

APPLICATION OF MEASURES TO IMPROVE LEARNING QUALITY OF ELECTIVE PHYSICAL EDUCATION UNDER CREDIT SYSTEM FOR HONG DUC UNIVERSITY STUDENTS

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Abstract:

Based on the assessment of the actual situation of curriculum, the results of the elective physical education by students, the research has selected and applied a number of measures to improve the learning quality of elective physical education in accordance with credit system for students at Hong Duc University.

Keywords: Learning quality, elective sports, solution.

INTRODUCTION

Facing the requirements of fundamental and comprehensive renovation of education and basing on the general trend of the Education and Training, in the past years, Hong Duc University has conducted renovation of organization, management and method of teaching subjects in general and physical education in particular and achieved positive results in which the change of training form from year to credit training.

However, the implementation of transferring the form of credit to non-professional subjects has only been carried out for one year, there are still some difficulties such as the inadequate orientation and selection of elective subjects by students. Besides, the extra-curricular sports of students is limited, the performance of the sports clubs in the school is not good. In addition, the deal with especially treatment for students with weak health has various shortcomings without specific solving measures. Therefore, it has greatly affected the quality of physical education in general and elective subjects in particular, as well as the overall physical strength development of students.

Therefore, the research has selected and applied measures to improve the learning quality of the Physical Education module in general and the elective Physical Education module in particular in accordance with credit learning by non-professional students at Hong

Duc University.

RESEARCH METHODS

The research process has used the following research methods: analysis and synthesis of documents, pedagogical observations, pedagogical tests, statistical mathematics.

RESULTS AND DISCUSSION

1. Current situation of learning quality of Physical Education module and elective Physical Education module

1.1. Reality of curriculum of Physical Education and elective Physical Education according to credit system by Hong Duc University students

Under the regulations of the Ministry of Education and Training, based on the actual conditions of the University, the Physical Education curriculum is arranged in 2 modules corresponding to the following terms:

+ Semester 1 - Corresponding to module 1, it is a compulsory module.

+ Semester 2 - Corresponding to module 2, it is an elective module.

The total time in the entire course of the Physical Education curriculum is 04 credits and divided into 02 semesters. The average point of the 02 semesters is the ending point of the subject.

1.2. Actual situation of extra-curricular training of elective Physical Education module by students

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Most of the children selected to study extra-curricular sports at the main learning time: football with 46.67%, basketball with 41.67%, volleyball with 44.29% and vovinam with 46.67%. However, there are still a large number of students who prefer to study other extra-curricular sports, the highest rate is Badminton accounting for 13.6%, swimming accounting for 8.8%, aerobic accounting for 7.6%.

Regarding the form of practice: Most students participate in extra-curricular sports training in the form of self-training because there is no instructor (accounting for 26.00%) or self-practice in groups (accounting for 65.20%);

When learning about the need to participate in training in the form of sports classes and clubs with instructor, the students highly appreciated (85.20%).

1.3. Results of elective Physical Education module and assessment of students' standards for physical training

1.3.1. Results of elective Physical Education:

The statistics of the learning results of elective sports for non-specialized students at

Hong Duc University shows that students' study results are mainly ranked average (account for 65.69%), followed by very good rank with 78/510 students (account for 15.29%). The rate of students achieving excellent and very good level is very low, only 28/510 students, accounting for 5.49%. Meanwhile, the rate of students with fair and weak grades is still large with of 60/510 students (account for 13.53%).

1.3.2. Current situation of general physical fitness according to students' standards for physical training

In general, when compared with the physical training standards by the Ministry of Education and Training of the same age, the physical fitness level of students at Hong Duc University is still low and the percentage of students meeting the average physical training standards is only 52.68%.

2. Application of measures to improve learning quality of elective Physical Education module for Hong Duc University students

2.1. Selection of measures

From these theoretical bases, through

Table 1. Current situation of physical strength level by non-specialized students at Hong Duc University (n_{male} = 228; n_{female} = 282)

