

# THE ANALYSIS OF THE EDUCATIONAL CONTENTS IN DEVELOPING COORDINATIVE CAPACITIES

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**Abstract:** *In this paper I realized a thorough study of the discipline sheet courses "Sporting polyvalence - gymnastics" "Sporting polyvalence - athletics," "Sporting polyvalence -game sports," "Sporting polyvalence-swimming", in order to identify those programs discipline, their potential to influence specifically and to develop students' coordinative ability. The assembly of the empirical material on the subject of study was carried out and based on questionnaires that were sent to a number of 193 college students. I used a list of questions about the issue of coordinative development capacity, arranged in a certain order, which we followed to obtain information about the same problem, and the questions used were closed and by choice. Questionnaires watched appreciation of theoretical knowledge and practical skills and the ability to understand the need to develop coordinative capacity in motor activity; dynamics of knowledge and skills relative to their year of study. The questionnaire included 20 questions with 108 options. The results of questionnaires led to the shaping of status quo and to the researched phenomenon related to increased requirements for curriculum content of each discipline studied, emphasizing the need for interdisciplinary training with emphasis on coordination complex.*

**Key words:** *sport discipline, development, coordinative ability,*

## 1. Introduction

The mission of school represents a set off general standards through which one can interpret the tasks requested by the state or different communities that the school is involved in.

The general purposes of education and the educational ideal describe the reasoning to be of the academic system.

The quality and efficiency of the system are directly dependent to the professional training and ability of the educators. The

people within this domain must be high-leveled trained and selected and well and adequately formed to efficiently work with students, according to an adequate professional deontology with and for them [2].

The academic system occupies an important role in the social system, the object of its activity being man, with special abilities from the knowledge and creation point of view, of efficiently practicing a certain profession and the possessor of a highly civic behavior.

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The academic system occupies an important role in the social system, the object of its activity being man, with special abilities from the knowledge and creation point of view, of efficiently practicing a certain profession and the possessor of a highly civic behavior. As a specialized human activity, the academic system is conditioned by the level of the human practice, by the level of the subjects involved, by the level of development concerning knowledge and applied technologies.

Nowadays, one can discuss of “a didactical university system” [8], having the following components: students, didactical faculties, science (knowledge), appreciation and action, components that intertwine together.

The nature of learning in the university system has an interactive character, the student actively contributing to modeling his personality, to expanding the universe of knowledge, appreciation and action, in collaborating with the didactical faculties, bearing in mind the natural and social conditions and the genetic information. The university learning is characterized by the fact that students find themselves in different didactical situations that allow them to build knowledge, appreciations and structured practical action systems [8]. Success in university education and instruction is influenced by the didactical situations in which the students undergo the processes of own action, appreciation and knowledge.

The university curricula, as an educative project that defines the purposes and objectives of an educative action, the means, the methods and activities used for reaching these proposed purposes, as well as the methods and instruments for evaluating actions, all of these are appearing in the curricular documents: academic plans, analytical programs (discipline chart), manuals, methodical

guides and materials, ideas shaped by Cretu C. [1].

Within this context of the curricular reform, one must look at the educational process from the Faculty of Physical Education and Sports as well.

Making the study program for the Faculty of Physical Education and Mountainous Sports more flexible is ensured by optional and facultative disciplines.

The initial training of students is done based on the academic plan, structured as follows:

- Compulsory disciplines: fundamental, specialty, complementary, practical activities;
- Optional disciplines: comprised in packages of option with necessary conditions;
- Facultative disciplines.

The other curricular document that particularizes the instructive and educative process for the students in our faculty is the “Discipline Chart” that comprises:

- The name of the discipline: the title of the discipline;
- The number of hours for each discipline/week/semester;
- The forms of organization: course, practical papers, seminars;
- The number of credits guaranteed;
- The abilities acquired by studying the disciplines;
- The instructive and educative objectives;
- The content of courses and seminars/practical papers;
- *Bibliography*
- Evaluation forms.

One concisely presents the two important documents within the actual curriculum, and now we shall analyze each component of these documents, in part.

From the compulsory disciplines frame we shall mention: the theoretical disciplines that comprise: social and

human disciplines (The history of physical education) and the medical and biological disciplines (Anatomy, Physiology), each having a certain allowance of courses and seminars on the two semesters; the specialty disciplines that comprise the sporting disciplines practiced in the first year of study: sporting polyvalence, athletics – trial techniques; sporting polyvalence: basic gymnastics; sporting polyvalence: swimming, handball – tactics and technique; volleyball: tactics and technique; basketball: tactics and technique; skiing, swimming, rowing; complementary disciplines: foreign language I.

