

Virtual communities in physical education and sport in Brazil

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Abstract:

The aim of this paper was to gather available information on Brazilian virtual communities in Physical Education and Sport. In this study were not included: virtual communities that do not disseminate scientific and professional documents and information on Physical Education and Sport, communities that are less representative or visible and that do not have their own URL. The search was carried out between May and December 2008. Four categories were used: discussion lists, Internet forums, newsgroups and newsletters. The results indicate: (a)- that there are 132 discussion lists in the Virtual Sport Center (CEV); (b)- three Internet forums: the Internet Forum of Physical Education, Sport and Health, the site Educacaofisica.org and the Virtual Forum Sport For All; (c)- and three Physical Education and Sport newsletters: Ideas in Movement - Newsletter of the Virtual Sport Institute, Electronic Newsletter [CONFEE] and the Brazilian Bulletin of Physical Education. Interestingly there is no Physical Education and Sport newsgroup.

Keywords:

Information and communication technologies; virtual communities; discussion lists; internet forums; newsgroups; newsletters.

Título:

Comunidades virtuales en educación física y deporte en Brasil

Resumen:

Este artículo tuvo por objetivo reunir informaciones disponibles sobre las comunidades virtuales brasileñas en Educación Física y Deporte. Se adoptaron los siguientes criterios de exclusión en este estudio: comunidades virtuales que no difunden documentos e informaciones de carácter científico y profesional en Educación Física y Deporte, que son poco representativas o con poca visualidad y que no tienen una dirección (URL) propia. La búsqueda fue realizada entre los meses de mayo y diciembre de 2008. Se utilizaron cuatro categorías en este trabajo: lista de distribución, foro, grupo y boletín. Los resultados indican la existencia de: (a) 132 listas de distribución presentes en el Centro Deportivo Virtual (CEV); (b) tres foros, el primero es el Foro de Educación Física, Deporte y Salud, el segundo es el del sitio Web Educacionfisica.org; y el tercero es el Foro Virtual Deporte para Todos; (c) tres boletines de Educación Física y Deporte - Ideas en Movimiento - Boletín del Instituto Virtual del Deporte, Boletín Electrónico

[CONFEEF] y el Boletín Brasileño de Educación Física. Un dato interesante es la ausencia de la categoría grupo en Educación Física y Deporte.

Palabras clave:

Tecnologías de la información y comunicación; comunidades virtuales; listas de distribución; foros; grupos; boletines.

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1. Introduction

The fast development and expansion of Information and Communication Technologies (ICT) has created new knowledge and information exchange environments. Every day, there are new technological resources that generate changes of paradigm in the way information is disseminated and in people's organization. The best known example is the emergence of virtual communities.

Virtual communities can be described as groups of people who live in different places, and who speak different languages, but have common interests and who share professional, scientific and cultural information as well as entertainment through the Internet. These people, who generally don't know each other personally, share ideas, experiences and documents and meet online to communicate through ICT resources, such as discussion lists, Internet forums, newsgroups, and newsletters (Alarcón Alvarez, 2006; Ellis, Oldridge, & Vasconcelos, 2004; López Yepes, 2004; Martínez de Haro, 2000; Martos, 2007). "The virtual communities often edit newsletters which are distributed to the members in order to inform them." (Martos, 2007, 321).

For 15 years now different knowledge areas have constructed their own virtual communities. There is no doubt that the idea of virtual communities has reached the area of physical education (Cox & Salter, 1998; Guterman, 1997, 1998; Key, 1994; Martínez de Haro, 2000; Pereira, 1998). Some subareas have taken the advantages of this new virtual environment, such as the area of sport documentation and information.

These technological resources (discussion lists, Internet forums, newsgroups and newsletters) are considered information tools for three reasons: 1^a- the messages and the documents exchanged are kept (using software based on web technology) in archives that can be consulted; 2^a- virtual communities are also composed of scientists and teachers; 3^a- citations and references from virtual communities' documents and archives are accepted in the academic documents of the Brazilian Technical Standards Association (2002) and the American Psychological Association (2001).

In addition to being important information resources, these tools are beginning to be used in virtual learning environments designed for physical education teachers (Villaciervos, 2007).

