



P-ISSN: 2394-1685  
E-ISSN: 2394-1693  
Impact Factor (ISRA): 5.38  
IJPESH 2019; 6(1): 26-29  
© 2019 IJPESH  
www.kheljournal.com  
Received: 19-11-2018  
Accepted: 21-12-2018

**Nguyen Duc Thanh**  
Center of Physical and Defense  
Education, Ho Chi Minh City  
University of Technology and  
Education, Vietnam

**Truong Quang Minh**  
Center of Physical and Defense  
Education, Thu Dau Mot  
University, Vietnam

**Trinh Phuoc Thanh**  
Center of Physical and Defense  
Education, Thu Dau Mot  
University, Vietnam

**Correspondence**  
**Nguyen Duc Thanh**  
Center of Physical and Defense  
Education, Ho Chi Minh City  
University of Technology and  
Education, Vietnam

# International Journal of Physical Education, Sports and Health

## Evaluating effectiveness of the elective karatedo curriculum for male students in Thu Dau Mot University, Vietnam

**Nguyen Duc Thanh, Truong Quang Minh and Trinh Phuoc Thanh**

### Abstract

This Research aimed to evaluate the effectiveness of the elective Karate-do curriculum, the rebuy enriching the extra curricular content, contributing to improving student's health and the quality of physical education in the University Thu Dau Mot University, Vietnam.

**Keywords:** Curriculum, Karatedo, extracurricular, development, fitness, students, Thu Dau Mot

### Introduction

Through thousands of years of struggle to survive, cultural exchanges, Vietnamese martial arts have developed very diverse and formed many different sects, build an enormous treasure of martial arts, including traditional martial arts system, vovinam; sects of Chinese origin; Foreigners (Judo, Taekwondo, Thai Aikido, Boxing, Muaythai, Wushu, Pencak Silat, etc.). In particular, the system consists of going from effortless to strenuous exercises, from basic to complex, rich in content as well as teaching methods, Karate-do is very suitable for the constitution and the body of Vietnamese people.

The introduction of Karate-do into the elective physical education program is in line with the student's preference and the facilities of Thu Dau Mot University but has never been done, and no studies are evaluating the specific effects of this program indeed. Starting from the practical requirements of teaching at the school, conducting research and evaluating the effectiveness of the Karate-do curriculum by elective physical education for students at Thu Dau Mot University is necessary.

### 2. Methodology

In the research process, following methods were employed to evaluate effectiveness of the elective karatedo curriculum for male students: integrated research and relevant literature reviews, interview, pedagogical experiment and statistic mathematics.

### 3. Results

#### 3.1. Developing content of elective Karatedo curriculum of Thu Dau Mot University

Through reference to professional documents, teaching programs of schools, training plans of some centers and movement classes, martial arts clubs in and outside the province, the topic was initially synthesized. 93 criteria of 6 content groups included in the Karate-do curriculum for Thu Dau Mot University students.

Besides that, in order to determine the appropriate criteria, including the content of the teaching, the subject has interviewed 22 highly experienced and knowledgeable people about Karate-do (Teachers, some coaches of Binh Duong college Karate-do teams, sports school, some Karate-do clubs...). In order to ensure objectivity, science and accuracy, the interview is conducted twice a month, each month apart. In both interviews, the number of interviews generated was 22, collected 22. The respondents selected according to the five levels of Likert scale (very important, important, normal, less important, unimportant). The convention is that the selected content must have a level of approval of 70% or more of votes and consistency between 02 interviews. Interview results selected content for the Karate-do curriculum as shown in Table 1.

