

## ARTICLE BY COLLELA & ROSA - 4 LANGUAGES ABSTRACTS (E)(F)(S)(P)

### MOVEMENT COMPETENCE AND INDIVIDUAL'S GROWTH

Physical Education in Italy is deeply changing because of the introduction of the National Indications which will replace the National Syllabus in Nursery, Primary and Secondary Schools. Each teacher is therefore induced to a disciplinary analysis in order to adopt an epistemological structure and to plan on the basis of motor competences. A curriculum planned according to the motor competences, following the constructivist pedagogy, goes beyond the traditional didactic approach and seeks a strong interaction between the motor abilities, knowledge and the socioaffective behaviour of the person. Abilities and knowledge are instrumental to the competences to acquire even if in the field of motor education there are methodological contradictions and a lot of confusion. The documentary evaluation of the process and the results of the didactic process itself are recorded in the student's dossier which contains the activities planned and carried out, the student's experiences and the results achieved in disciplinary and interdisciplinary field.

### COMPETENCIA MOTORA Y DESARROLLO INDIVIDUAL

La Educación Física en Italia atraviesa una fase de cambios profundos determinada por la introducción de las Indicaciones (Programas) Nacionales que van sustituir los Programas Ministeriales en las escuelas infantiles, primaria y secundaria. Eso exhorta a cada profesor al análisis disciplinaria para que sea definida la estructura epistemológica proyectada por competencias motoras. El currículo por competencias motoras, según la pedagogía constructivista supera el enfoque didáctico tradicional por objetivos y prevé una interacción ajustada entre las habilidades motoras, los conocimientos y los comportamientos sociales y afectivos de la persona. Las habilidades y los conocimientos son los instrumentales para la adquisición de competencias en el orden motor aun mismo si no hay confusiones terminológicas ni contradicciones metodológicas. La documentación del proceso didáctico y los resultados obtenidos por el alumno son recogidos en un dossier. El dossier comprende el complejo de las actividades programadas y desarrolladas, las experiencias motoras y las opciones metodológicas y los resultados obtenidos en órdenes disciplinario y interdisciplinario.

### COMPETENCES MOTRICES ET DEVELOPPEMENT DE LA PERSONNE

L'éducation physique en Italie traverse une phase de changement profond déterminée par l'introduction des Indications (Programmes) Nationales qui remplaceront les Programmes Ministériels dans l'école de l'enfance, primaire et secondaire. Ceci exhorte chaque professeur à l'analyse disciplinaire afin de définir la structure épistémologique et projeter par compétences motrices. Le curriculum pour compétences motrices, selon la pédagogie constructiviste, dépasse l'approche didactique traditionnelle par objectifs et prévoit une interaction serrée entre les habilités motrices, les connaissances et les comportements sociaux et affectifs de la personne. Les habilités et les connaissances sont instrumentales à l'acquisition de compétences dans le domaine moteur même si ils ne manquent pas de confusions terminologiques et de contradictions méthodologiques. La documentation du processus didactique et les résultats atteints par l'élève sont recueillis dans un dossier. Le dossier comprend le complexe des activités programmées et déroulées, les expériences motrices et les choix méthodologiques et les résultats obtenus dans le domaine disciplinaire et interdisciplinaire.

### COMPETÊNCIA MOTORA E DESENVOLVIMENTO INDIVIDUAL

A Educação Física na Itália está passando por profundas transformações por causa da apresentação das Indicações Nacionais que substituirão o Programa Nacional nas escolas do pré-escolar, ensino básico e ensino médio. Cada professor, portanto, é conduzido a uma análise da disciplina com vistas a uma estrutura epistemológica e ao planejamento com base nas competências motoras. Um currículo planejado de acordo com as competências motoras, seguindo a pedagogia construtivista vai além da abordagem didática tradicional e prevê uma forte interação entre as habilidades motoras, conhecimento e comportamento sócio-afetivo do indivíduo. As habilidades e conhecimento são instrumentais para a aquisição de competências, até mesmo considerando que na área da educação motora há contradições metodológicas e muita controvérsia. A avaliação documental do processo e os resultados do processo didático em si são registrados no dossiê do aluno, no qual constam as atividades planejadas e realizadas, as experiências dos alunos e os resultados alcançados nas áreas disciplinar e interdisciplinar.