However, like all developments, as well as advantages there are also some drawbacks concerning this change of paradigm in the physical education area in Brazil: 1º- there is little control over the updated number of these information resources; 2º- the terms: discussion lists, Internet forums, newsgroups and newsletters are used incorrectly as synonymous (Gresham, 1994; Moreira, 2005); 3º- out-of-date information in virtual communities is kept in the web and represented as updated.

The need to control these information resources in Physical Education and Sport is one of the main challenges of the subarea of sport documentation and information (Clarke, 2001; Irureta-Goyena Sánchez, 1996).

Therefore, is it possible to minimize this lack of control over the information resources of virtual communities? What would be the best strategy for controlling these resources in Brazil?

The aim of this paper was to gather available information on Brazilian virtual communities in Physical Education and Sport.

2. Materials and Methods

The first step in this study was to define which expressions should be used to search for the virtual communities. The following were chosen:

- Discussion lists – Physical Education; Discussion lists – Sport;
- Internet forum – Physical Education; Internet forum – Sport;
- Newsgroups – Physical Education; Newsgroups – Sport;
- Newsletter – Physical Education; Newsletter – Sport.

The term Sport in English is equivalent to Desporto and Esporte in Portuguese, which were both used in the search.

The search engine used was Google Brazil, at <<http://www.google.com.br/>>.

The following exclusion criteria were adopted: virtual communities that do not disseminate scientific and professional documents and information on Physical Education and Sport, or less representative and visible communities, or communities that do not have their own Uniform Resource Locator (URL). For these reasons the communities that are only present in Yahoo Brazil and in <Grupos.com.br> were excluded.

A limitation of this work is that only one search engine (Google) was used to identify the information resources in the virtual communities.

In addition web pages and sites of Physical Education scientific associations were searched and used to support bibliographic research.

Once the data gathering process (carried out between May and December 2008) was completed and the information resources found, the second step was to retrieve the archives and information available in the virtual communities, to verify if they

were active. An active source was considered one that contained a message or document from after January 2008.

Next, are described the categories adopted in this paper (Alarcón Alvarez, 2007; Böhmerwald & Cendón, 2003; Ferreira, 2004; López Yepes, 2004; Martos, 2007; Muñoz Castro, 2003; Newton, 2004).

2.1. Discussion Lists

Interaction between users: all subscribers (participant members) can send messages to the other users or to one particular user. The messages are sent and received by e-mail.

Web technology: the lists (also known as electronic mailing lists) are a collection of e-mail addresses stored in a database. These lists use management software. Each list is identified by an exclusive e-mail address composed of three components which distinguish it from the others: the name of the list, followed by @ (at) and the domain in which the database that contains the list is stored. For example, a discussion list about physical education at schools is called <cevefesc@listas.cev.org.br>.

Data transmission: asynchronous.

2.2. Internet Forums

Interaction between users: subscribers to the Internet forums (also known as online forums) write messages and read the answers by connecting to the forum and accessing a specific box. Messages do not arrive in the subscriber's e-mail inbox, rather the user searches for information. The initial page has a notice board with the questions that have been suggested and the name of who made the suggestion. To read a message from the notice board, it is necessary to click on the corresponding link which may be Read More. To answer, the user clicks on the link Reply, writes the answer in the form provided, indicates their name and clicks Send to send it to the forum. The other participants need to access the notice board to find the answer, which appears close to the question. To suggest a question, the user clicks on New or To Insert New. The names of the links indicated here may be different depending on the kind of forum.

Web technology: all messages are sent to a database and then sent to all the forum's subscribers. Generally, this information is stored on a web page organized with HTML files with their respective dates.

Data transmission: asynchronous.

2.3. Newsgroups

Interaction between users: participants interact in two ways: by e-mail or by accessing the group to read what is attached.

Web technology: this is the category with most possibilities. Newsgroups are similar to Internet forums, however access is more restricted than in the forums, and it is possible to attach and exchange files and images. Some newsgroups do not allow these files and images. Newsgroups also bring together people with the same interests. To subscribe and read articles published about a specific subject is very interesting. The name of the group indicates which subject it treats. In addition to a web page, newsgroups have a database that has more capacity to store information and files. E-mail is also used.

Data transmission: asynchronous.

