

Questionnaire for teachers

Questionnaire for teachers on entrepreneurship education and sustainable entrepreneurship competence



Labels used in this report

- APRO IT APRO (Italy)
- BBS DE BBS Nienburg (Germany)
- GENT BE Hogeschool Gent (Belgium)
- GENCAT General Direction for VET and Specialized Studies,
Regional Government of Education of the Government of
Catalonia, CATALONIA (Spain)
- RocFP NE Roc Friese Poort (Netherlands)
- WSX UK WSX Enterprise (UK)
- Kurikka FI Kurikka high school (Finland)
- SeAMK FI Seinäjoki University of Applied Sciences (Finland)
- SEDU FI Vocational Education and Training Institute Sedu
(Finland)

Questionnaire for teachers

Data was collect in 12/2019 - 02/2020

Educational Institution	Respondents
GENT BE	21
GENCAT	4
WSX UK	4
BBS DE	4
APRO IT	8
RocFP NE	6
SeAMK FI	29
SEDU FI	40
Kurikka FI	9
All teachers	125

Data processing

- The questionnaire included some questions about respondents background and about 60 questions measuring opinions of teaching entrepreneurship
- Questions or data variables have summarized into 10 sum variables
- Each of those 10 variables are named measures and have very good Cronbachs' alpha varying between 0,831 - 0,950

Cronbach alphas (α) indicates the ability of all questions including sum variable measuring same thing, i.e. how the questions are consistent with each other. It is usually said that alphas below 0,60 should not be accepted.

The difference in the means (p) is significant statistically between different groups if it is $p \leq 0,05$.

Background Information

Age

Teaching experience in years

Do you have experience of working as an entrepreneur (previously or currently, included part-time)?

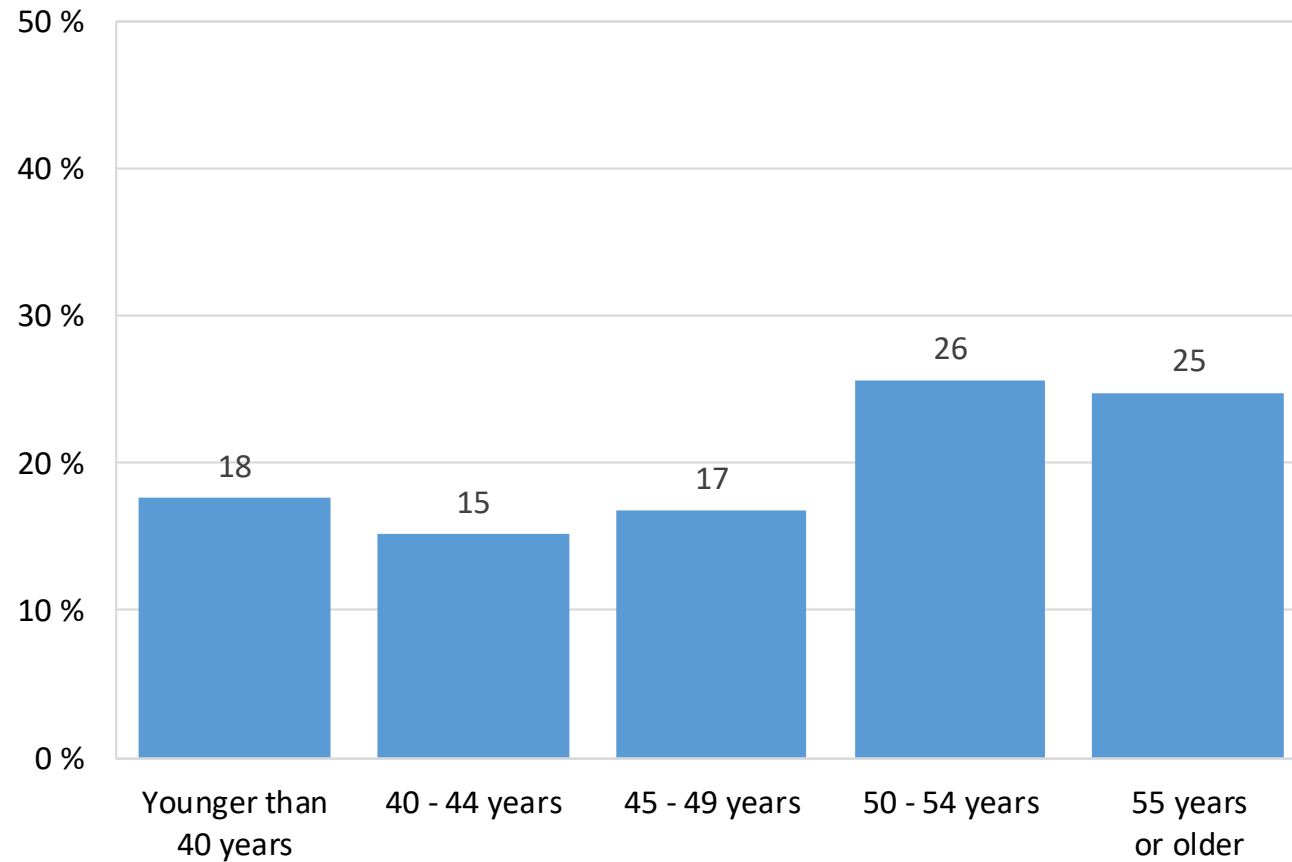
Have you participated in training related to entrepreneurship education?

Have you worked in business life? If yes, how many years? What were you in charge of?

What is your approach in teaching entrepreneurship: a) I teach courses directly related to entrepreneurship b) I teach other courses but I apply aspects of entrepreneurship in my teaching c) I don't teach entrepreneurship at all

What is your approach in teaching sustainability: a) I teach courses directly related to sustainability b) I teach other courses but I apply aspects of sustainability in my teaching c) I don't teach sustainability at all

