

Developing language skills and environmental awareness of public sector managers: the **transdisciplinary** approach

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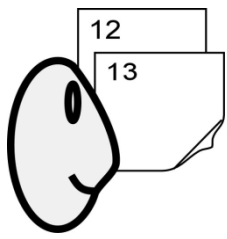
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Agenda

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- The role of HR education and development in New Economy
- The **transdisciplinary approach** in training
- An experimental transdisciplinary training program of public sector managers
- Final comments & Discussion



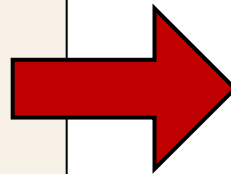


“Forces” creating new training needs

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Global trends

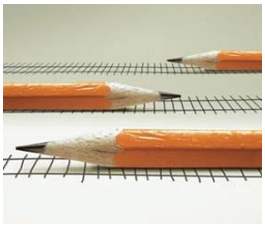
- Economic globalization
- Environmentalism – Corporate Social Responsibility
- Multicultural societies, markets and corporations
- New technologies of information and communication
- Economic crisis



Needs for new HR qualifications

- Tackling complicated problems (wicked Vs tame problems)
- Survival in a multicultural environment
- Development of adaptive strategies
- “Green innovation and development” (think globally, act locally)

...In order to create and/or sustain organizational competitive advantages and achieve high performance levels



Current trends in training

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- Life-long learning (top priority of EU policies)
- Trainee-centered (constructivistic approach in learning)
- Focus on skills and competences development contributing to organizational strategic development
- The trainers as coaches, mentors and consultants
- Implementation of new training methods (active learning, on-the-job training, team-learning) and techniques (use of authentic material, distance learning)

... in the frame of a **Knowledge management strategy**.



Training public sector managers

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Public sector faces new “challenges”:

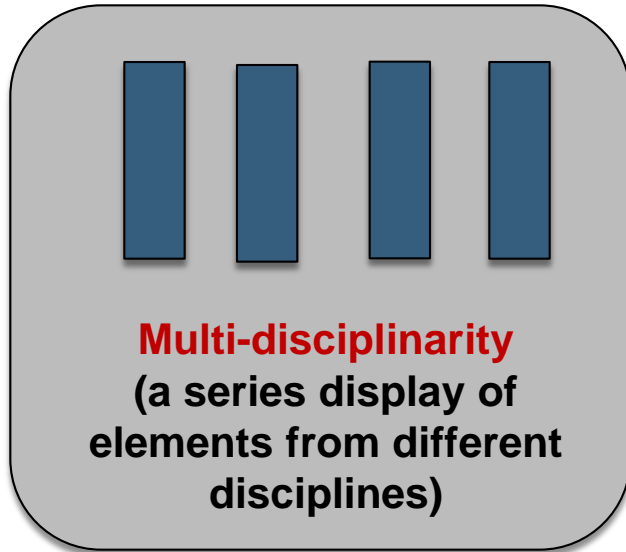
- Plan and implement coherent policies that give viable solutions to social problems and facilitate private sector growth through an increasingly open society
- Public administration focused on concrete results under the New Public Management Movement
- More effective and qualitative services provided to citizens-customers (Total Quality Management, one stop-shop services)
- A quest for more transparency, accountability and social participation

Effective and efficient training that add value on public investments presupposes the adoption of new and innovative methods based on certain research

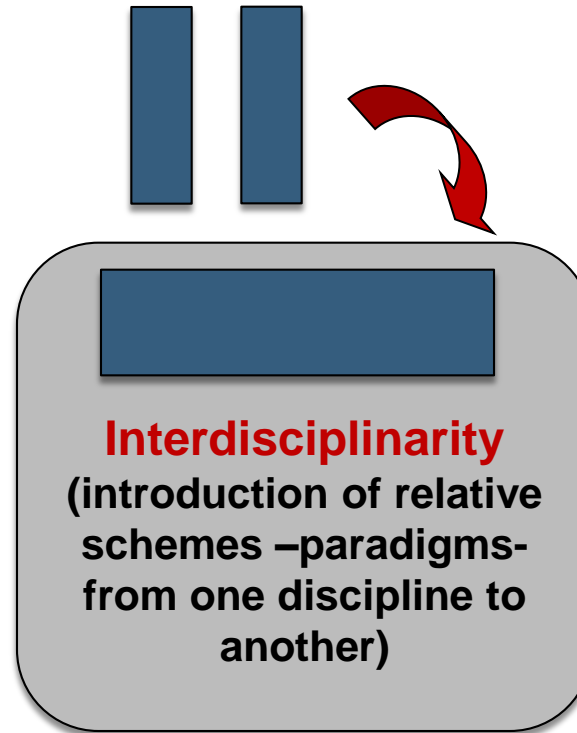


What is transdisciplinarity ?

