

ACTIVITIES OF PHYSICAL EDUCATION TEACHERS IN THE PROCESS OF FORMING MOTOR SKILLS OF THE STUDENTS

Activities of physical education teachers

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Abstract

Introduction. The aim of this study was to assess the motivating and informing activities taken by physical education teachers in the classes devoted to shaping students' motor skills. **Material and methods.** The study was carried out in 55 secondary schools from Lublin region. It covered 30 female teachers and 52 male teachers representing all levels of career advancement. Material was collected on the basis of specially developed lesson observation sheet. On this basis, the information of 315 lessons was obtained. **Results.** The data were analyzed in relation to gender and professional promotion of the subjects. It was found that the respondents did better with informing than motivating activities, and in their implementation there were no major differences between female and male teachers. The tendency to change the level of the analyzed activities according to the professional promotion status occurred only among male teachers. **Conclusions.** Analysis showed that the teachers should place more emphasis on motivating activities, and especially on convincing students about the possibilities in the use of after-school activity of what they mastered in the classroom.

Key words: teaching exercise, teacher's activities, the students of secondary schools

Introduction

Implementation of the content related to teaching exercise techniques in various disciplines, and equipping students in an optimal resource exercise skills is one of the main tasks of the school and physical education teachers. The poor results in this respect may be due to various reasons, but mostly to the lack of intentional behavior of teachers and of appropriate program to perform a task, i.e. creation of the right task situation [1]. Deliberate task performance will be characterized by the transformation of the initial situation into the final situation, then such behavior will be called actions. For example, the act of learning the art of exercise leads from the inability to the ability situation, action to improve the efficiency from the low to high efficiency situation, etc. [2, 3].

Often, the results achieved do not coincide with the objectives set, as well as the actual operations with the programs and then we can talk about errors of the results and activity [4]. In the implementation of each activity, we can distinguish sub-activities, which we call operations. These in turn determine the pattern of activity, which can be viewed in terms of objective (external), subjective (modal) and formal structure, in which the linear (serial) structure is the simplest and consists in the fact that result is achieved by a series of consecutive partial tasks, i.e. operations. Operations in relation to motor tasks are nothing more than exercises, i.e. sub-tasks forming the main task [3].

Nowadays, more and more often, it is considered that the effects of exercise learning depend on the teachers' pedagogical activities and the conditions under which these operations are conducted. A characteristic feature of his teaching is the fact that they involve directing the activities of students and the kind of interaction with them.

The educative activity of the teacher should be understood as his/her behavior and focus on achieving a specific effect of the tasks pursued by the students [2]. However, the behavior of students means activities focused on completion of a task, oriented on a specific result. We see that according to modern psychologists, the task is a master pattern and regulator of activities that may be of simple and complex nature. Complex, i.e. major tasks, are performed by the simple tasks on which depend the structure and effects of work [2].

Each teaching task including the exercise has a content component (objective) answering the question "what" and the operational component (functional) answering the question "how". Depending on the complexity of motor task, we choose the appropriate way of teaching – an easier or more difficult. Selection of teaching strategies is conditioned on and results from the implementation of specific activities of the teacher and student. Among the activities teachers can choose those that relate to the preparatory, motivating, informing, guiding, checking, corrective, protective and pro-social activities [3, 5, 6].

Preparatory activities are those of the teacher, the purpose of which is to introduce the right mood for implemen-

tation of the tasks of the lesson. Often these activities are limited to exercises with the music, the appropriate choice of words, describing the way of exercise performance, preparing with the students equipment and appliances, and efficient handling of organizational forms.

An important role in shaping motor skills play the incentive activities based on stimulation of interests and full mobilization of students during task performance. They are linked with the emotional and mental processes and constitute the psychical attitude of the student to the task. Within the extent of these operations it is important to individualize the motivation and address the needs of girls and boys.

In the process of teaching the techniques of various exercises the importance of informing activities involving the transfer of new messages to the students should be particularly emphasized. The major information role in physical education involves properly demonstrated presentation, which combined with the word creates a mixed word-presentation strategy. Using this strategy it is suggested that the teacher should apply the following algorithm of operation: 1) providing the names and the importance of the motor activity, 2) a brief description of actions (verbal illustration of motor activity), 3) an explanation of relationships between the elements of a motor task, 4) demonstration of a motor task in natural and slow pace.

The positive effects of informing activities are achieved also by using acoustic-rhythmic measures to assist awareness of the students about individual elements of exercise techniques. This follows from the existence of common element – rhythm in both music and exercise.

The task of guiding actions is to motivate students to eliminate shortcomings in the implementation of exercises, especially in cases where the task is introduced for the first time. These activities are mainly focused on sophistication of the student self-reliance in approaching the target by offering advice and appropriate solutions.

