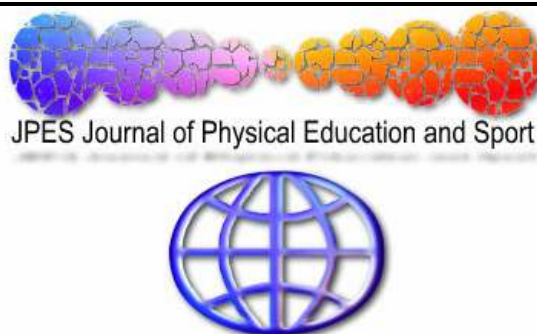




Online Publication Date: 15 March, 2010

ORIENTATION ARTICLE

THE MANAGEMENT OF THE SCIENTIFIC RESEARCH PROJECT

MIHAILESCU Nicolae, Ph.D. Professor

MIHAILESCU Liliana, Ph.D. Professor

University of Pitesti

Abstract

In the context that the management “in spreading everywhere in the modern society” (T. Gavrilă, V. Lefter, 2002) and that is “part of the every social institution” (P. Drucker) gets a major importance concerning the elaboration and promotion of the scientific research projects from superior education. The promotion of the managerial thinking in the framework of the (multiannual) scientific research projects fulfills major roles and generates a remarkable potential impact to some essential components, having effects in the positive and decisive influence of the work processes realized in systemic and synergic context in order to achieve the goal. Starting from the previous expressed premise that the management is part of any social institution, the promotion of the managerial thinking within the framework of the scientific research project concept realized by us was reflected by the content elements that will be revealed forward. In the framework of the conceptualization phase, by the promotion of the management through objectives, there were formulated five objectives that were considered by us as necessary in order to achieve the purpose that results from the research project theme

Key words: *scientific research, management of project, managerial perspective*

The context of the research

The scientific research in the superior education represents, in the same time, a necessity of the activity specific to the knowledge improvement and a professional obligation. This can be realized through the scientific projects that are elaborated according with the market requirements in the framework of some teams that are constituted in this direction, projects that are agreed to receive financing from the structures representing the public or the private domain.

Our investigation realized on a significant scientific papers and documents elaborated by specialist from the physical education and sport superior education emphasizes two aspects (conclusions) that we consider to be significant and with impact for the future activity in this domain:

- the first, that represents a strength point, is that in the Physical Education and Sport fundamental domain there are demonstrated competencies in order to elaborate valuable specialty concepts concerning the scientific research, in concordance with the social necessities and requirements;
- the second, that represents still a weak point, is that in many situations the valuable specialty concepts are not sustained by a adequate managerial approach, context where the general valuable projects' potential is decreased and the finance chances are minimal.

The National Council of the Scientific Research from Superior Education elaborated formal and content requirements for the scientific research projects that are financed from the state budget and also criterions to evaluate the financing requirements, requirements and criterions that concern, both the scientific specialty component and the quality of the project managerial approach.

Content, methodology

From the methodological view point, our research is based on the bibliography documentation that underlined to the theme and the extrapolation of some concepts founded in the specialty literature, as well as on the case study and the experience gained within the framework of the no.5, appendices Ia, NCSRSE code 1172 project and grant (grant contract no. 35GR/2007) called “Educational strategies concerning the social integration of the minors in the reeducation centers”.

The purpose of the project was to determine the ways by which the means of the physical education and sport can be used more efficient to reform the human personality of the young institutionalized from the minors’ reeducation centers and to favoring a more quicker and efficient social insertion of them after they get out of center.

Within the framework of the project we started from the hypothesis that the access of the institutionalized children from the reeducation minors’ centers to the educational complex process and adequate to their particularities by using the physical education and sport means will activate in a grater way the educational levers, especially of the moral education and will determine an adequate social insertion after institutionalization.

From the managerial perspective we considered that the identification and using of the specific management concepts in the multiannual scientific research project will provide the fulfillment of the NCSRSE criterions will generate the increasing of the financing possibility and will represent a work instrument in the projects’ running and completion in efficiency conditions.