2.4. Newsletter

Interaction between users: the owners of the newsletter (also used in plural – newsletters) are the only ones who can send, periodically, information to the subscribers' e-mail inboxes. It is not possible to change the information provided in the newsletter.

Web technology: e-mail is the only tool. Subscription is similar to the discussion lists, but it is not always necessary to send messages. The user clicks on a link in order to register automatically. The messages in the newsletter specify how to unsubscribe, which is generally done by clicking on a link (unsubscribe) or sending a message to the server. Some newsletters keep their previous files (in HTML or PDF) on web pages. In general, the newsletter files are numbered and have a date of publication. In newsletters it is possible to find information about courses, events, scientific congresses and references to journals, books, dissertations, thesis and web pages.

Data transmission: asynchronous.

To remove any doubt about the type of data transmission (asynchronous or synchronous) used in the categories presented above, they are defined next:

The Asynchronous Transmission is a method of data transmission which allows characters to be sent at irregular intervals by preceding each character with a start bit, and following it with a stop bit. It is the method most small computers (especially PCs) use to communicate with each other. In asynchronous transmission there's no clocking signal. The receiving terminal or computer knows what's what because each letter, number or punctuation mark begins with a start bit and ends with a stop bit. It is called asynchronous if the timing of the transmission is not determined by the timing of a previous character (Newton, 2004).

The Synchronous Transmission uses some form of clocking signal. At a precise time, the transmission starts, etc. Transmission of data is called synchronous if the exact sending or receiving of each bit is determined before it is transmitted or received. Transmission in which the data characters and bits are transmitted at a fixed rate with the transmitter and receiver synchronized. Synchronous transmission eliminates the

need for start and stop bits. Is the most popular communications method to and from mainframes (Newton, 2004).

3. Results

This study identified 132 discussion lists, two Internet forums with different themes, three newsletters in Physical Education and Sport and any newsgroups.

3.1. Discussion Lists

The Brazilian discussion lists in Physical Education and Sport are available in Virtual Sport Center [Centro Esportivo Virtual] (CEV).



Figure 1. Virtual Sport Center - <http://cev.org.br/comunidade/>

Next, Table 1 gathers information (names and themes) about the 132 lists of CEV.

Table 1. Brazilian Discussion Lists in Physical Education and Sport - Virtual Sport Center - 2008

DISCUSSION LISTS	THEMES
1- cevanato	Human Anatomy in Physical Education
2- apefsp	São Paulo's Physical Education Teachers Association
3- cevmotor	Learning, Development and Motor Control
4- cevarquitetura	Architecture of Sportive and Recreational Facilities
5- cevapef	Professional Associations' of Physical Education
6- cevpsf	Physical Activity in Family Health Program
7- cevatlas	Atlas of Sport in Brazil
8- cevatlet	Athletics
9- cevavali	Evaluation in Physical Education and Sport
10- cevbadminton	Badminton
11- cevbasq	Basketball
12- cevbibli	Libraries of Physical Education and Sport
13- cevbiodanca	Biodance
14- cevbiomc	Biomechanics
15- cevbioquimica	Biochemistry of the Exercise
16- capacitacao	Sport Management Course
17- cevcapoe	Capoeira
18- cev ciclo	Cycling
19- cev cine	Cinema and Video in Physical Education
20- cev circo	Circus Activities
21- cevcbce	Brazilian College of Sport Sciences
22- cevconcursos	Open Public Examinations in Physical Education, Sport and Leisure
23- cevcorfebol	Korfball
24- cevindigena	Body and Indian Education
25- cevcorrida	Jogging
26- cevcrian	Children
27- cevdanca	Dance
28- cevdancaef	Dance, Education and Physical Education
29- cevderua	Street Dance
30- cevdancad	Dance on Wheels
31- cevi esef	Directors of Physical Education Faculties
32- cevdc	Scientific Spreading in Sports
33- cevdopagem	Doping in Physical Activity and in Sport
34- cevdroga	Drugs and Sport
35- ceveconomia	Economy and Sport
36- ceveditc	Scientific Editors in Physical Education
37- cevead	Distance Education - Learning in Physical Education and Sport
38- alagoasef	Physical Education - State of Alagoas
39- ef-ceara	Physical Education - State of Ceará

