Intensive programmes as incentive for mobility?
How to build on the achievements of IPs?

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Introduction

Since the beginning of the 90th the Institute of Sports Science and Clinical Biomechanics, University of Southern Denmark have been involved in ERASMUS supported intensive programs. The institute has coordinated two IP's in relation to Physical Activity for Elderly People (the first in 1994); three IP's in relation to Physical Activity and Health; five IP's in relation to Children and Physical Activity with special focus on health and obesity. Just now in May 2008 we are running the second IP in the children area of a second circle and the third IP have been accepted also for 2008-09. All the IP's have been modules on the master's level. Beside this, the institute has been in the coordinating group of European Master Programmes in 'Physical Activity for Elderly People, 'Physical Activity and Health' and 'Physical Activity, Children and Health' (parallel programs). The institute has also been in the coordinating group of two ERASMUS supported Thematic Network Projects; the last was the project 'Aligning European Higher Educational Structures in Sport Science' (http://www.aehesis.de) which finalized the dissemination year in 2007.
The last IP circle of the IP's, 'Children and Physical Activity - relations to Obesity and Health', began in the study year 2006-2007, and will, as already mentioned, be carried through in a 3-year period, finalizing in May 2009.

Background

There is a widespread decline of school physical education in most European countries, and an associated perception that children's freedom to cycle, walk and play outdoors is restricted. Further, there is concern that children are adopting a lifestyle of sedentary pursuits, and there is increasing concern that both childhood obesity and the development of cardiovascular disease (CVD) risk factors in children are directly related to sedentary living. Cardiovascular disease is now recognized as a pediatric problem. The recent results from a multinational European study have shown that clustering of CVD risk factors tendencies are evident in both children and adolescents with low physical fitness (PF) and physical activity (PA), and that an inverse relationship exist between PF, PA, obesity and CVD factors in both children and adolescents. PF is the variable with the highest and most consistent association with CVD risk factors, at levels even higher than with obesity especially in children. During the last decade the PF level of children has undoubtedly decreased, and the difference between children and adolescent with high and low PF has increased markedly. This increased polarization of PF levels is mirrored in the fact that obese children and adolescents have become even more obese and they have increased in number. The latest research has also shown evidence of a socio-economical status (SES) factor, relating in both lower PF and higher body mass index (BMI) in youngsters coming from families with low SES.
These negative trends and polarization of PF and obesity in European children suggests that a future adult generation will have a higher prevalence of CVD, metabolic syndrome and type 2 diabetes, if public health initiatives for children are not being implemented. The situation implies that intervention strategies towards a healthy and more active lifestyle should be encouraged at a young age, most particularly in the school setting but already starting in the kindergarten.

Aims of the IP

The aims of the IP's is to educate master level students in both the theoretical and applied aspects in the field of health related and health enhancing physical activity in children.

The content focus on:

- the academic rationale for the inclusion of sport, exercise, fitness and related health issues in the public health domain;

- state-of-the-art scientific data on the physiological, epidemiological, psychological, sociological and social factors underpining children's participation in PA and sport;

- methodological, ethical and practical issues which underpin scientific investigation and intervention in the field;

- opportunities for students to obtain a European perspective on the topic, and offer them tools to evaluate how policy issues differ between countries.

Before the aims can be achieved, a European educational strategy is needed between the involved institutions, where specialists in the area can encourage multinational and multidisciplinary teaching, as it is not a topic taught in all universities dealing with sports sciences. A group of European sports scientists has established a European master's program in the area of Physical Activity and Health. Based on their positive experiences with earlier IP's, we consider it very important to focus on this kind of learning and teaching programs, in order to enhance knowledge and understanding about Physical Activity – and especially health enhancing Physical Activity - in children. An efficient strategy to gain new perspectives in the area is to develop an IP, which in a short period can involve a large number of students and specialist teachers from many European countries. In this way students can benefit from specific and specialized learning, and the teaching staff will get the possibility to exchange views on teaching content, new curricular approaches and its connection to new research in the area.