**Table 1:** Content distribution of the Karate-do curriculum for elective physical education by students of Thu Dau Mot University

Order number	Content	Selective courses	Extracurricular courses	Total
	Total duration of Karate-do	60	60	60
1	Theory	8	6	14
	Foundation and development of Karate-do in the world and Vietnam	1	2	3
	Karate titles, karate ranks and scientific basis of Karate-do	1	2	3
	Karate ranking system and referees in Karate-do martial arts	1	1	2
	Scientific basis of Karate-do	2	1	3
	Psychology of Karate-do	1	1	2
	Competition rules	2	1	3
2	Practice	52	54	106
	Basic technique	12	12	24
	Basic stances (Dachi) – Moving method in stances	4	3	7
	Hand techniques (Tewaza): punches, blocks, joint lock	4	4	8
	Leg techniques (Geri): basic kicks	4	5	9
	Martial arts performances (Kata)	12	14	26
	Taikyoku Shodan, Taikyoku Nidan, Taikyoku Sandan, Heian Shodan, Heian Nidan, Heian Sandan,	12	12	24
	Competition, sparring (Kumite)	10	10	20
	Practice in pairs with convention: Gohon, Sanbon, Ippon Kumite	4	10	14
	Competition, Free sparring	3	4	7
	Basic tactics	3	2	5
	Practice the organization of arbitration and competition	4	4	8
	General fitness and professional strength	10	10	20
	Exercises to develop ability to coordinate movement and flexibility	3	3	6
	Speed, strength, endurance development exercises	2	2	4
	Exercises with extra weight (dumbbells)	3	3	6
	Physical activity games	2	2	4

### 3.2. Evaluating the effectiveness of the experimental program

#### 3.2.1. Experimental Organization

The curriculum is organized pedagogical experiment in the form of comparing the single sequence on the experimental group including 30 male students studying in the first year at Thu Dau Mot University.

Experimental group will study the Karate-do program built in the topic during the experiment period while studying according to the current program of their majors at school.

Experimental time is carried out for 30 weeks with a duration of 60 sessions, 2 times per week, 2 sessions per time (credit: 50 minutes/a session). In addition, students arrange their own 60-day extracurricular training sessions.

#### 3.2.2. Evaluation tools

Conducting interviews with 22 Karate-do experts, the project has selected a physical and technical test for Thu Dau University students as following:

- General fitness tests include: Standing long jumping (cm); Push-up in 15s (times); Crunche in 1 minute; running 800m (s); Seated Forward Bend/Intensive Dorsal Stretch (cm); Horizontal split; Vertical split; T-Test.

- Tests for assessing specialized fitness criteria include: Punching with back hand (Gyaku Tsuki) in 10s; Punch by fore hand (Oi Tsuki) with rubber band in 15s; Punching with 2 hands (Lenzoku Tsukion) on 2 opposite targets in 15s; Kick straightly (Mae Géri) in 10s; Kich round (Mawashi Géri) in 10s; Kick straightly (Mae Géri) on 2 opposite targets in 15s; Kich round (Mawashi Géri) co-ordinate Punching with back hand (Gyaku Tsuki) in 30s; Moving (Taisabaki) and Punching

with 2 hands (Lenzoku Tsukion) on 2 opposite targets in 30s. After the end of the experimental process, we conducted an assessment of the development indicators of physical and technical qualities.

### 3.3. Evaluating the experimental results of Karate-do program

Experimental results are evaluated after students have completed the program of Karate-do that has been developed and applied (30 weeks).

Collecting data is divided into two separate times: the first time before the second experimental period (the first semester) at the end of the second semester, after finishing the optional sports subject. Summarize the data, compare the results and then draw conclusions.

The collected results are processed and presented in tables 2 and 3.

#### 3.3.1. Comparison general physical health indexes Karate-do of students in The Thu Dau Mot University

Table 2 showed that the average value of 8 general physical indexes after the experiment of male students in Thu Dau Mot University had increased significantly compared to the time before applied the experiment. Namely, the obtained 't' value higher than the tabulated 't' value (=3,646) at the probability threshold of  $P < 0.001$ .