The control activities are directed on assessment of the discrepancies between the actual condition and the objective, which is a measure of the so-called result error. If a student is able to see mistakes in the exercise implementation, the phenomenon of self-esteem and self-control occurs, strongly linked with the psyche of the student. Monitoring and evaluation should not function as forms of threat and fear.

Very important role in shaping motor skills is also played by the corrective, alternative securing and pro-social actions.

With regard to corrective and alternative actions, synchronous correction can be distinguished consisting of current informing the students about errors without interrupting the exercise, a quick correction in which the teacher stops the exercise and corrects the error, and delayed correction when the teacher corrects the error over a longer period of time due to the fitness or health infirmities of the student.

Alternative activities involve quick teacher's decision taken without losing the attractiveness and interest in the class.

Securing actions make the teacher aware of his/her responsibility to ensure the safety and welfare of students. It should be noted that every fall and injury sustained move the student away from physical activity and repetition of certain exercises. However, the atmosphere of satisfaction, fairness and altruism created during the lessons promotes positive attitudes and is the basis for pro-social activities [1, 3, 5, 6].

The aim of this study was to determine whether and to what extent the physical education teachers undertook activities to motivate and inform high school students in the process of shaping motor skills.

Material and methods

The study was conducted in the fall semester of 2008 in 55 secondary schools of the Lublin Voivodeship. It was attended by 30 female teachers and 52 male teachers representing all levels of career advancement. The technique of observation was used, and under it a developed in the Department of Theory and Methodology of Physical Education of FPES in Biala Podlaska lesson visitation sheet comprising a record of activities that teachers should take in the process of teaching exercise techniques. The task of the visiting parties – trained students on teaching practice – was to take notes of those activities that have been presented during the lesson. The tool was verified in pilot studies in secondary schools in Biala Podlaska. Overall test material covered 315 visitations of physical education lessons, of which 126 have been carried out by female teachers (40%) and 189 by male teachers (60%). In the analysis of research material the gender and promotion grade of the subjects were taken into consideration.

Results

Among the motivating steps taken by the teachers, the awareness of the students about the possibility of using motion taught in after-school activity, interesting the students in the exercise taught, encouraging them to independent physical activity, and the use of praise and criticism were evaluated.

In more than half of visited lessons the subjects did not inform the students why and how they can use motor skills mastered during the lessons in their after-school activity. This significant shortcoming was observed in a larger number of lessons given by female teachers (53%) than male teachers (51%). Given the degree of career progression, it has been observed that this was particularly neglected by appointed teachers (27% of lessons) and qualified teachers (24%). Other lessons, including a bit more conducted by male teachers, took into account that aspect of preparation for independent self-work (Tab. 1).

Table 1. Convincing students about the possibility of using exercise taught in out-of-school activity (in % of the lesson)

Answer category	Female teachers			Total	Male teachers			Total
	Promotion grade				Promotion grade			
	I and II	III	IV		I and II	III	IV	
Yes	12	26	9	47	4	20	25	49
No	10	27	16	53	7	20	24	51

Explanations: I – trainee, II – contract, III – appointed, IV – certified

In general, in nearly 70% of lessons the students were interested in exercise, in about 30% it was difficult to make a clear assessment. There was no interest only in 3% of lessons. Lessons conducted by a female teacher raised a little less interest than conducted by male teachers (67% and 70%). In the career groups, the best in this respect were the certified male teachers (39% of lessons) and appointed female teachers (36%). The biggest difficulty in assessing students' interest in an exercise were in the case of lessons taught by appointed male and female teachers (16% and 11%) (Tab. 2).

Table 2. Interest of students in exercise taught (in % of the lesson)

Answer category	Female teachers			Total	Male teachers			Total
	Promotion grade				Promotion grade			
	I and II	III	IV		I and II	III	IV	
Yes	12	36	19	67	8	23	39	70
No	0	1	2	3	0	1	1	2
Difficult to say	6	13	11	30	2	16	10	28

Explanations: I – trainee, II – contract, III – appointed, IV – certified

Male teachers were better than female teachers in encouraging to independent physical activity (69% vs. 50% of lessons). Qualified and appointed teachers were the best (42% and 21% of lessons). Attention should be drawn to a large proportion of lessons, including 48% held by the female teachers and 39% by male teachers, in which the visitors could not clearly identify this. These were mainly lessons of female appointed teachers (28%) and male teachers at the same level of career advancement (19%) (Tab. 3).