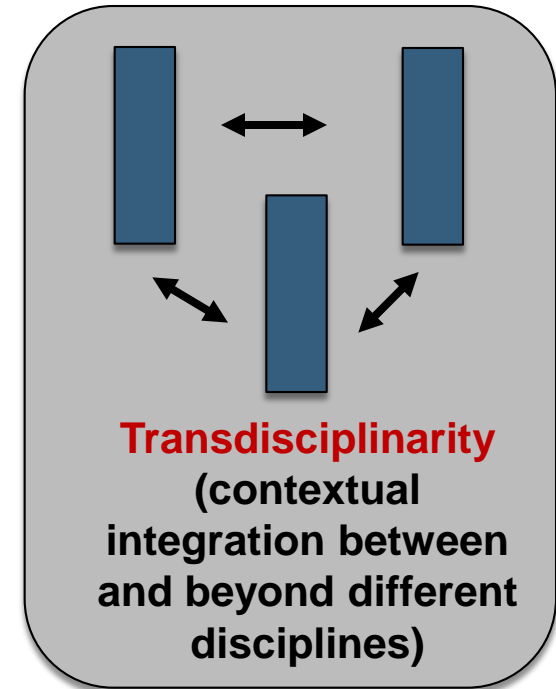
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Geography, history and political economy of Europe



Political “forces” in Sociology



English for special purposes

“The Whole is more than the sum of its parts” (Aristotle, Metaphysics)



The experimental transdisciplinary training program

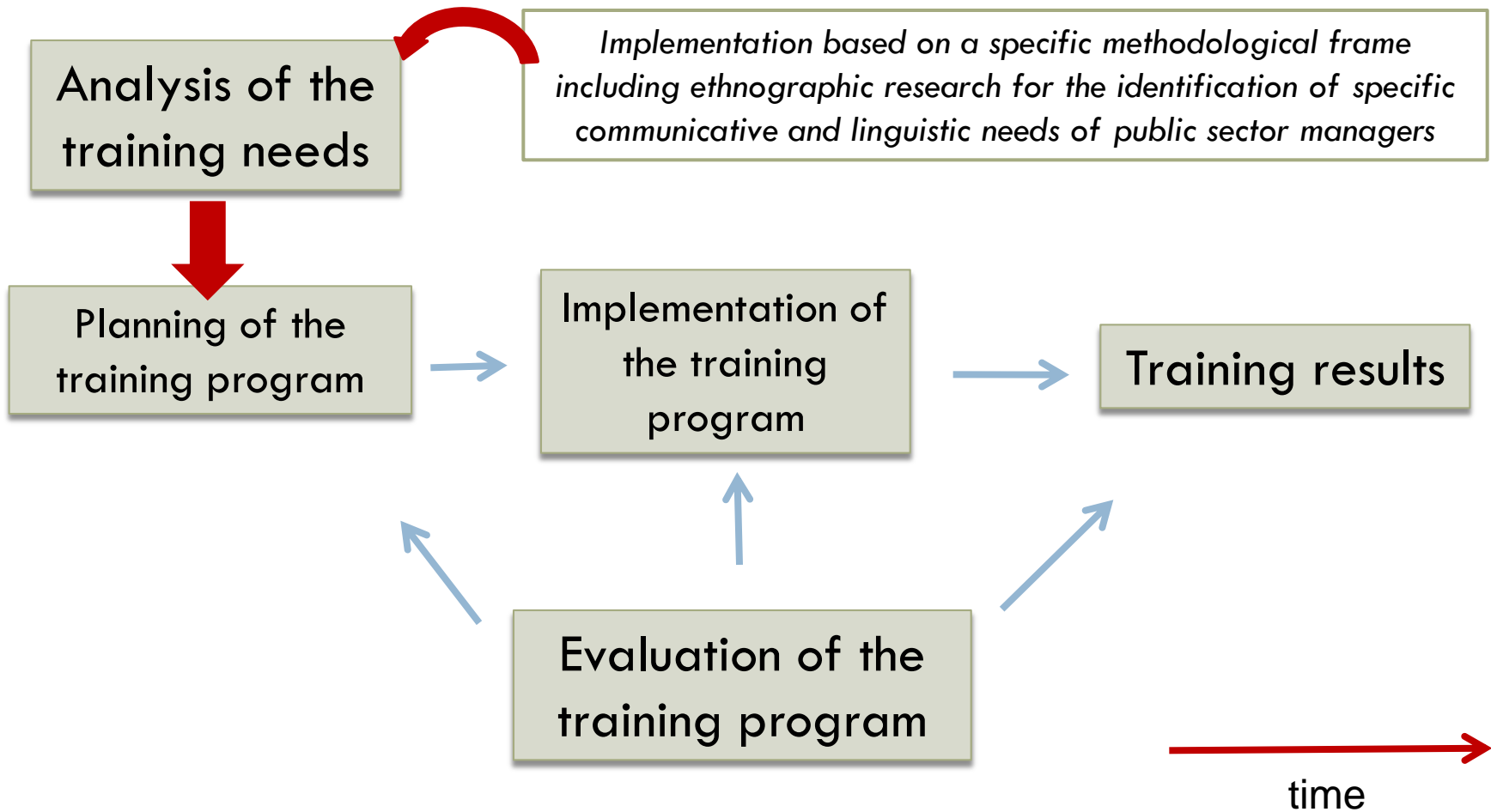
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- A wider program of Pella Local Government, under the frame of Community Initiative INTERREG III
- **Training content:** European Integration and local Sustainable Development
- **Trainees' profile:** Local Government managers working on departments closely related to the local and regional development
- **Training aim:** development of communication and environmental knowledge, competences and attitudes which will contribute to the strategic development of Local Government Organizations.



