

RECOMMENDATIONS AND FUTURE GOALS

Irene Kamberidou and Konstantinos Karteroliotis

- 1. Create a hub for sharing knowledge (with regard to the "Development of MSc Programs) facilitating communication and coordination with students:
 - 1.1. Goal #1: Increase visibility and fostering/retaining partnerships.
 - 1.2. Goal #2: Contribute to improving gender inclusive practices.
 - 1.3. Goal #3: Encourage dialogue and partnerships and facilitate strategic alliances

Namely, a websites (safe and free of charge) that will help transform 'classrooms' into more collaborative and dynamic learning environments, allowing students to communicate with other students and teachers around the world.

- 2. Proposed course/or Directed Study: "Gender issues in sports" (offered by ESTIA-EARTH partner, scient. responsible: Irene Kamberidou)
- 3. Proposed course/ or Directed Study: "Research Methods" (offered by ESTIA-EARTH partner, Kostas Karteroliotis)
- 4. Directed Study: "Gender and technology (the anachronistic gender-science imbalance) from a sociological perspective." (offered by ESTIA-EARTH partner, Irene Kamberidou)
- 5. Proposed course or directed study: "Sport Sociology" offered by ESTIA-EARTH partner Nikolaos Patsantaras.

FUTURE GOALS: TRAINING THE TRAINERS/EDUCATING THE EDUCATORS

- 6. Training the trainers/educating the educators** (see attached recommendations). The institutionalization of mandatory techno-education as an integral part of the curricula in public schools, beginning in kindergarten and extending to vocational training. Additionally required are computers in all classrooms, equitable and non-discriminatory distribution of technological infrastructures, appropriate policies, international educational benchmarking and collaboration with the ICT industry.
- 7. A widespread campaign to change attitudes about science and technology: to inform, introduce and familiarize citizens with technologies, technological tools, services, best practices, etc.
- 8. The continued development of a wide-ranging network of public internet access points, free of charge and easily accessible to the public, in every prefecture or municipality, staffed with employees to assist users, and with hours that accommodate women's schedules. Many international studies confirm that awareness, familiarity and a change in attitudes have been achieved through regular use, rather than only formal training. (Warrington & Younger, 2000; Kamberidou, Patsantaras, Pantouli 2008)

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- 9. An '*Education-Engagement-Retention Action Plan*' that entails: Learning, continued training and participation in areas of planning, management, assessment and organisation. (b) Family support programmes, flexi-hours, a family-friendly working environment, child care facilities, etc. (c) Development of new curriculum and literacy materials for pre-school, kindergarten, and first grade students, including after-school tutoring and adult technology education courses Kamberidou, Patsantaras, Pantouli 2008).
- 10. A teacher preparation-training program—technology-friendly teachers and computerfriendly age-appropriate classrooms. Educating the educators/ teachers training other teachers using a gender-sensitive approach focused on the participation process and the development of an age appropriate curriculum.
- 11. A 'Big Sister' campaign, focusing on the grassroots, "bottom-up" aspects. Specifically, girls trained by girls, girls trained by women (new role models), as has been applied in the case of sports. (e.i. Peace Games organization, Sport in society org.) For instance, women teaching women, i.e. eight year old girls 'coached' by sixteen year old girls or by women volunteers engaged in technological/engineering activities—at community or municipal centres, in schools or as part of after-school activities— in friendly and inviting environments, with no stress, i.e. no exams or tests.
- 12. Recruit female volunteers with a science background from high schools to ('coach' female elementary school pupils). Recruit female university students, offering them course credits or other incentives— in order to transform stereotypes before they take root, as in the example of the Peace Games model (www.peacegames.org). Recruit retired/pensioned women engineers or experienced women who have left the science and technology fields, or those who have left due to the incompatibility of private life and career, etc. Naturally, all this with the support of the Education Ministry, universities, municipalities, public agencies, public schools, etc
- 13. The establishment of an interdisciplinary network of researchers.
 - 1.1 Interdisciplinarity in Education to formulate new pedagogical methods, best practices and approaches. Education and Engagement for teachers and for children means extra-curricula approaches, new classroom examples and best practice models, examining the role of 'visual literacy, of literature and text, namely traditional literacies and how they fit into the Visual age, etc.
- 14. Set up an **Forum** (a platform/hub) to exchange international experiences, educational change scenarios, research and practice findings that will help educators and administrators examine/explore educational technologies, the effects of teaching styles on learning a specific topic (i.e. engineering, computer technology), ways to create a climate of change with faculty and a foundation of 'leaders' that will take the initiative in technology and curriculum integration
 - 14.1. Consequently, establish and promote *a Shared Vision- a Multidimensional Mission and Code* that entails the strengthening of collaborative-communication skills to ensure that the curriculum addresses the needs of all students as part of the community regardless of gender, race, physical handicap, etc. Closing the *'achievement gap'* requires the formulation of *a common vision of teaching and learning*. This involves all members—educators, faculty, staff, administration, future teachers, parents and students in collaborative processes and intergenerational activities. Namely, supportive and participative organizational