Table 3. Encouraging student to independent physical activity (in % of the lesson)

Answer category	Female teachers			Total	Male teachers			Total
	Promotion grade				Promotion grade			
	I and II	III	IV		I and II	III	IV	
Yes	10	21	19	50	6	21	42	69
No	1	1	0	2	2	0	0	2
Difficult to say	7	28	13	48	3	19	7	39

Explanations: I – trainee, II – contract, III – appointed, IV – certified

In the process of shaping motor skills the subjects preferred to use praise (over 70% of lessons) than the critical comments (more than 20%). It was slightly more likely done by male teachers (77% of lessons as compared to 75% carried out by the female teachers). Praise occurred in the largest proportion of qualified teachers' lessons (42%) and appointed teachers (40%). Female teachers more often gave critical comments than the male. This was observed particularly in lessons conducted by qualified and appointed teachers (12% and 10% of lessons). In the case of the male teachers these mainly related to the lowest level of career advancement (10%) (Tab. 4).

Table 4. Using praise and critical comments (in % of the lesson)

Answer category	Female teachers			Total	Male teachers			Total
	Promotion grade				Promotion grade			
	I & II	III	IV		I & II	III	IV	
Praise	14	40	21	75	1	34	42	77
Critical comments	3	10	12	25	10	6	7	23

Explanations: I – trainee, II – contract, III – appointed, IV – certified

As part of informing activities, the names of the taught exercise technique were analyzed, capability of exercise description remembering by the students, the order of the description and the presentation, compliance of the exercise description with the presentation, and comprehensibility of the description.

In nearly 95% of visited lessons the subjects gave the name of an exercise technique taught in accordance with applicable terminology. In the remaining 5% of lessons observed this action has not occurred. The name of the activity taught was reported accurately by appointed and certified teachers of both sexes (Tab. 5).

Table 5. Providing the name of the exercise (in % of the lesson)

Answer category	Female teachers			Total	Male teachers			Total
	Promotion grade				Promotion grade			
	I and II	III	IV		I and II	III	IV	
Yes	17	46	32	95	10	38	46	94
No	1	3	1	5	1	2	3	6

Explanations: I – trainee, II – contract, III – appointed, IV – certified

In about 90% of analyzed lessons it was discovered that the taught descriptions of exercises were remembered by the students (Tab. 6). Female teachers in this respect were a bit better than the male teachers (91% to 88%). Given the degree of career, the appointed female teachers (44% of lessons) and certified male teachers (45%) were better.

Table 6. Students' ability to remember the exercise description (in % of the lesson)

Answer category	Female teachers			Total	Male teachers			Total
	Promotion grade				Promotion grade			
	I and II	III	IV		I and II	III	IV	
Yes	17	44	30	91	10	33	45	88
No	1	0	3	4	0	1	1	2
Difficult to say	0	4	1	5	1	6	3	10

Explanations: I – trainee, II – contract, III – appointed, IV – certified

During the exercise teaching, female teachers more often than male teachers began with a description (66% of lessons), and then passed to the presentation (34%). Male teachers in equal proportions (50% lessons) first used the description or the presentation. Mostly appointed female teachers began with the description of the exercise (39% of lessons), and appointed and qualified male teachers with the presentation (22%) (Tab. 7).

Table 7. Order of exercise description and presentation (in % of the lesson)

Answer category	Female teachers			Total	Male teachers			Total
	Promotion grade				Promotion grade			
	I and II	III	IV		I and II	III	IV	
Exercise description	11	39	16	66	5	18	27	50
Exercise presentation	6	11	17	34	6	22	22	50

Explanations: I – trainee, II – contract, III – appointed, IV – certified

As for the pace of the presentation, most subjects preferred to demonstrate exercise at the natural pace, i.e. motivation presentation (about 70% lessons). In other lessons, there was a presentation in slow motion, called the methodological. This form of visual instruction was used mainly by certified male teachers (36% of lessons) and appointed female teachers (33%). Slow motion occurred in the largest percentage of lessons conducted by appointed female teachers (17%) and qualified male teachers (14%) (Tab. 8).

Table 8. Exercise presentation pace (in % of the lesson)

Answer category	Female teachers			Total	Male teachers			Total
	Promotion grade				Promotion grade			
	I and II	III	IV		I and II	III	IV	
Natural	11	33	25	69	8	26	36	70
Slow	6	17	8	31	3	13	14	30

Explanations: I – trainee, II – contract, III – appointed, IV – certified

Compliance the exercise description with the actual behavior (syntactic criterion) occurred in all analyzed classes conducted by both the male and female teachers. It was present in the highest degree at the lessons of appointed female teachers (50%) and certified male teachers (49%) (Tab. 9).

