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Original article

USE OF ITC MEANS IN THE PHYSICAL EDUCATION AND SPORTS LESSON

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Abstract

The contemporary world represents a permanent and unique challenge for absolutely all the education field. The existence of each person, as well as of the whole society, is becoming more and more alert, is becoming increasingly marked by the need for rapid knowledge. This inevitably leads to an increase in the volume of information that must be analyzed and interpreted, to the necessity of storing and processing it, so to the need of using the computer in the instructional-educational process.

Although the advantages of using ITC in education are numerous, the teacher should not be transformed into -a "robot" that only knows how to use the computer. He / she must carry out, in permanence, a real, concrete activity, because he / she develops his / her spirit of observation, ability to concentrate, patience, attention and pedagogical skills.

Educational "actors" must be trained to deal with changes, uncertainties and innovations, a phenomenon which characterizes the ascending path of contemporary society. We present the advantages and limitations of the use of TIC in the educational process,with reference to the field of physical education and school sports, as well as an analysis on the efficiency of the use of ITC in the didactic approach organized in the physical education lessons.

Although the problem of replacing the teacher with the computer it is not possible it should be used only for the optimization of the instructional-educational process, in certain stages.The use of the computer in school should not be limited to a particular area such as computer science, the computer must also find its place in other disciplines, in a rational and well thought out way and among them, there is also the physical education.

Keywords: physical education, sports, technology, computer science, lesson.

Introduction

The innovative trends that have entered in our education system in the country are multiple. Thus, through these opportunities, it is possible to move towards a real curriculum, to the flexibility and diversification of the structure of training programs, to the flexibility of professional routes. It is also possible to generalize the system of transferable credits in accordance with national and European standards, as well as the use of interactive training strategies, focusing the teaching approach on the student or transferability and professional mobility.

In the context of these ideas, presented above, is the importance and timeliness of the topic, especially since, for some time, to achieve these goals, the development of ICT skills has become a necessary precondition in the field of physical education and school sports.

The reason for choosing this topic derives from my own desire to document this topic, because it is extremely important,both in the European Union and in our country as a member of this international structure, as physical education and sport must be achieved to the standards of functionability expected by this international forum.

The aim of the research was to study in depth the aspects of ICT technology and the possibilities of their application in physical education and sport, as well as to identify the most important aspects of teachers' work in this direction.

The research hypothesis started from the premise that the integration of information and communication technology into the teaching process is, in fact, a natural action by which the school institution reacts to the evolution and development of the knowledge-based society And, therefore, in an investigation carried out through a survey based on a questionnaire, among the teachers, it will be possible to identify the most important aspects related to the use of TIC in physical education and sports lessons.

Methods

Analysis and generalization of the scientific-methodical literature. Questionnaire-based survey method. Statistical-mathematical method. Tabular method. Graphic method

Organisation and conduct of research. The investigation was carried out on a structured sample of physical education teachers from several school units in Brăila County**.**

Subjects were asked to complete the questionnaires on the spot, in the presence of the researcher and in the school units concerned.

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The actual activity of the investigation was preceded by an introduction in which information and guidance on completing the questionnaire was provided to each group of teachers.

The questionnaire used was as follows:

Questionnaire for teachers

The present study represents an ongoing research in order to carry out this article"The use of TIC means in the lesson of physical education and sports", at school units in Brăila.Your answers will be analyzed and processed, and the conclusions will be part of the final issue of the topic.

Please respond to the items below by ticking the option that suits your situation or opinion. There are no right or wrong answers. The only correct answer is the one you choose.

Thank you !

Nameand Surname.....Age.....

Teaching degree (beginner / final / second grade / first grade

Gender (male / female) ..... Seniority in education (in years) .....

The level of education at which he teaches (primary / secondary / high school) .....

Seniority in the school unit (years) ..... Specialization .....

Studies (short-term / long-term / master's / doctorate ...

1. Do you have knowledge of Information and Communication Technology (ICT)?

Yes No Partially

2.How did you acquire the knowledge of ICT

Self-taught □ Courses organized by □ Master □ Other

3.How often do you use ICT in your professional activity?

