



## IMPACT OF ACTIVITIES IN THE NATURAL ENVIRONMENT ON THE COMPETENCE-BASED MODEL OF PHYSICAL EDUCATION TEACHING STUDENTS

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# Introduction

## Physical activities in natural environment

Different benefits  
(social, physical, psychological)

Different contexts  
(educational, recreational,  
tourist, competitive)

Personal development  
competences

# Material & Method I

- Participants:  
50 (26 men, 24 women) students of Teaching on Primary School Degree. Faculty of Education (University of Zaragoza, Spain)  
Aged:  $22.77 \pm 1.64$

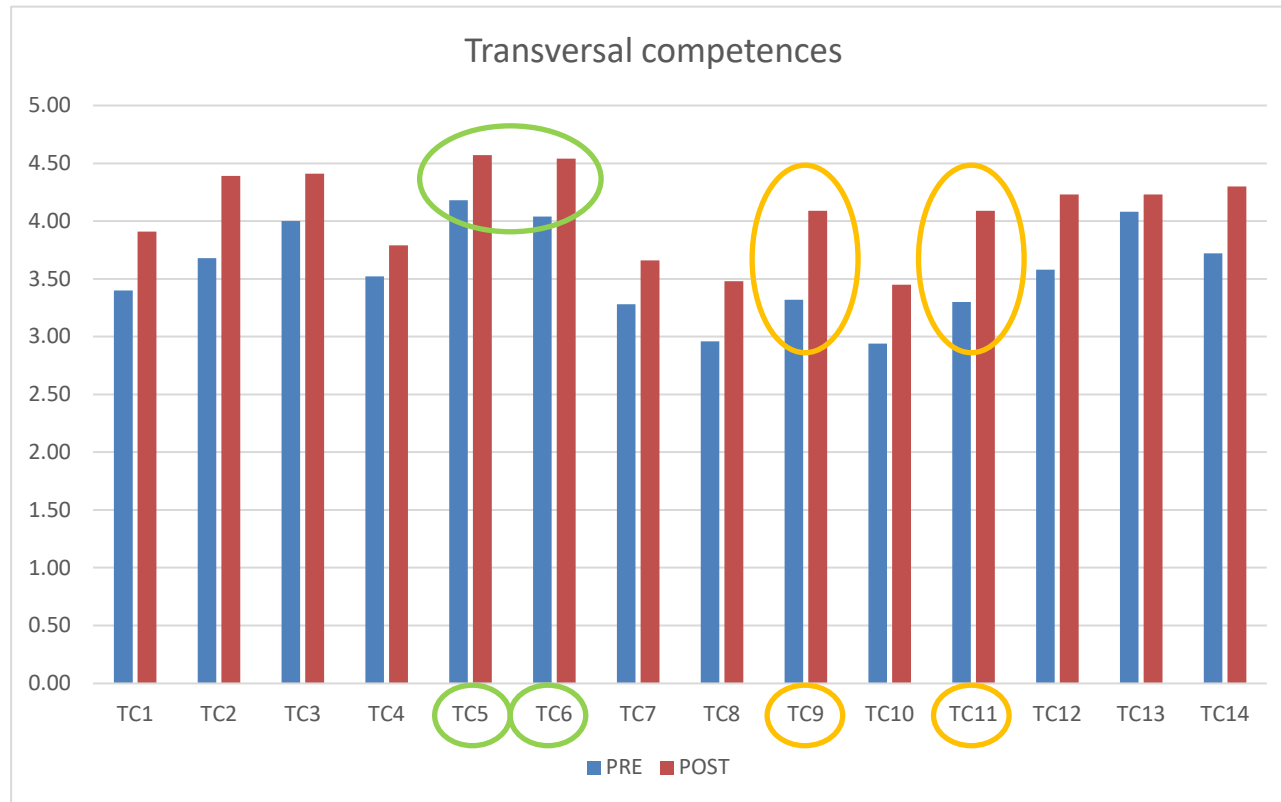


## Material & Method II

- Subject: Physical Activities in Natural Environment.
- Material: *ad hoc* pre-post questionnaire based on transversal competences and personal and prosocial competences (Peire & Estrada, 2018)



# Results I



**TC5:** Involve students in their own learning and work

**TC6:** Work as a team being able to exercise different roles within the group

**TC9:** Use and apply Information and Communication Technologies (ICT), to learn, communicate and share knowledge in different contexts