In order to analyze each discipline from the coordinative ability point of view, we have studied the analytical programs and the discipline charts of the respective disciplines.

Doing this, we have noticed, unfortunately, the existence of little information regarding the coordinative ability aspect in the undergone activities, even the lack of such information.

Thus, to the level of the practiced discipline in the first year: sporting polyvalence: basic gymnastics, sporting polyvalence: athletics, sporting polyvalence: sporting game, we have noticed the following aspects:

- At the level of the discipline chart one presents the instructive and educative objects and the necessary abilities and the end of the first year of studies.
- One states the performance standards that include both the evaluation criteria and the practical, technical and performance trials for each semester;
- Furthermore, one presents the contents that are about to be studied and accomplished practically in the first year, contents representing motile actions specific to each studied sporting discipline.

- One does not specify the action systems that can resolve the content units and no motile indications regarding organizing the undergoing didactical activities, not to mention references to ways of forming and coordinative capacities, these methods remaining to the free choice of the educator.

Regarding the theoretical disciplines, both medical and social and human ones, the discipline charts do not contain concrete references to the studied aspects, these references appearing only at the level of certain theme courses of anatomy, physiology, motile somatic and functional evaluation, when one approaches issues related to circulatory, nervous, bone and muscular system problems.

We think it is necessary to highlight the idea that the base of assimilating physical education represents the coordinative ability, the main factor in unifying the cinematic elements of assimilating the motile acts.

Tudor, V. [7] defines the coordination ability as a psycho motile quality that has as its core the correlation between the central nervous system and the skeletal muscularity while effectuating a movement. The coordinative abilities have an open role in managing certain situations that require rapid and rational action, being quite helpful in preventing accidents. Knowing the components of the coordinative capacity is important because it allows a rational development of the latter. Here are the components accepted by the majority of the specialists: the adaptive capacity; the reaction capacity; the guidance, combination capacity; the balance capacity; the agility, skillful capacity. Manno, R. [4] author, add other components such as: gesture, grace, gesture elasticity, the capacity of gesture transfer and variation. According to Manno, R. [4] there are three basic coordinative capacities: motile guidance

capacity, motile adaptation and re-adaptation and motile learning capacity. They are in tight correlation, by the most important one of all is considered to be the motile learning capacity, without which the other two having no sense at all.

The motile learning capacity is based, beforehand, on the reception, adaptation and storage of information. The motile guidance capacity is especially based on the coordinative components of the kinesthetic differentiation capacity, spatial orientation capacity and balance capacity [6].

The coordinative capacities have other synonyms: skillfulness, dexterity and ingenuity and are determined by the guidance and regulatory process of gestures. They put the athlete in the situation of self coordinating securely and economically the motile actions in the possible situations (stereotypes) and unpredictable ones (adaptation) and to learn relatively quickly the sporting gestures [3]. The coordinative capacities are distinct to abilities; while abilities refer to acts of concrete, consolidates, partially automatic gestures, the coordinative capacities represent the conditions consolidated by generality, that is fundamental, of the man's performance in relation to the entire series of gesture acts [5]. These generically appoint a complex of mainly psycho motile qualities that presume the ability to quickly learn new movements, the rapid and efficient adaptation to varied conditions specific to different types of activities, by restructuring the existent motile background in order to sustain this idea and find the solution for the existent lacks.

## 2. Research Methods

In this case, we have thought about using the questionnaire method. The applied

questionnaires comprise questions regarding both the practical disciplines in which the coordinative capacity is approached, and the necessity of deepening the coordinative capacity.

## 3. Research Results

In this sense, to the question: "In which discipline from the academic plan is the coordinative capacity accomplished?" out of the interviewed 78 students from the I year, 33 (42,3%) have opted for the "sporting polyvalence; gymnastics", 21 (26,9%) for the "sporting polyvalence: athletics" and 15 for the "sporting polyvalence: sporting game" and 9 (11,5%) for "sporting polyvalence: swimming".

At the II year level, the situation is presented as follows: out of the 64 interviewed students, 35 (54,64%) have opted for "sporting polyvalence; gymnastics", 14 (21,8%) for sporting polyvalence: athletics", 10 (15,6%) for sporting polyvalence: sporting game" and 5 (7,8%) have opted for "sporting polyvalence: swimming".

At the III year level, out of the 51 interviewed students, 28 (54,9%) have opted for "sporting polyvalence: gymnastics", 12 (23,5%) for "sporting polyvalence: athletics", 6 (11,7%) for "sporting polyvalence: sporting game" and 5 (9,8%) for "sporting polyvalence: swimming".