© Irene Kamberidou, Assistant Professor (<u>ikamper@phed.uoa.gr</u>) Kostas Karteroliotis, Professor (<u>ckarter@phed.uoa.gr</u>) National and Kapodistrian University of Athens <u>www.uoa.gr</u> and www.phed.uoa.gr environments that integrate all community members towards the achievement of *shared goals*.

- 15. Innovative educational approaches should include multi-age classrooms, curricular integration, cooperative groups, curricular revision processes to ensure that all students use information technology to enhance and direct their own learning:
 - 15.1. The use of games as teaching strategies: (a) Create appropriate games to develop mathematical and technological concepts, etc. b) Develop educational communication tools for elementary and middle school students, i.e. a way for teachers to create websites (safe and free of charge) that will help them transform their classrooms into more collaborative and dynamic learning environments, allowing them and their students to communicate with other students and teachers around the world.
 - 15.2. A pilot study: laboratory schools-pilot schools with educational-friendly technology to alleviate technophobia. For instance, the distribution of 'One Lap Top Per Child' (OLPC). In 2005, a special non-profit organization "one Lap Top Per Child" (OLPC) was formed. The mission of this organization is to design, produce, and distribute low-cost educational laptop computers to be sold to governments for use in public school systems, distributed to pupils free of charge. The idea of providing one laptop per child was originally conceived by Nicholas Negreponte of MIT Media Labs to address the issue of inadequate child education in developing countries. However digital illiteracy is not only a problem in developing countries. In 2006 these lap tops were distributed to 100 pilot elementary schools in Greece.¹
 - 15.3. Another example, the internet-powered television services (IPTV). Spearheading the move are South Korean companies, like KT, which plan to upgrade their internet-powered television services to full internet television know as IPTV. According to KT, online education for children ranks among the most successful programs on its 'Mega TV' system, which also offers after-school tutoring and adult education courses. In their children's programs, children use a remote control to learn by playing games and solving puzzles. Lectures on IPTV can be repeated at any time and they allow students to take quizzes or pose questions in real time. In China, where geography and history programs are already offered, education is set to become the fastest-growing part of Bes TV's business, according to the spokesman, referring to the IPTV unit of the Shanghai Media Group.² Of course parents may not yet feel comfortable with the idea of their children studying in front of a television set.

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¹ See: Peter J. Papadooulos and Alexios Zavras (2007). One Lap Top Per Child" Projet: A Children Educational Initaitve for Developing Countries. Published in official Proceedings (ISBN 978-960-89028-4-8, ISSN 1790-661X) of '*The 3rd International Conference on Interdisciplinarity in Education, ICIE* '07 An International Forum for Multi-Culturality, Multi-Ethnicity and Multi-Disciplinarity in European Higher Education and Research, Multi Forum '07.' European Commission DG Education and Culture Jean Monnet Programme Study and Research Centres. Published by the Faculty of Electrical and Computer Engineering of the National Technical University of Athens: 59-67.

²See: International Herald Tribune, "Educational programs lift online television in Asia", by Rhee So-eui, Reuters, Tuesday, Feb. 26, 2008.