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## DEVELOPING FLIPPED METHODS FOR TEACHING

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DFM – DEVELOPING FLIPPED METHODS FOR TEACHING - ERASMUS STRATEGIC PARTNERSHIP PROJECT

2020-2023

# Flipped Classroom

- ▶ Delivering instructional content outside of the classroom
  - ▶ Multimedia lectures, usually with short instructional videos – out of class
    - ▶ Students like to re-check videos if they doesn't understand something ([Johnson, 2013](#))
  - ▶ Reduced traditional F2F, or frontal teaching in the classroom
- ▶ Increased time for student-oriented in the classroom
  - ▶ Projects; Assignments; Home works; Group-based activities, cooperative methods; Individual practice, individualised help
  - ▶ Side-effects: develops student's communication skills, self-regulation

# FP: advantages

- ▶ Student ownership of learning
- ▶ Gives more time to explore the content
- ▶ Emphasis on cooperative learning
- ▶ More time to deal with difficult subjects and concepts

In essence, it is a self-driven learning gained through social activity,  
that is non-formal learning (Helyer and Corkill, 2015)

Although in classroom, but using non-formal methods like role play, talking  
wheel

# FC - Research data

- ▶ Influences student's motivation and their self-efficacy beliefs ([Thai, De Wever, & Valcke, 2017](#))
- ▶ offers increased opportunities for students to develop critical thinking skills (Horn, 2013)
- ▶ Cooperative Techniques with Flipped Classroom ([Bishop & Verleger, 2013](#))

# FC: difficulties

- ▶ Work-Intensive preparation
- ▶ Students working at home?
  - ▶ It is unusual, at first they don't know how to approach it ([Lo & Hew, 2017](#))
  - ▶ Needs institutional support
- ▶ It should address higher-order learning (Bloom's Taxonomy) in discipline-based learning (Betihavas et al, 2016)
- ▶ Teachers usually don't understand FC steps and the online-offline activity connection ([O'Flaherty & Phillips, 2015](#))
- ▶ There is no research data about FC in elementary classroom (Ho and Chen, 2017)
  - ▶ And only two reports in 5-8 grade

# INEC 2019 presentation

- ▶ Flipped Classrooms as spaces for non-formal education (Educație non-formală în Clasa răsturnată)
- ▶ Project idea
  - ▶ Partner's roles
    - ▶ Preparing at least three FC multimedia materials
    - ▶ Translate (subtitles, or synchronize) materials developed by partners
    - ▶ Implement materials in classroom
    - ▶ Experience change (meetings)
    - ▶ Revise materials in accordance with suggestion
- ▶ Result: A well-prepared and piloted course with FC methods!
  - ▶ Dissemination and continuation: new courses, new partners

# Background:

- ▶ Erasmus strategic partnership(DFM projekt): elaborating FC materials (introduction to Psychology)
  - ▶ Educational materials in 30 subjects
  - ▶ Hungarian, Portuguese, Bulgarian, Greek, Slovak, Romanian and English (subtitles)
- ▶ Research:
  - ▶ Experiences, image? (questionnaire: Faculty Focus Special Report - Flipped Classroom Trends: A Survey of College Faculty, A Magna Publication, 2015), case studies - Hints for the teachers's guide



# Results: educational materials



[About the project](#) [Partners](#) [Intellectual outputs](#) [Contact](#)

## Teacher's guide

A guide about how to teach 30 subject in psychology in a Flipped Classroom settings can be downloaded in several languages. Please find also attached proposed pre-tests (to be used before teaching) and post-test (to be used after teaching).

Teacher Guides	Annexes
<a href="#">English</a>	<a href="#">English</a>
<a href="#">Hungarian</a>	<a href="#">Hungarian</a>
<a href="#">Portuguese</a>	<a href="#">Portuguese</a>
<a href="#">Romanian</a>	<a href="#">Romanian</a>
<a href="#">Greek</a>	<a href="#">Greek</a>
<a href="#">Slovak</a>	<a href="#">Slovak</a>
<a href="#">Bulgarian</a>	<a href="#">Bulgarian</a>

[Kre.hu/dfm](http://kre.hu/dfm)



# YouTube Channel: 30 videos





**Flipped Methods in Psychology**  
@flippedpsychology 10 subscribers 30 videos

The channel contains 30 educational videos for teaching subjects in psych... >

[pk.kre.hu/dfm](http://pk.kre.hu/dfm)

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# Have you heard about the method?

<b>Country</b>	<b>N</b>	<b>Knows</b>	<b>Don't know</b>	<b>% no</b>
<b>BG</b>	97	83	14	14
<b>HU</b>	69	36	33	48
<b>PT</b>	59	48	11	19
<b>RO</b>	118	38	79	67
<b>SK</b>	95	73	22	23
<b>Total</b>	<b>438</b>	<b>278</b>	<b>159</b>	<b>36</b>

# Differences between number of scholars aware about the flipped class method

- ▶ One-way ANOVA: statistically significant difference in scholars knowing about the flipped methods between some of the groups ( $F(5, 473)=24,563, p=0,000$ )