Rarely □ Sometimes □ Often □ Daily □

4. How many hours a day do you use your computer (at home) to solve professional problems?

1 hour / day □ 2 hours / day □ 3 hours / day □ 4 hours / day □ More than 4 hours / day □

5. Do you use ICT resources in the preparation of planning documents?

Yes □ No □ Partially □

6. What planning documents do you develop using your computer?

Annual Plan □ Calendar Plan □ Learning Units □ Lesson Plans □

7. What other physical education documents do you use with the help of ICT?

Personal CV □ Department documents □ Various papers □ Others □

8. What program do you use in your activity?

Word □ Excel □ Power Point □

9. Do you think that the Internet is useful in your work?

Yes □ No □ Partially □

10. At the school where you work do you have a computer which you can use in lessons?

Yes □ No □

11. What means of information do you use at school?

Computer □ Laptop □ Tablet □

12. What issues do you present to students in physical education lessons?

- technical-tactical executions from various tests or sports branches
- sequences from competitions (athletics, gymnastics, sports games, etc.) ..... □
- suggestive images of physical deficiencies and their recovery ..... □
- information about various events or sports ..... □
- films (documentary, historical, scientific, etc.) with a sports character ..... □

13. During physical education lessons, do you recommend that students use the computer (in their free time) to inform them about certain issues related to physical education and sports?

Yes No

14. Have you designed the "teacher's notebook for physical education and sports" in electronic format?

Yes No

15. When do you fill in the fields of the teacher's notebook with current data (absences, marks, medical exemptions, etc.)?

During the lesson □ During the recreations □ At the end of the program □ Home □

16. Does the school unit, in which you carry out your activity, have an "electronic catalog" in which to enter information on the school situation of the students of the class you are teaching?

Yes □ No □

The investigated sample. The questionnaire survey was conducted by administering it to the following sample (Table 3.1.):

Table no. 3.1.
Sample structure - physical education and sports teachers

No.crt.	School units	Men	Women	Total
1.	Scoala Gimnaziala I.C.	1	1	2
2.	Liceul Teoretic N.I.	3	1	4
3.	Scoala Gimnaziala D.C.	1	1	2
4.	Scoala Gimnaziala G.	-	2	2
5.	Scoala Gimnaziala C.	1	-	1
6.	Colegiul National G.M.M	2	1	3
7.	Liceul Teoretic N.B.	1	1	2
8.	Scoala Gimnaziala M.M	2	-	2
9.	Scoala Gimnaziala G.C.Ş	1	1	2

10.	Scoala Gimnaziala A.P.	1	-	1
11.	Liceul Teoretic M.S.	-	2	2
12.	Scoala Gimnaziala R.	2	1	3
13.	Scoala Gimnaziala T.	1	1	2
14.	Scoala Gimnaziala M.S.	1	1	2
Total		17	13	30

Regarding age, the situation of the subjects was as follows (table no. 3.2.):

Table no. 3.2
The age of the subjects

Age Range	22-30 Years	31-40 Years	1-50 Years	51-60 Years	Over 60 Years	Total
Men	6	7	1	2	1	17
Women	3	6	4	-	-	13
Total	9	13	5	2	1	30

The 30 teachers had the following teaching degrees (table no. 3.3.):

Table no. 3.3.
The situation of teaching degrees

Teaching degree	Debutantbeginner	Second degree	First degree	Total
men	3	9	5	17
women	3	6	4	13
Total	6	15	9	30

Table no. 3.4.
The level of education he teaches

Level of education	Primary level	Gymnasium	Secondary	Total
Men	3	10	4	17
Women	2	8	3	13
Total	5	18	7	30

Processing, analysis and interpretation of results. The results obtained from collecting the answers to the questionnaire administered to teachers were systematized and presented in table no. 3.5.:

Table no. 3.5.
Statistical situation of the answers to the questionnaire applied to teachers

No. crt.	Question	Answer options	Nr. răsp.	%	Total
1.	Do you have knowledge of Information and Communication Technology (ICT)?	Yes	28	93,33%	30/ 100,00%
		No	1	3,33%	
		Parțial partially	1	3,33%	
2.	How did you acquire the knowledge of ICT	Autodidact self -taught	5	16,67%	30/ 100,00%
		Organized courses	20	66,67%	
		Master	3	10,00%	
		Others	2	6,66%	
3.	How often do you use ICT in your professional activity?	Rarely	1	3,33%	30/ 100,00%
		Sometimes	4	13,33%	
		Often	15	50,00%	
		Daily	10	33,33%	
4.	How many hours a day do you use your computer (at home) to solve professional problems?	1/Hour/Day	5	16,66%	30/ 100,00%
		2/ Hour/Day	16	53,34%	
		3/ Hour/Day	5	16,66%	
		4 /Hour/Day	3	20,00%	
		Morethan 4 hours /day	1	3,34%	
5.	Do you use ICT resources in the preparation of planning documents? Yes □ No □ Partially □	Yes	27	90,00%	30/ 100,00%
		No	1	3,34%	
		partially	2	6,66%	
6.	What planning documents do you develop using your computer?	4 documents	24	82,75%	29/ 100,00%
		3documents	2	6,90%	
		2 documents	2	6,90%	

