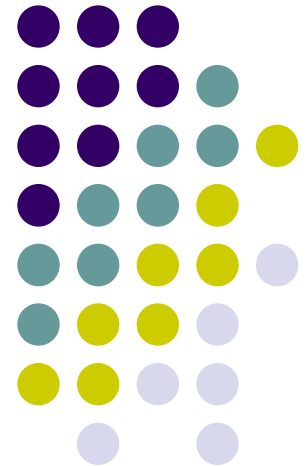
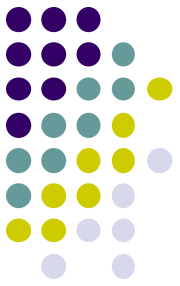


Preparing Graduate Students for a Global Workforce

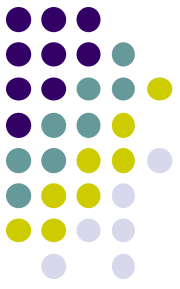
John J. Wood
**Senior Associate Vice Provost
for International Education**
The State University of New York at Buffalo





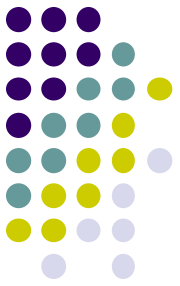
What skills do graduate students need to succeed in a globalizing workforce?

The central questions that we face in graduate education globally:



- How do we articulate graduate program objectives with societal needs?
- How do we develop the domains of competences that our young researchers need to develop for this new environment?
- A challenge: What does it mean to function in a global and knowledge-based society?

Changing contexts



Changing Ph.D. demographics

- More doctoral candidates than ever before are completing a Ph.D. at universities throughout the world

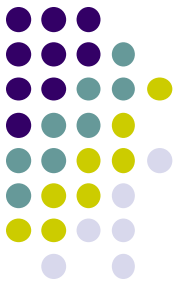
Knowledge-based economies

- Many more to be trained to meet the future needs of knowledge economies

Recognition of transferable training needs

- Doctoral candidates encounter increasing difficulties in securing employment as public and private funding flows less freely

TRANS-DOC PROJECT (2010-2012)

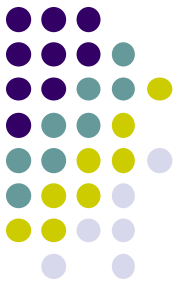


TRANS-DOC: TRANS-Atlantic and TRANSferability aspect of DOctoral training

- Organized by the Coimbra Group of Universities in Europe working with a consortium formed in the BALANCE Project (2006-2009), funded by the European Commission through the Erasmus Mundus program
- Through the earlier project, partners in Europe, Canada and the United States collaboratively identified a new area for cooperation
- Partners had a shared interest in doctoral studies and career readiness of Ph.D. students



TRANS-DOC PROJECT (2010-2012)



Project Partners

- The Coimbra Group Office, Brussels (coordinator) and 8 institutional partners (4 European, 4 North American)
- Aarhus University, Denmark
- University of Alberta, Canada
- University at Buffalo, SUNY, USA
- University of California, Davis, USA
- University of Granada, Spain
- University of Graz, Austria
- University of Leuven, Belgium
- York University, Canada



TRANS-DOC PROJECT (2010-2012)

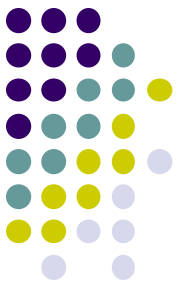


Principal Objectives

- Facilitate intra-European and transatlantic collaboration at the doctoral level
- Enhance employability prospects for Ph.D. students
- Enhance global skills and social responsibility of doctoral students
- Provide universities with their own in-house trainers, through a train-the-trainers program
- Create a flexible template for a transferable skills program for doctoral students in various institutional settings



TRANS-DOC PROJECT (2010-2012)