Teachers' age

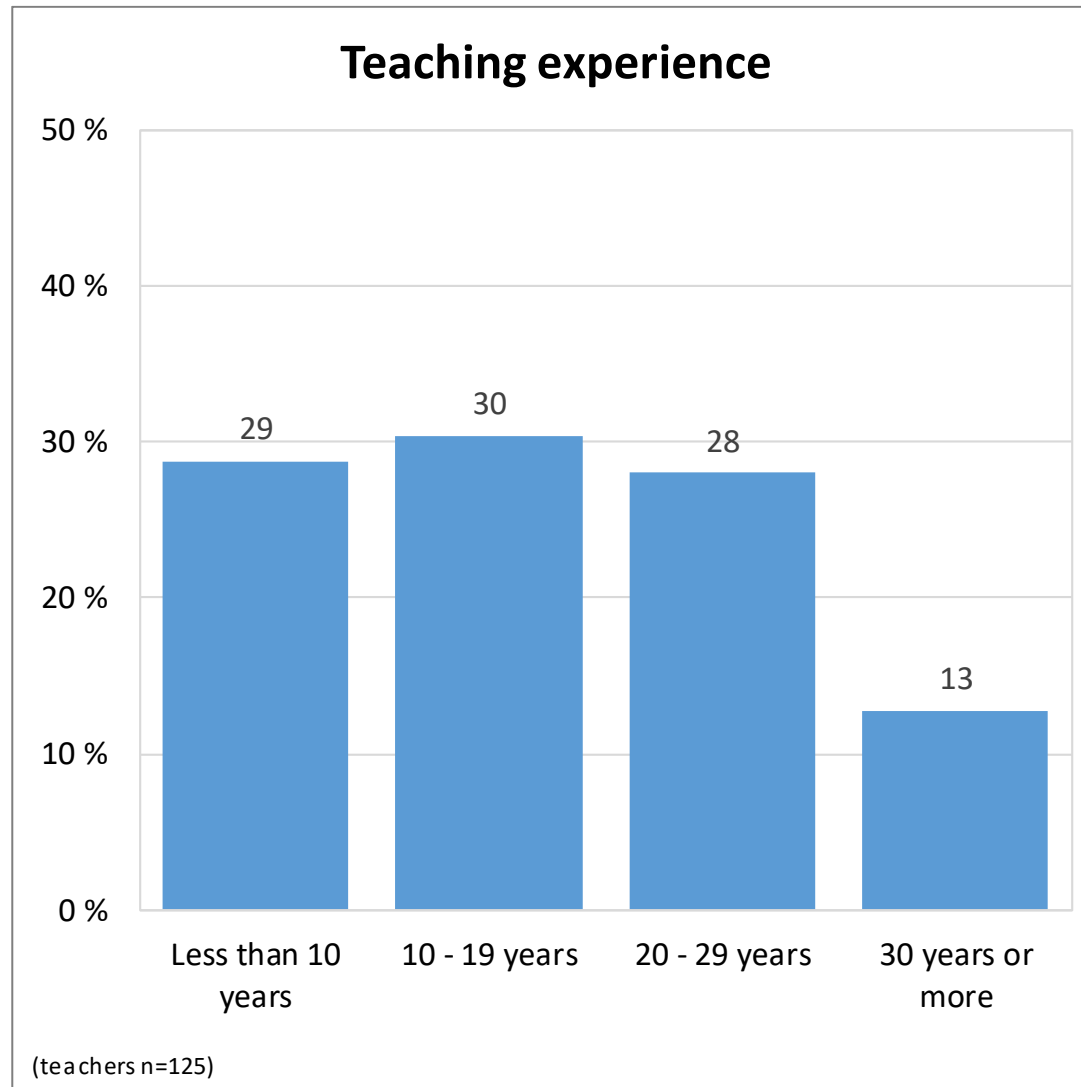


(teachers n=125)

Teachers' age

Average age	48
Std. Deviation	8,6
Minimum	28
Median	50
Maximum	64
N	125

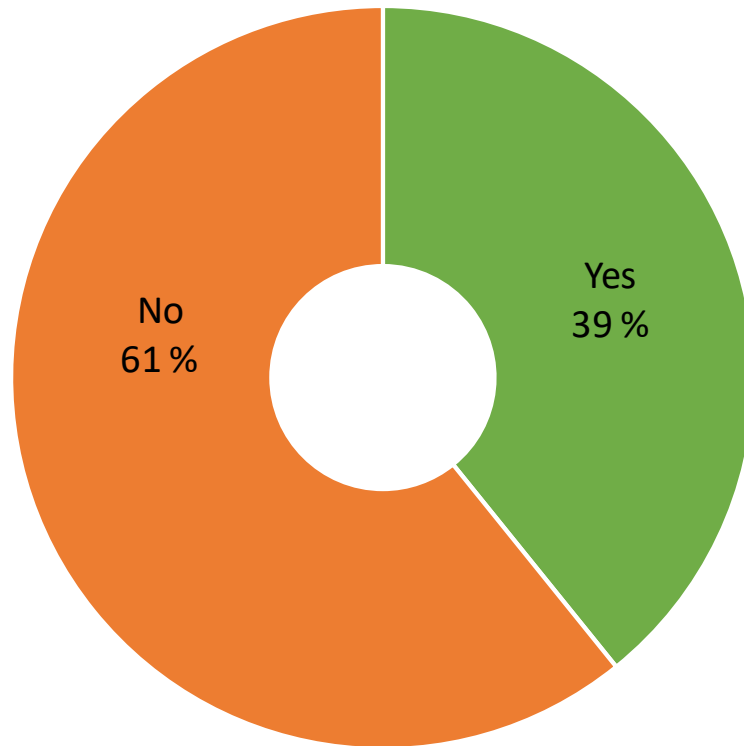
About 50 % of teachers are 50 years or older.



Teaching experience in years	
Mean	16
Std. Deviation	9,6
Minimum	0
Median	15
Maximum	40
N	125

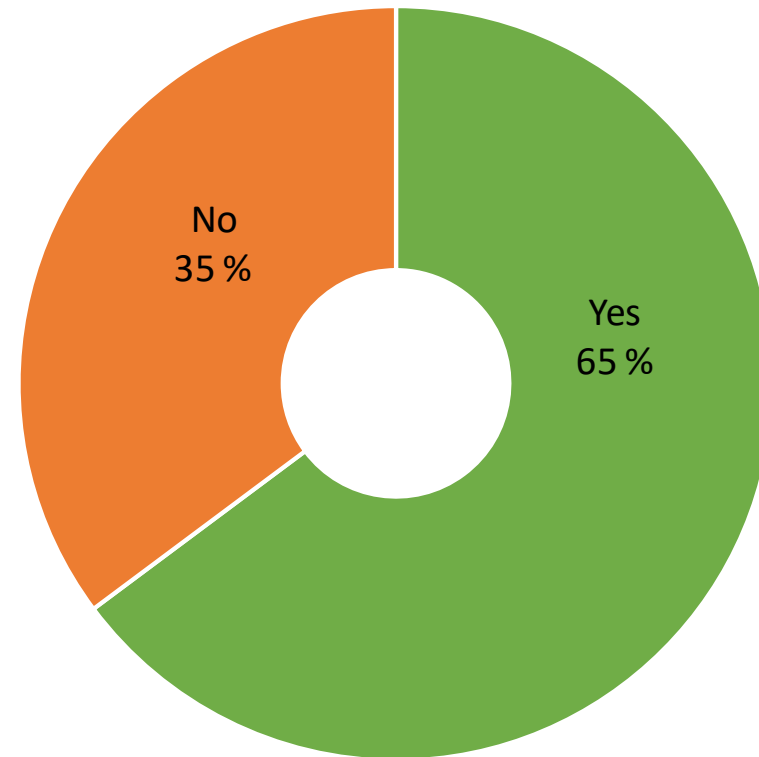
The average teaching experience is 16 years.

Do you have experience of working as an entrepreneur (previously or currently, included part-time)?



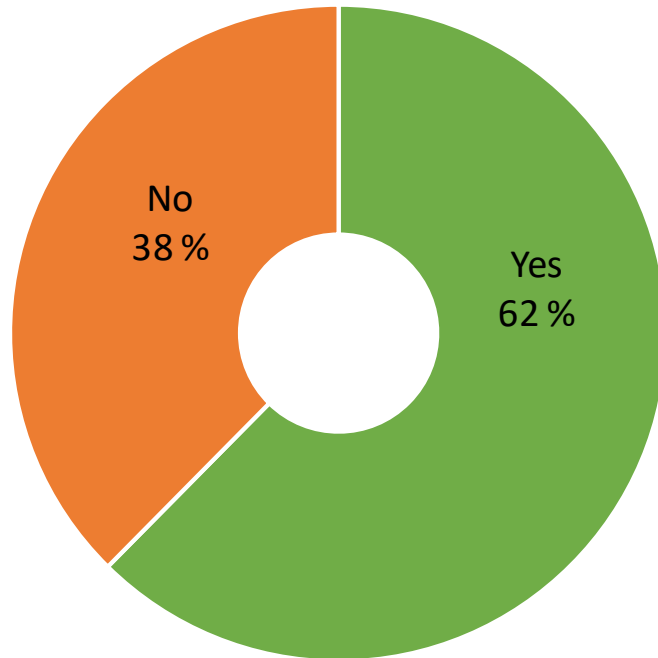
(teachers n=125)

Have you participated in training related to entrepreneurship education?