**TC11:** Facing the duties and ethical dilemmas of the profession

Transversal competence	PRE	POST	Dif	% ev	% dif	Result
<b>TC1</b> Integrate the competences of the different subjects, to guide the Final Degree Project	3.40	3.91	0.51	115.00	15.00	↑
<b>TC2</b> Understand learning as a global fact	3.68	4.39	0.71	119.29	19.29	↑
<b>TC3</b> Manage and self-regulate the progression of learning	4.00	4.41	0.41	110.25	10.25	↑
<b>TC4</b> Address the uniqueness of different professional contexts	3.52	3.79	0.27	107.67	7.67	↑
<b>TC5</b> Involve students in their own learning and work	4.18	4.57	0.39	109.33	9.33	↑
<b>TC6</b> Work as a team being able to exercise different roles within the group	4.04	4.54	0.50	112.38	12.38	↑
<b>TC7</b> Participate in institutional management	3.28	3.66	0.38	111.59	11.59	↑
<b>TC8</b> Inform and involve society in the purposes of the institution	2.96	3.48	0.52	117.57	17.57	↑



Transversal competence	PRE	POST	Dif	% ev	% dif	Result
<b>TC9</b> Use and apply Information and Communication Technologies (ICT)	3.32	4.09	0.77	123.19	23.19	↑↑
<b>TC10</b> Develop the ability to communicate. to teach in the own language and in another European languages	2.94	3.45	0.51	117.35	17.35	↑
<b>TC11</b> Facing the duties and ethical dilemmas of the profession	3.30	4.09	0.79	123.94	23.94	↑↑
<b>TC12</b> Organize the own continuous training and motivate the quality	3.58	4.23	0.65	118.16	18.16	↑
<b>TC13</b> Research on the own practice	4.08	4.23	0.15	103.68	3.68	↑
<b>TC14</b> Search, manage, process, analyze and communicate information effectively, critically and creatively	3.72	4.30	0.58	115.59	15.59	↑
<b>Total</b>	<b>3.57</b>	<b>4.08</b>	<b>0.51</b>	<b>114.28</b>	<b>14.28</b>	



# Results II





Personal Competence	PRE	POST	Dif	% ev	% dif	Result
Creativity/imagination	4.04	4.29	0.25	106.19	6.19	↑
Concentration	4.04	4.18	0.14	103.47	3.47	↑
Interdisciplinarity	4.00	4.43	0.43	110.75	10.75	↑
Self-confidence	4.30	4.54	0.24	105.58	5.58	↑
<b>Resilience</b>	4.32	<b>4.36</b>	0.04	100.93	<b>0.93</b>	↑
Emotional control	3.88	4.21	0.33	108.51	8.51	↑
<b>Effort</b>	4.30	<b>4.29</b>	- 0.01	99.77	<b>- 0.23</b>	↓
Assertiveness	3.50	3.86	0.36	110.29	10.29	↑
<b>Adaptability</b>	4.28	<b>4.25</b>	- 0.03	99.30	<b>- 0.70</b>	↓
<b>Empathy</b>	4.06	<b>4.11</b>	0.05	101.23	<b>1.23</b>	↑
Cooperation	4.40	4.54	0.14	103.18	3.18	↑
<b>Respect</b>	4.52	<b>4.55</b>	0.03	100.66	<b>0.66</b>	↑
Self-criticism	4.06	4.30	0.24	105.91	5.91	↑
<b>Total</b>	<b>4.13</b>	<b>4.30</b>	<b>0.17</b>	<b>104.12</b>	<b>4.12</b>	



## Discussion

- Physical Activities on natural environment let personal development (Caballero, Hernández-Hernández & Reina, 2018)
- PANE are useful to develop social competences (Agostini, Minelli & Mandolesi, 2018; Eigenschenk et al., 2019)

# Conclusions

- The methodology used in the subject, based on teamwork, enhances the perception of transversal and prosocial competences in future Physical Education Teachers.



## Future perspectives

- Comparison pre-post: different Faculties in the same University (Huesca-Zaragoza)
- Longitudinal study:
  - PEPS 3<sup>th</sup>-year (pre, september 2019)
  - PANE 4<sup>th</sup>-year (post, february 2021)
- Qualitative study: students reflexions
  - Their own perception while training
  - Future aplicability as teachers



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ENTRENAMIENTO, ACTIVIDAD FÍSICA Y RENDIMIENTO DEPORTIVO