DISCUSSION LISTS	THEMES
40- ef-goias	Physical Education – State of Goiás
41- ef-maranhao	Physical Education – State of Maranhão
42- ef-matogrosso	Physical Education – State of Mato Grosso
43- ef-para	Physical Education – State of Pará
44- ef-riograndedonorte	Physical Education – Rio Grande do Norte
45- efriograndedosul	Physical Education – State of Rio Grande do Sul
46- efrondonia	Physical Education – State of Rondônia
47- efsergipe	Physical Education – State of Sergipe
48- cevefesport	Events, Publications and Programms in Physical Education and Sport
49- cevefesc	Physical Education at Schools
50- cevama	Special Physical Education
51- ef-ef	Physical Education at Future School (USP)
52- cevlatin	Physical Education in Latin America
53- cevenduro	Trekking
54- cevyniversitario	University Sports
55- cevnauta	Nautical Sports
56- cevradkl	Adventure Sports
57- cevcorporeidade	Transdisciplinary Studies
58- cevetica	Ethics and Moral in Sport
59- cevnegro	Ethnic Groups and Sport
60- cevfilos	Philosophy
61- cevfisio	Exercise Physiology
62- cevfiste	Physiotherapy
63- cevfit	Fitness and Life Quality
64- cevprof	Professional Preparation – Work in Physical Education
65- cevfut	Soccer
66- cevfutsal	Futsal
67- cevgenero	Gender and Woman in Sport
68- cevgenetica	Genetics and Physical Activity
69- cevgestao	Sport Management
70- cevacadmkt	Management and Marketing of Fitness Gym Centers
71- cevgin	Gymnastics
72- cevginla	Labor Gymnastics
73- cevgravidez	Pregnancy and Physical Exercises
74- cevhand	Handball
75- cevhipismo	Horse Racing
76- cevhist	History of Physical Education and Sport
77- cevhiv-aids	HIV-AIDS and Physical Activity
78- cevhoquei-de-campo	Field Hockey
79- cevidoso	Physical Activity, Older People and Ageing
80- cevcomp	Informatics in Physical Education and Sport
81- cevjiu-jitsu	Jujitsu
82- cevtradg	Traditional Games

DISCUSSION LISTS	THEMES
83- cevjudo	Judo
84- cevkarate	Karate
85- cevlazer	Leisure and Recreation
86- cevleis	Sport Law
87- lei-de-incentivo	Law of Incentive to Sport
88- cevsarau	Literature and Sport
89- cevlusof	Lusophony
90- cevmkt	Sport Marketing
91- cevmedes	Sport Medicine
92- cevmidia	Media and Sport
93- cevmotri	Motor Functions
94- cevmeef	Student Movement in Physical Education
95- cevmusc	Bodybuilding
96- cevmuseu	Sport Museums and Memory Centers
97- cevnat	Swimming
98- cevnutri	Nutrition in Physical Education and Sport
99- cevodonto	Sport Dentistry
100- cevoftalmologia	Sport Ophthalmology
101- cevolimp	Olympic Movement
102- cevong	Non-Governmental Organizations and Sport
103- cevpanathlon	Panathlon
104- cevpbl	Problem Based Learning (PBL) in Physical Education
105- cevpedag	Sport Pedagogy
106- cevpentatlo	Modern Pentathlon
107- cevseer	Electronic Journals
108- cevperst	Personal Training
109- cevpolpu	Public Politics
110- cevanpef	Postgraduate Studies
111- cevagita	Agita São Paulo Program
112- cevpsi	Sport Psychology
113- cevradio	Virtual Sport Center's Radio
114- cevremo	Rowing
115- cevsaudc	Collective Health
116- cbcemt	Brazilian College of Sport Sciences State Secretary (Mato Grosso)
117- cbce-sc	Brazilian College of Sport Sciences State Secretary (Santa Catarina)
118- cevskate	Skating
119- cevsocio	Sport Sociology
120- cevsocor	First Aid
121- cevsurfe	Surfing
122- cevtafisa	Tafisa
123- cevtenis	Tennis

DISCUSSION LISTS	THEMES
124- cevtenisdemesa	Table Tennis
125- cevtesauro	Thesaurus in Physical Education and Sport
126- cevteses	Dissertations - Thesis in Physical Education
127- cevtreino	Sport Training
128- cevtriatlo	Triathlon
129- cevvolei	Volleyball
130- cevwushu	Wu shu
131- cevxadrez	Chess
132- cevयोग	Yoga

3.2. Internet Forums

Three virtual communities that offer this resource were identified.