		1 document	1	3,45%	
7.	What other physical education documents do you use with the help of ICT?	4 documents 4 documents	22	75,87%	29/ 100,00%
		3 documents 3 documents	3	10,34%	
		2 documents 2 documents	3	10,34%	
		1 document 1 document	1	3,45%	
8.	What program do you use in your activity?	Word	20	68,97%	29/ 100,00%
		Excel	6	20,69%	
		Power Point	3	10,34%	
9.	Do you think that the Internet is useful in your work?	Yes	26	86,67%	30/ 100,00%
		No	1	3,33%	
		partially	3	10,00%	
10.	At the school where you work do you have a computer which you can use in lessons?	Yes	29	96,66%	30/ 100,00%
		No	1	3,34%	
11.	What means of information do you use at school?	Computer	20	66,67%	30/ 100,00%
		Laptop	7	23,33%	
		Tablet	3	10,00%	
12.	What issues do you present to students in physical education lessons?	5 categories of information	16	53,34%	30/ 100,00%
		4 categories of information	4	13,33%	
		3 categories of information	3	10,00%	
		2 categories of information	4	13,33%	
		1 categories of information	3	10,00%	
13.	During physical education lessons, do you recommend that students use the computer (in their free time) to inform them about certain issues related to physical education and sports?	Yes	27	90,00%	30/ 100,00%
		No	3	10,00%	
14.	Have you designed the "teacher's notebook for physical education and sports" in electronic format?	Yes	21	70,00%	30/ 100,00%
		No	9	30,00%	
15.	When do you fill in the fields of the teacher's notebook with current data (absences, marks, medical exemptions, etc.)?	During the lesson	2	6,67%	30/ 100,00%
		During the recreations	8	26,66%	
		At the end of the program	12	40,00%	
		Home	8	26,66%	
16.	Does the school unit, in which you carry out your activity, have an "electronic catalog" in which to enter information on the school situation of the students of the class you are teaching?	Yes	14	46,67%	30/ 100,00%
		No	16	53,33%	

Results

Do you have knowledge of Information and Communication Technology (ICT)?

Was answered as follows: 28 teachers (93.33%) answered in the affirmative, 1 teacher (3.33%) answered in the negative and 1 teacher (3.33%) answered that he has partial knowledge (fig. 3.1.):

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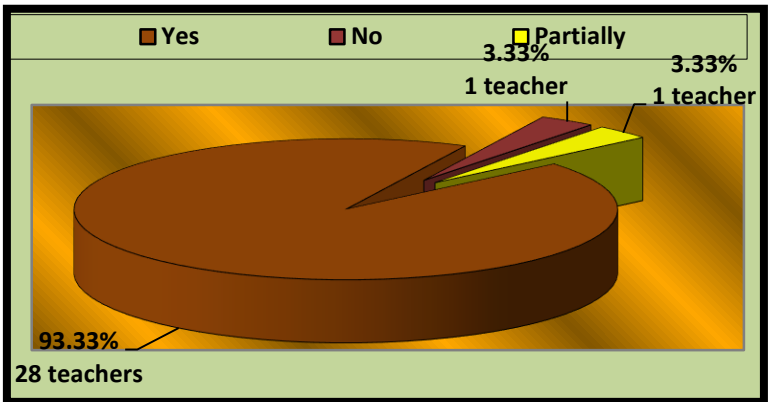

Fig. 3.1. – ITC knowledge level

To the second question **(**How did you acquire the knowledge of ICT)the subjects gave the following answers: 5 teachers (16.67%) were self-taught, 20 teachers (66.67%) took organized courses, 3 teachers (10.00%) acquired knowledge through masters and 2 teachers (6, 66%) by other means (fig. 3.2.)