The process of training program development...

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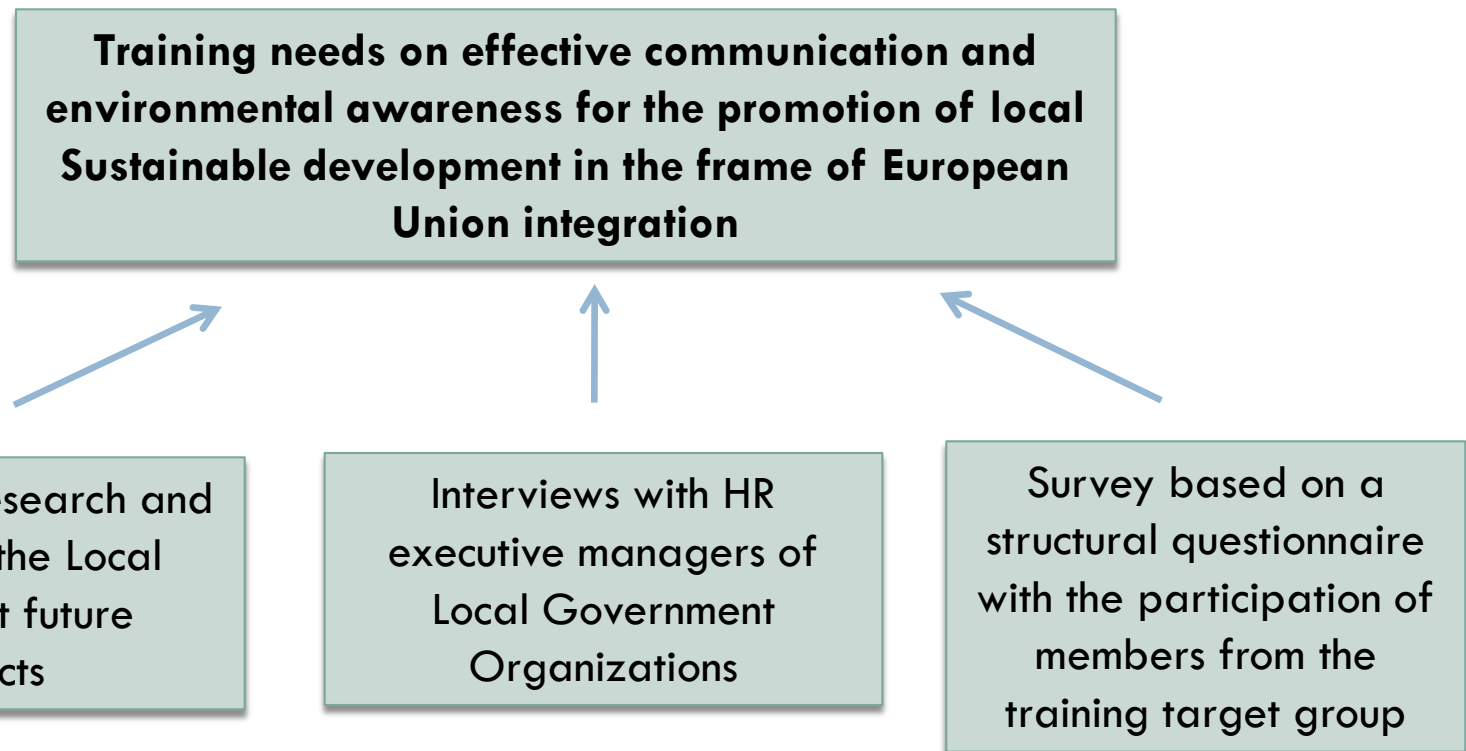




Analysis of the training needs

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Implementation of a multileveled research methodology with information from three different sources:





The training planning ...