The first is the Internet Forum of Physical Education, Sport and Health which groups 15 areas, including in these areas different themes in Physical Education.

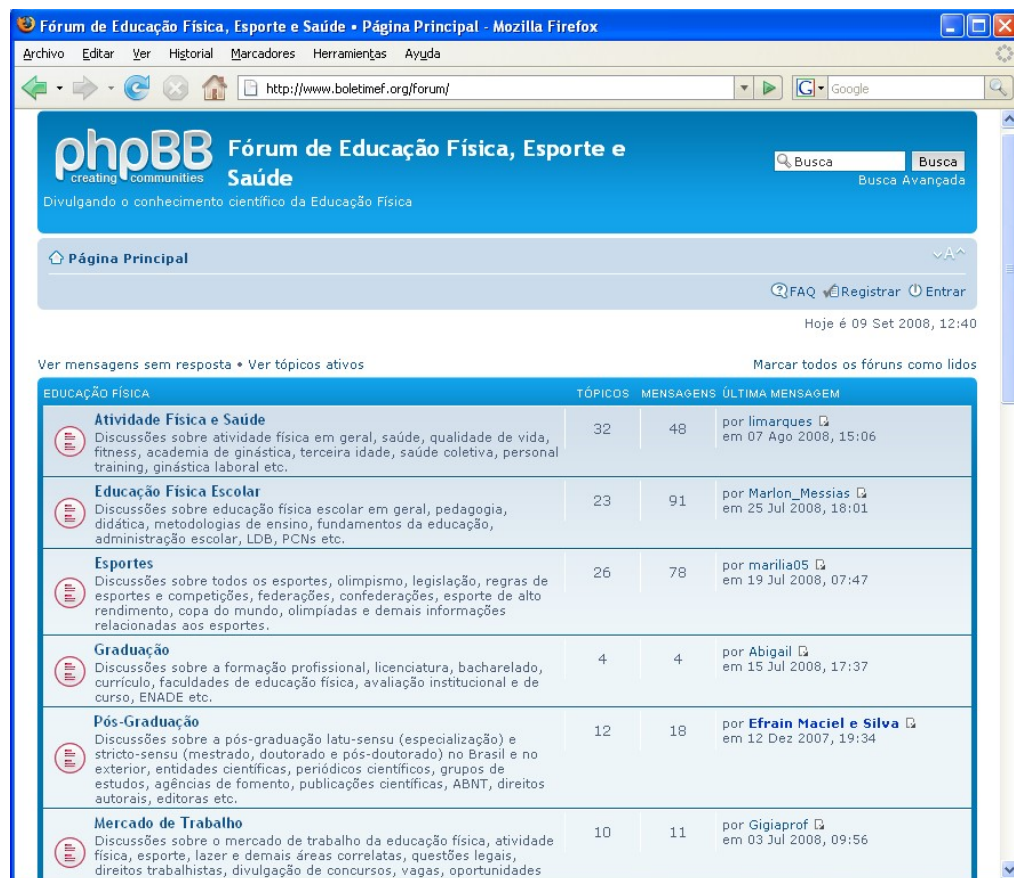


Figure 2. Internet Forum of Physical Education, Sport and Health – <http://www.boletimef.org/forum/>

Table 2. Internet Forum of Physical Education, Sport and Health – Brazilian Bulletin of Physical Education – 2008