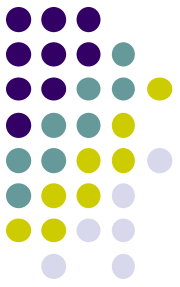
Main Activities

- Survey of structure and administration of doctoral programs in Europe and North America (Dec . 2010)
- Evaluation of the LEADER* training program at Aarhus University, Denmark (August 2011)
- Train-the-Trainer Workshops in March 2012 at Granada, (Spain), York (Canada), and Davis (USA)
- **Two-week pilot course on transferable skills at SUNY Buffalo in August 2012 → *Generic template***
- **Final Seminar in Brussels on Trans-Atlantic Cooperation in Doctoral Training (October 2012)**

* Learning Environment for Advancement of Doctoral Excellence and European Research



Developing the TRANS-DOC course template



Developing a course template for doctoral candidates on transferable skills

- To ensure that doctoral candidates are well prepared to apply interdisciplinary and inter-sectoral skills and knowledge
- To prepare for a research and professional context typically characterized by international (e.g. transatlantic) collaboration
- Focal themes include funding opportunities, communication, interdisciplinary collaboration, team building, project management and entrepreneurial skills, etc.

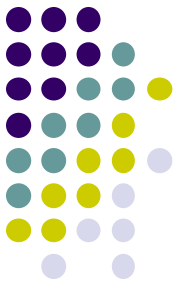


The Transferable Skills Program for Ph.D. Students at the University at Buffalo

July 22 – August 2, 2012



Two-week Coursework



Week 1

- Underscoring the importance/ relevance of transferable competences
- Inter-/intrapersonal skills
- Inter-/intra-cultural communication
- Creativity
- Challenge of collaboration
- Networking

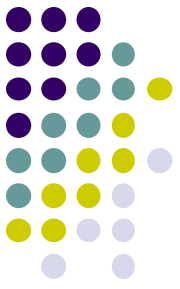


Guided Tour



Week 2

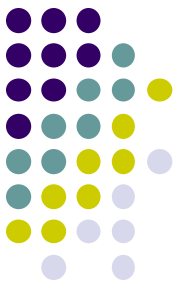
- Global competence
- Technology transfer
- Leadership skills
- Entrepreneurship
- Experiential knowledge
- Professionalization
- Evaluation & Certificate Conferral



Distinctive features

- **Intensive** - a two-week residential program on transferable skills
- **Experiential** - the design facilitated *understanding, acquiring* and *making use* of these skills
- **Extensive** – Week 1 self-awareness and self-expression; Week 2 leadership skills; knowledge transfer; innovation
- **Globally-oriented** – program capitalized on diversity of students in terms of national origin, institution and discipline
- **High relevance of content** – careful selection and design
- **Effective pedagogy** – modes of delivery; diversity of speakers (European, Canadian and American)
- **Goal-oriented** – professionalization of the young researcher

The Outcome Student Learning

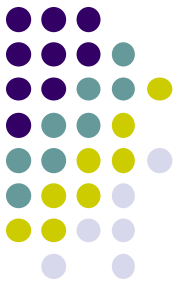


Metacognition of the importance of transferable skills
Knowledge of Self
Metacognition of higher education

Global competence
Understanding the entrepreneurial spirit
Interdisciplinarity

Student Voices

Meta-cognition of the importance of Transferable Skills

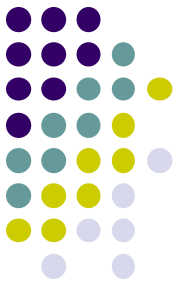


What I found most compelling of today's workshop is how to understand the meanings of transferable competencies and how to develop these competencies/survival skills to be a responsible professional.



Student C in week 1

Knowledge of Self

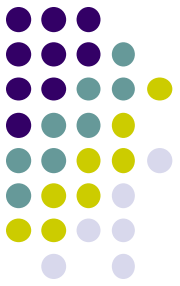


The most compelling one in terms of revealing my professional preferences and the ways of working was to explore my own preferences for collaboration and communication with others. It helped me to see what my preferences actually are and it seems a large benefit to know my own strengths and challenges connected to my working skills. The same goes for the learning styles. I will definitely use this knowledge in the future.