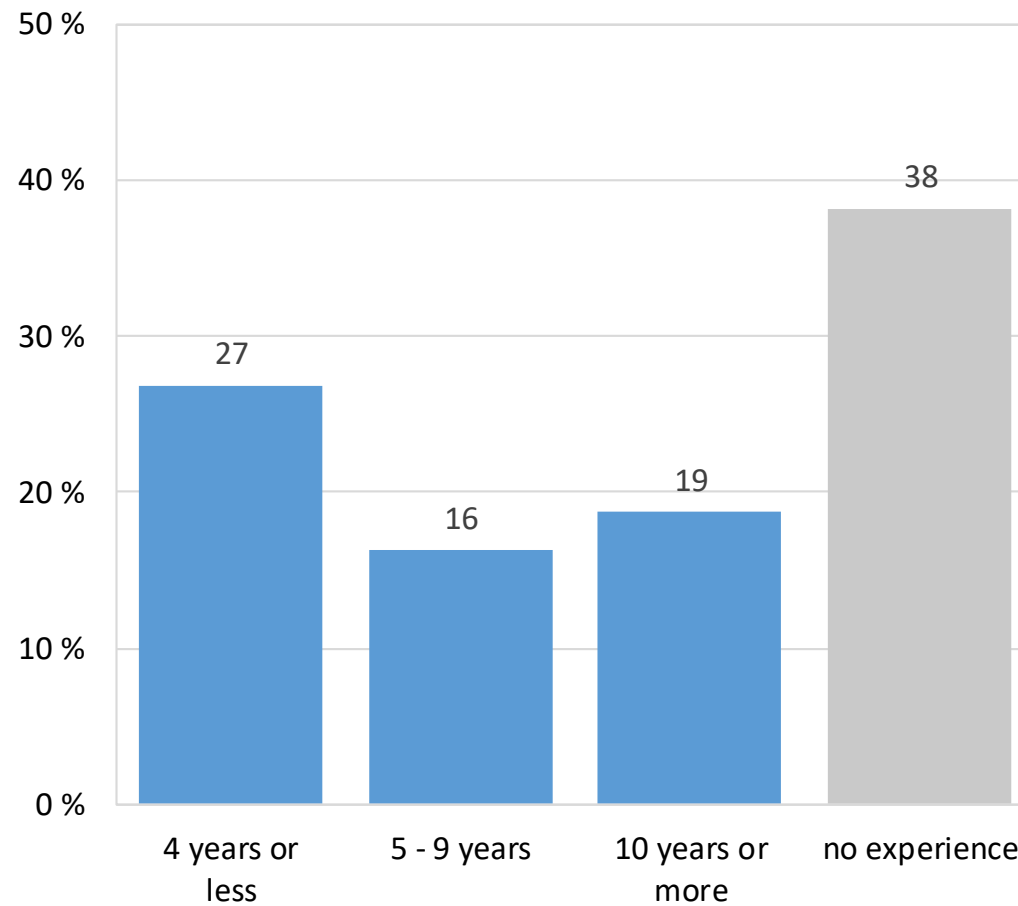
(teachers n=125)

Have you worked in business life?



(teachers n=125)

Working experience in business life



(teachers n=123)

Working experience in years in business life	
Mean	8
Std. Deviation	7,6
Minimum	1
Median	5
Maximum	30
N	76

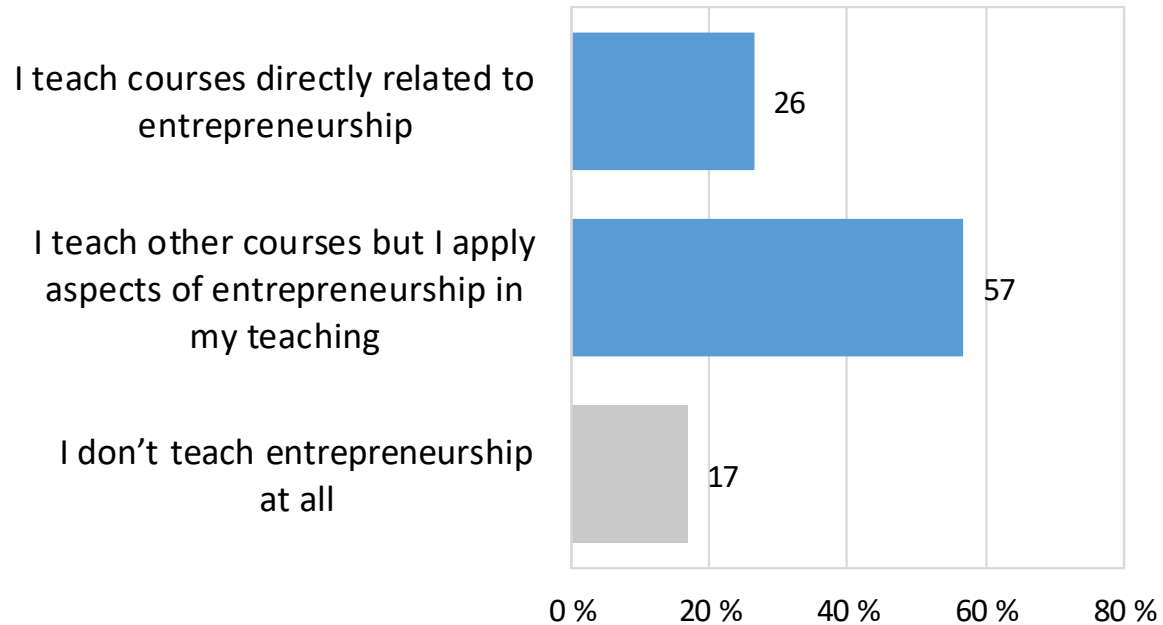
Worked in business life in charge of

Typical answers:

- Marketing
- Sales
- Supervisor
- Human resources
- Restaurant business
- Journalist
- IT-support
- Some single comments

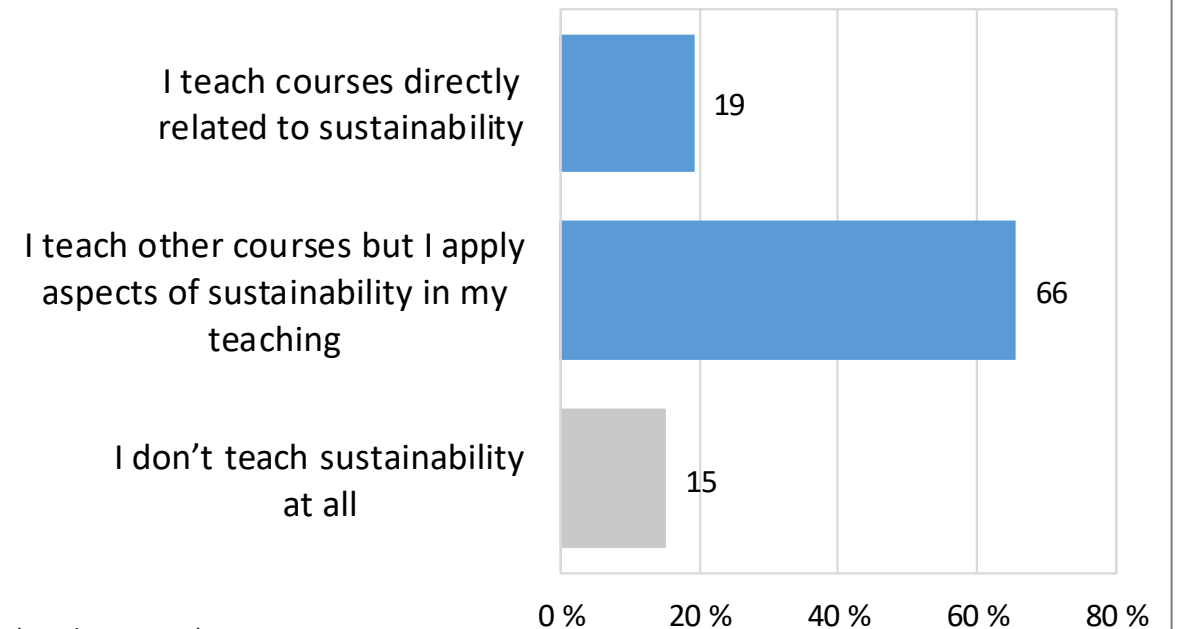
(n=70)

What is your approach in teaching entrepreneurship?