AREAS	THEMES
Physical Activity and Health	Life quality, fitness, gymnasiums and physical activity centers, ageing, collective health, personal training and labor gymnastics.
Physical Education at Schools	Pedagogy, didactics, teaching methods, fundamentals of education, school administration, Organic Law of Education and National Curriculum Parameters (PCN).
Sport	Olympism, legislation, sport and competition rules, federations, confederations, high performance sport and achievement, World Cup, The Olympics and other information related to sport.
University Career	Professional preparation, graduation, curriculum, physical education faculties, institutional – course evaluation and National Examination of Student Performance (ENADE – BRAZIL).
Postgraduate Courses	Postgraduate courses, Official Masters and Doctorates in Brazil and abroad, scientific institutions, scientific journals, research groups, agencies for university sponsorship, scientific publications, Brazilian Association for Technical Standards (ABNT) and author rights.
Labor Market	Labor market in physical education, physical activity, sport, leisure and related areas, legal questions, labor rights, open competitions and announcements of selections and job opportunities.
Science and Technology - Innovation	Recent scientific findings and the application of technological resources at the area of physical education and sport. Software analysis, computers, Internet, gymnastics equipments, brands, models and prices.
Fundamentals of Physical Education	Epistemological bases and fundamentals of physical education, history of Brazilian and international physical education and sport, philosophy, sociology and psychology.
Biological and Physiological Bases	Physiology, exercise physiology, biochemistry, anatomy, biomechanics, physics, sport training, physical preparation, nutrition, body building, cytology, histology, sport medicine, genetics and doping.
Adapted – Special Physical Education	Motor activity, adapted physical education, special needs population, adapted sport and Paralympics.
Recreation and Leisure	Free time, toys and recreational activities.
Communication and Marketing	Communication and sport journalism, marketing, sponsorship, sport events, image, Internet, television, radio, magazines, sport broadcasting and cinema.
Games and Body Expression	The different types of games, body expression, dance, capoeira and yoga.

AREAS	THEMES
Martial Arts	The world of martial arts, its technical, historical and philosophical aspects. Karate, judo, taekwondo, kung fu, tai chi, jiu-jitsu and aikido.
Public Politics and Social Movements	Public politics in physical education, sport and leisure, Ministry of Education, social politics and sport, student movement, non-governmental organizations, scientific associations and entities, National Movement Against the Regulation of the Profession (MNCR – BRASIL) and Federal and Regional Councils of Physical Education in Brazil.

The second is the Educacionfisica.org that presents the following themes: gymnasiums and physical activity centers; physical activity and mental health; biomechanics; physical education at schools; physical education in general; sports; physiology; leisure and recreation; body building; nutrition; obesity and slimness; sport psychology; sport training; courses, lectures and events; jobs; sport events; interesting sites and products and services.