The documentation regarded to the project led to some concepts’ shape and activation, considered by us as being fundamental:

1. The praxiologic vision according which a well done thing is the result of a well thinking approach and that this approach can be achieved only by respecting the following trajectory: objectives – contents (activities, methods, resources, organization) – evaluation, (D. Colibaba Evuleț, 2007);
2. The managerial vision, that supposes provisional activities of organization, managing and control-evaluation, grouped in three phases: conceptualization, coordination and commensuration;
3. The conceiving and managing of the research project will realized at superior parameters if the specific methods of management by objectives, results and budget will be used in a complex and modern vision.

The achievement of the scientific research projects in the physical education and sport domain specific conditions supposes the browsing of some significant importance stages:

- the identification and concretization of the research interest domain by studying the requirements of the market, specialty and normative context the provisioned impact of the research completion;
- the elaboration of the research concept based on the conditions/criterions that are formulated by the potential founder as a scientific research project;
- the ongoing of the research project by realizing the actions that are related to the established objectives and the allocation of the necessary managerial resources;
- the research release and valorization in order to emphasize the utility and durability of the project and to open new research and knowledge horizons

Starting from the previous expressed premise that the management is part of any social institution, the promotion of the managerial thinking within the framework of the scientific research project concept realized by us was reflected by the content elements that will be revealed forward. **So, in the framework of the conceptualization phase**, by the promotion of the management through objectives, there were formulated five objectives that were considered by us as necessary in order to achieve the purpose that results from the research project theme. In order to achieve those five objectives there were identify 21 activities that were associated to the objectives as it follows: objective 1 – 4, objective 2 – 5, objective 3 – 5, objective 4 – 4, objective 5 – 3 (table 1).