From a total of 193 students of the Faculty of Physical Education and Mountainous Sports, Brasov, 76 (39,3%) have opted for "sporting polyvalence: gymnastics", 47 (24,3%) for "sporting polyvalence: athletics", 31 (16%) for "sporting polyvalence: sporting game" and 19 (9,8%) for "sporting polyvalence: swimming. The aforementioned aspects are presented in table 1 and figure 1.

Table 1

*The answer repartition regarding the coordinative capacity forming to the level of practiced disciplines studied in faculty EFS and SPM specializations*

	First YEAR EFS/SPM (78)		Second YEAR EFS/SPM (64)		Third YEAR EFS/SPM (51)		TOTAL (193)	
	No.	%	No.	%	No.	%	No.	%
1 Sporting polyvalence – Gymnastics	33	42,3%	35	54,6%	28	54,9%	<b>76</b>	<b>39,3%</b>
2 Sporting polyvalence – Athletics	21	26,9%	14	21,8%	12	23,5%	<b>47</b>	<b>24,3%</b>
3 Sporting polyvalence – Sporting game	15	19,2%	10	15,6%	6	11,7%	<b>31</b>	<b>16,0%</b>
4 Sporting polyvalence – Swimming	9	11,5%	5	7,8%	5	9,8%	<b>19</b>	<b>9,8%</b>

*The option of students from First, Second and Third year (in percentage)*

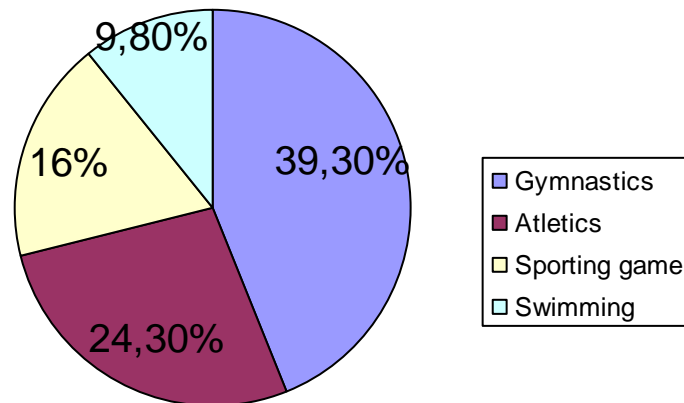


Fig. 1. *The answer repartition regarding the coordinative capacity forming with the motile activity to the level of practiced disciplines studied in the First year.*

From the above table and figure one can notice that “sporting polyvalence: gymnastics” is the discipline the offers the most adequate methods for performing the coordinative capacity having the most options to all the respondent levels, being followed by the “sporting polyvalence: athletics,” , “sporting polyvalence: sporting

game” and “sporting polyvalence: swimming”.

From figure 2, we notice that form 193 respondents to the question: ”Do you need special training for developing coordinative capacity?” 6,54% have responded – I don’t know, 72,89% have responded – Yes and 20,57% have responded – No.

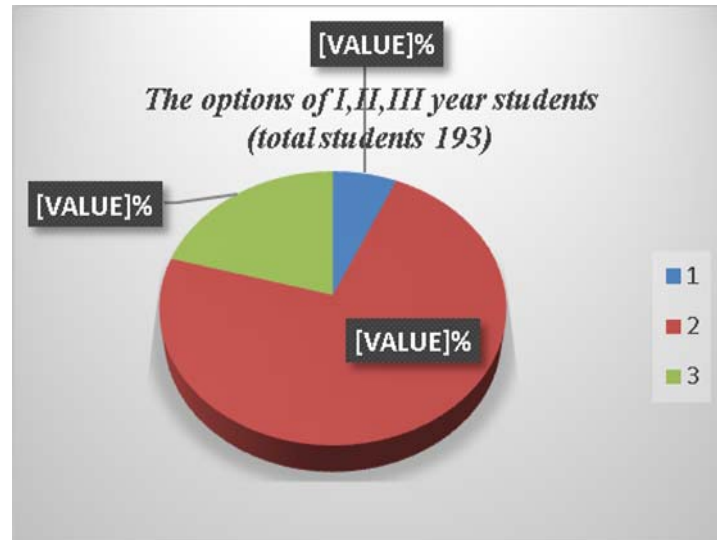
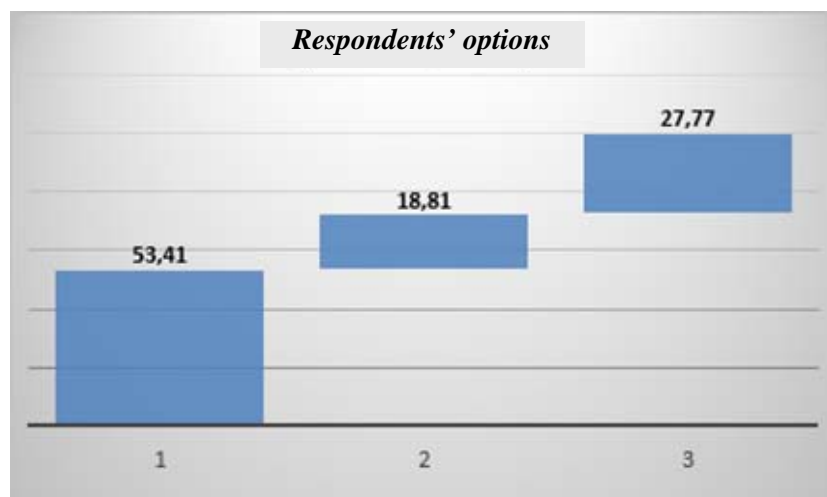


