.

To apply the MI theory is therefore essential to teach with a range of didactic activities that meet the variety of intelligence of each pupil. Obviously, it is impossible to know the exact form of intelligence of each single pupil (although with the disabled pupils this phase is easier thanks to the observation phase that precedes the preparation of the PEI) but it is useful to start from the awareness that there are more forms of intelligence and, therefore, it is necessary to propose didactic activities and differentiated and various exercises that involve all the preferences, or rather the predispositions, of our pupils.

Strategies and Methods of Teaching/ Learning

The existence of individual differences, even accentuated among students, requires the teachers to use carefully different teaching strategies. In this way, by alternating content processing, there will always be a time when classroom activities will fully involve the most developed mindsets of each pupil. In this perspective, teachers are need to enrich their repertoire with a wide range of methods, materials and strategies to "hook" increasingly heterogeneous classes.

From an operational point of view, didactics work on multiple intelligences can be conducted using two general strategies. The first, called "an activity for every intelligence", allows the teacher to solicit

predominantly a single type of intelligence with a didactic activity specifically devoted to it. The second strategy, defined as "an activity for more intelligence," allows teachers different more intelligences.

Individualized Evaluation, Testing and Feedback

The third aspect considered is the "individualized" testing, evaluation and feedback. MI Theory highlights how many possible ways exist that the pupil can demonstrate the knowledge and abilities he has acquired; including advance organizers, observation checklists, mistakes analysis, and portfolio.

For example, in order to evaluate maths learning, teacher can work in cooperative groups (interpersonal intelligence) with manipulation materials (body-kinesthetic intelligence) to conclude with metacognitive thinking (intrapersonal intelligence).

Pupils with learning difficulties

In Italy, support and curriculum teachers are currently working synergistically trying to develop in pupils with disabilities those intelligences that they are most lacking. Thanks to Gardner's studies and his theory of multiple intelligence, we have provided teachers with the opportunity to open new scenarios for pupils' learning.

By alternating various didactic proposals, it is possible to stimulate the development of intelligences in which the pupil is deprived, and at the same time allow him to learn through his strengths in other types of intelligence.

This alternation represents the true didactic innovation that points to the bio-psycho-social model of the ICF in an attempt to exploit the existing capabilities in each individual, while at the same time enhancing those less developed or deprived areas.

CONCLUSIONS

From what has been said in the course of the present discussion, there are numerous tools the teacher can use to meet the different needs that characterize all the learners, especially those with learning difficulties. Awareness of all these aspects by the teacher can substantially contribute to the creation of a class climate positive for the acquiring knowledge, that is to say an inclusive climate, where everyone's differences become a resource for the others and not a limit. In such a perspective, therefore, the MI-based strategies and methodologies are considered an integrated and inclusive approach that does not replace traditional contents but uses them to reach all students and involve all type of intelligence.

The best choice, in fact, especially if there are pupils with learning difficulties in the classroom, is what can be called "eclecticism" in daily didactic practice, whose main characteristic, according to Gardner's theory, is summarized in the expression: "fits the methodology to the pupil and not vice versa".

This means that the starting point of every teaching activity must always be the pupil, with his needs and necessities, his limits and potentialities, his styles, times and rhythms of learning, his past experiences and his context of belonging.

This new vision allows to focus the attention on differences in learning processes and to consider differences as resources, respecting the need for special normality that joins all pupils indiscriminately.

Bibliography:

- Armstrong T., (1994), Multiple Intelligences in the classroom, Alexandria
- Claire G., (2004), Sei più intelligente di quanto pensi? Oltre 150 test per scoprire e utilizzare al meglio la tua intelligenza naturale, L'Airone Editrice
- Bellanca J., Chapman C. e Swartz E. (1994), Multiple assessments for multiple intelligences, SkylightsPublishing

- Calovi C., Traduzione italiana (2003), Multiple intelligence for every classroom. Tratto da «Intervention in School and Clinic», vol. 39, n. 2, Pubblicato con il permesso dell'Editore.
- Canevaro A., lanes D., (2003), Diversabilità, Storie e dialoghi nell'anno europeo dei disabili, Trento, Erickson
- Cardona P., (2001) Il ruolo della memoria nell'apprendimento delle lingue, UTET Università
- De Beni R. et al., (2001) Psicologia cognitiva dell' apprendimento. Aspetti teorici e applicazioni, Trento, Erickson
- De Feo L., Elia M. et al. , (2013), Le Attività di sostegno didattico, Napoli, Edises
- Iaccarino C. (a cura di), (2009), Le intelligenze multiple: teoria e applicazioni didattiche
- lanes D., Macchia V., (2008), La didattica per i Bisogni Educativi Speciali, Trento, Erickson
- Gardner H., (1983), Frames of Mind: the Theory of Multiple Intelligence
- Gardner H., (1991), Aprire le menti. La creatività e i dilemmi dell'educazione, Feltrinelli
- Gardner H., L'educazione delle intelligenze multiple. Dalla teoria alla prassi pedagogica, Anabasi, 1993
- Gardner H., Formae Mentis. Saggio sulla pluralità dell'intelligenza, Milano, Feltrinelli, 2002
- Gardner H., (2005), Educazione e sviluppo della mente. Intelligenze multiple e apprendimento, Erickson
- Kagan S., (2001), Multiple Intelligences: The complete IM Book
- Nicolini P. (a cura di), (2002), Intelligenze in azione. Osservare il bambino nella scuola dell'infanzia, Hoepli
- Pavone M., (2014), L'inclusione Educativa, Milano, Mondadori Università
- Sternberg R.J., Kaufman J.C. (1999), Diversamente intelligenti: differenti modelli di spiegazione delle abilità mentali, pubblicato in «Difficoltà di Apprendimento», vol. 4, n. 3, Trento, Erickson