(teachers n=125)

What is your approach in teaching sustainability?



(teachers n=125)

Methods in entrepreneurship education

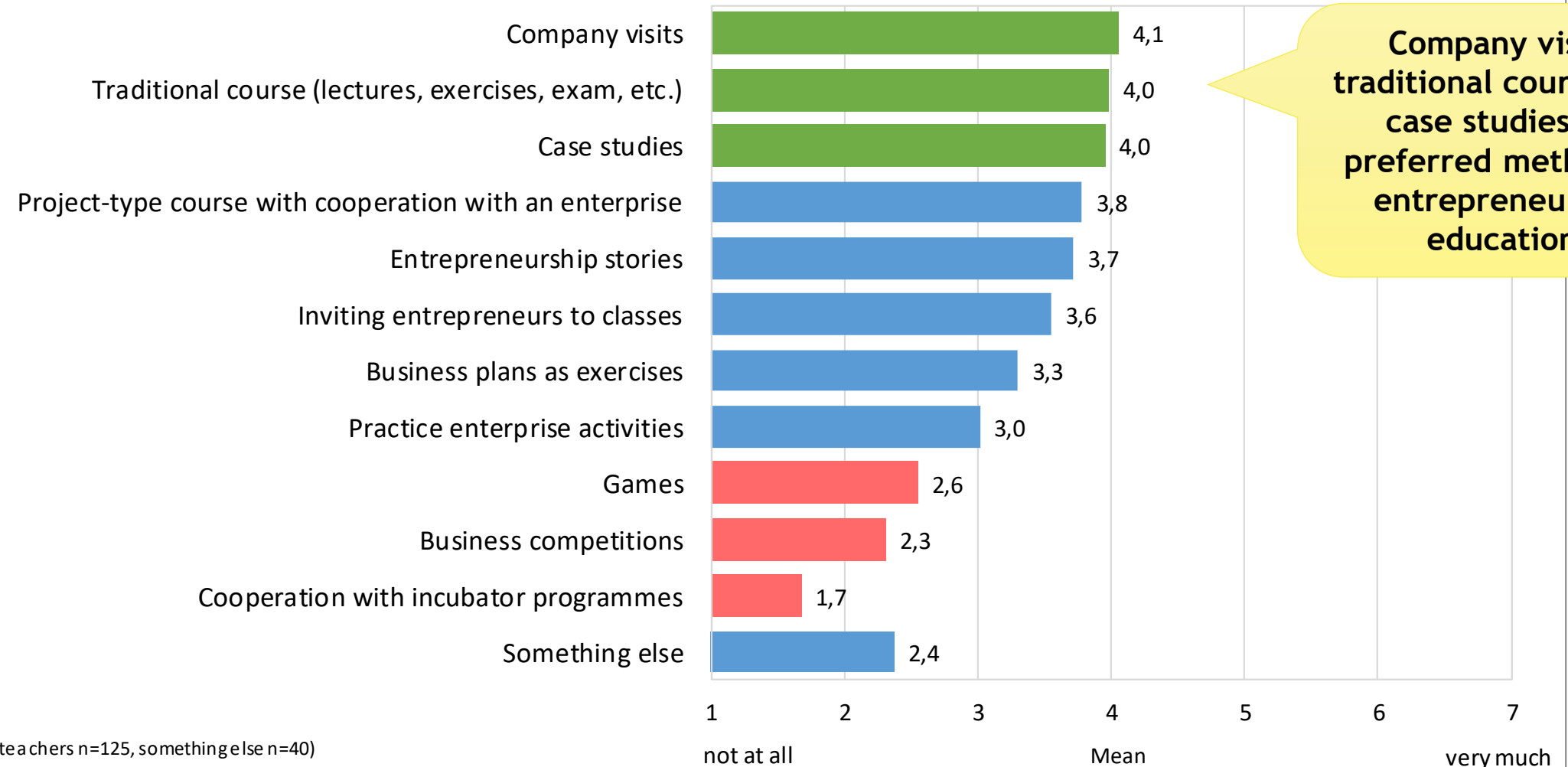
Methods in entrepreneurship education

Have you (and how much) implemented following methods in entrepreneurship education in your teaching:

- Traditional course (lectures, exercises, exam, etc.)
- Project-type course with cooperation with an enterprise
- Inviting entrepreneurs to classes
- Practice enterprise activities (or other virtual business activities)
- Cooperation with incubator programmes
- Company visits
- Business plans as exercises
- Business competitions
- Games
- Case studies
- Entrepreneurship stories
- Something else, please specify what? _____

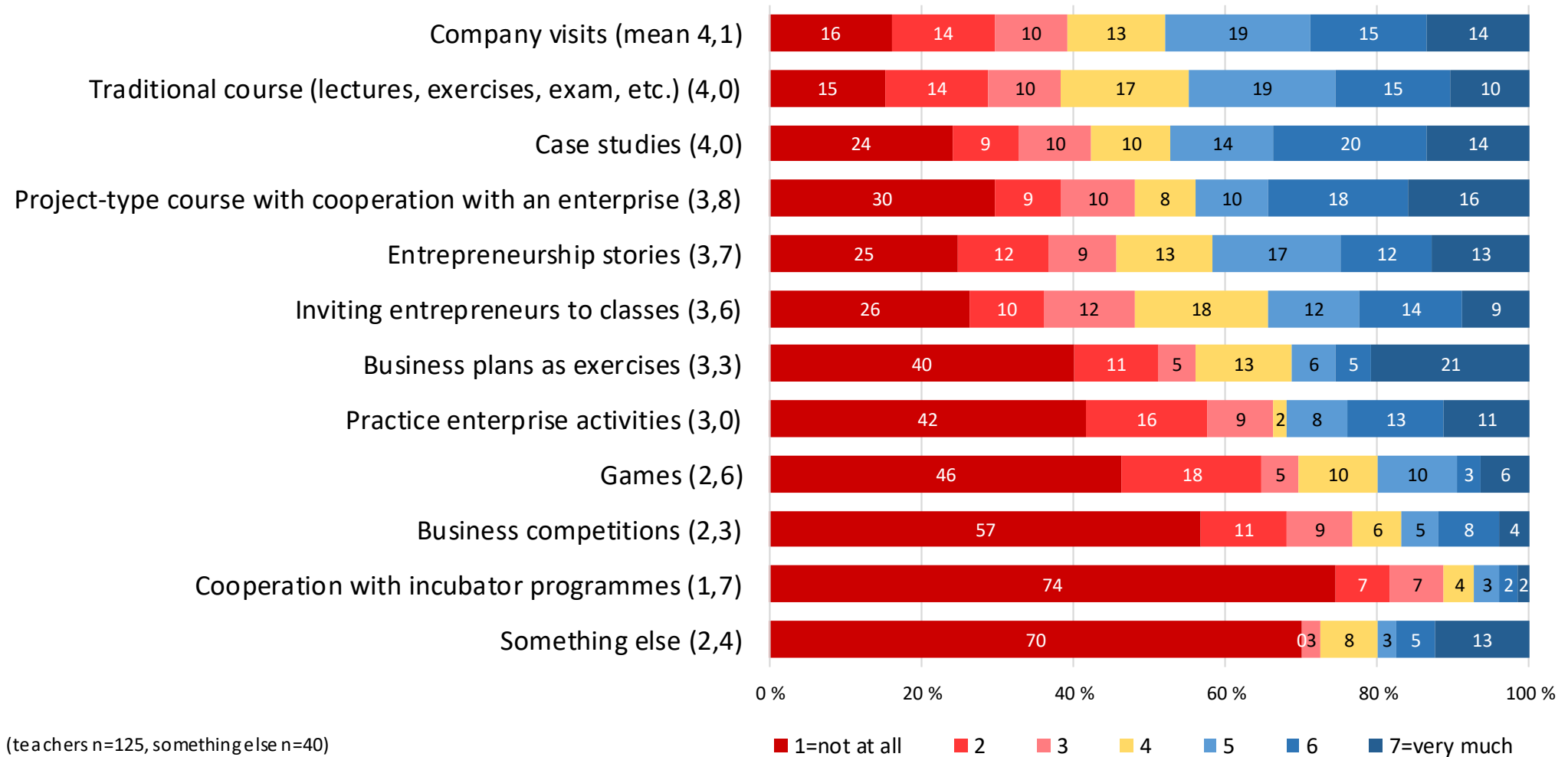
Scale 1 (not at all) -7 (very much)