It's a necessity making international programs to be supported from your university. The Erasmus Policy Statement of the University of Southern Denmark was developed in 2002, and a new statement was issued last year. A specific aim of the statement is to enhance international programs and exchange of teachers and students as well as being part in networking at different levels. The university has been and is still an active partner in a variety of European programs and networks. It is a top priority of the university to strengthen the European cooperation in relation to education, and therefore new international programs have been developed. Another top priority is to enhance the number of student and teacher exchange, both incoming and outgoing. Other partners in the IP do have a university policy which is very close to what is mentioned above.

What have we done?

As already mentioned, we have earlier carried through Erasmus supported IP's in the area of Children and Physical Activity. Based on these programs as well as an earlier two year European Master in Preventive and Adapted PA, a new European Master in Physical Activity and Health (EMPAH) has started. Key institutions in this program are universities in Rome (IUSM), Vienna, Oslo and Odense supported by Bristol and Cologne, which are also key institutions in the IP. The IP is part of that program, which is a joint or parallel program between the mentioned universities, supported especially from the Italian ministry of education but also from the other universities through multilateral agreements. It's of big importance for an IP to be an essential module in a masters program, either an international or a national program.

So, the IP is a specialization module of the EMPAH. The EMPAH Program is a Postgraduate program of 2 years, consisting of intensive Teaching Modules in the first year and specialization and Internship in the second year, in addition to Elective Activities and Thesis, leading upon completion to a *European Master's Degree* (120 ECTS). Students proceeding into the second year will need to select the age group on which they intend to specialize, and this will then be the focus of their Internship and the final thesis. There will be one common path in the first year, and specializations in the second year. One of these is the IP module: **Children and Physical Activity - relations to Obesity and Health.** The program involves institutions, who will jointly

offer the program and issue the related credits and title, i.e.: The Rome University Institute of Movement Sciences (IUSM); The University of Vienna; The University of Southern Denmark, Odense, The Norwegian School of Sport Science, Oslo; and associate partners, who will contribute to the program and recognize it, including The German Sport University, Cologne; and The University of Bristol. These universities are naturally also partners in the IP, but the IP is also open to other institutions (19 all together), who can be partners of the EMHPA in the next future. In that way the IP contributes strongly to the teaching program of all partner institutions.
The IP program constitute 15 ECTS credits which students can count towards their Masters degrees, either at there home institution or inside the EMPHA. The main focus of study during the two and a half week (theoretical and methodological issues) is fundamental to the Masters degrees operated within the partner institutions, and lends it self ideally to trans-national, multidisciplinary teaching. The range of teachers available gives a unique opportunity to study physical activity in children from a full range of academic disciplines and from the full range of European countries. As teaching programs differ between institutions, the IP provides a critical focus of study which gives students a broad European, multidisciplinary perspective, and is in that way innovative.

Learning methods and exams
The IP comprise the teaching and learning methods listed below.
Lecture-based topics: Issues are addressed from a multidisciplinary perspective, using teachers from different disciplines and also different countries.
Seminars: Students discuss the lecture content and formulate questions, ideas, and strategies for future academic and public health initiatives. It is aimed to maximize the level of student participation in the learning process.
Practical workshops: Workshops are related to the lecture topics and the outcomes of discussion groups. Students are given a variety of practical tasks to consider, each one building further on the outcomes of the lectures and discussion groups. Again, this is intended to maximize student participation in the learning process.
Student presentations: Students are required to make either an oral or a poster presentation. Feedback will be given regarding the academic content and the mode and style of presentation.
The module is finalized by a written essay. The evaluation of the essay is on the responsibility of the University of Southern Denmark, then using the Danish exam system, since the students are subscribed as guest students at the university. It means external examiners from a group of independent university teachers in the area (not from the University of Southern Denmark) has evaluated the written essays together with responsible teachers from the Institute of Sports Science an Clinical Biomechanics at the University of Southern Denmark. The students passing exams are obtaining a certificated master module degree from SDU
The network of participating institutions has substantial experience in delivering web-based seminars, including support of World Wide Web pages on the Internet (black board), online discussions, chat communication and the compilation of downloadable files to support seminars. All key lectures are available on the web site executed by University of Southern Denmark. These lectures are available for students and teachers taking part in the course. Also the course literature as well as all other kind of necessary information are advertised and displayed.
The program is an integrated part of the Life Long Learning Program, following all the intensions of the Bologna process.

