

# How to innovate a course on innovative startups?



A course offered for  
the 24th semester,  
since 2010

More than 6000  
(satisfied) students  
during the years

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# What can students get if they take this class?

**Introduction to the world of startups and entrepreneurs – a possible career**

**Famous Hungarian entrepreneurs are invited**



**Theoretical knowledge on entrepreneurship**

**Business concept mapping, value prop, marketing, market research, MVP, pivoting, ...**

**Practical experience of launching an enterprise and solving business challenges of entrepreneurship**

**CAN BE SELECTED**

**Guidance to career planning: „Is this a job for me? Is it worth launching a startup for my idea?“**

# What will YOU get if you take this class?



**Sunday  
hiker**



**Easy  
rider**



**Startup  
VIP**

It depends on YOU, on what YOU want. This is YOUR class, YOU chose it.

# What do YOU want to get?



**Sunday  
hiker**

**Just getting an  
introduction,  
by making a  
limited effort.**



**Easy  
rider**

**I want  
knowledge, and  
am willing to  
test myself.**



**Startup  
VIP**

**I want to start a  
business and  
am willing to  
work hard.**

# What do YOU have to fulfil?



**Sunday  
hiker**

**One test at the  
end of Semester**



**Easy  
rider**

**Business Concept  
+  
2-minute video**



**Startup  
VIP**

**StartupVIP  
Programme:  
Validated business  
concept +  
Pitching**

# Methodology of the primary research

Online survey sent by  
Neptune System

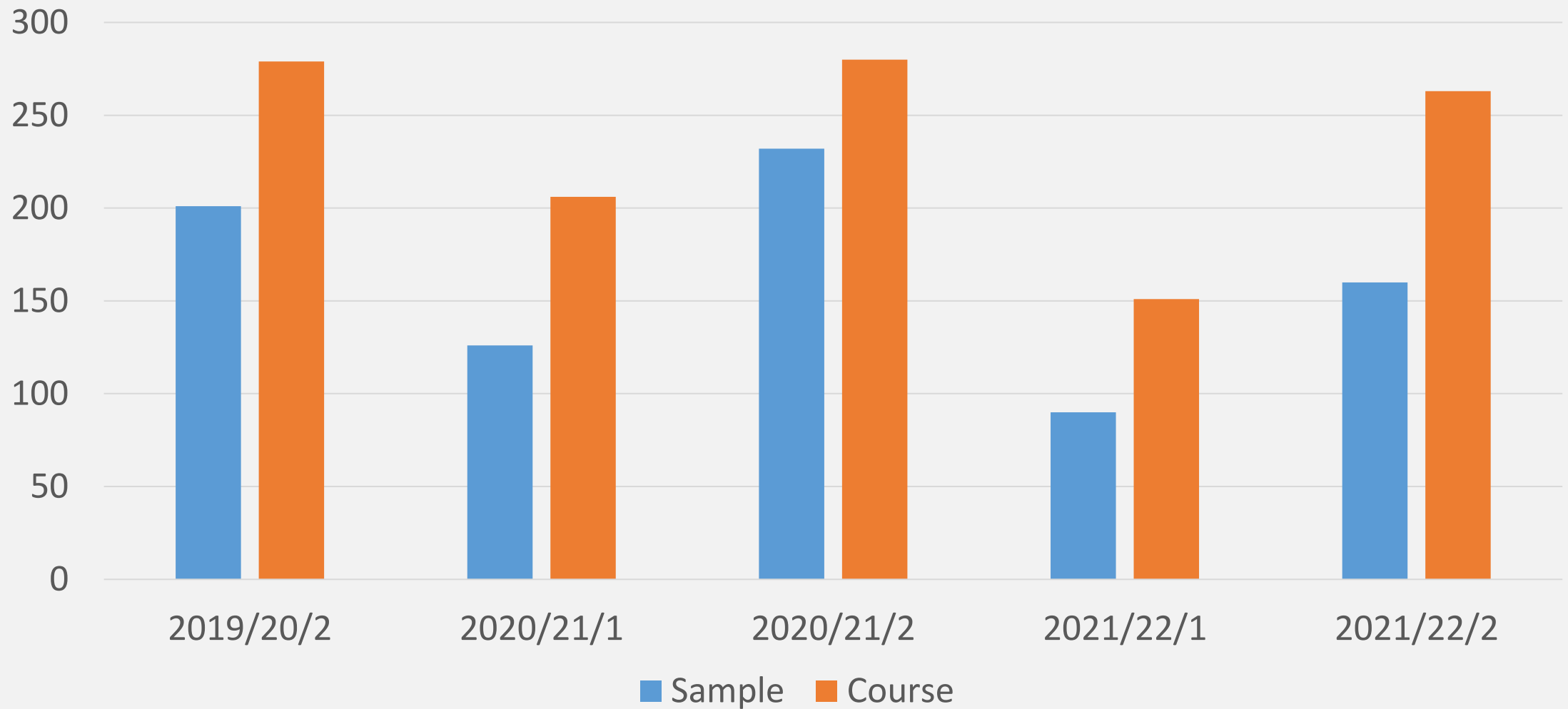
Method: convenience  
sampling

Each semester at the same  
time: few days before the  
first lecture

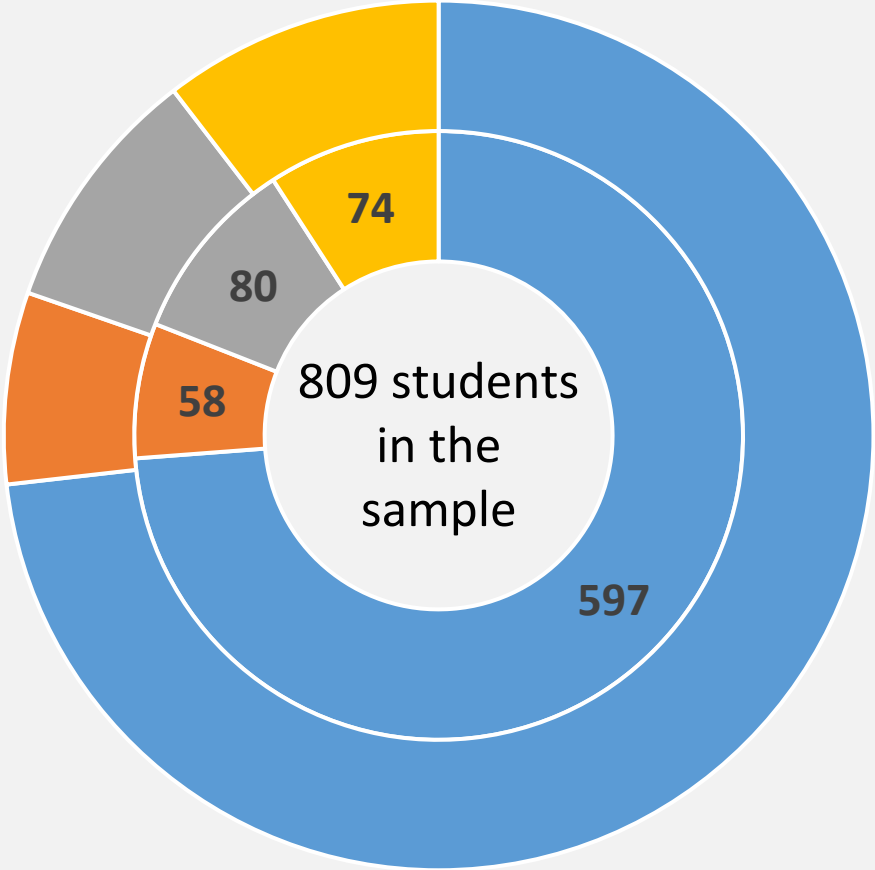
Topics:  
-goals of the course  
-why startups are important  
-skills of an entrepreneur