Methods in entrepreneurship education



**Company visits,
traditional courses and
case studies are
preferred methods in
entrepreneurship
education.**

Methods in entrepreneurship education



Something else

Implemented methods in entrepreneurship education; something else

- Entrepreneurship (3 respondents)
- In vocational materials enterprising extract
- Business communication
- Moodle
- Own company
- Simulation
- Network course
- Networking

Sustainability-driven Entrepreneurship Questionnaire for teachers	All teachers (n=125)	Age				p
		Younger than 40 years (n=22)	40 - 49 years (n=40)	50 - 59 years (n=52)	60 years or older (n=11)	
		Mean	Mean	Mean	Mean	
Methods in entrepreneurship education						
Company visits	4,1	3,3	4,2	4,5	3,3	0,067
Traditional course (lectures, exercises, exam, etc.)	4,0	3,8	4,6	3,7	3,5	0,107
Case studies	4,0	3,4	4,6	4,0	2,6	0,038
Project-type course with cooperation with an enterprise	3,8	3,5	4,5	3,8	1,9	0,010
Entrepreneurship stories	3,7	3,3	4,5	3,4	3,1	0,042
Inviting entrepreneurs to classes	3,6	2,7	4,1	3,8	2,3	0,007
Business plans as exercises	3,3	3,2	4,0	3,1	1,9	0,065
Practice enterprise activities (or other virtual business activities)	3,0	2,9	3,9	2,6	2,0	0,016
Games	2,6	2,2	2,9	2,6	1,7	0,265
Business competitions	2,3	1,8	3,0	2,2	1,5	0,025
Cooperation with incubator programmes	1,7	1,5	2,1	1,6	1,4	0,230

Implemented methods - scale 1-7, 1=not at all ... 7=very much

Sustainability-driven Entrepreneurship Questionnaire for teachers	All teachers (n=125)	Teaching experience in years				p
		Less than 10 years (n=36)	10 - 19 years (n=38)	20 - 29 years (n=35)	30 years or more (n=16)	
	Mean	Mean	Mean	Mean	Mean	
Methods in entrepreneurship education						
Company visits	4,1	3,8	4,0	4,2	4,4	0,772
Traditional course (lectures, exercises, exam, etc.)	4,0	4,4	3,9	3,5	4,0	0,281
Case studies	4,0	4,3	3,9	3,6	3,8	0,595
Project-type course with cooperation with an enterprise	3,8	3,8	4,3	3,5	3,2	0,314
Entrepreneurship stories	3,7	4,0	3,7	3,5	3,5	0,724
Inviting entrepreneurs to classes	3,6	3,2	4,0	3,6	3,2	0,382
Business plans as exercises	3,3	4,0	3,2	2,9	3,0	0,253
Practice enterprise activities (or other virtual business activities)	3,0	3,8	2,9	2,5	2,8	0,089
Games	2,6	2,7	2,7	2,4	2,2	0,705
Business competitions	2,3	2,8	2,2	2,1	1,9	0,288
Cooperation with incubator programmes	1,7	1,8	1,7	1,5	1,8	0,924

Implemented methods - scale 1-7, 1=not at all ... 7=very much

Participating in training effects positively to methods.

Sustainability-driven Entrepreneurship Questionnaire for teachers Methods in entrepreneurship education	All teachers (n=125)	Have you participated in training related to entrepreneurship education?		p
		Yes (n=81)	No (n=44)	
	Mean	Mean	Mean	
Company visits	4,1	4,4	3,4	0,008
Traditional course (lectures, exercises, exam, etc.)	4,0	4,2	3,5	0,050
Case studies	4,0	4,8	2,4	0,000
Project-type course with cooperation with an enterprise	3,8	4,5	2,4	0,000
Entrepreneurship stories	3,7	4,5	2,4	0,000
Inviting entrepreneurs to classes	3,6	4,2	2,4	0,000
Business plans as exercises	3,3	4,2	1,6	0,000
Practice enterprise activities (or other virtual business activities)	3,0	3,7	1,8	0,000
Games	2,6	2,9	2,0	0,013
Business competitions	2,3	2,8	1,4	0,000
Cooperation with incubator programmes	1,7	2,0	1,1	0,000

Implemented methods - scale 1-7, 1=not at all ... 7=very much

Working experience in business life effects positively to methods.

Sustainability-driven Entrepreneurship Questionnaire for teachers	All teachers (n=125)	Have you worked in business life?		p
		Yes (n=78)	No (n=47)	
Methods in entrepreneurship education	Mean	Mean	Mean	
Company visits	4,1	4,3	3,7	0,110
Traditional course (lectures, exercises, exam, etc.)	4,0	4,2	3,6	0,083
Case studies	4,0	4,4	3,3	0,007
Project-type course with cooperation with an enterprise	3,8	4,4	2,8	0,000
Entrepreneurship stories	3,7	4,0	3,2	0,039
Inviting entrepreneurs to classes	3,6	4,0	2,9	0,003
Business plans as exercises	3,3	3,8	2,4	0,001
Practice enterprise activities (or other virtual business activities)	3,0	3,4	2,4	0,010
Games	2,6	2,8	2,1	0,058
Business competitions	2,3	2,6	1,8	0,010
Cooperation with incubator programmes	1,7	1,9	1,4	0,030

Working as an entrepreneur effects positively to methods.