# MOVEMENT COMPETENCE AND INDIVIDUAL'S GROWTH

(E)

**DARIO COLELLA  
ROSA ANNA ROSA**

**FIEP Delegates in Italy**

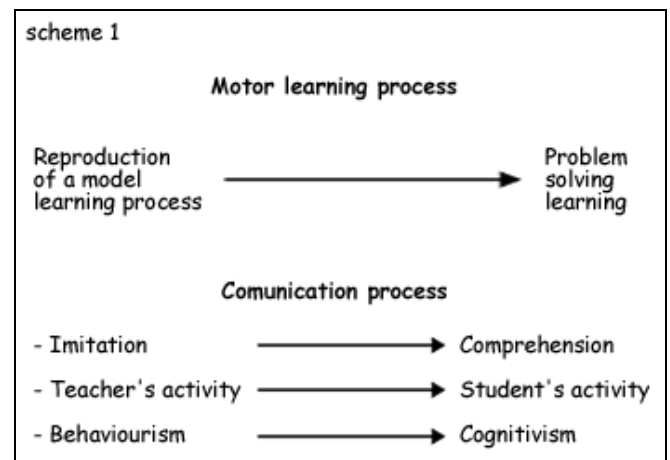
## INTRODUCTION

Italian school is going through a phase of deep innovation from the cultural, teaching and organizational points of view. The reference for each subject for the structure of the curriculum is represented by the National Guidelines (2003). The planning based on **competences** in the school curriculum brings about a considerable and methodological change that emphasizes the training value of movement activities. Every movement experience done by the pupil, beyond the practical dimension, requires the awareness of the experience done and of its consequence, including the command of the concepts, terms and definitions, the application in varied contexts of skills and knowledge. The meanings of body-awareness and movement experience during the development age belong, from the epistemological point of view, to different scientific fields that represent the basis in order to define the training aims according to the National Guidelines. It has to be said that there is a discrepancy between the theories, for example with reference to the expressive fields and the sport-technical ones of 'movement', has created a semantic field that is sometimes far from the recurring one in other subjects. The use of the term '**competence**', connected with the practical-motor domain of the person, reflects epistemological delays, uncertainties, and confusion as well as contradictions with evident consequences in the field of teaching, on the evolution of the learning processes within the teaching continuity and on the inter-subject links.

### 1. THE CURRICULUM ACCORDING TO MOVEMENT COMPETENCES.

The research in the psycho-pedagogical field has brought about a revision of the teaching tendencies and a completion of the learning models of behaviourist and knowledge types. (Bruner 1967-Novak, Gowin, 1984, Ausubel 1990). The structure of the curriculum based on competences in a movement field implies the overcoming of the traditional aims-approach where the skills are taught in a linear and consequential technique, progressive with reference to the criteria of difficulty, complexity and intensity that are not always connected with each other. In the aims-approach learning is through imitation - reproduction of a model and the pupil is seen as a passive receiver of movement behaviors, terms and definitions, concepts, procedures: the structure of

the curriculum is like a pyramid, starting from movement structures and elementary tasks and develops according definite steps. (scheme 1)