Table 9. Compliance of the description with actual exercise (in % of the lesson)

Answer category	Female teachers			Total	Male teachers			Total
	Promotion grade				Promotion grade			
	I and II	III	IV		I and II	III	IV	
Compliant	18	50	32	100	11	40	49	100
Incompliant	0	0	0	0	0	0	0	0

Explanations: I – trainee, II – contract, III – appointed, IV – certified

Description of the exercise taught was understood (meeting the semantic criterion) in more than 85% of the observed lessons. This was found in about 87% of teaching units carried out by male and female teachers. In other lessons it could be understood only partially (some fragments). The most understandable descriptions of the motion were applied by certified male teachers (44% of lessons) and appointed female teachers (43%). Weaker (partially understood) were the descriptions submitted by appointed male teachers (8%) and female teachers representing the same level of promotion (7%) (Tab. 10).

Table 10. Understandability of exercise description (in % of the lesson)

Answer category	Female teachers			Total	Male teachers			Total
	Promotion grade				Promotion grade			
	I and II	III	IV		I and II	III	IV	
Absolutely understandable	14	43	30	87	10	32	44	86
Partially understandable	4	7	2	13	1	8	5	14

Explanations: I – trainee, II – contract, III – appointed, IV – certified

Discussion

Of the two types analyzed, in case of the teaching actions taken in the development of motor skills of students the subjects were better in their informing duties.

Considering these activities it should be emphasized that, as found in a high percentage of visited lessons, the description of the exercise was clearer (semantic criterion), it was compatible with actual exercise (syntactic criterion) and the students were able to remember the description of the exercise (a pragmatic criterion). This aspect of the development of verbal messages was strongly emphasized in his works by Czabański [5, 7].

Among informing actions that were well implemented by the subjects, the provision of the name of exercise taught and related explanation of its purpose were implemented well. In his monograph on the verbal message during physical education classes Zatoń [8] states, that this type of information have a positive impact on the quality of teaching.

The order of the description and the presentation shown by the subjects, some of which starts teaching with a description, and some with the presentation, reflects the positions of the various authors in this issue. Some people e.g. Zatoń [8] gives more importance to verbal instructions, others, such as Strzyżewski [4] to the visual instructions giving words only a supporting role.

Appreciating the role of information relating to the indicated exercise technique Wiesner [9, 10] pointed to the fact that the described process does not only take place in the cognitive sphere but also in the emotional, with its source in personal and social motivations of the students.

From motivating activities analyzed in this work, use of praise and inspiring students' interest in the exercise taught during lessons was found to be better, encouraging the students to independent physical activeness and persuasion about a possibility of using the exercise taught in out-of-class activities was poorer. In some aspects an analogy to studies of Bukowiec [11] can be seen, who stated that in the lessons of physical education teaching predominates over education, and in teacher's interaction with students dominate the concrete and indifferent relations. Skipping encouraging the students to independent physical activity, and convincing them about a possibility of using the exer-

cises taught out-of-class can bear even more serious consequences – it may cause abandonment of physical activity together with graduation – as is clear from the work of Sulisz [6] and Zatoń [8] it is very difficult for the students to understand the dual role of physical education. In accordance with the basic assumption of modern theory [2] and the methodology of physical education [4, 12] it has, on the one hand to meet immediate development needs of students, on the other to prepare them to care for the body during leisure time after school and after the completion of organized process of physical education.

The greatest differences between female and male teachers, to the benefit of male teachers, occurred in encouraging students to independent exercise activity. Women, more often than men, began teaching exercise with the description. This is consistent with the results of Srokosz [1] research, who also found (albeit in a slightly different context) that when conducting physical education classes, women are more likely to use the word than men. In other cases, the results of studied male and female teachers were very close.

As for the level of the analyzed activities (measured by the percentage of classes in which they were observed) in relation to the degree of professional promotion, it was found that this correlation occurred only in the case of men. The lowest level was represented by trainee and contract teachers, higher by appointed, and the highest by qualified male teachers. Among women, the least scored trainee and contract female teachers, while in the other two groups, in some activities appointed teachers were better, and in certain – certified teachers.

Conclusions

Based on the study, the following conclusions can be made:

1. In the case of the physical education lessons observed, the teachers included and correctly implemented the motivating and informing activities during the shaping of exercise skills of the students.
2. From motivating and informing activities, the examined informing activities were used in the teaching process in a wider range.
3. As part of informing activities, providing the students with names of the exercise technique taught and correct description of the same was best carried out.
4. Teachers paid too little attention to the motivational activities, which determine the use of mastered skills in physical activity during school and after graduation.
5. In exercise teaching, female teachers more often used the word, the male teachers – presentation.
6. Only in the case of men, the level of ongoing activity was higher, the higher was their level of career advancement.

Acknowledgements

The research was accomplished within the framework of research project of Faculty of Physical Education and Sport in Biała Podlaska, Josef Pilsudski University of Physical Education in Warsaw – DS-104 – financed by the Ministry of Science and Higher Education.

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Submitted: June 17, 2010

Accepted: July 22, 2010