The results presented in Table 2 and specifically in Figure 1 also demonstrate the growth rate of general physical indicators of male students at Thu Dau Mot University after the experiment is higher than before the experiment. from 2.3% to 55.07% (average increase of 17.45%).

**Table 2:** Results of general physical health indexes before and after the experiment of male students in Thu Dau Mot University (n = 30)

Order number	Test	Before experiment				After experiment				Comparison		
		$\bar{X}_1$	$\pm S1$	Cv%	$\mathcal{E}$	$\bar{X}_2$	$\pm S2$	Cv%	$\mathcal{E}$	W%	t	P
1	Standing long jumping (cm)	223.20	4.69	2.1	0.04	233.73	4.64	1.99	0	2.3	14.64	<0.001
2	Push-up in 15s (times)	11.03	1.67	15.1	0.31	14.43	2.06	14.3	0.3	13.35	11.89	<0.001
3	Crunches in 1 minute (times)	35.37	2.95	8.34	0.17	44.13	3.79	8.59	0.2	11.02	18.04	<0.001
4	Running 800m (s)	391.23	15.2	3.89	0.08	357.43	20.54	5.75	0.1	-4.51	7.41	<0.001
5	Seated forward bend (cm)	2.57	0.77	30	0.61	8.87	1.93	21.8	0.4	55.07	17.54	<0.001
6	Horizontal split	31.17	7.07	22.7	0.46	20.37	6.42	31.5	0.6	-21	19.58	<0.001
7	Vertical split	25.90	7.2	27.8	0.57	14.33	5.6	39.1	0.8	-28.8	20.20	<0.001
8	T-Test	2.29	0.16	1.72	0.04	8.65	0.32	3.7	0.1	-3.57	11.05	<0.001

**Table 3:** Results of specialized physical health indexes before and after the experiment of male students in Thu Dau Mot University (n = 30)

