
KNOWLEDGE IN PRACTICE - ESP IN SPORTS SCIENCES AND E-LEARNING

Danica Pirsl, PhD

University of Nis, Faculty of sport, Nis, Serbia, danicapirsl@gmail.com

Abstract: Challenges of modeling domain-specific cognitive competencies within the area of generic skills acquisition have to deal with the modeling of domain specific competence development over the life span. Students acquiring specific domain knowledge are confronted with at least two major challenges: (a) the stipulation of benchmarks for the judgment of competence development over the life span (for different requirements and standards across the life span) and (b) a coherent modeling of competence development over different educational stages allowing the description of cumulative developmental progress over time (scale anchoring). As for e-learning, especially in sports sciences, it is not yet fully developed, at least not in the local scene. Main reason for not having a wider acceptance of this form of study programs curricula implementation can be contributed not only to the technical but to cultural factors as well. Globalized spreading and popularity of sports sciences call for wider students' audience and participation. This also means digitally literate teaching staff completely competent to administer distance learning mode of teaching and assessing the outcomes of the administered study program. This is actually knowledge put into practice. The more competent input, the more sophisticated and educated students body we will get. The competitive university has to appeal to a large number of the international students. Eastern Europe students want to obtain their education in sports for the knowledge sake but also for the license to work as coaches. This is the ultimate end of their schooling. So they want to put their knowledge into real practice of being able to assume the role of the instructor, coach, teacher, personal trainer, etc. Consequently, we as their teachers do not just teach them their expertise subjects, but we also teach them how to put this vast body of knowledge into practice. They become skillful, reliable, team-work oriented, thus assuming not just core but also soft skills and emotional intelligence as well. To that purpose, University of Nis and National Sports Academy in Sofia, as the leading sports educational institutions in their respective countries, Serbia and Bulgaria, strive to establish distance learning centers for sports sciences students, thus promoting e-learning and as practical aspect of it all, and a development of a possible higher level diploma attainment as the ultimate goal. This paper presents attempts to establish, through IPA cross border cooperation project, joint distance learning centers in Nis, Serbia and Sofia, Bulgaria for sport sciences curricula implementation and sports sciences knowledge dissemination, having both countries students' benefits as primary challenges and goals.

Keywords: knowledge in practice, generic skills; ESP specific-domain knowledge; sports sciences; e-learning

1. INTRODUCTION

Distance education or distance learning is a field of education that focuses on teaching methods and use of cutting-edge technology with the aim to, mostly on the individual basis, transfer knowledge to students who are not physically present in the vicinity of teachers, or are not able to attend the traditional educational institutions such as schools or classrooms, on a regular basis. It is described as a process that enables access to learning when the source of information and student are separated in space, time, or in one or the other. Courses delivered at a distance requiring any physical attendance in a teaching process (such as the final test), are called hybrid, blended or combined courses. Pertaining to these aspects, a possibility of introducing distance learning mode teaching in sports sciences proved to be intriguing, and at the same time promising, due to a pronounced vision of the Faculty of sport in Nis, Serbia to attract and recruit students audience both nationally and internationally.

Distance learning has relatively long history. It was created to overcome physical distance for the sake of imparting knowledge. Learning at the beginning of its development was used primarily through the postal system by providing educational opportunities to people who were unable to attend classes in regular schools. It was used by women due to the exclusion from the institutional education program that was then intended only for men, for employed people who were in the workplace during teaching, and those who lived too far away from educational centers.

Since the mid-twenty century until today, the process of social development has been greatly influenced by the information technology. In the last 30 years the level of development of hardware and software, has enabled the application of information technology, to a greater or lesser extent in almost all areas of human activity. One of them is, of course, the field of education, too. For a long time the computer has been used only for education studying IT disciplines, or as an aid in the preparation of teaching. Over recent years, information technology

has been used in the teaching process, but it has not resulted in some key changes in the teaching process implementation. In most cases, traditional methods of education that put students into the same dimension with the teacher in time and space, were not abandoned. To add to the existing situation, we could say that unwilling acceptance of any change in teaching practices may be the cause of a slow introduction of distance learning elements into the teaching curriculum, especially in the Eastern Europe countries.

The course of the development of modern society continually necessitates changing the model of education. In parallel with these systematic changes, one finds also individual initiatives in a trial to connect the education system to the real needs and possibilities of the environment. One of these initiatives, supported by a strong impulse of the rapid development of information and communication technologies, and the advent of the Internet has led to the emergence of the modern forms of distance learning. Communication that previously took place mainly in the direction of the teacher-student now has become much more diverse, in its highest quality in the audiovisual form. Today, the internet offers us the opportunity to follow lectures via video camera, to access learning materials, scripts, multimedia presentations and other educational resources, with electronic communication with professors and other trainees. Knowledge thus become accessible to the masses and cannot afford to lag behind because it will mean loss of money, loss of time and loss of prospective opportunities to advance your career.