TT	Content of test	Sex	Qualified physical training level (age 19)	Test results					Total (n = 510)			
				Test results ($\bar{x} \pm \delta$)	Number of passed students	Rate %	Number of failed students	Rate %	Number of passed students	Rate %	Number of failed students	Rate %
1	Dominant handgrip strength (kg)	Male	≥41.40	41.85±3.65	168	73.68	60	26.32	369	72.35	141	27.65
		Female	≥26.70	27.55±2.48	201	71.28	81	28.72				
2	Crunches (time/30s)	Male	≥17.00	17.2±1.25	118	51.75	110	48.25	254	49.8	256	50.2
		Female	≥16.00	15.83±1.24	136	48.23	146	51.77				
3	Standing long jump (cm)	Male	≥207.00	207.35±18.39	116	50.88	112	49.12	248	48.63	262	51.37
		Female	≥153.00	151.32±14.11	132	46.81	150	53.19				
4	30 m standing start run (s)	Male	≤5.70	5.66±0.51	152	66.67	76	33.33	311	60.98	199	39.02
		Female	≤6.70	6.65±0.62	159	56.38	123	43.62				
5	Shuttle run 4 ´ 10m (s)	Male	≤12.40	12.55±1.06	108	47.37	120	52.63	234	45.88	276	54.12
		Female	≤13.00	13.42±1.15	126	44.68	156	55.32				
6	5-minute run (m)	Male	≥950.00	927.17±69.34	90	39.47	138	60.53	196	38.43	314	61.57
		Female	≥870.00	850.04±62.85	106	37.59	176	62.41				
	\bar{x}								52.68		47.32	

analyzing the status of organization, management of physical education class non-specialized students at Hong Duc University, the reference of relevant documents and consultation of expert, the research has selected and identified measures to develop physical strength for the study subjects, including:

Measure 1: Educate to raise awareness about the position and role of physical education in general and elective sports in particular

Measure 2: Diversify teaching methods and means to develop the initiative and creativity of students in elective sports class

Measure 3: Strengthen professional activities and professional self-fostering of lecturers of elective sports

Measure 4: Innovate teaching of elective sports according to the direction of student health and fitness classification

Measure 5: Equip and supplement professional facilities and means for the teaching of elective sports

Measure 6: Strengthen guidance for students to practice extra-curricular activities after school in the form of sports clubs as well as open competition for the elective sports.

2.2. Application and evaluation of measures

2.2.1. Organization of pedagogical experiment

The subject of pedagogical experiment is 125 students (60 male students and 65 female students) of the university course 20 studying the first year at Hong Duc University. Experimental subjects choose one of the subjects of the elective Physical Education module include Vovinam, football, basketball, volleyball and aerobic.

When defining the effectiveness of the measures to improve the quality of teaching and learning selected sports, the research based on the following evaluation criteria: Movement density in practical lessons of elective sports; Learning results of elective sports; General level of physical fitness according to the standards of Physical Training by the Ministry of Education and Training.

Before the pedagogical experiments, the research has conducted test, evaluation and classification of the general level of fitness

strength according to the standards of physical training, and assessment of the movement density in the first 2 practice sessions of the elective subject program, from which to use as a basis for comparing the results of post-experimental test.

After the experiment, the study has conducted an evaluation on the experimental subjects in the three criteria mentioned above. Under the conditions of time and scope of research and the impact of individuals, the experiment is only possible to apply in practice 5 measures, namely 1, 2, 3, 4 and 6.

2.2.2. Pedagogical experiment results

Results of post-experimental test:

The results in tables 2, 3 and 4 show:

- The movement density during the regular classes of elective sports by the subjects has increased significantly. The movement density in the lessons reached from 67.61% to 70.07%. Compared with movement density before experiment, the post-experimental movement density increased from 19.40% to 19.73%.

- The results of testing the general physical fitness level according to the contents and standards of physical training show that after the experiment, the physical level of both male and female students has markedly different ($t_{\text{calculation}} > t_{\text{table}}$ is at probability threshold $P < 0.05$ to 0.01). At the same time, the percentage of students meeting test requirement is higher than before the experiment, the average growth rate is from 24.490% to 45.000% for men and from 23.028% to 40.000% for women.

- The learning results of elective sports by students of university course K19 and K20 are also similar. The learning results have a significant difference with $\chi^2_{\text{calculation}} > \chi^2_{\text{table}} = 16.778$ with $P < 0.01$.

Thus, from the results above, it can be seen that the measures, which the research process has developed after the experiment, prove effective in improving the quality of teaching and learning elective Physical Education module in accordance with credit system, contributing to improving the efficiency of physical education for non-specialized students at Hong Duc University.

Table 2. Comparison of movement density at elective sports class by the research subjects before and after experiment (n = 125)