Table 1. Involvement of the team members

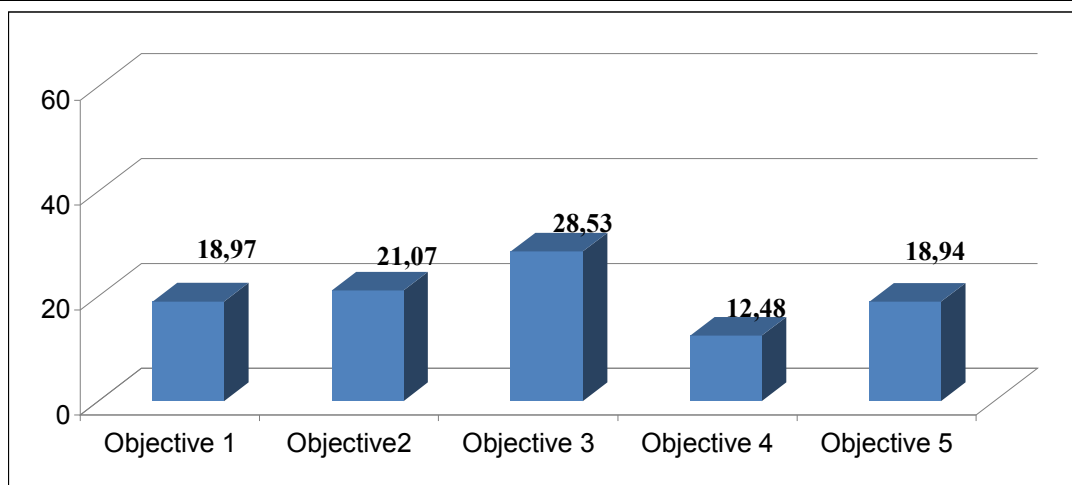
Member of the team Activities	0	1	2	3	4	5	6	7	8
1.1. Organizing the research and its resources (First year – 2007)	Yes	Yes	Yes						
1.2. Research into the specialty literature corresponding to the project's subject (First year – 2007)		Yes	Yes	Yes				Yes	
1.3. The examination of the syllabuses and of the training strategies specific to the pre-academic education (First year – 2007)		Yes				Yes	Yes		Yes
1.4. Carrying out the audit of the organizational environment submitted to the research (First year – 2007)		Yes	Yes			Yes	Yes		
1.5. Self-evaluation concerning the objective achievement (First year – 2007)	Yes	Yes	Yes	Yes					
2.1. The processing, the analysis and the interpretation of the Yesta and information resulting from the achievement of the objective 1 (First year – 2007)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2.2. The elaboration of the instructional strategy project containing curricular and extra-curricular activities of physical education and sports (First year – 2007)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2.3. The analysis and completion of the instructional strategy project (First year – 2007)	Yes	Yes		Yes		Yes			
2.4. Self-evaluation concerning the objective achievement (First year – 2007)	Yes	Yes	Yes						
3.1. Organizing the activity and providing the necessary resources in order to apply the proposed models (First year – 2007)	Yes		Yes						
3.2. Experimenting the models while carrying out the center's activities for the 1 st semester (First year – 2007)	Yes		Yes		Yes		Yes	Yes	
3.3. Self-evaluation concerning the application of the proposed strategy for the 1 st semester (First year – 2007)	Yes	Yes	Yes	Yes					
3.4. Experimenting the models while practicing the activity of the centre during the 2 nd semester (Second year – 2008)	Yes		Yes		Yes		Yes	Yes	
3.5. Gathering, registering and processing the information resulting from the application of the experimental strategy (Second year – 2008)			Yes	Yes	Yes	Yes	Yes	Yes	Yes
3.6. Self-evaluation concerning the application of the strategy (Second year – 2008)	Yes	Yes	Yes	Yes					
3.7. The valorization of the research's partial results through communication and publishing (Second year – 2008)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4.1. The optimization of the models that have been used according to the conclusions resulting from the experimental application self-evaluation (Second year – 2008)	Yes	Yes		Yes	Yes	Yes			
4.2. The elaboration of the final models concerning the curricular and extra-curricular educational-instructional strategies of physical education and sports meant to determine the favoring of the institutionalized children' re-education and social integration (Second year – 2008)	Yes	Yes	Yes				Yes	Yes	
4.3. The results valorization through the elaboration of the syllabuses for this social category (Second year – 2008)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4.4. The elaboration of the final report concerning the project achievement (Second year – 2008)	Yes	Yes							
4.5. The valorization of the research's results through scientific communications, by publishing articles and by editing a book (Second year – 2008)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

We believe that an objective can't be achieved by less than three actives and more the five. For each activity we identified the necessary expenditure types and its quantum, what led to the establishment of the project budget on the trajectory of each activity related expenditure → necessary expenditure for each objective achievement → total project expenditure on types of expenditures (table 2) The distribution of the expenditures

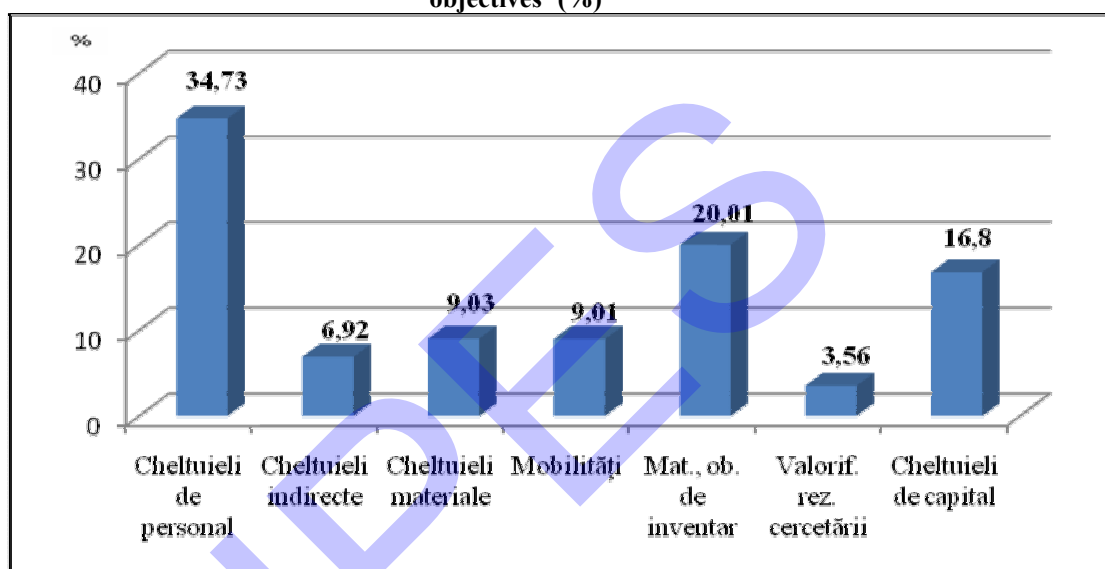
was framed between 2 – 6% to 18 limits activities and in only two cases (when there was necessary capital expenditures) they exceeded 11, respectively 15 %. The judicious distribution of the financial resources on activities generated a balance share of the expenditure for each objective achievement (graphic 1), the third objective having a bigger share because of the capital expenditure.