Low standard has many young people forced to get a job immediately after graduating from high school. Unable to attend school regularly, they would probably be happy to accept distance learning as the best form of their future education. Development of the internet technology has enabled the temporal and spatial separation of learning and teaching, and the development of multimedia technologies has enabled the administration of teaching materials with interactive elements. We can point out some of the advantages offered by distance learning:

- Classes may be held via streaming, transfer of multimedia content that are always available to students.
- Classes may be available in the form of printed materials that are stored as files on the server of the educational workers.
- Students can communicate among themselves and with the teacher through internet forums, email and chat.
- Course materials are always available and easy to update.

Of course, it goes without saying that you need to equip your intended audience, that means, your students with sufficient knowledge of IT technologies so that they can really benefit from a blended or completely distance delivered mode of teaching. With our partners from the NSA (National Sports Academy) in Sofia, Bulgaria we first of all had to organize a set of lectures on the role and implementation of high quality IT teaching methods meant both for prospective students and the teaching staff willing to later on, take part and implement modules of joint curriculum sports sciences courses. It took whole two weeks of instruction with the possibility to ask questions, to try some techniques and to try some teaching bits via videoconferencing streamline with our colleagues in Sofia. It helped a lot because that is how one can do a little bit of a market research of what courses students are most interested in and find most useful for their current and future levels of studying.

Learning through video represents one of the solutions that makes e-learning unique and attractive. Using multimedia technology (synthesis of audio and visual communication) allows the presentation of an educational content in a dynamic and explicit manner. Attending lectures through interactive use of these media allows participants to keep focused on events associated with e-learning constantly, although dislocated. Within the e-learning lectures are organized in the form of web conferencing. To be present it is enough for the participants to have administrative authorized access to, and at the appointed time to be in the virtual classroom. These technologies enable participation in discussions, and interactive work in real time. We used this opportunity to agree with colleagues from NSA in Sofia, that there should be some core courses such as biomechanics, research design in sports, etc., but that we should also include some elective courses on selected sports of interest to students, for example, tennis, athletics and interestingly a suggestion from NSA students, on golf.

Distance learning can improve learning in several ways. It brings students, their families and teachers the experience of working on the internet, and familiarizing with it during the process of education. Distance learning gives students the chance to gain new skills and qualifications and to develop in new directions. In the case of sports sciences related studies, it proved beneficial for lots of sports coaches, sports instructors, sports animators who are working worldwide, and yet they want to complete some study cycle to obtain their diploma.

The need for remote learning emerged with the advent of seminars. Students who attend the seminars are usually employed and cannot attend classes. Implementation of distance learning via video camera is easier way to study for many students, and distance learning is cheaper which would be reflected in the budget of students. Project of distance learning through video lectures should allow students the following:

1. Regular lecture attending by direct streaming.
2. The possibility of delayed viewing of videos of lectures.
3. Access to remote users who are unable to attend classes, which can result in significant savings in time and money.
4. Preparation of standard ways to train a large number of employees in a short period of time.
5. A quick and quality access to learning materials: scripts, multimedia presentations and other educational resources on the Internet.
6. The current dispersion of new knowledge in the infinite space conditions (remote sites).
7. The dynamic interaction between teachers and students, qualitatively and actively participating in class.

Video lectures also would allow a lot more people to get educated and lifelong upgrading their education. Through this method of learning one would enable the people who for health reasons are not able to go to school to obtain a university degree and to realize some of their dreams. Also, this project would allow meeting people who live in different places, who have different interests, and that they want to share with other people.

E-learning can be defined as the process of transferring knowledge and skills in electronic form using appropriate computer applications, ie. targeted programs, and environments in the learning process. These applications and processes include learning via the web, a computer, in digital classrooms, and the contents are transmitted over the Internet, intra-net/extranet, audio and videotape, satellite television. The transition to e-learning does not mean rejection of the existing content for teaching/ training, but only improving the existing education materials and its modernization. Transferable content types that are used in e-learning are:

Word documents, Adobe Acrobat files, and any other files; Web content (HTML, Shockwave, Java, etc..), Continuous or streaming media (Real Video, MP3 audio, No Show); Authorised teaching facilities in the form of so-called Executive Courseware.