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Based on the implementation of **three principles of effective training planning**

- ▣ The formulation of the objectives of training precedes any other action
- ▣ The specific needs of the trainees constitute the specific objectives of the program, described in terms that point to competences
- ▣ All choices related to the learning content, methods and techniques are interrelated to specific objectives



Specific training objectives

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	environmental	communicative	technological
Knowledge	Local ecology, biodiversity values and principles of Sustainable Development	Select and interpret documents of EU programs and initiatives	Select the appropriate technological tools
Skills-Competences	Evaluate the potential threats and opportunities from local natural resources management	Participate, communicate and collaborate in interdisciplinary and multicultural project teams	Plan, develop and use specific technological solutions
Values-attitudes	Voluntary undertake and participate in initiatives concerning local Sustainable Development	Overcome social stereotypes	Recognize the strategic role that new technologies play



Adoption of the **transdisciplinary approach** in training content

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Environmental science and Education for Sustainability

- Ecological values and structures on local level
- Sustainability and European integration
- Local initiatives for local Sustainable Development (Local Agenda 21)

Sciences of language and communication

- Communication and collaboration of international project teams
- Case studies of oral and written communication in multicultural contexts
- Planning and submitting of proposals in the frame of EU initiatives.

European integration and local Sustainable Development, using the technology of Geographic Information Systems

Spidergraph of the transdisciplinary integration

New communication and information technologies
The Geographic Information Systems (GIS) technology



Implementation of the training program

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- **Trainees:** 34 managers of Local Government Organizations (engineers, scientists and administrators)
- **Time-schedule:** 8 training sessions of 5 hours per day (8 different days in a time span of 2 months)
- **Location:** A meeting room in the main building of the leading Local Government Organization appropriately adapted and equipped