No.	Name of sports	Time	Number of observation session	Startup (15 minutes)		Fundamental part (75 minutes)		Movement density (%)
				($\bar{x} \pm \delta$)	MĐVĐ (%)	($\bar{x} \pm \delta$)	MĐVĐ (%)	
1	Football	Before experiment	2	7.23±0.91	48.20	37.02±4.12	49.36	48.78
		After experiment	2	10.13±1.21	67.53	52.02±5.15	69.36	68.45
		Increasing level			19.33		20	19.67
2	Basketball	Before experiment	2	7.14±0.86	47.60	36.05±4.05	48.07	47.83
		After experiment	2	10.02±1.16	66.80	51.05±5.09	68.07	67.43
		Increasing level	2		19.20		20	19.60
3	Volleyball	Before experiment	2	7.18±0.88	47.87	36.08±4.08	48.11	47.99
		After experiment	2	10.08±1.08	67.20	51.18±5.13	68.24	67.72
		Increasing level	2		19.33		20.13	19.73
4	Vovinam	Before experiment	2	7.51±0.95	50.07	38.05±4.18	50.73	50.40
		After experiment	2	10.21±1.25	68.07	54.05±5.18	72.07	70.07
		Increasing level			18.00		21.33	19.67
5	Aerobic	Before experiment	2	7.19±0.89	47.93	36.36±4.11	48.48	48.21
		After experiment	2	10.05±1.09	67.00	51.16±5.11	68.21	67.61
		Increasing level			19.07		19.73	19.40

Table 3. Comparison of results of general physical fitness test after experiment (n_{male}=60, n_{female}=65)

No.	Content of test	Sex	Qualified physical training level	Test results		Difference		Before experiment		After experiment		W%
				Before experiment	After experiment	t	P	Number of passed students	Rate %	Number of passed students	Rate %	
1	Dominant handgrip strength (kg)	Male	≥41.40	41.8±3.66	42.95±3.61	16.396	<0.01	43	71.67	55	91.67	24.490
		Female	≥26.70	27.5±2.49	28.2±2.42	15.340	<0.01	46	70.77	58	89.23	23.077
2	Crunches (time/30s)	Male	≥17.00	17.1±1.24	18.05±1.21	31.715	<0.01	31	51.67	49	81.67	45.000
		Female	≥16.00	15.86±1.22	16.85±1.19	25.800	<0.01	31	47.69	43	66.15	32.432
3	Standing long jump (cm)	Male	≥207.00	207.25±18.40	209.38±18.03	10.165	<0.01	30	50.00	43	71.67	35.616
		Female	≥151.29	151.29±14.13	154.12±14.02	9.745	<0.01	30	46.15	42	64.62	33.333
4	30 m standing start run (s)	Male	≤5.70	5.69±0.52	5.32±0.48	2.527	<0.05	38	63.33	53	88.33	32.967
		Female	≤6.62	6.62±0.63	6.36±0.60	2.170	<0.05	39	60.00	49	75.38	22.727
5	Shuttle run 4' 10m (s)	Male	≤12.40	12.61±1.08	12.22±1.01	2.602	<0.01	28	46.67	41	68.33	37.681
		Female	≤13.00	13.4±1.14	12.82±1.11	3.397	<0.05	29	44.62	41	63.08	34.286
6	5-minute run (m)	Male	≥950.00	927.23±69.36	954.15±68.34	7.877	<0.01	24	40.00	37	61.67	42.623
		Female	≥870.00	849.82±62.84	875.96±61.85	7.527	<0.01	24	36.92	36	55.38	40.000

Table 4. Comparison of learning results of elective physical education module by students of University course K20 after experiment with K19 students

Subject		Classification of learning results					Comparison	
		A, B ⁺	C ⁺	C	D, D ⁺	F	χ^2	P
University course K19 (n = 510)	m _i	28	78	335	56	13	16.778	<0.01
	Rate %	5.49	15.29	65.69	10.98	2.55		
University course K20 (n = 125)	m _i	15	29	74	7	0		
	Rate %	12	23.2	59.2	5.6	0		

CONCLUSION

1. The reality of teaching Physical Education module in general and the elective Physical Education module under the credit system by non-specialized students at Hong Duc University still has limitation and shortcomings. Especially, The conditions of facilities for teaching some sports are lacking and not good quality, the extra-curricular sports of students have not been fully implemented, lack of organization and guidance for students in self-training physical training and sports training activities (including elective sports). Meanwhile the demand for extra-curricular sports training in general and elective sports by students is relatively high (account for 85.20%). This situation has affected the quality of Physical Education for students in the University. The rate of students with average physical training standards in all content is only 52.68% of satisfactory.

2. The research process has selected and developed 06 professional measures with specific instructions to improve the quality of teaching elective Physical Education module for non-specialized students at Hong Duc University, initially gained the acknowledged by teachers, experts in leadership, management and teaching work at sports universities and colleges. At the same time, through experiments in the practice of organizing and managing teaching elective Physical Education module for the research subjects, 05 measures have confirmed the effectiveness, contributing to improving the quality of Physical Education for students in the University. This expressed by the following aspects: The learning results of Physical

Education by students have significant differences with P <0.01; Movement density in elective lessons increases at average level from 19.40% to 19.73%; The physical fitness level of students under the physical training standards has been significantly increased with the difference at probability threshold P <0.05 to P <0.01.

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