Semantic scales (1-7) were  
used to conduct hierachical  
clustering

# Demography of the course and the sample



# Demography of the course and the sample



- Faculty of Electrical Engineering and Informatics
- Faculty of Mechanical Engineering
- Faculty of Economic and Social Sciences
- Other faculties



# The goals of the students by semesters

2019/20/2	Practice		34%	Theory	Knowledge-based enterprises		35%	Conventional enterprises	Practical tasks during the semester		53%	Test at the end of the semester
2020/21/1			24%				40%				34%	
2020/21/2			29%				34%				36%	
2021/22/1			26%				36%				40%	
2021/22/2			27%				40%				37%	
2019/20/2	Teamwork		47%	Work individually	Active participation		56%	Passive participation	Easily obtainable mark		53%	Value of the knowledge
2020/21/1			46%				57%				60%	
2020/21/2			49%				60%				58%	
2021/22/1			51%				54%				56%	
2021/22/2			48%				55%				54%	

Scale transformation was used: 1-7 semantic scale to percentage

# The goals of the students by groups

Original classification by the students												
Sunday hiker	Practice		3,03	Theory	Knowledge-based enterprises		3,2	Conventional enterprises	Practical tasks during the semester		4,88	Test at the end of the semester
Easy rider			2,51				3,16				2,16	
Startup VIP			1,94				3,35				2,35	
Sunday hiker	Teamwork		4,78	Work individually	Active participation		4,94	Passive participation	Easily obtainable mark		3,74	Value of the knowledge
Easy rider			3,07				4,08				4,79	
Startup VIP			3,54				3,19				5,72	

1-7 semantic scales were used in their original form

# The goals of th

Two step hierachical clustering was performed:  
 Single linkage method – for finding the outliers  
 Ward method – for creating the most different groups

		Ward m										
Sunday hiker	Practice		3,28	Theory	Knowledge-based enterprises		3,41	Conventional enterprises	Practical tasks during the semester		5,68	Test at the end of the semester
Easy rider			2,19				3,03				2,08	
Startup VIP			2,59				3,13				2,69	
Sunday hiker	Teamwork		5,89	Work individually	Active participation		5,55	Passive participation	Easily obtainable mark		3,55	Value of the knowledge
Easy rider			6,33				4,24				4,76	
Startup VIP			1,91				3,86				4,68	

# The goals of the students by groups

## Sunday hiker:

- Knowledge is less important
- Less participation during lectures
  - No need of teamwork
  - Practice is less important

## Easy rider:

- Knowledge is valuable
- Less participation during lectures
  - No need of teamwork
  - Looking for practice

Group	Method	Knowledge	Participation	Teamwork	Practice	Test mark
Startup VIP	Practical	2,59	3,13	2,69	Test a	the
Sunday hiker	Teamwork	3,55	4,76	4,68	Value of the	knowledge
Easy rider	Teamwork	3,55	4,76	4,68	Value of the	knowledge
Startup VIP	Teamwork	3,55	4,76	4,68	Value of the	knowledge

## Startup VIP:

- Knowledge is valuable
- Want to participate in lectures
  - Needs teamwork
  - Looking for practice

# Differences between the classifications

Differences of the two classifications (Ward - original)

Sunday hiker	Practice	0,25	Theory	Knowledge-based enterprises	0,21	Conventional enterprises	Practical tasks during the semester	0,8	Test at the end of the semester
Easy rider		-0,32			-0,13			-0,08	
Startup VIP		0,65			-0,22			0,34	
Sunday hiker	Teamwork	1,11	Work individually	Active participation	0,61	Passive participation	Easily obtainable mark	-0,19	Value of the knowledge
Easy rider		3,26			0,16			-0,03	
Startup VIP		-1,63			0,67			-1,04	