Countries		Mean Diff.	Sig.	95% C.I.	
<b>HU</b>	PT	,292*	0,002	0,08	0,51
<b>HU</b>	SK	,268*	0,001	0,07	0,46
<b>HU</b>	BG	,365*	0,000	0,17	0,56
<b>HU</b>	RO	-,191*	0,038	-0,38	-0,01
<b>PT</b>	RO	-,483*	0,000	-0,68	-0,29
<b>SK</b>	RO	-,459*	0,000	-0,63	-0,29
<b>BG</b>	RO	-,556*	0,000	-0,72	-0,39
<b>RO</b>	CY and GR	,401*	0,000	0,18	0,62

Tukey's HSD post-hoc test

# Have you tried flipping an activity, class period, or course?

	Total	%	BG	%	HU	%	PT	%	RO	%	SK	%
<b>Yes</b>	<b>167</b>	<b>38,1</b>	65	67,0	9	13,0	32	54,2	23	19,5	38	40,0
<b>I tried it, but I do not plan to do it again</b>	<b>18</b>	<b>4,1</b>	0		10	14,5	3	5,1	3	2,5	2	2,1
<b>No, I don't intend to flip my class</b>	<b>50</b>	<b>11,4</b>	5	5,2	10	14,5	8	13,6	3	2,5	24	25,3
<b>No, but I plan to flip in the next year</b>	<b>81</b>	<b>18,5</b>	25	25,8	7	10,1	16	27,1	10	8,5	23	24,2
<b>Total</b>	<b>316</b>	<b>72,1</b>	<b>95</b>	<b>97,9</b>	<b>36</b>	<b>52,2</b>	<b>59</b>	<b>100</b>	<b>39</b>	<b>33,1</b>	<b>87</b>	<b>91,6</b>

We'd like to know more information about why you are not interested in flipping your class or what prevents you from flipping. Select the statement(s) that best explains your decision.

	Frequency	Percent
<b>Not enough knowledge about flipping</b>	16	3,7
<b>It's a fad that will soon be replaced by the next new thing</b>	8	1,8
<b>Too time consuming</b>	7	1,6
<b>Uncomfortable with the approach</b>	6	1,4
<b>Limited experience with and/or knowledge about technology</b>	4	,9
<b>Lack of recognition and/or support in using this method</b>	2	,5
<b>This type of work is not part of my position/role</b>	2	,5
<b>Total</b>	45	10,3
<b>Missing</b>	393	89,7
<b>Total</b>	<b>438</b>	<b>100,0</b>

What were the biggest benefits experienced from flipping? (check all that apply)

	<b>N</b>	<b>%</b>
<b>Increased student engagement</b>	144	79,1
<b>More learner-centered teaching</b>	119	65,4
<b>Improved learning environment</b>	89	48,9
<b>Improved student learning</b>	86	47,3
<b>I know my students better</b>	71	39,0
<b>I am more excited about teaching</b>	36	19,8
<b>Re-energized a course</b>	33	18,1
<b>I look forward to class more often</b>	18	9,9
<b>I have been asked by colleagues to share what I am doing</b>	8	4,4
<b>I have produced scholarship related to my flipped teaching</b>	3	1,6
<b>Total</b>	<b>182</b>	

# What challenges do you face when thinking about flipping your class?

	Time	Lack of support (resources/funding/space)	Competing department/college/campus goals	Not valued by colleagues/administration	Not understood by colleagues/administration	Being creative/developing new strategies and ideas	Student resistance/lack of motivation	My experience/comfort with technology	Other responsibilities required by my position
<b>Very Significant/Always a challenge</b>	38,5	20,0	10,2	10,9	14,2	29,5	16,7	14,4	14,7
<b>Significant/Often a challenge</b>	37,9	33,0	28,2	44,6	37,7	21,9	33,9	39,4	42,4
<b>Moderate/Sometimes a challenge</b>	17,8	33,5	20,9	22,3	19,7	23,0	31,7	24,4	27,7
<b>Insignificant/Rarely a challenge</b>	5,7	13,5	40,7	22,3	28,4	25,7	17,7	21,7	15,3
<b>Total</b>	<b>174</b>	<b>185</b>	<b>177</b>	<b>184</b>	<b>183</b>	<b>183</b>	<b>186</b>	<b>180</b>	<b>177</b>



*Professor Carlos Reis, PhD, Faculty of Psychology and Educational Sciences  
– University of Coimbra*

- ▶ **Challenge:**
  - ▶ the number of students
  - ▶ some students do not complete the entire task, compromising the group's work.
- ▶ **Evaluation:**
  - ▶ students appreciate this practice,
  - ▶ students recognize how much this type of teaching allows them to learn more autonomously.
- ▶ **Hints**
  - ▶ Carefull planning
  - ▶ Time

# Professor Valentim Alferes, PhD, Faculty of Psychology and Educational Sciences – University of Coimbra

- ▶ Motivation:
  - ▶ Put an end to traditional practice
  - ▶ Deep learning
- ▶ Implementation:
  - ▶ Working groups – text analysing, presenting in class
- ▶ Challenges
  - ▶ Time in classroom
  - ▶ Text preparation
- ▶ Benefits
  - ▶ Student's interest
  - ▶ Quality of works

# A new possibility of collaboration

- ▶ Preparing a subject with non-formal educational methods
  - ▶ In international collaboration
  - ▶ Intellectual output: a course guide (teaching guide) with piloted methods

Let's do it!

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Thank you for your attention