Sustainability-driven Entrepreneurship Questionnaire for teachers	All teachers (n=125)	Do you have experience of working as an entrepreneur (previously or currently, included part-time)?		p
		Yes (n=49)	No (n=76)	
		Mean	Mean	
Methods in entrepreneurship education				
Company visits	4,1	4,4	3,8	0,120
Traditional course (lectures, exercises, exam, etc.)	4,0	4,7	3,5	0,000
Case studies	4,0	4,7	3,5	0,001
Project-type course with cooperation with an enterprise	3,8	4,4	3,4	0,023
Entrepreneurship stories	3,7	4,0	3,5	0,241
Inviting entrepreneurs to classes	3,6	3,9	3,3	0,107
Business plans as exercises	3,3	4,3	2,6	0,000
Practice enterprise activities (or other virtual business activities)	3,0	3,9	2,4	0,001
Games	2,6	3,1	2,2	0,018
Business competitions	2,3	2,7	2,0	0,044
Cooperation with incubator programmes	1,7	1,9	1,6	0,258

Sustainability-driven Entrepreneurship Questionnaire for teachers	All teachers (n=125)	How many years you have worked in business life?				p
		4 years or less (n=33)	5 - 9 years (n=20)	10 years or more (n=23)	No experience (n=47)	
	Mean	Mean	Mean	Mean	Mean	
Methods in entrepreneurship education						
Company visits	4,1	3,9	4,0	4,9	3,7	0,120
Traditional course (lectures, exercises, exam, etc.)	4,0	3,9	4,2	4,5	3,6	0,289
Case studies	4,0	4,0	4,1	5,1	3,3	0,012
Project-type course with cooperation with an enterprise	3,8	3,8	4,7	4,8	2,8	0,001
Entrepreneurship stories	3,7	3,6	4,0	4,6	3,2	0,087
Inviting entrepreneurs to classes	3,6	3,7	3,4	4,7	2,9	0,003
Business plans as exercises	3,3	3,3	3,9	4,4	2,4	0,005
Practice enterprise activities (or other virtual business activities)	3,0	2,9	3,9	3,6	2,4	0,041
Games	2,6	2,7	3,0	2,8	2,1	0,291
Business competitions	2,3	2,5	2,2	3,0	1,8	0,053
Cooperation with incubator programmes	1,7	1,7	1,8	2,3	1,4	0,071

Implemented methods - scale 1-7, 1=not at all ... 7=very much

Sustainability-driven Entrepreneurship Questionnaire for teachers	All teachers (n=125)	What is your approach in teaching entrepreneurship?		p
		I teach courses directly related to entrepreneurship (n=33)	I teach other courses but I apply aspects of entrepreneurship in my teaching (n=71)	
		Mean	Mean	
Methods in entrepreneurship education				
Company visits	4,1	4,6	4,3	0,408
Traditional course (lectures, exercises, exam, etc.)	4,0	5,0	3,9	0,004
Case studies	4,0	5,0	4,1	0,041
Project-type course with cooperation with an enterprise	3,8	4,7	3,9	0,095
Entrepreneurship stories	3,7	4,8	3,9	0,021
Inviting entrepreneurs to classes	3,6	4,3	3,6	0,110
Business plans as exercises	3,3	5,6	2,8	0,000
Practice enterprise activities (or other virtual business activities)	3,0	3,9	3,1	0,113
Games	2,6	3,2	2,6	0,116
Business competitions	2,3	3,4	2,2	0,008
Cooperation with incubator programmes	1,7	2,4	1,5	0,022

Implemented methods - scale 1-7, 1=not at all ... 7=very much

Sustainability-driven Entrepreneurship Questionnaire for teachers	All teachers (n=125)	What is your approach in teaching sustainability?		p
		I teach courses directly related to sustainability (n=24)	I teach other courses but I apply aspects of sustainability in my teaching (n=82)	
		Mean	Mean	
Methods in entrepreneurship education				
Company visits	4,1	4,2	4,1	0,854
Traditional course (lectures, exercises, exam, etc.)	4,0	4,3	4,1	0,602
Case studies	4,0	4,6	3,9	0,165
Project-type course with cooperation with an enterprise	3,8	3,6	3,9	0,516
Entrepreneurship stories	3,7	3,7	3,9	0,651
Inviting entrepreneurs to classes	3,6	3,4	3,7	0,613
Business plans as exercises	3,3	3,0	3,3	0,581
Practice enterprise activities (or other virtual business activities)	3,0	2,6	3,1	0,295
Games	2,6	3,1	2,5	0,123
Business competitions	2,3	2,0	2,5	0,342
Cooperation with incubator programmes	1,7	1,4	1,7	0,202

Implemented methods - scale 1-7, 1=not at all ... 7=very much

Teaching entrepreneurship competence

Teaching ideas and opportunities $\alpha = 0,947$

Please assess your own current abilities in regard to teaching the following aspects of entrepreneurial competence

- Teach students to use their imagination and abilities to identify opportunities for creating value.
- Teach students to identify some unsolved problem of opportunity.
- Teach students to validate that this opportunity or problem is relevant for a significant group of potential customers.
- Teach students to develop creative and purposeful ideas.
- Teach students how to work towards a vision of their future.
- Teach students how to make the most of ideas and opportunities from different points of views.
- Teach students to assess the consequences and impact of ideas, opportunities and actions.

Scale 1 (no ability) -7 (strong ability)

Teaching resources $\alpha = 0,831$

Please assess your own current abilities in regard to teaching the following aspects of entrepreneurial competence

- Teach students to believe in themselves and keep developing.
- Teach students how to stay focused and don't give up.
- Teach students how to gather and manage the resources they need.
- Teach students to understand financial and economic issues.
- Teach students how to inspire, enthuse and get others on board.

Teaching how to into action $\alpha = 0,902$

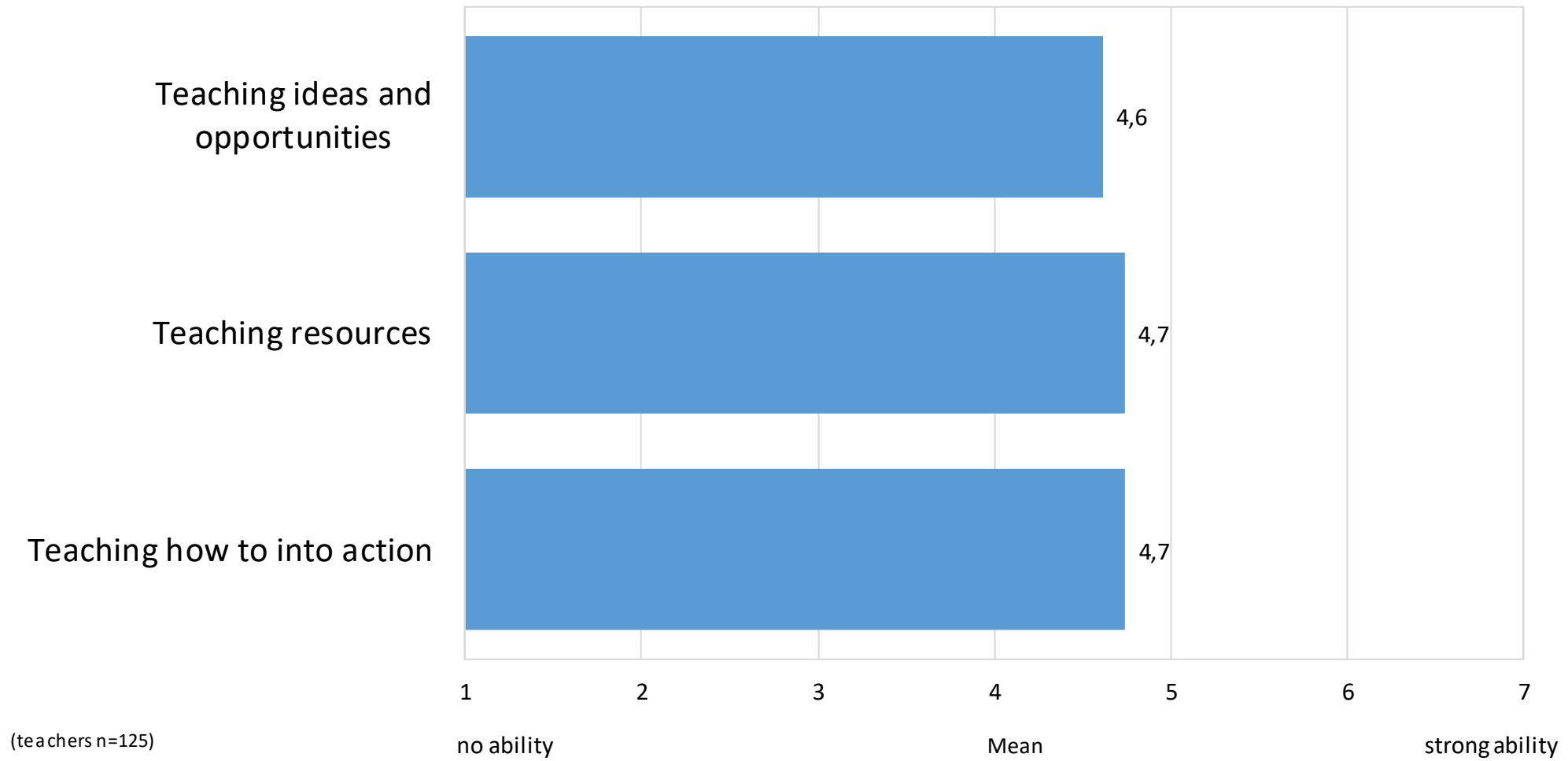
Please assess your own current abilities in regard to teaching the following aspects of entrepreneurial competence