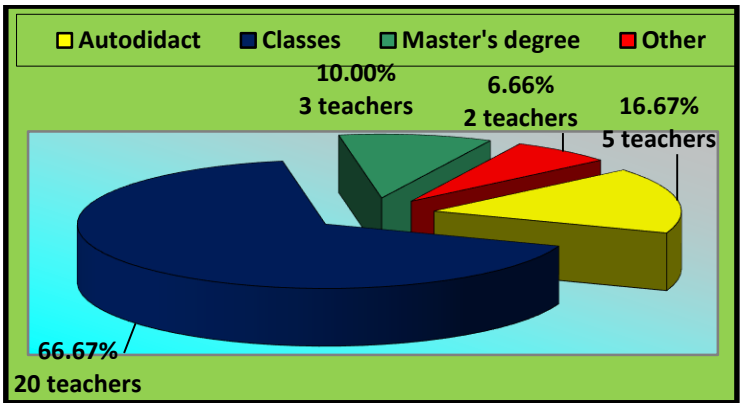

Fig. 3.2. – HOW TO ACQUIRE ICT KNOWLEDGE

To the third question(How often do you use ICT in your professional activity?)he answer was as follows: 1 teacher (3.33%) rarely uses ICT, 4 teachers (13.33%) sometimes, 15 teachers (50.00%) often and 10 teachers (33.33%) daily (fig. 3.3.):

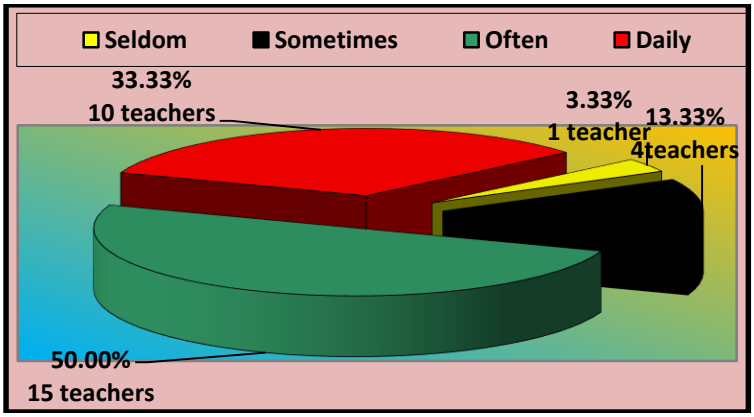

Fig. 3.3. – Frequency of ICT use in professional activity

To the fourth question How many hours a day do you use your computer (at home) to solve professional problems?subjects gave the following answers: 5 teachers (16.66%) use the computer one hour a day, 16 teachers (53.34%) two hours a day, 5 teachers (16.66%) three hours a day, 3 teachers (10.00%) four hours a day 1 teacher (3.34%) more than four hours a day (fig. 3.4.):

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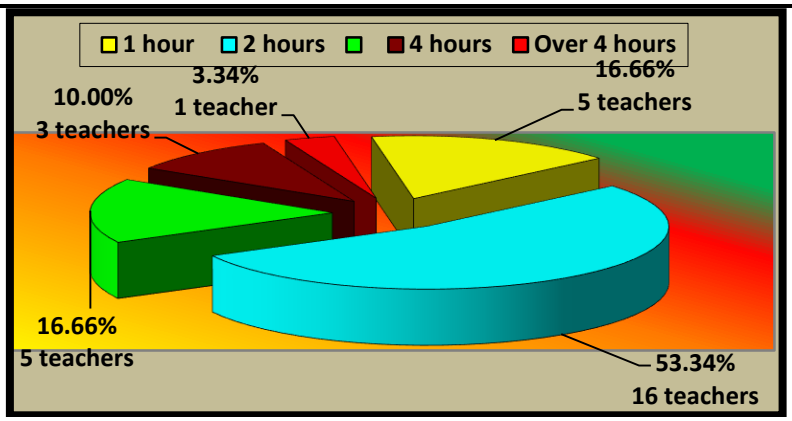

Fig. 3.4. – The number of hours allocated to solving professional problems

The fifth question Do you use ICT resources in the preparation of planning documents?received the following answers: 27 teachers (90.00%) use the computer to prepare planning documents, 1 teacher (3.34%) does not use the computer for this purpose and 2 teachers (6.66%) partially solve this problem (fig3.5.):