Table 2 Objectives and activities within the project.

Year *	Scientific objectives (Objective name)	Associated activities* *	Requested value for activities (RON)***
2007	1. The theoretical and methodological substantiation of the research	1.1. Organizing the research and its resources	17.210
		1.2. Research into the specialty literature corresponding to the project's subject	3.640
		1.3. The examination of the syllabuses and of the training strategies specific to the pre-academic education	3.590
		1.4. Carrying out the audit of the organizational environment submitted to the research	3.890
		1.5. Self-evaluation concerning the objective achievement	3.390
	2. The elaboration of the project concerning the instructional strategy	2.1. The processing, the analysis and the interpretation of the Data and information resulting from the achievement of the objective 1	3.390
		2.2. The elaboration of the instructional strategy project containing curricular and extra-curricular activities of physical education and sports	3.640
		2.3. The analysis and completion of the instructional strategy project	3.640
		2.4. Self-evaluation concerning the objective achievement	3.390
	3. Experimenting and evaluating the proposed models	3.1. Organizing the activity and providing the necessary resources in order to apply the proposed models	12.435.7
		3.2. Experimenting the models while carrying out the center's activities for the 1 st semester	5.740
		3.3. Self-evaluation concerning the application of the proposed strategy for the 1 st semester	3.350
2008	3. Experimenting and evaluating the proposed models	3.4. Experimenting the models while practicing the activity of the centre during the 2 nd semester	6.710
		3.5. Gathering, registering and processing the information resulting from the application of the experimental strategy	6.410
		3.6. Self-evaluation concerning the application of the strategy	3.110
		3.7. The valorization of the research's partial results through communication and publishing	4.710
	4. The elaboration of the final models, the project completion	4.1. The optimization of the models that have been used according to the conclusions resulting from the experimental application self-evaluation	3.110
		4.2. The elaboration of the final models concerning the curricular and extra-curricular educational-instructional strategies of physical education and sports meant to determine the favoring of the institutionalized children's re-education and social integration	5.210
		4.3. The results valorization through the elaboration of the syllabuses for this social category	4.910
		4.4. The elaboration of the final report concerning the project achievement	3.110
		4.5. The valorization of the research's results through scientific communications, by publishing articles and by editing a book	7.660