Student A in week 1

Meta-cognition of Graduate Education

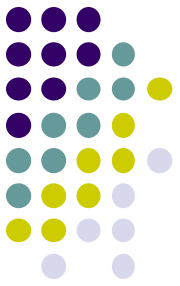


I think institutions (academic programs) need to develop the professional skills and/or retrain their current faculty; the same demand should be placed on the faculty, who themselves have the obligation to prepare their students for academic/ non-academic jobs.



Student D in week 1

Learning Transferable Skills



The most influential one for my scholarly development was the introduction to each specific transferable skill and their pivotal roles in the workplace, and why Ph.D. students need to acquire these skills.



Student G in week 1

Global Competence

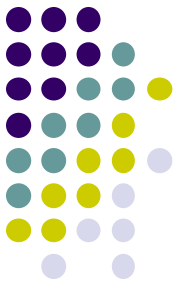


Today, we explored the importance of global competence. It was interesting to hear that global competence is an increasingly relevant skill. I feel that this skill is not emphasized at my university and when I return, I will let my peers know of the importance and opportunities for studying abroad out there. [The lecture] inspired me to become more self-reflexive of my own global competency; to start to think about global competency as a skill and asset in my future career.



Student M in week 2

Knowledge Transfer

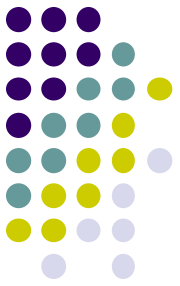


Transferring the kinds of knowledge that we acquired in graduate studies to the campus-external community is a presentation of personal aspiration for socioeconomic mobility; but at the same time it is a contribution of higher education professionals to the society. The nature of knowledge transfer is well indicated in Dr. Genco's key position that the goal of transferring technology (or knowledge) is 'about society', not anything like commercializing our ideas.



Student I in week 2

Interdisciplinarity

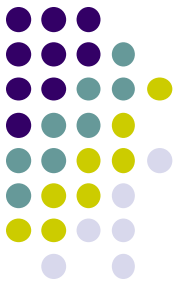


I am definitely amazed by “thinking cross-disciplinary” (self-created term; not used in the session) for innovative research. I had never thought how my expertise can combine with other areas, and how people from different fields (e.g., computer science, archaeology) can relate to my research. This session and the collaborative challenge project made me think cross-disciplinary and definitely inspired me to seek ways of reaching out to other fields to make collaborative projects cross disciplinary borders.



Student L in week 2

Professionalization

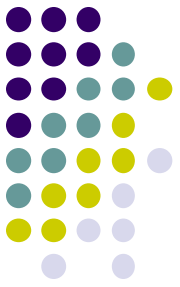


As graduate students, we need to improve, and step back to examine how we can work on the things we are already good at.



Student K in week 2

Social responsibility

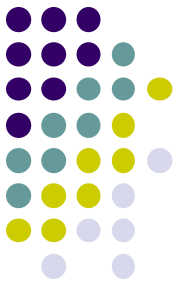


As future leaders of our society, professors or not, [we] have an ethical responsibility to empower and help others to become productive and active members of our broader society... I see that there really are ways to educate students for the broader world."