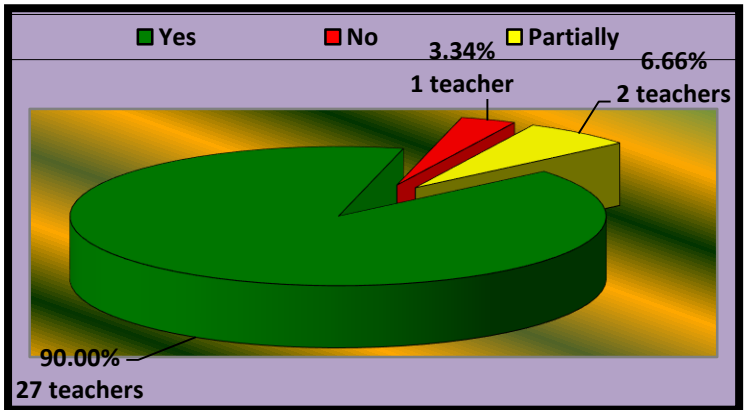

Fig. 3.5. – Using the computer to prepare planning documents

To the sixth question What planning documents do you develop using your computer?the following answers were given: 24 (82.75%) of the teachers who use the computer prepare all four planning documents, 2 teachers (6.90%) prepare only three documents (annual plan, calendar plan and learning units) , 2 teachers (6.90%) elaborate only two documents (annual plan, calendar plan) and 1 teacher (3.45%) elaborates a single planning document (annual plan) (fig. 3.6.):

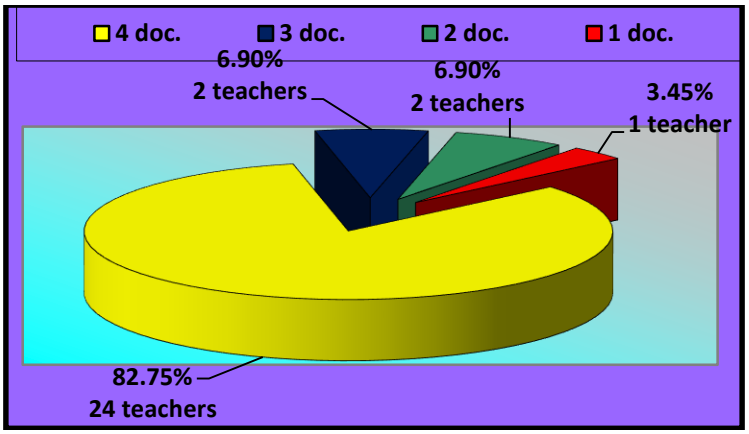

Fig. 3.6. – Planning documents prepared using a computer

For question no. 7 What other physical education documents do you use with the help of ICT?the answers were: 22 (75.87%) of the teachers who use the computer elaborate all the four categories of mentioned documents, 3 teachers(10.34%) elaborate only three of these documents, 3 teachers (10.34%) elaborate only two documents and 1 teacher (3.45%) elaborates a single document mentioned in the question (fig. 3.7.):

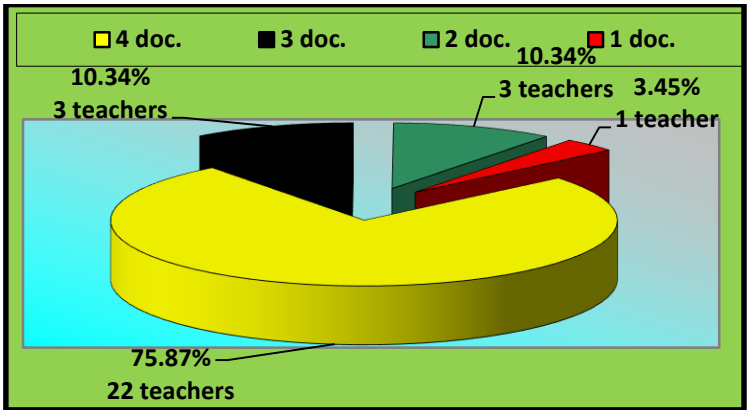

Fig. 3.7. – Other documents prepared using a computer

To the eighth question What program do you use in your activity?the answer was as follows: 20 teachers (68.97%) use the three programs, 6 teachers (20.69%) use two of them and 3 teachers (10.34%) use only one program (fig. 3.8.):