Factors of differentiating

# Differences between the classifications

		Ward Method classification		
		Sunday Hiker	Easy Rider	Startup VIP
Chosen by the students	Sunday Hiker	189	67	120
	Easy Rider	38	73	268
	Startup VIP	7	13	34

Chose a less complex way to finish the course

56%

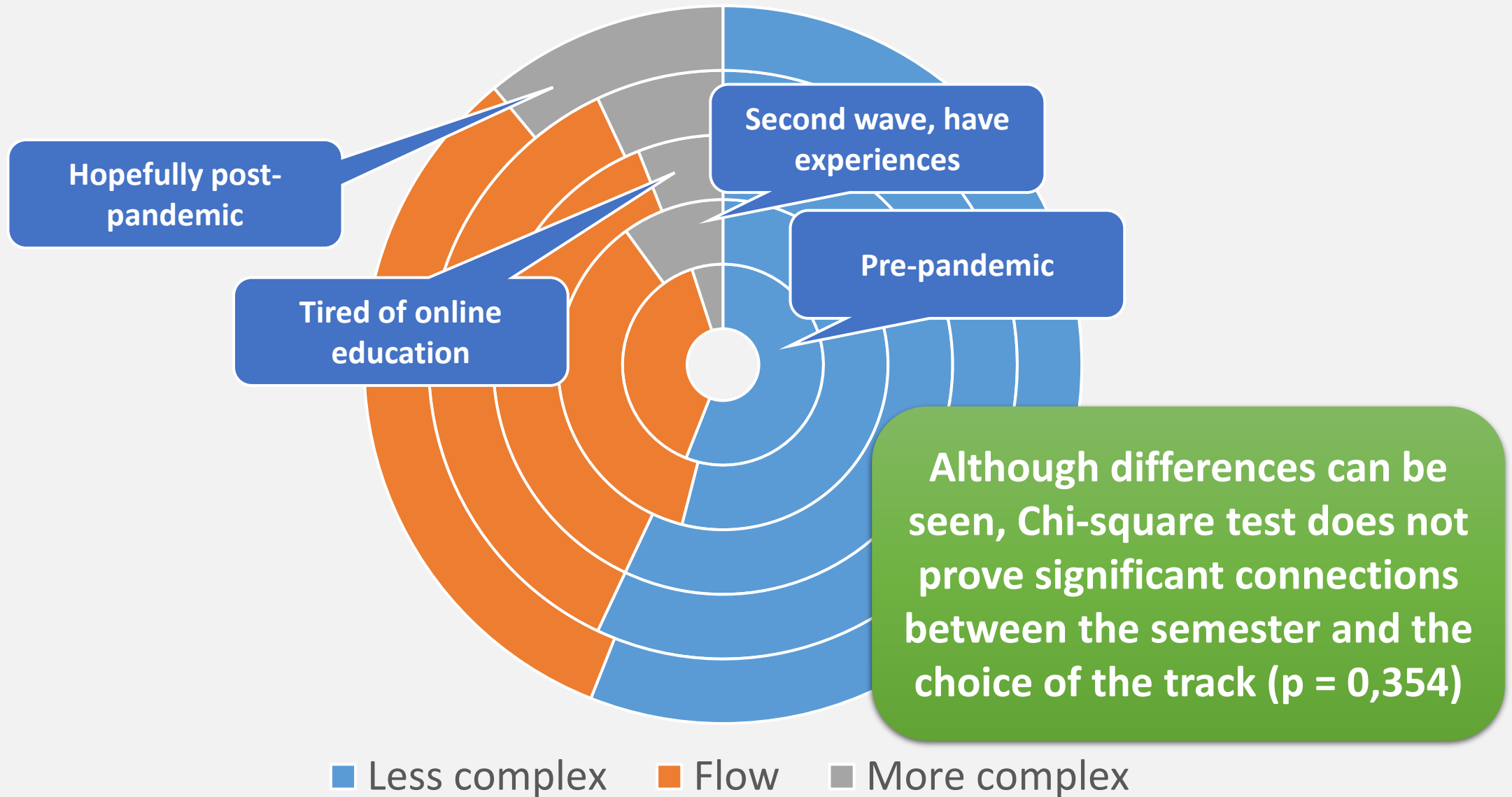
Chose according to their needs

37%

Chose a more complex way to finish the course

7%

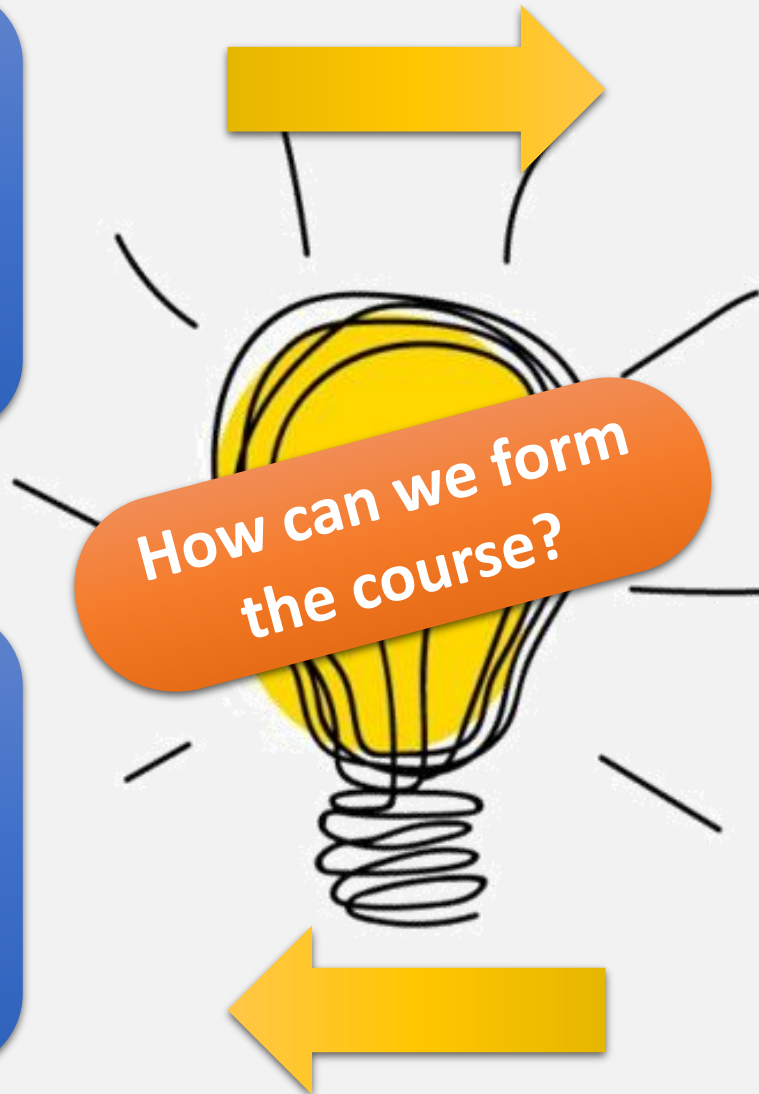
# Differences between the classifications



# Implications based on the primary research

Ward Method validates the original concept of different requirements

More accurate communication should help students to find the perfect way to fulfil the course



Teamwork, participation in lectures and the value of gained knowledge are the most critical factors

Differences between Easy Rider and Startup VIP should be more detailed



# Implications based on the primary research

Ward Method validates the original concept of different requirements

Students are not forming a homogeneous group in the case of a class about entrepreneurship

collaboration should help students to find the perfect way to fulfil the course



Teamwork, participation in lectures and the value of gained knowledge

Segmentation is inevitable, and can improve the efficiency of education

connections between Easy Rider and Startup VIP should be more detailed

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Thank you very much for your attention!

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