- Teach students how to initiate processes that create value and how they can take up challenges.
- Teach students how to prioritize, organize and follow-up.
- Teach students to make decisions in uncertain situations and deal with ambiguity and risk.
- Teach students how to team-up, collaborate and network.
- Teach students how to reflect and learn from both success and failure.

Scale 1 (no ability) -7 (strong ability)

Teaching entrepreneurship competences $\alpha = 0,963$

Teaching entrepreneurship competence



Abilities Related to Business Development

Please assess your own current abilities related to business development on a scale:
no ability 1 2 3 4 5 6 7 strong ability.

Business development

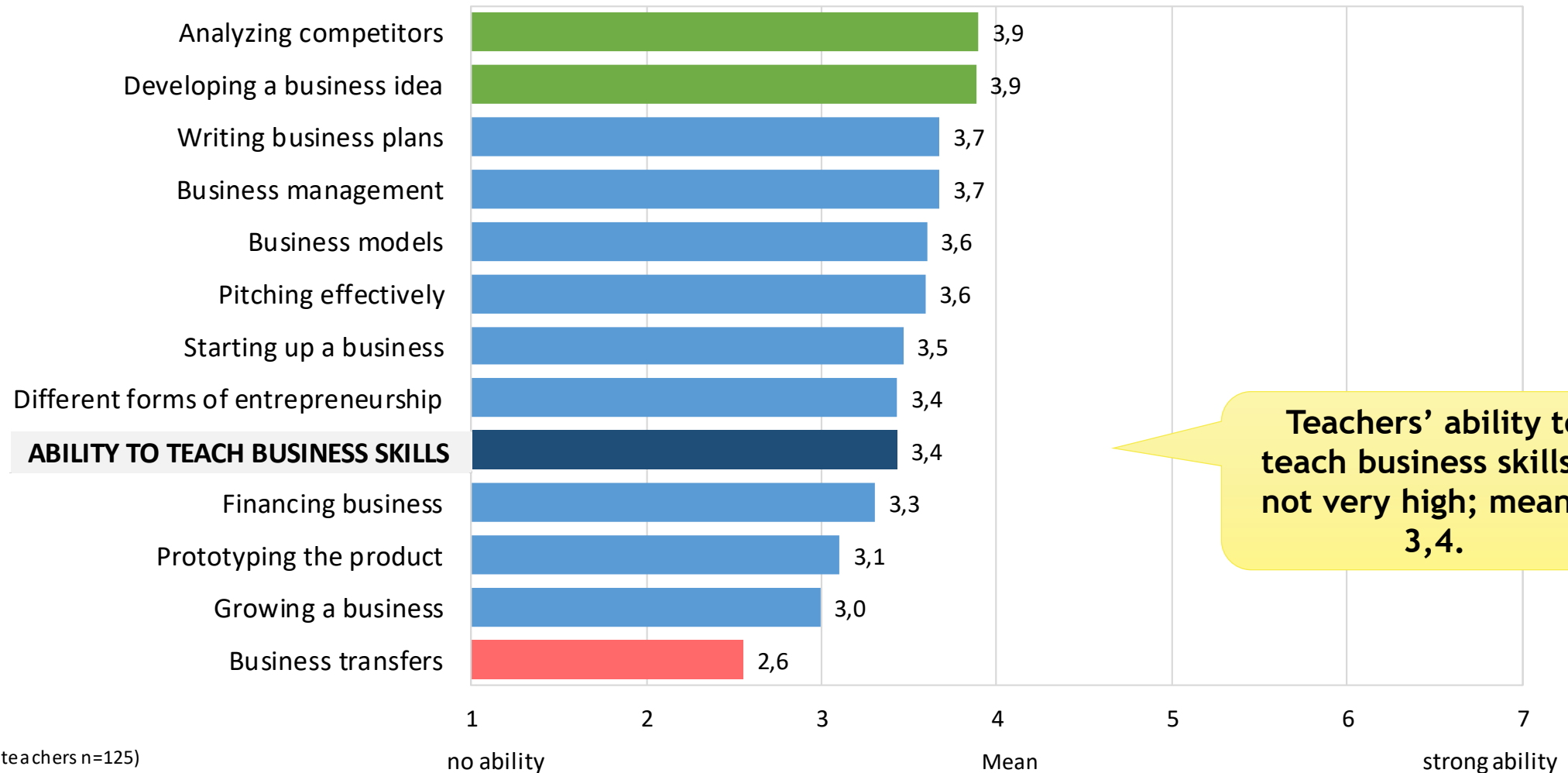
Have you (and how much) implemented following methods in entrepreneurship education in your teaching:

- Different forms of entrepreneurship (i.e. part-time, hybrid entrepreneurs, light entrepreneurs)
- Business models
- Developing a business idea
- Analyzing competitors
- Writing business plans
- Prototyping the product
- Pitching effectively
- Starting up a business
- Business management
- Financing business (both starting and developing)
- Growing a business (growth strategies)
- Business transfers (buying or selling the company)