Constructivist teaching approach takes into consideration the competences that the pupil will have to show at the end of a teaching cycle. These competences will have to refer not only to the school subject but also to a cultural and professional growth. In this way the teaching process is directed towards the co-existence of movement skills, knowledge and social and emotional behaviour of the pupil and towards teaching experience useful to reach the elements mentioned before. According to this approach learning is a process in which the pupil plays an active role, and is aware of his movement behaviour, processes information connected to the task and to the context where he lives., shows skills and knowledge; learning takes place through comprehension and problem solving, takes place within a context of and is conditioned by learning styles and by possibilities of individual development. An example of the constructivist approach in sport activities of young people is the transition from a teaching method based on a single technical performance and on the memorizing of the rule to a new one in which the pupil is required to have a good comprehension of the structure of a team game, a comprehension and application of tactics schemes, the respect for rules and their transferring, the cooperation and the evaluation of processes and the results reached. Another example can be the transition from movement performances generally aimed at the shaping of skills of resistance or of various expressions of muscles strenght, to the

comprehension of the meanings of movements as a means of physical effectiveness and of the person's well-being, to the relationships of between movement performance, healthy food habits, and lifestyles in various ages and working contexts. The structure of a curriculum based on movement skills and knowledge, therefore, motivates the teacher to do a subject analysis. In order to point out the essential and necessary key-themes, the training value, the internal criteria, that is the epistemological ties, the degrees of freedom and the experiment fields. Every process of meaningful movement learning, we remember, is put into practice through the constant interaction of the following factors: **skill-knowledge-behaviours** and **attitudes** in the social-emotional field. They develop according to different rhythms in relation to the individual processes of growth-learning-individual development. As we know, movement skills are the points of reference for the learning and the performance of skills, they are potential factors of the movement area of the person that are expressed varied movements for quantity and quality. According to Gundlach (1968) they are classified as: **coordinate abilities** (conditioned by the learning and processing of the information and the control of the performance) and **conditional abilities** (conditioned by energy processes, by physiological factors and differences according to age and sex). The initial stage of movement abilities brings about the learning of the movement abilities. The movement ability (know how to do) is a component of the individual movement behaviour, the performance of which remains constant and becomes increasingly automatic through repetitions. Movement abilities re-structured on the basis of movement abilities both coordinate and conditional. The combination of abilities according to the elements of space and time develops movement abilities. The movement abilities are the ones that are learnt, the main ones are **discreet ability, series ability, continuous ability**. A further classification of the movement abilities takes into consideration the level of predictability of the environment during their performance: **open ability; close ability** (it is performed in a stable environment which allows the person to plan the movements in advance, ex. in the field of swimming, in arts gymnastics, and so on). A movement ability is the result of a learning process, through subsequent stages, connected with each other. It starts from the **basic movement schemes**, crawling, rolling, climbing, walking, running, jumping, launching, catching (Meinel, Schnebel, 1984, Manno, 1984, Schmidt, Wrisberg 2000)

**Knowledge** is the combination of contents, terms, concepts, rules, theories, procedures referring to one or more subjects. The learning of knowledge in the field of movement is an educational goal you can reach through methodologies aimed at the interaction between the knowledge functions, movement abilities and social-emotional components of the individual. A teaching programme aimed at the learning of knowledge, needed for every movement ability, completes, enriches and characterizes the practical aspects. A crucial aspect is represented by the distinction between three types of knowledge:

**declaring, conditional, procedural** (Paris, Lipson, Wixsons, 1983).

The declaring knowledge concerns 'what' (know-that), and understand facts, events, theories; the conditional knowledge represents 'to know where-when and why'. The procedural knowledge concerns 'how' to do something that regards mainly the practical aspect in the movement field.

In High School the pupil's knowledge concerns the aims of what is performed, ex. to distinguish the effects of physical exercise on systems, to analyse the cause-effect relationship in the development of movement tasks, to recognize the features of the equipment and the environment, to understand the solution of practical problems, to apply the rules and so on.

A **social-emotional** behaviour includes the individual's attitudes, the tendencies to act in a specific way, and they can be connected to the following elements: individual motivation, participation, commitment, socializing and cooperation, method of work, aspect for the rules. They represent the expression of movement abilities, and knowledge by influencing and bringing about the method of learning. Behaviour can be analysed in answers and includes all the activities of the individual that can be potentially measures and observed (Meazzini, P., 1978).