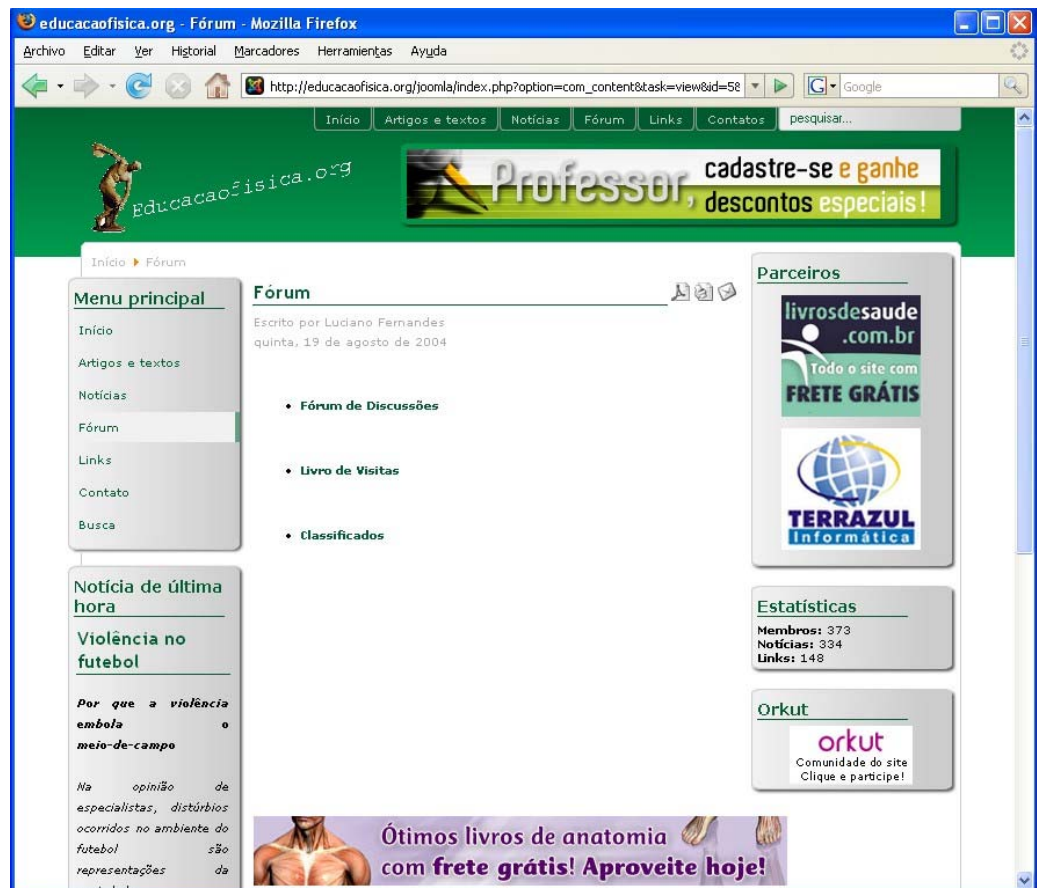


Figure 3. Internet Forum of Physical Education 2008 -

http://educacaofisica.org/joomla/index.php?option=com_content&task=view&id=5&Itemid=

The Virtual Forum Sport For All, the third internet forum identified, was created in the last trimester of 2008. It is an initiative of Trade Social Service/São Paulo (SESC - SP) and International Sport and Culture Association (ISCA), through - Latin America Youth Committee (LAYC).

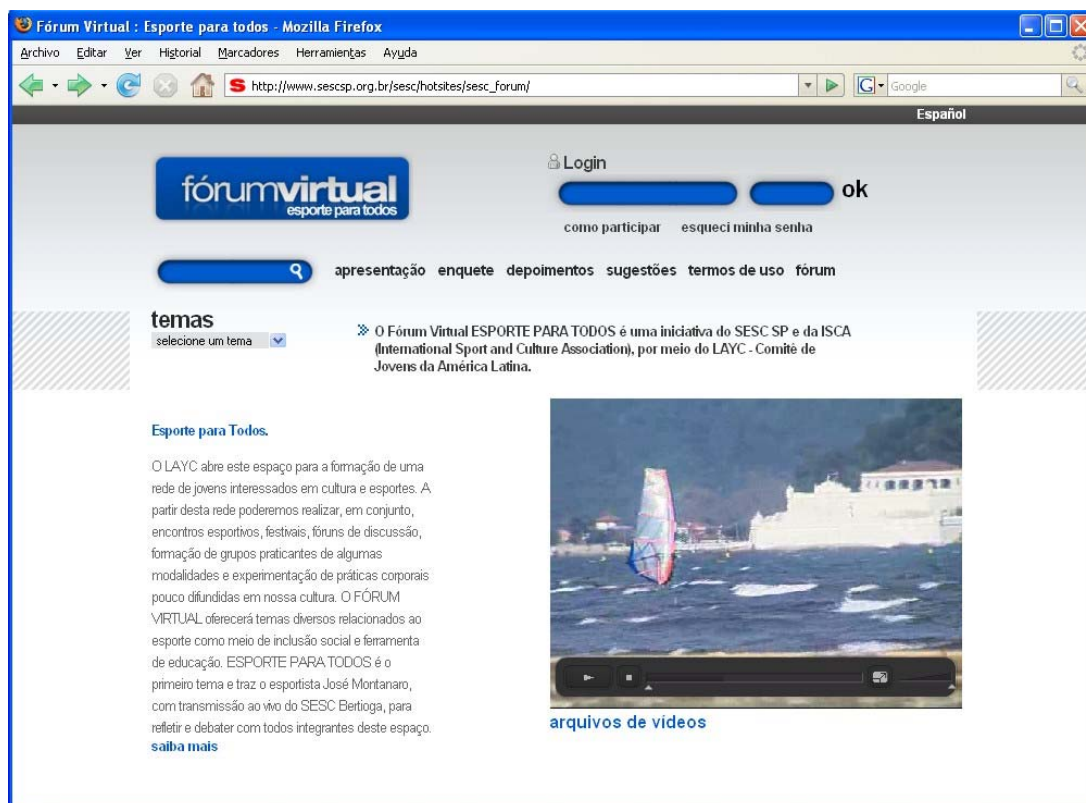


Figure 4. Internet Forum Sport for All - SESC - SP (November 2008) - http://www.sescsp.org.br/sesc/hotsites/sesc_forum/

3.3. Newsgroups

There is no Physical Education and Sport newsgroup.