To make e-learning possible, one first needs to make educational content available over the Internet or intranet. This is achieved by making website with the appropriate training materials, which the user can take. Furthermore, a complex system of electronic teaching requires a series of components which include: The registration process - creating a unique password (identification number) for each participant in the process of e-learning, allowing its access to the system; Control of activities - giving users opportunities to access those features and functions that match their roles in the learning process, which ensures that all activities in the system are recorded and monitored; Environment that supports learning - enabling users to communicate with each other, participate in class and put questions to their teachers/ instructors; Testing and evaluation - measuring success in mastering the knowledge and skills; Monitoring of the teaching and development of a database for managing and administering with the possibility of making various reports - recording all activities related to learning, which will then be used for various reports. Since in our project we opted for Moodle web based learning platform we are giving some additional explanations on its origin and application modalities.

"Moodle" is a software package designed for creating Web sites and courses on the Internet. It is a global development project designed to support teaching through the Internet. "Moodle" is open source software also known as a Virtual Learning Environment - VLE. This program is freely available and used under the GNU public license. This means that the "Moodle" is copyright, but its users have the freedom to copy, use and modify it if they agree to certain terms of use. These conditions are: providing programs for other users; original license and copyright must not be altered or removed; the same license must be applied to other projects stemming from "Moodle ". It has become very popular among educators around the world as a tool for creating dynamic websites for their students. The word "moodle" is actually an acronym for modular object oriented dynamic learning environment. In order to function, "Moodle" must be installed on a web server that supports php and sql. It can work under "Windows", "Mac" and Linux operating systems. "Moodle" project has been always focused on providing the best tools for the educators, so that they can better make and manage internet courses. There are many ways "Moodle" can be used. It can be used for hundreds of thousands of students, but it can also be used in the primary school. Many institutions use it as a platform for the implementation of internet courses, and some use it purely as a substitute for direct contact of students and professors. There are three classes of "Moodle" users: administrators, teachers and students.

2. PROJECT "ELFS"

A project entitled "Establishment of E-learning centers on the basis of IT infrastructure for joint program implementation at the Faculty of sport and physical education in Nis and National sports academy in Sofia" with the acronym "ELFS", lasted for 12 months with total approved budget of 266.948,97 Euros. Leading partner was a Faculty of sport and physical education in Nis and the project partner was National sports academy in Sofia. General aims were: Strengthening cross-border cooperation in the field of sport sciences through the formation of the centers for distance learning in the context of both partner institutions (Nis and Sofia). This goal will be achieved by implementing the following specific objectives:

1. The introduction of the European dimension into the university education by developing general digital literacy of students, teachers and administrative staff of the cross-border regions
2. Preparation of students through distance learning for the lifelong learning process
3. Preparation of high-quality study programs at the bachelor, master and doctoral level study cycles via distance learning
4. Improvement of the social dimensions of the cross-border regions by creating new opportunities for students and teachers from both partner institutions for the academic exchange
5. Providing better access to both partner institutions in the cross-border regions to academic resources and information in the field of sport and sport sciences
6. Creation of conditions for the reception of foreign students from the European Union and other countries to ensure joint action in Europe and in the global labor market.

To achieve the objectives of the project it was necessary to perform the following tasks:

1. The management and administration of the project
2. Organization and implementation of the joint action plan for the purchase of equipment and the creation of two parallel IT centers in Nis and Sofia
3. Preparation of the appropriate platform for the introduction of distance learning at the University of Nis
4. Preparation of the appropriate platform for the introduction of distance learning at NSA Sofia
5. Training of teaching, administrative and support staff for the implementation of distance learning using modern IT infrastructure
6. Preparing a pilot study program in basic and applied sciences in the field of sport to measure the degree of preparedness of students and teaching staff for the implementation and the use of new IT infrastructure
7. Organization of promotional and information campaigns for students, teachers, administrative staff and other users
8. Control of project implementation
9. Dissemination of information on the findings of the project at the level of the European Union, at the country level, but also at the level of cross-border regions.