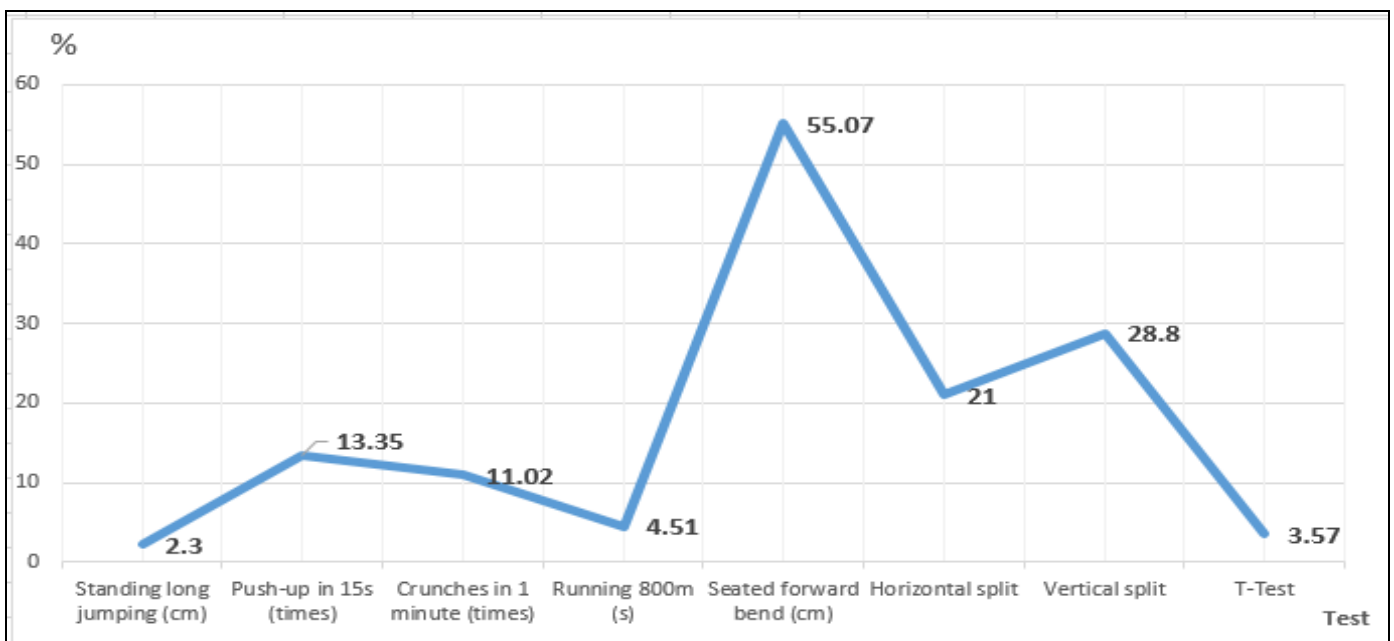
Order number	Test	Before experiment				After experiment				Comparison		
		$\bar{X}_1$	$\pm S1$	Cv%	$\mathcal{E}$	$\bar{X}_2$	$\pm S2$	Cv%	$\mathcal{E}$	W%	t	P
1	Punching with back hand (Gyaku Tsuki) in 10s (1)	13.87	2.67	19.3	0.39	19.27	2.1	10.9	0.2	19.29	21.06	<0.001
2	Punch by fore hand (Oi Tsuki) with rubber band in 15s (2)	17.57	2.53	14.4	0.29	21.50	2.27	10.6	0.2	10.06	14.99	<0.001
3	Punching with 2 hands (Lenzoku Tsukion) on 2 opposite targets in 15s (3)	13.93	3.26	23.40	0.48	19.40	2.27	11.7	0.2	16.41	17.87	<0.001
4	Kick straightly (Mae Géri) in 10s (4)	6.67	2.83	42.4	0.87	11.57	2.43	21	0.4	26.86	17.19	<0.001
5	Kich round (Mawashi Géri) in 10s (5)	5.07	2.9	57.2	1.17	10.20	2.31	22.7	0.5	33.6	18.71	<0.001
6	Kick straightly (Mae Géri) on 2 opposite targets in 15s (6)	5.10	3.43	67.3	1.37	10.40	2.34	22.5	0.5	34.19	16.27	<0.001
7	Kich round (Mawashi Géri) co-ordinate Punching with back hand (Gyaku Tsuki) in 30s (7)	18.90	5.3	26.6	0.54	24.80	4.8	19.4	0.4	13.5	19.14	<0.001
8	Moving (Taisabaki) and Punching with 2 hands (Lenzoku Tsukion) on 2 opposite targets in 30s (8)	21.60	3.46	16	0.33	30.26	5.38	17.8	0.4	16.65	15.3	<0.001

**3.3.2. Comparison of Karate-do's specialized physical health indexes of Thu Dau Mot University students after the experimental period**