Behaviour is the synthesis of the dynamics of knowledge-motivational-emotional factors that work dynamically according to the individual's experience. Attitude is an inclination to behave in a positive way and according to varied grades towards a certain symbol; it does not emerge when the behaviour can be checked but finds its roots in the previous experience of the individual (Gattullo, M., 1968, p.105). The influence of the environment determines and keeps the attitudes. A social-emotional behaviour in the field of movement gives sense, direction and value to the learning of abilities and of knowledge.

## 2. EVOLUTION OF THE MEANING OF 'MOVEMENT ABILITY'

The first stage for the building of the curriculum is the pointing out of the *training aims*, in terms of **movement abilities** and **knowledge**, taken from the proposed in the National Guidelines. The training goals give organization to the unity of learning, they correspond to precise individualistic needs, structured in accordance with minor or major correlation to the *movement abilities*. An example can be the definition of the training aims as a means for the competences expected with in the *field of individual sports or team sports*, or within *expressive activities*.

A teaching-learning process of movement abilities-mime-gestures-technical-sport, disconnected from theoretical knowledge and from social-emotional behaviours-attitudes of the individual, limits the training importance of movement abilities and requires further completion. Actually, in order to be considered competent in the movement field, it is not necessary to know how to perform a task, but it is very important **to combine** various types of knowledge (declarative, procedural and conditional)

and attitudes (motivation to learn, socializing and cooperation, participation, work method, and so on ) but, above all, to manage to apply them in different contexts. This ability represents an ideal combination of contents and methodologies directed towards the practical aspect.

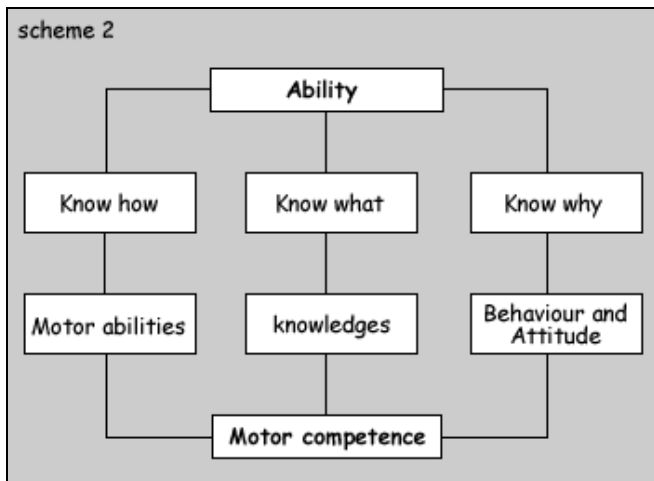
In the building of a curriculum based on competences, the result of learning is not represented by movement abilities and by isolated theoretical knowledge; the results of a training process are their theoretical and practical use in a specific context.

You have to use movement abilities and knowledge and to express the individual's attitudes as a means to learn competences: this perspective directs the attention from a teaching-based school (traditional, logical, technical-imitative) to the movement learning school (meta-knowledge-breathive-individualistic) where the person's role is the key.

Competences are how to use and command knowledge and the abilities are mental structures **to use in various contexts**, producing a cycle of varied knowledge.

**a. movement ability, an approved definition?**

The term competence is generally associated to the command on the behalf of the individual, of the abilities to show behaviours functionally suitable for a wide range of situations based on a range of movement abilities, technical-sport and mime-gestures, knowledge and individual dispositions. A movement competence is theoretical use of knowledge is the application of theoretical and abstract knowledge through **know how, know what, know why** (scheme 2). In particular a movement ability is represented by the completion of movement abilities, knowledge and attitudes of the individual that exist beneath every process of meaningful learning.



A pupil becomes competent within a movement field when, guided through an effective learning, learns to process and to organize information to acquire ways of reading and interprets messages, to self-evaluate one's own experience, learns to learn, becomes aware of a completed process, giving to the body movement a value for further knowledge and meanings.

The definitions of the term competence proposed by various scholars direct the analysis and the definition of training aims.