Fig. 2. The answer dynamics regarding the necessity of a special training for developing coordinative capacity

From figure 3, we notice that from 193 respondents to the question: “What kind of training do you think it is necessary for developing the coordinative capacity?” 53,41% have responded that a practical

training is needed, 18,81% have responded that a theoretical training is needed and 22,77% have considered that no methodic training is needed in developing the coordinative capacity.



Legend: 1= practical training; 2=theoretical training; 3=methodic training

Fig. 3. The answer dynamics regarding the necessity of a special preparation for developing the coordinative capacity

To the question: “Have you independently worked in forming the coordinative capacity?” the answers have been as follows out of 193 respondents of the I, II and III years: 64,73% said Yes and

35,27 have said they don’t give too much importance to the independent developing of the coordinative capacity. The situation is represented in figure 4.

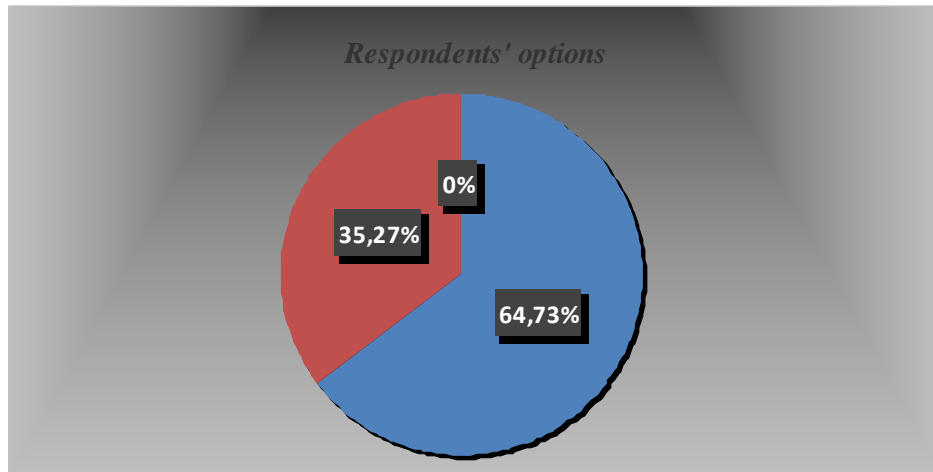


Fig. 4. *The answer dynamics regarding the independent development of coordinative capacity*

To the question: “Give yourself a mark for developing the coordinative capacity of your motile activity”, out of the 193 students, have tried to appreciate

themselves as real as possible and the self given mark can be compared with the marks obtained at the studied disciplines (see table 3).

Table 3

*Self appreciation of the level of coordinative capacity for the motive activity for the interviewed students (193 students)*

Mark	I Year EFS/SPM (78)	II Year EFS/SPM (64)	III Year EFS/SPM (51)
10	26	10	36
9	17	12	9
8	12	16	5
7	10	16	1
6	6	2	-
5	5	8	-
4	1	-	-
3	1	-	-
2	-	-	-
1	-	-	-

#### 4. Conclusions

Expressing the coordinative capacities is conditioned by the maturity process and the motile skill process that the subject has. The coordinative capacities are based on the physical factors of performance, the gesture repertoire and the analysis capacity and are expressed through containing the motile actions and the high capacity for learning.

As a conclusion, we have noticed that the interviewed students consider the coordinative capacity as being absolutely necessary and having as a main result the successful accomplishment of the professional activity. In this sense, they consider necessary a deeper training of the activity domain.

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