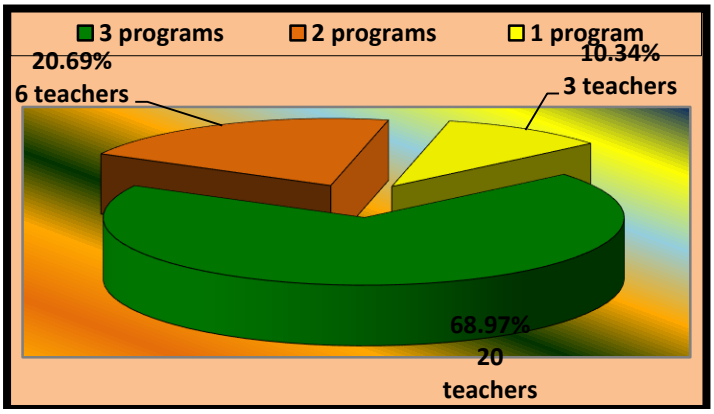

Fig. 3.8. – Variants of programs used

The 30 subjects answered question no.9 Do you think that the Internet is useful in your work?as follows: 26 teachers (86.67%) consider the internet useful, 1 teacher (3.33%) answered negatively and 3 teachers (10.00%) that the internet is only partially useful (fig. 3.9.):

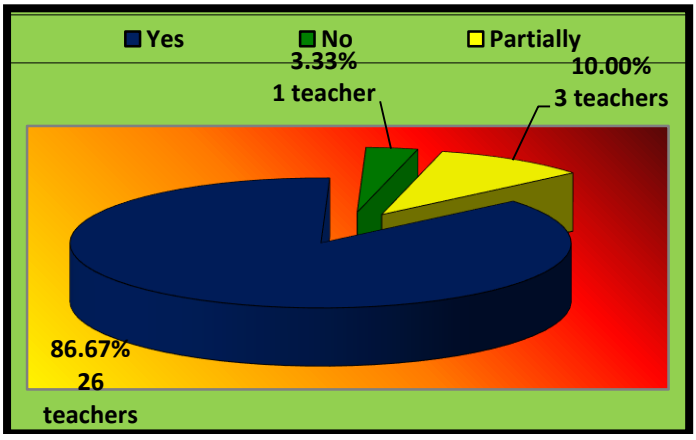

Fig. 3.9. –The usefulness of the internet

For question no.10 At the school where you work do you have a computer which you can use in lessons?29 teachers (96.66%) answered in the affirmative and 1 teacher (3.34%) answered in the negative (fig. 3.10):

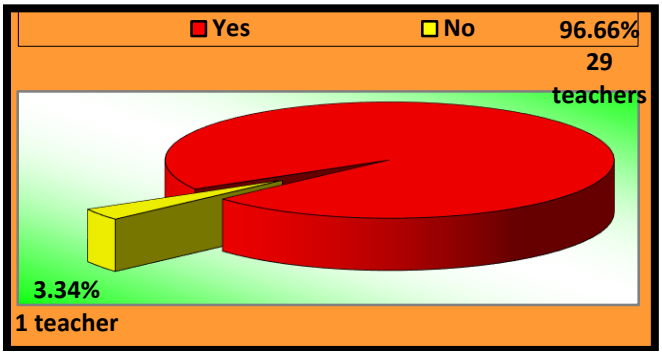

Fig. 3.10.– Possibility to have a computer during the class

To this question(no11 What means of information do you use at school?the answer was as follows: 20 teachers (66.67%) use the computer, 7 teachers (23.33%) use the laptop and 3 teachers (10.00%) use the tablet (fig. 3.11.):