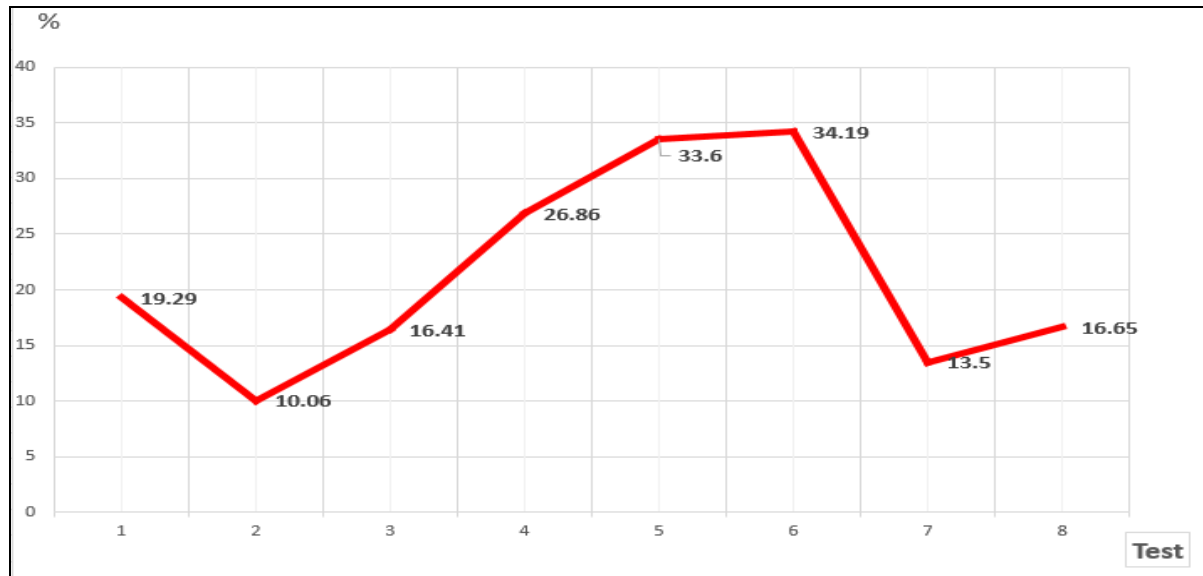
Karate-do's specialized fitness level of students of Thu Dau Mot University after the experimental period is shown in table 2: In 8 survey indicators, every result after the experiment is also higher than before the experiment. That is specifically

demonstrated through the index  $t_{student}$  with  $P < 0.001$ .

At the same time, the growth rate of general physical indicators of male students in Thu Dau Mot University after experiment was higher than before experiment from 10.06% to 34.19% (average increase of 21.32%). The research results are presented in Table 3.



**Fig 1:** Growth rate of general physical indicators of male students in Thu Dau Mot University after experimental period



**Fig 2:** Growth rate of specialized physical indicators of male students at Thu Dau Mot University after experimental period

#### 4. Conclusion

The research results have developed a teaching program of Karate-do in accordance with the practical conditions of Thu Dau Mot University, meeting the needs of students. This curriculum has been approved by the Board of Superintendents with a total of 120 sessions, both elective and extracurricular, including: theory (14 sessions), practice (106 sessions); in which, basic techniques (12 sessions), hand techniques (12 sessions), competitions, parring training (12 sessions), practice arbitration in karate (12 sessions), general fitness and professional strength (12 sessions).

Elective Karate-do teaching program applied to practice to create the diversity of subjects in the training program, and at the same time affirmed their appropriateness and effectiveness through the results after experiment with stactical significant differences and reliability at the probability of  $P < 0.001$  both in general health as well as the specialized physical fitness of male students.

#### 5. References

1. Nguyen Van Dung. Karate - Lessons from white to black. Thuan Hoa Publishing House, 1999.
2. Nguyen Duong Bac. Kumite Training. Sport Publishing House, 2004.
3. Manh Duong. Karate technique, volume one and volume two. Pedagogical University Publishing House, 2014.
4. Trinh Quoc Duong. Counter-techniques in karate. Thuan Hoa House, 1999.
5. Tran Tuan Hieu. Develop training plan for Karate-Do athletes. Sport Publishing House, 2006.
6. Tran Tuan Hieu, Nguyen Duong Bac. Karate-textbook by Bac Ninh Sports University. Sport Publishing House, 2001.
7. Ho Hoang Khanh. Karate-Ka Upper class. Long An Publishing House, 1996.
8. Kim Long. Karate-by self-defense and fighting. Ca Mau Publishing House, 1996.
9. Kim Long. Learn Karate by yourself. Ca Mau Publishing House, 2004.
10. Sanette Smit, Translator: Kien Van, Gia Huy. Guide to practicing Karate with images. Thuan Hoa Publishing House, 2018.
11. General Department of Sports and Physical Training. Karate-do law. Sport Publishing House, 2013