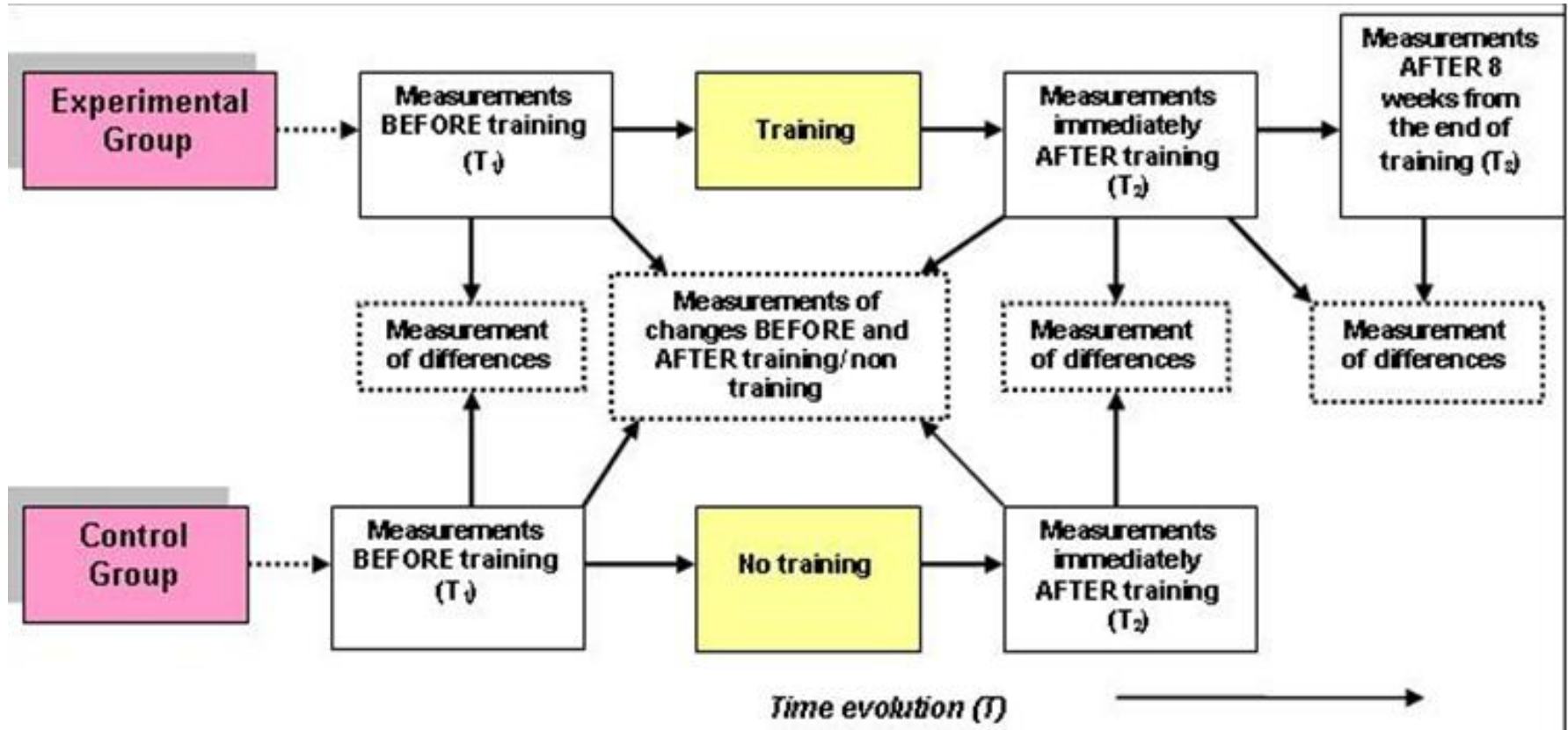
The evaluation process

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Level	Criteria
L1: Reactions to the training process	Trainees expectations concerning the training content, organization and implementation
L2: Learning	Knowledge (Sustainable development, EU integration) Skills/Competences (Cooperation in a multidisciplinary and multicultural environment of an international project)
L3: Labor Behavior	Values and attitudes concerning the use of skills and competences developed during the training program
L4: Work Performance	Effective and efficient implementation of the aforementioned skills and competences in everyday work
L5: Results in the Organizational Team	Collective results (enhancement of adaptation in recent changes, working “climate”, team cooperation, coherence, etc)
L6: Results in the Organization	Attaining strategic aims of the Organization concerning the training content
L7: Results in the Society	Self-fulfillment, career prospects, social networking, benefits for local society

Implementation of the evaluation model

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Source: Adapted from Petridou, 1992



Training results

(based on the evaluation model implementation)

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- Managers considered that their **expectations** for the training were adequately fulfilled
- Training had a **positive influence** on almost all levels of the evaluation model.
- Public sector managers enhanced their knowledge and competences on local Sustainable Development and cooperation between regional authorities of Local Government in the frame of EU integration.
- The training contributed to the enhancement of **managers' willingness** to participate in interregional projects and undertake relative initiatives
- Managers reported the **use of certain knowledge and skills** from the training in their work
- Training had no statistically significant impact on the level of **collective results**, except the **social ones**
- Only a few of the competences were maintained two months after the training implementation



Quantitative results

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Summary of ANOVA analysis results:

Variable	Evaluation Level	Mean	Mean change through time	Conclusions
Knowledge and Skills on Sustainability & Communication	Learning	T1: 2.69 T2: 3.37 T3: 3.22	T1-T2: Yes T2-T3: No	<i>Positive effect that persists through time</i>
Skills of effective communication in multicultural environments	Learning	T1: 2.56 T2: 3.12 T3: 2.94	T1-T2: Yes T2-T3 and T1-T3: No	<i>Positive effect that does not persist in long-term</i>
Willingness for the enhancement of lingual communication competence	Labor behavior	T1: 0.84 T2: 0.95 T3: 0.91	T1-T2 and T2-T3: Yes T1-T3: No	<i>Positive effect that does not persist in long-term</i>
Cooperation competence for the submission of a EU initiative proposal	Work performance	T1: 2.56 T2: 3.03 T3: 3.03	T1-T2 and T1-T3: Yes T2-T3: No	<i>Positive effect that persists through time</i>



Conclusions – Discussion

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- The complexities and contradictions in global community require **transdisciplinary skills** that cross disciplines, cultures and institutions, to be utilized by the citizens and professionals for a sustainable future
- **Investments on HR** education and development is a **strategic choice** as a response to intensive competition and economic crisis
- **Innovation in training** enhances effectiveness and efficiency according to the strategic goals which are pursued
- **Transdisciplinary approach** in training is a feasible choice with many comparative advantages
- The **Learning Organization** (Senge, 1990, The Fifth Discipline) is an appropriate frame where investments on training contribute to business excellence