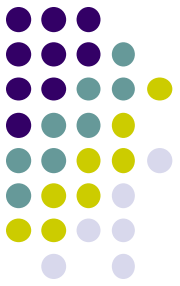
All 21 participants with Professor Brutt-Griffler

The Research Findings of the Summer Program



In-progress reflection
Summative evaluation

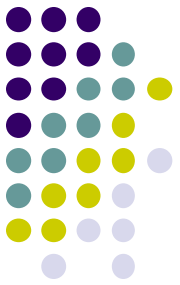
In-progress reflection



Week 1

Themes	Contents
Metacognition of the Importance of Transferable Skills	Understanding the importance/ relevance of transferable skills -from an employer's perspective -from an interpersonal perspective in order to collaborate and learn
Knowledge of Self	Understanding of one's strengths -self-awareness, challenging assumptions, interdisciplinarity -possibility of multiple career path
Metacognition of Graduate Education	Raising awareness among faculty Socialization of graduate students -agency on the part of students -graduate student placements data -interconnections of academic programs and workplaces -research funding sources
Learning Transferable Skills	Collaboration and teamwork Diversity management Interpersonal skills Networking skills Presentation skills Communication (oral and written) Self-reflection and understanding of the other Interdisciplinary thinking Problem-solving skills/ Creativity.

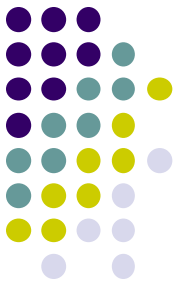
In-progress reflection



Week 2

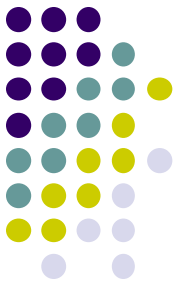
Themes	Contents
Global Competence	Understanding the relationship between global competence and employability Intercultural communication
Interdisciplinarity	Developing interdisciplinary collaboration skills
Understanding of Entrepreneurial Spirit	Understanding entrepreneurship -becoming an entrepreneur -other opportunities for PhD students
Knowledge transfer	Understanding technology as a social good -need to develop skills for translational research -understanding social values and examples of technology transfer
Professionalization	Active development of various domains Interview skills Writing letters and interviewing CV/resume writing skills Knowledge of academic and non positions Application of Strength Quest Enhancement of non-academic employability skills

Summative evaluation



Themes	Contents
Transferable Skills	Collaboration/teamwork Communication skills/networking Leadership/entrepreneurship Job searching skills Presentation skills Skills in writing a proposal Global competence Self-awareness of one's strength Creativity
Interdisciplinarity	International, intercultural, interdisciplinary interaction Group interaction across disciplines Awareness of interdisciplinary Potential collaboration across individuals & disciplines
Professionalization	Creating a LinkedIn account MBTI/ Strength Quest Tutorials on CVs, resumes, cover letters and interviews More focus on practical aspects Focus on non-academic opportunities How to use education in humanities in career search More global focus