Quality Assurance
The identification and internal quality evaluation of the finalized IP and the IP results consist of the following processes: Internal evaluation (IP management group, IP students and IP teachers) and external evaluation (areas sports science experts from other institutions).

The variables evaluated are: IP management, IP contents, IP results (presentations, essays), IP products (study material, website etc.) and processes.
The variables are developed by several criteria: The full IP will be followed by at least 3 of the program responsible teachers (members of the management group) and the students. Since most of the participating teachers are experienced through their job at their home universities by many years of being both teachers, researchers and internal/external examiners on master's and Ph.D. level, the guarantee of a high quality of the course program and the evaluation of the course is secured.
For the internal evaluation by IP management group, IP students and IP teachers, questionnaires with Lickert scales allowing a quantitative analysis and open questions (strong and weak points, comments) allowing a qualitative analysis is used.
For external evaluation by areas sports science experts from other institutions, questionnaires with Lickert scales analyzed by quantitative analysis as well as audit reports with documentation analysis is used.
There will finally be a meeting after having finalized the course in which as many as possible of the participating university members will take part plus areas sports science experts from other institutions if possible.
Using the above procedure, the tools of the Bologna and the Tuning process is followed, including both internal and external members in the internal quality assurance and evaluation process.

Essential parameters in relation to a continuation and the achievements of IP projects.
As already mentioned an international IP needs to build on what has been achieved by the Bologna and the Tuning process. This is essential in relation to the full acceptance of the module and the credits given.
We have found it essential too making the IP being a part of an international master's program as well as being a module in the hosting university. The first makes it interesting for more students and the latter gives the student a security for going through a recognized exam system, which again is a way of full recognition for all students involved.
A third but very essential point not mentioned yet, is the importance of a connection to a common research project in the educational area. In relation to this IP, the core partners have also developed a common research program in the area of Children, Physical Activity and Health, since the mid 90^{th}. The European Youth Heart Study is such a study. It's an international mixed longitudinal multi-centre study measuring among other things cardiovascular disease risk factors in children and youth and determinants of physical activity, making it possible to continue into intervention studies targeting specific groups (obese, specific ethnic groups etc.) needing among other things improvements in the degree of physical activity. The number of centers taking part in the project is still increasing, based on discussions and presentations at the IP, but naturally also at international scientific meetings and conferences. In this way the teaching is linked to concrete research projects, and the students are getting the possibility to be in direct contact with the researchers (many are top level researchers) but also to be inspired to go into research, and many has since the beginning got the possibility to make their thesis based on results from the European Youth Heart Study.

Future perspectives
A multilateral agreement between IUSM in Rome, Vienna University, the Norwegian School of Sport Science, Oslo, University of Athens and University of Southern Denmark has just been signed and probably the German Sports University, Cologne will be the next partner and others will be welcomed too.

The partners undertake to particularly strengthen and expand their commitment toward the integration of teaching and research activities in a European university system, along the following lines.
Previous agreements concerning the European Master in Health and Physical Activity are confirmed, and the partners undertake to further support and promote the program through Faculty, students, the organization of study periods, research and educational facilities, information, and any other means as may be appropriate.
Research cooperation will be increased and a common platform will be identified; a detailed analysis of research structures, facilities, and programs in the various locations will be conducted, and closer interaction, cooperation and exchanges will be promoted.
The European Master will be expanded at the doctoral level, and a European doctoral program in Health and Physical Activity will be developed.

So … IP programs can lead to common master programs as well as common doctoral programs; parallel or joint and they can develop into ERASMUS Mundus programs. Also close cooperation can be made with institutions from 3rd countries involved in TEMPUS projects. At the moment our core group is running two TEMPUS projects with Albania and Egypt and students from Albania and Egypt are taking part in our master program and through that way also our IP program.