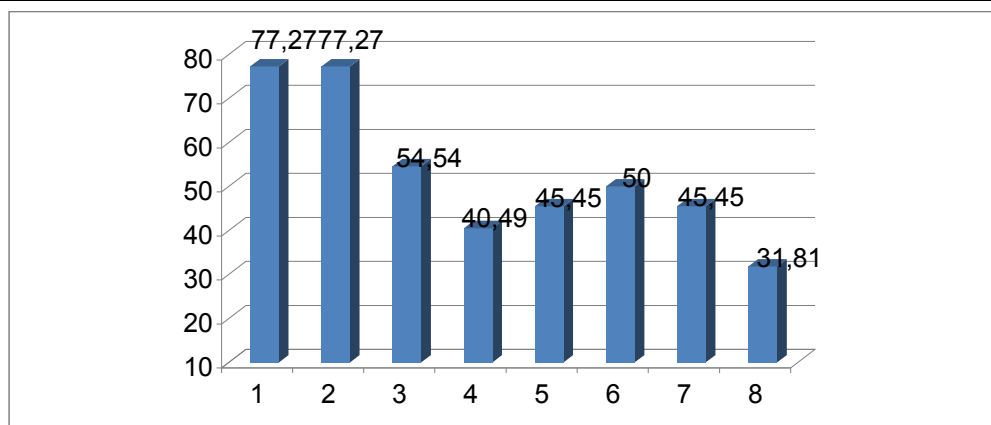
Graphic 1. The share of the expenditure that was necessary for the achievement of the research project objectives' (%)



Graphic 2. The distribution of the expenditures on expenditures types (%)

The utilization of the financial funds, grouped on 7 types of expenditures (graphic 2) was realized to assure the material support of the education – educative activities that made the object of the instructional strategy, in order to sustain the material component that was necessary the realize the research activities, as well as for the expenditures regarded to the mobility of the research members team, personal and research results recovery. From the total of 21 activities, 4 assumed 6 expenditures types (19%), 9 – 5 (42, 85%), 7 – 4 (33, 33%) and 1 – 3 (4, 72%).

The load of the research team members concerning the implication in the activities achievement, determined by their nature and team members competences (graphic 3) was a balanced one, two persons were involved in over 77 % of activities, 4 between 45 – 55 % and two between 30 and 40 %. The achievement of the Gantt diagram concerning the project activities – as a specific management technique – led to a chronological staging of the activities achievement and members for each activity. In this context it was valued the team work – 80 % of activities were achieved by 4 up to 8 members and valued the individual competences. The risk factor, inherent to every research approach, was diminished by promoting the managerial control – evaluation. The fulfillment of the activities that were associated to each objective was evaluated by double action – the self-evaluation of the members and the evaluation realized by persons designated by the project manager, the results being appreciated in direct correlation with the objectives of the research. The partial – at the end of the first research year - and final results were appreciated by the external evaluators from the Scientific Council of the University and NCSRSE, the ratings related with the activity achieved being beyond those that generated the financing.



Graphic 3. The share of the research team members' involvement in the activities achievement (%)

Conclusions

The obtained results after the implementation of the research project confirmed the positive impact of the instructional strategies proposed upon the behavior of the institutionalized minors on the communication, integration and team work line, respecting the game roles, assuming the responsibility, etc. these were valued by the elaboration of the physical education syllabus for the institutionalized children, book editing and communication in international scientific manifestations.

In conclusion, the promotion of the managerial thinking and the implementation of the scientific management concepts in the designing, achievement and evaluation of the scientific research projects is a vision that valorizes the project in the evaluation phase and facilitates the achievement of the activities, resources utilization, as well as the action and managing of the research team members.

Selective bibliography

1. COLIBABA-EVULEȚ, D., (2007) – *Curricular praxiology and projection in physical education and sport*, Universitaria P.H., Craiova;
2. GAVRILĂ, T., LEFTER, V., (2002) – *The general management of the business*, Economic P.H., Bucharest;
3. McCOLLUM, L.K., BĂNACU, C.S., (2005) – *Project management. A practical approach*, University P.H., Bucharest;
4. MIHĂILESCU, N., (2006) – *Management, Marketing, Legislation in physical activity*, University of Pitesti P.H.;
5. MIHĂILESCU, N., MIHĂILESCU L., (2009) - *Aspects concerning the management of the scientific research projects*, University of Pitesti P.H
6. NICOLESCU, O., VERBONCU, I., (2006) – *Managerial methodologies*, Economic Tribune, Bucharest;
7. YOUNG, T., (2007) – *Successful project management*, second edition, translation, Rentrop – Straton P.H., Bucharest.