3.4. Newsletter

Three Physical Education and Sport newsletters were identified.

Table 3. Physical Education and Sport newsletters in Brazil - 2008

NAME - URL	STARTING DATE	CURRENT DATA (2008)
Brazilian Bulletin of Physical Education http://www.boletimef.org/?canal=1	April 2001.	The last number was published in December. Since its creation 71 numbers were published.
Ideas in Movement - Newsletter of the Virtual Sport Institute http://www.ceme.eefd.ufrj.br/ive/boletim/	August 2004.	The newsletter is in its 39th edition.
Electronic Newsletter [CONFEEF] http://www.confef.org/extra/cadnews/	January 2008.	Sixteen numbers were published until December. This newsletter is linked to Brazil's Federal Council of Physical Education.

4. Discussion

The Brazilian discussion lists started to be visible with the creation of CEV, non-governmental organization (NGO) that since 12 years ago is the main and most prestigious web site in Brazil and that group all discussion lists described in this paper. This NGO was created in January 1996 and manages knowledge based on virtual communities (composed by people, who are technology vectors) in Physical Education, Sport and Leisure, whose aim is to be the front door and the transit area to the exchange of national and international sport information (Pereira & Vaz, 2005).

Despite the concentration of the Brazilian lists on a unique web site, there is an excellent geographic distribution, existing lists' managers in all five regions of Brazil (Pereira & Vaz, 2005). Nowadays there are 11.513 participants, these been distributed in Spanish-speaking countries such as Argentina, Chile, Cuba, Spain, Mexico, Peru, Uruguay and Venezuela; Portuguese-speaking countries such as Angola, Mozambique, Portugal and São Tomé and Príncipe; and English-speaking countries such as United States and Australia and other countries such as Canada, France, Cayman Islands, Japan and Rumania.

In relation to the newsletters, the main is the Brazilian Bulletin of Physical Education that appeared in April 2001 as an initiative of the teacher Efrain Maciel e Silva. The aim of this newsletter is to use the Internet to disseminate scientific information in Physical Education and Sport to the Brazilian academic and professional community (Silva, 2003).

A resource available at this newsletter is the Internet Forum of Physical Education, Sport and Health, which was created in the year of 2007. The Brazilian Bulletin of Physical Education offers two resources: the newsletter and the Internet forum.

The development of virtual communities in Physical Education area and also in other areas is getting close to what is known as invisible colleges (Ramirez, A. & Ramirez, F., 2008) or virtual colleges (Gresham,1994; Moreira, 2005). An idea about these colleges, according to Price (1986, 65), “[...] Perhaps the true research man does not read at all but takes his input in other ways, orally and socially. On the whole, one can keep up with a colleague group that has an effective size of a few hundred members; one cannot possibly keep up with 10,000.” Price still said that “[...] For each group there exists a sort of commuting circuit of institutions, research centers [...]”.(75). “[...] More than this, the invisible colleges have a built-in automatic feedback mechanism that works to increase their strength and power within science and in relation to social and political forces [...]” (80-81).

5. Conclusions

In summary, this study identified 132 discussion lists, three Internet forums and three Physical Education and Sport newsletters in 2008. Interestingly there is no Physical Education and Sport newsgroup.

This first research can serve as basis to the development of other academic works, such as the study of new virtual communities in Physical Education and Sport been created at some social networking sites like Orkut and MySpace or the study of the interaction between these sites and the creation of blogs in Physical Education and Sport in Brazil.

A disadvantage is that still there is not a directory or an e-book that annually gathers the virtual communities in Physical Education and Sport in Brazil. There is no doubt that this is a limitation to the search in this knowledge field, once new virtual communities started already to appear in Brazil while this research was in development.

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