J. S. Bruner (1967) defines competence as the effective and productive combination of the individual and the environment and provides a special relevance to this term generally used to refer to a reached ability. Making a person competent means to make her-him self-confident to live well and originally in a dynamic life, to understand with the appropriate keys and means. From the teaching point of view the structuralist proposal stresses the importance of methodological procedures, through which the various contents of subjects are organized in order to make each pupil constructive in his knowledge.

L. Calonghi (1992) asserts that a competence is not recorded in a single task but in a series of situations, in a skill for life, for every context different from learning.

According to M. Aubert (1997) competence is a complex activity that needs the combination instead of the juxtaposition of knowledge, know how to do and how to be, learnt before and leading to a product that can be valued and completes them.

De Landsheere (1993), competence can be defined as the knowledge deep enough of a subject or as a recognized ability.

The term competence indicates the ability to develop a specific task satisfactorily; generally it is not comparative. We are competent towards performances done and not towards the others' performances. This definition highlights two aspects:

1. the need to make the **teaching process individual** and specific according to learning styles and the rythms of the pupils' learning as well as of homogeneous groups.
2. the overcoming of obstacles of laws and the **non comparative nature of testing**.

A pupil is considered competent when he applies knowledge, manages to transfer them to specific situations of social life or to further studies. In the movement activities the competent pupil can answer the following questions: for ex. within team games: what abilities do I manage to perform correctly? Have I learnt and do I respect the rules for basketball and volleyball? What are my attitudes within the context of the match? Why should I respect the succession of movement tasks proposed by my teacher? When should I apply the schemes? How should I plan a sport game in an extra school background? Another example could concern the application and the respect for the sport rules in the interpersonal relationships, the practice extra school with prevention aims and for the improvement of life quality, the discovery of the relationships between verbal and nonverbal languages and the meanings of movement symbols.

Directing the teaching process towards competence means, therefore, promoting a wide learning, that is multi directional, lasting and flexible in order to promote the learning of movement abilities; underlining knowledge and attitudes to use in various life and work situations, manage to spend the training gained beyond the border of the classroom or of the gym.

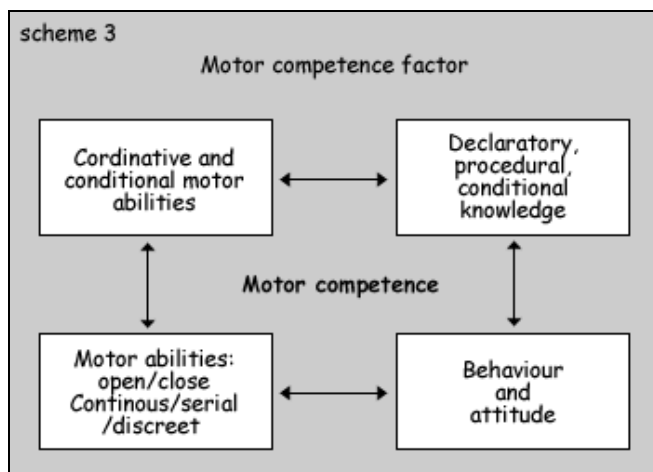
### b. Competence: combination and application.

A movement competence gives value to the combination of knowledge, of movement abilities and of behaviours on the basis of personal abilities and takes it for granted a teaching intentional action aimed at the individual, but not its randomness. The choice of movement competence according to levels of under groups, refers to a teaching method of processes and to an evaluation through processes in order to make the pupil more and more aware of what, how and why he learns in a movement environment and how the previous knowledge is connected with the following knowledge and where to put them into practice.

In each movement competence there is a distinction between three dimensions:

1. The first one is knowledge nature and concerns comprehension and the organization of terms, concepts, definitions, theories and so on;
2. The second is a **practical** nature and concerns the map of movement abilities that characterize them;
3. The third is **emotional**, in that it involves the individual inclinations, the motivations, the convictions, the attitudes that allow to enrich the movement experience with sense and value.