The expected results to be achieved with this project are:

1. Established and formed center for distance learning which combines both partner institutions (Nis and Sofia, NSA)
2. Formed relevant IT infrastructure for the implementation of joint Bachelor, Master and Doctoral studies and developing the concept of lifelong learning
3. Prepared highly-qualified teaching, administrative and support staff to develop IT infrastructure in higher education, created joint study programs as well as increased mobility of teachers and students
4. Developed study programs in basic and applied sciences in the field of sport as a basis for the pilot implementation of a new IT infrastructure
5. Organized promotional and information campaigns to attract students and teachers to use new IT infrastructure
6. Proven quality of the project in order to be in compliance with the basic guidelines of the IPA Program and aims promoted by this program, as well as verification of the sustainability of the project.
7. Realized campaign for adequate dissemination of information on the findings of the project at the EU level, the state level and at the level of cross-border regions

3. E-LEARNING RATIONALE AS A CONCLUSION

The E-learning project was envisaged to last one year, gave rise to serious activities taken to enable distance learning mode introduction into the conventional modes of teaching. What are the real life facts showing? 80% of the PE students in Nis, Serbia are not home town dwellers. They come from nearby towns or even from remote places; therefore they present a grabbing audience for E-learning. The students' body in Sofia, Bulgaria is even more varied and would benefit from E-learning as well. In terms of facilities, Faculty of Sport in Nis does not have a platform or modes for distance learning and all study cycles curricula are conventionally implemented. Students in Sofia have already started implementation of distance learning through the "Introducing a new educational system of quality distance learning in sports and sports-related programs " project of EU in the frame of human resources development". As for the equipment Faculty of sport in Nis does not have any equipment or distance learning platform.

Bulgarian students have found most benefits of distance learning mode through exams taking. The lecturers claim that they are highly motivated to embrace this mode of learning and exam taking because they can learn at their own pace, can consult the lecturers and can take progress tests showing them their aptitude and readiness to sit for an exam. But there is always a catch indicating that something is missing or grasped wrong. Lecturers in Sofia complain that sometimes they did not gain what they asked for, that students could be more comprehensive and studious, that learning platform was not giving them freedom to communicate fully with students, that teaching materials could be more sophisticated, etc. Referring to the teaching staff in Nis the potential weaknesses could be that teachers are not yet familiar with distance learning platforms, that they are not so prone to changes, that they cling to convenient methods, that sport is sport and cannot be practiced at a distance. On the other hand, students would gladly accept the new teaching mode but they need to be trained for such a challenge and lastly, they need certain skills and competences.

As a conclusion we could claim that all our target groups for this project such as teaching staff at both partner universities, students of both partners' universities, prospective students from the region and beyond and students from the European Community as well as from other countries around the world, would benefit from such an endeavor to promote digital literacy within the Balkan frame of cooperation and worldwide as well.

REFERENCES

- Drucker Peter, *The Coming of the New Organization*. Knowledge Management, USA: Harvard Business School Press, 1998.
- Nonaka Ikujiro. *The Knowledge-Creating Organization*. Knowledge Management, USA: Harvard School Press, 1998.
- Mayer Committee. *Putting general education to work: The key competencies report*. AEC/MOVEET, Melbourne, 1992.
- Secretary's Commission on Achieving Necessary Skills. *What Work Requires of Schools*. Washington, DC: US Department of Labor; (ED 332 054), 1991.
- Moy Janelle. *The Impact of Generic Competencies on Workplace Performance*. (Australia: NCVER), 1999.
- Kearns Peter. *Generic Skills for the New Economy*. Australia: NCVER, 2001.
- Majumdar Shyamal. *On-line Collaborative Learning*. Proceedings of the Career and Technical Education Annual Convention & IVETA at New Orleans, USA, 2001.13-16.
- Pirsl Danica. *English in Physical Education and Sport*. University of Nis, Nis, Serbia. 2010.
- Pirsl Danica, "Rhetorical and metadiscoursal patterns in the scientific discourse in the register of sport" (PhD diss., International University of Novi Pazar, Serbia, 2011).
- Weinert Sabine. "Sprachentwicklung", in (Eds.), *Kognitive Entwicklung*, ed. W. Schneider & B. Sodan (Enzyklopädie der Psychologie C/V/2, Göttingen: Hogrefe, 2006), 609–719.
- Weinert Sabine. "Kompetenzentwicklung und Kompetenzstruktur im Vorschulalter", in *Kompetenzdiagnostik. Zeitschrift für Erziehungswissenschaft, Sonderheft 8* ed. M. Prenzel, I. Gogolin, & H.-H. Krüger (Wiesbaden: VS Verlag für Sozialwissenschaften, 2007a), 89–106.
- Weinert Sabine et al., *Expertise zur Erfassung von psychologischen Personmerkmalen bei Kindern im Alter von fünf Jahren im Rahmen des SOEP* (Data Documentation 20). Berlin: Deutsches Institut für Wirtschaftsforschung (DIW), 2007.
- Wertsch, James. *Die gesellschaftliche Bildung des Bewußtseins*. Marburg: Bdwi. 1996.
- Wirth James and Klieme, E. *Computer literacy im Vergleich zwischen Nationen, Schulformen und Geschlechtern*. 2002), 136–157.