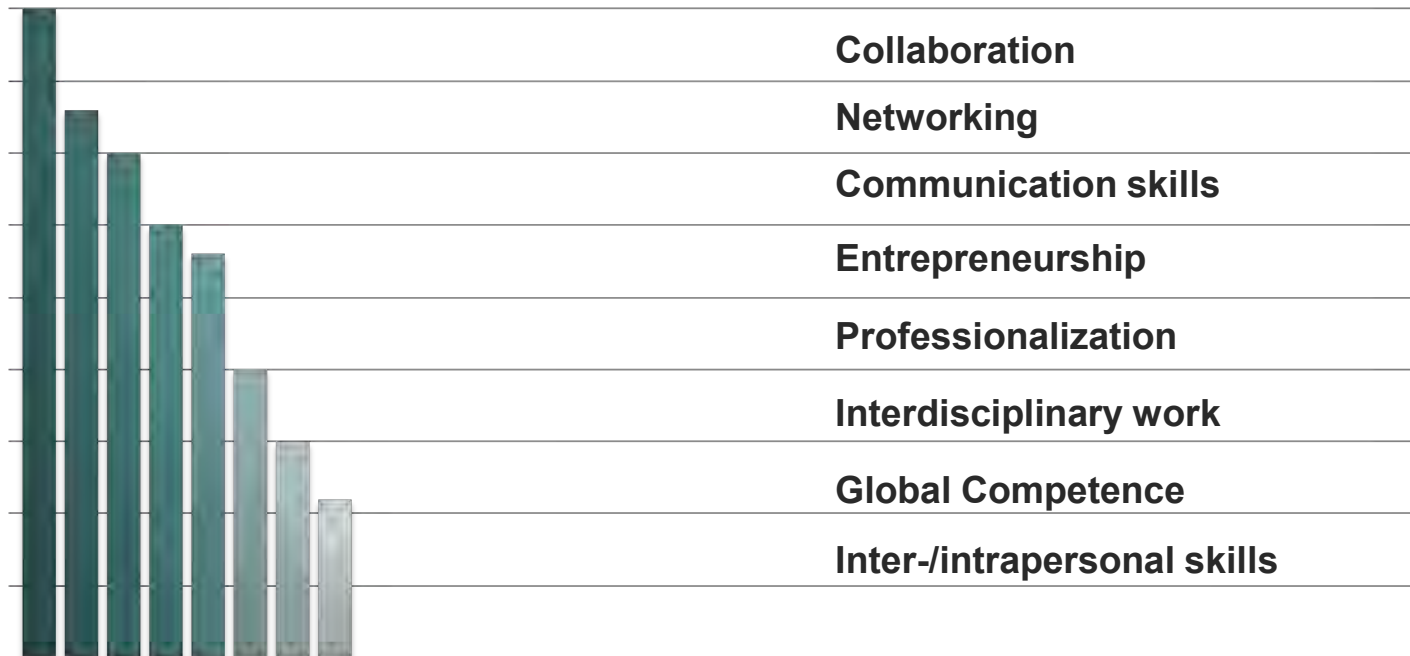
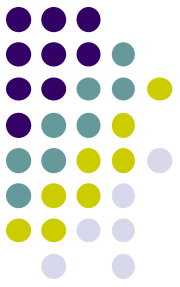
Summative evaluation

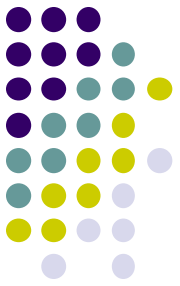


continued

Themes	Contents
Most useful content	Diversity of the program Efficiency in teamwork & communication High relevance of contents Effective pedagogy Raising self-awareness Useful information on professionalization
Preferences in Organization/ Pedagogy	Workshops on creativity, teamwork, communication, management skills Workshops led by the UB career center useful for future career Workshop with Louisa and Mark Group work/ Working on projects Group project presentations/ Workshop on career exploration and options
Need for follow-up activities	A follow-up to the course sometime in the future would help Possibility of future reunions to discuss progress and professional development
Other Needs	More about life and career balance Grant writing practice/ More on how to write a proposal Leadership training targeted for PhD candidates pursuing careers within and outside academia More information on funding More feedback on individuals' presentation skills

Transferable skills recognized/developed





Conclusion – Graduate Programs

Societal needs - graduate programs need to be responsive to societal needs and advance our societies in the 21st century

Graduate students needs - graduate education needs to be responsive to its students - develop domains of competencies for diverse career options

- increase their capacities in transferable skills
- increase their awareness of different career paths
- raise the students' potential to play multiple roles

Graduate Schools need to develop a greater integration of content areas and the processes of socialization of the graduate student

From challenges to TRANSferability

- recognize the changing landscape of graduate education
- develop the students' potential for social roles and social responsibility



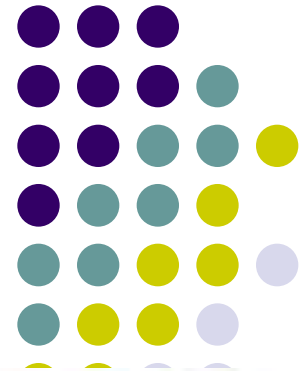
Concluding Question:

**Could the Trans-Doc
program template be
adapted to meet the
needs of your students
and institutions?**

The TRANS-DOC: Transferable Skills Program at SUNY Buffalo



Thank you



UB University at Buffalo
The State University of New York