When we use the term 'competence', we refer to the ways of the pupil's learning, that is the strategies that he adopts intentionally (Connolly and Bruner 1978), but to the object and to the context, The interest on behalf of the teacher is not directed to the movement abilities, but to their organization, planning, coordination. Competence is not a synonym for movement ability because it includes it together with knowledge movement abilities of the person and gives her-him the right expression, knowledge and attitudes shared by every meaningful theoretical learning. (scheme 3)



### 3. MOVEMENT COMPETENCE AND EVALUATING PROCESS.

A movement performance is expressed on various levels of competence and awareness. Furthermore, a movement ability includes behaviours and attitudes of the pupil which bring about *dynamic projects*, **choices**, *practical decisions* and self evaluation of the process and, therefore, of its result. Typical of

the training process, actually, is the promotion of the self evaluation ability of the level of competence reached by each pupil. This is due to two main reasons: motivate and support the learning of competences of their own learning (meta-knowledge), and the analysis of the progress reached is a reinforcement of the learning process as a whole. A movement competence cannot be separated from a group of performances that must be related to the same subject. And represent the indicators of the presence and of the level reached. When a pupil does not manage to perform an expected movement task (ex. *jumping, basket, terning and so on*), therefore, does not express the absence of a competence but its level and becomes an opportunity for the teacher to go back to the teaching process, for ex.: the presence of coordinate deficits, to the degree of motivation of the pupil, to the cooperation within the group, to the type of communication used, to the time of movement commitment and so on. The process of **testing** and **evaluation** includes the control of the performance and of the performing techniques, that is, of the performances that he can do and of the problems he can sort out, but he will have to go ahead pointing out the coordinative abilities and knowledge styles the pupil has. From the point of view of testing and evaluation, it is important to underline that the methods are varied and necessary to each other, using a set of tests not only practical but also theoretical, in order to provide the student and the teacher with organized information and control the level of the teaching process and the self evaluation of the following procedures:

- constant analysis and definition of the testing criteria through lists of precise descriptions of movement learning and of categories to classify attitudes;
- the description of the development, pointing out the sequence and the type of experience, the most frequent mistakes, the improvements, the order of tasks, the possible improvements;
- the structured and half-structured tests of knowledge;
- the use of testing for the control of conditional movement abilities.

The teaching based on movement competences brings about a meaningful transformation of the evaluating procedures (scheme 4). In other words, we should go from a traditional testing to an evaluation of isolated factors of the performance (coordinative abilities, conditional ones, movement abilities, knowledge, attitudes), to a comparative and non-comparative system based on both quantity and quality, the relationship pupil-group and pupil before and after the teaching process.

### 4. THE PORTFOLIO OF MOVEMENT ABILITIES

A method introduced by the National Indications to produce documents for the teaching and training process is the pupil's **Portfolio**. In particular, they are the documents concerning the competences reached by the pupil starting from childhood. A dossier about a pupil on movement experiences shows processes and products, the needs and the

movement attitudes expressed by everyone in his training iter, the proposed initiatives, time and ways, the proposed motivations, the answers received, for a new exam at the same time and in the following time.

An evaluating way of the movement competence is the collection of the activities put into practice, starting from precise aims and criteria, of the experiences done by the pupil during a specific training practice: the portfolio of movement competences (Aubert 1997). This collection represents the documents of various performances to analyse, specifically movement and beyond, to interpret and evaluate in order to certify the level of competences reached.

The portfolio should inform about the movement experiences that the pupil has done at school, in curriculum and extra-curriculum, in subject fields or in multi subject projects. It is therefore the re-building of movement abilities, and of the most representative teaching conditions; is a re-reading of processes done and of its products.

The evaluating methodology changes and becomes wider to allow to go back to the movement abilities in terms of abilities but also of processes and teaching strategies performed, of circumstances where these performances have been learnt and expressed. Through this means it is possible to put into practice an evaluation done by the teacher and by the pupil, through a comparison between what was expressed at the beginning of the itinerary and what has been learned

During the process. the comparison between the beginning terms and the final terms will allow to point out the real learning process realized by the pupil, the effectiveness of the teaching process put into practice.

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