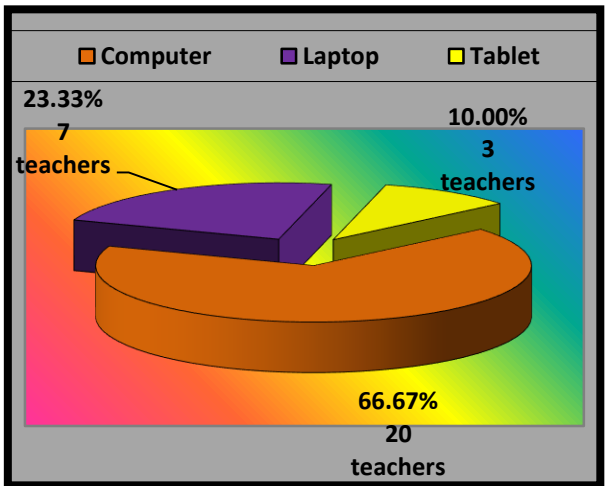

Fig. 3.11. – The type of equipment used in the school

To the question no. 12. What issues do you present to students in physical education lessons?the answers were: 16 of the teachers (53.34%) present all five categories of information, 4 teachers (13.33%) present four categories of information, 3 teachers (10.00%) present three categories of information, 4 teachers (13.33%) present two categories of information and 3 teachers (10.00%) present a single category of information (fig. 3.12.):

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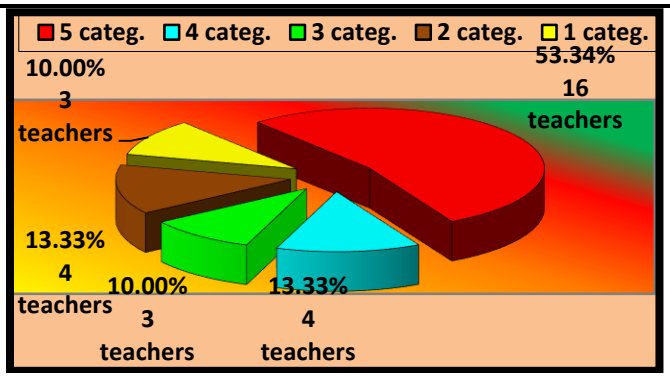

Fig. 3.12.– Problems presented to students in physical education lessons

The answers to question no. 13. During physical education lessons, do you recommend that students use the computer (in their free time) to inform them about certain issues related to physical education and sports?) Were the following: 27 teachers (90.00%) answered in the affirmative and 3 teachers (10.00%) answered in the negative (fig. 3.13.):

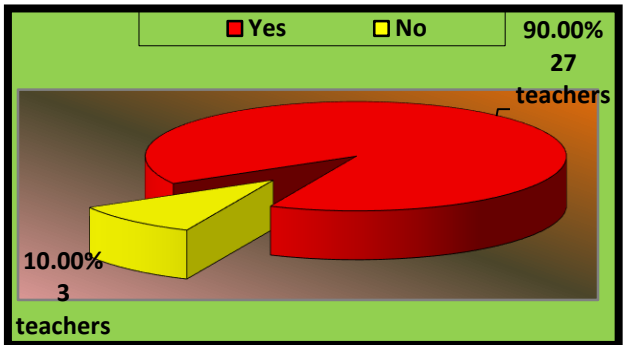

Fig. 3.13.–Recommendation to use the computer (in their free time) to inform about certain issues related to physical education and sports

For question no. 14. Have you designed the "teacher's notebook for physical education and sports" in electronic format?-they gave the following answers: 21 teachers (70.00%) answered in the affirmative and 9 teachers (30.00%) answered in the negative (fig. 3.14.):

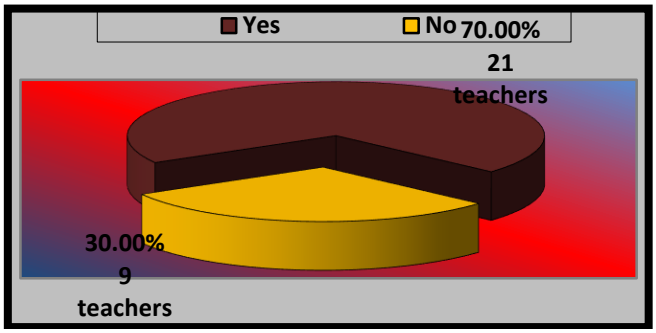

Fig. 3.14. –Physical education and sports teacher's notebook in electronic format

To the question no.15 When do you fill in the fields of the teacher's notebook with current data (absences, marks, medical exemptions, etc.)answered as follows: 2 teachers (6.67%) solve this during the lesson, 8 teachers (26.66%) during recreations, 12 teachers (40.00%) at the end of the program and 8 teachers (26.66%)home(fig.3.15)

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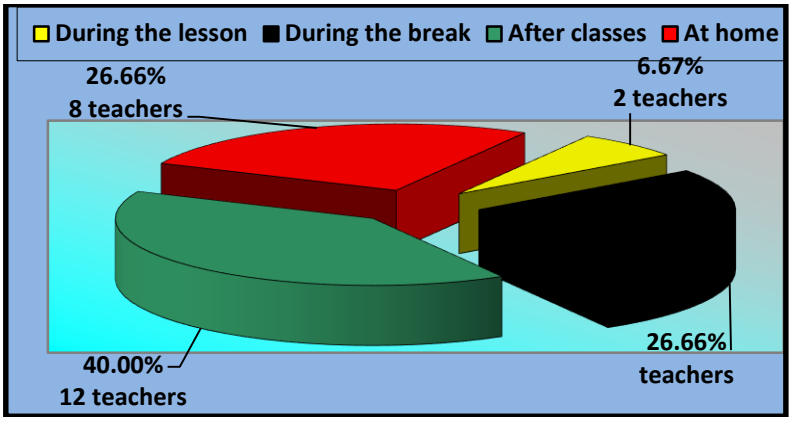

Fig. 3.15. –Time to complete the sections of the teacher's notebook with current data

To the last question (16.Does the school unit, in which you carry out your activity, have an "electronic catalog" in which to enter information on the school situation of the students of the class you are teaching?the answers were as follows: 14 teachers (46.67%) answered in the affirmative and 16 teachers (53.33%) answered in the negative (fig. 3.16.):

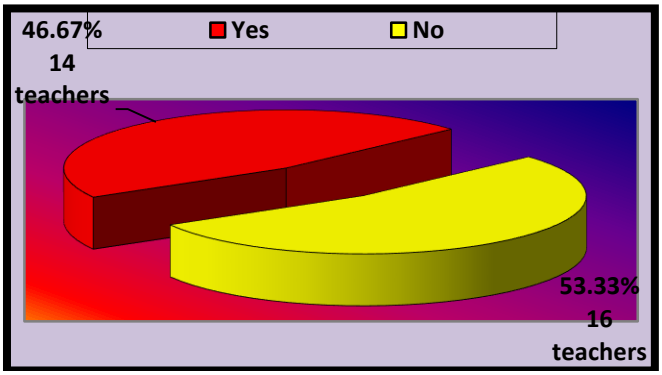

Fig. 3.16. –Existence of the electronic catalog in the school unit

Discussions

Most of the subjects often use the computer for professional activities, on average, about 2 hours a day, and 90.00% of them prepare their planning documents in this way, even other documents, so the computer is, for them, a indispensable element

In general, the word is the most frequently used program, then Excel, and accessing the Internet is very necessary for them, especially in the schools where they work and use, commonly the computer and, less, the laptop. or tablet.

The issue of ICT is very large and requires a long time to master it at a level necessary for education, therefore, at certain time intervals, it is good to recommend teachers to resort to a reassessment of knowledge through ICT.

Conclusions

The issue of the use of ICT means in the activity of physical education and sports has become, in recent years, a very stringent one, the reason being to be in line with the evolution of the education system, but also the alignment of the discipline to the others included in the curriculum. for each class.

The research carried out by administering the social questionnaire prepared, revealed a series of problems, some known, others unknown and clarified on this occasion.

Thus, it was found that, out of the total of 30 subjects involved in the research, 93.00% of them had knowledge of ICT, one of them had partial knowledge and the other was in the process of obtaining them, which indicates that the interest for his own improvement was very high. The knowledge was acquired, in the vast majority of cases, by participating in courses organized by institutions adjacent to education and by master's degree.

90.00% of the subjects (27 teachers) recommend students to access the Internet for their information on certain issues related to physical education and sports and 21 have designed the "notebook of the teacher of physical education and sports" in electronic format, whose fields (absences, motivations and marks) are most often completed at

the end of the program. And, in almost half of the cases, there is an "electronic catalog".

As general conclusions, we can deduce those related to the fact that it is imperative the action of improvement in the direction of ICT, as the issues of education diversify and become more complex from one school year to another.

A first recommendation could be that each of the teachers specializing in physical education and sports participate actively, and in rotation, in various school sports activities, which require knowledge of ICT (various competitions, for example), in order to avoid request only from those who are aware of the case.

Then, it is good that teachers of physical education and sports, who have knowledge of ICT to be empowered, by the institutions of the education system, to become trainers in this field, for their colleagues.

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