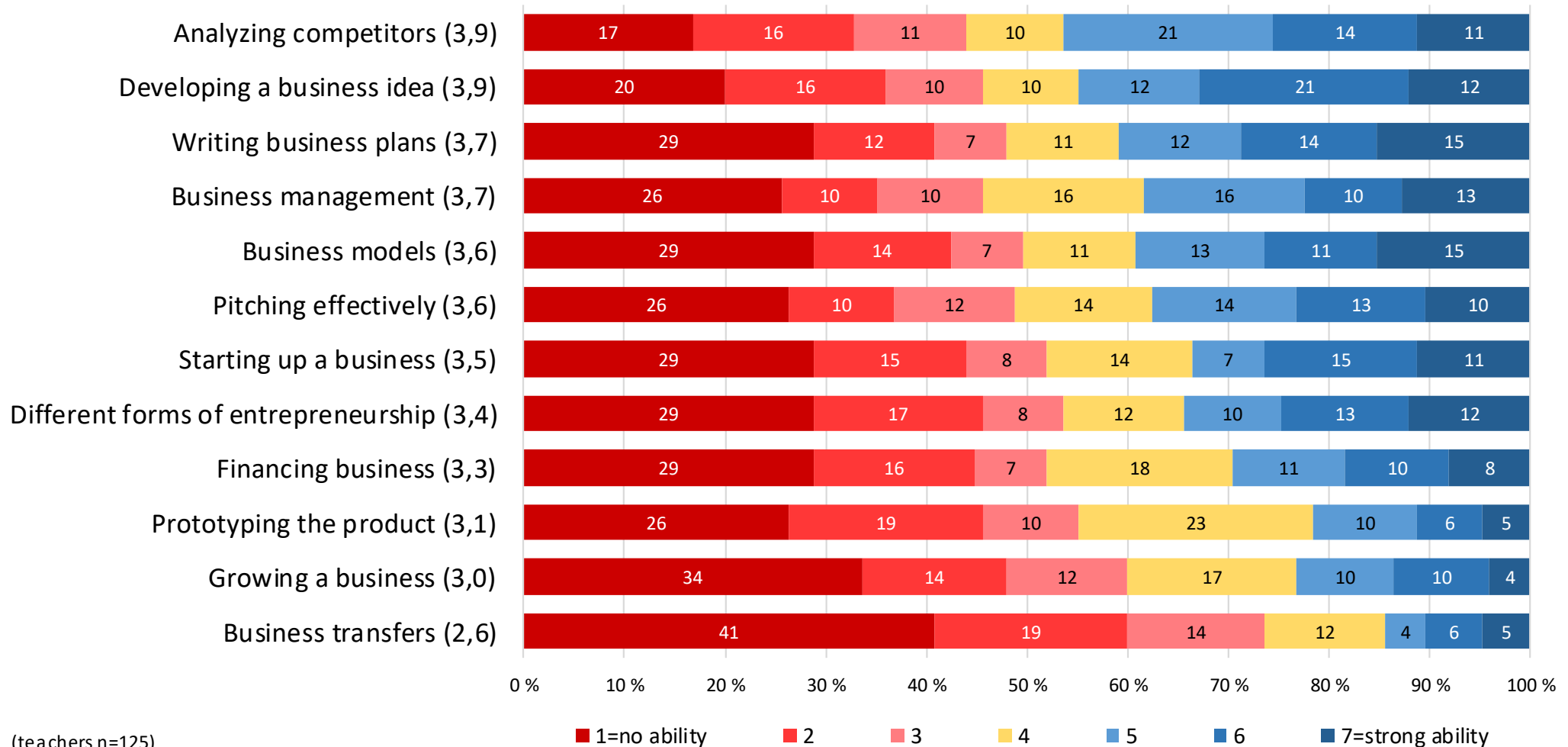
Scale 1-7, 1=no ability, 7=strong ability

Sum variable: ABILITY TO TEACH BUSINESS SKILLS ($\alpha = 0,968$)

Teachers ability to teach competences related to business development



Teachers ability to teach competences related to business development



Students vs. teachers

Students own current abilities and teachers ability to teach competences related to business development	Students current abilities (n=1128)	Teachers ability to teach competences (n=125)
	Mean	Mean
Developing a business idea	4,1	3,9
Analyzing competitors	4,0	3,9
Business management	3,8	3,7
Writing business plans	3,8	3,7
Pitching effectively	3,8	3,6
Business models	3,7	3,6
Starting up a business	3,7	3,5
BUSINESS SKILLS	3,8	3,4
Different forms of entrepreneurship *)	3,7	3,4
Prototyping the product	3,8	3,1
Financing business (both starting and developing)	3,5	3,3
Growing a business (growth strategies)	3,7	3,0
Business transfers (buying or selling the company)	3,4	2,6

*) (i.e. part-time, hybrid entrepreneurs, light entrepreneurs, intra entrepreneurs, social entrepreneurs)

Scale 1-7, 1=no ability, 7=strong ability

Students vs. teachers

Students own current abilities and teachers ability to teach competences related to business development	Students current abilities (n=1128)	Teachers ability to teach competences (n=125)
	Mean	Mean
Developing a business idea	4,1	3,9
Analyzing competitors	4,0	3,9
Business management	3,8	3,7
Writing business plans	3,8	3,7
Pitching effectively	3,8	3,6
Business models	3,7	3,6
Starting up a business	3,7	3,5
BUSINESS SKILLS	3,8	3,4
Different forms of entrepreneurship *)	3,7	3,4
Prototyping the product	3,8	3,1
Financing business (both starting and developing)	3,5	3,3
Growing a business (growth strategies)	3,7	3,0
Business transfers (buying or selling the company)	3,4	2,6

*) (i.e. part-time, hybrid entrepreneurs, light entrepreneurs, intra entrepreneurs, social entrepreneurs)

Scale 1-7, 1=no ability, 7=strong ability

Students vs. teachers

Students own current abilities and teachers ability to teach Sum variables	Students current abilities (n=1128)	Teachers ability to teach competences (n=125)
	Mean	Mean
Ideas and opportunities	4,7	4,6
Resources	4,5	4,7
Into action	4,6	4,7
Business skills	3,8	3,4
Diversity competence	4,1	4,3
Foresighted thinking competence	4,2	4,1
Systems thinking competence	4,2	3,8
Normative competence	4,2	4,3
Strategic action competence	4,0	3,7

Scale 1-7, 1=no ability, 7=strong ability

Sustainability-driven Entrepreneurship Questionnaire for teachers Teachers ability to teach competences related to business development	All respondents (n=125)	GENT BE (n=21)	SeAMK FI (n=29)	SEDU FI (n=40)	Other institutions (n=35)	p
	Mean	Mean	Mean	Mean	Mean	
Analyzing competitors	3,9	4,5	4,4	3,1	4,0	0,019
Developing a business idea	3,9	4,2	4,0	3,6	4,0	0,677
Writing business plans	3,7	4,3	4,0	3,1	3,7	0,157
Business management	3,7	4,2	3,9	3,3	3,5	0,405
Business models	3,6	4,3	3,7	3,1	3,6	0,229
Pitching effectively	3,6	4,4	4,1	2,7	3,7	0,005
Starting up a business	3,5	3,9	3,3	3,4	3,4	0,788
Different forms of entrepreneurship (i.e. part-time, hybrid entrepreneurs, light entrepreneurs)	3,4	3,4	3,4	3,3	3,7	0,860
ABILITY TO TEACH BUSINESS SKILLS	3,4	3,8	3,7	3,0	3,5	0,326
Financing business (both starting and developing)	3,3	3,6	3,4	3,0	3,4	0,747
Prototyping the product	3,1	2,6	3,7	2,9	3,2	0,140
Growing a business (growth strategies)	3,0	3,4	3,2	2,5	3,2	0,207
Business transfers (buying or selling the company)	2,6	2,5	2,9	2,5	2,4	0,764

Scale 1-7, 1=no ability, 7=strong ability

What is your approach in teaching entrepreneurship, choose the most appropriate option:	Ability to teach business skills					p
	Teachers who teach entrepreneurship or apply aspects of it	GENT BE	SeAMK FI	SEDU FI	Other institutions	
	Mean	Mean	Mean	Mean	Mean	
I teach courses directly related to entrepreneurship	5,0	5,1	5,2	4,1	5,4	0,064
I teach other courses but I apply aspects of entrepreneurship in my teaching	3,3	3,6	3,4	3,0	3,2	0,765
	p=0,000	p=0,014	p=0,001	p=0,058	p=0,001	

What is your approach in teaching sustainability, choose the most appropriate option:	Ability to teach business skills					p
	Teachers who teach sustainability or apply aspects of it	GENT BE	SeAMK FI	SEDU FI	Other institutions	
	Mean	Mean	Mean	Mean	Mean	
I teach courses directly related to sustainability	3,6	3,9	3,5	3,9	3,1	0,827
I teach other courses but I apply aspects of sustainability in my teaching	3,5	3,8	3,7	2,9	3,9	0,128
	p=0,761	p=0,981	p=839	p=0,222	p=0,378	

Scale 1-7, 1=no ability, 7=strong ability

What is your approach in teaching entrepreneurship, choose the most appropriate option:	Teachers who teach courses directly related to entrepreneurship	I teach courses directly related to entrepreneurship				p
		GENT BE	SeAMK FI	SEDU FI	Other institutions	
		Mean	Mean	Mean	Mean	
Developing a business idea	5,7	6,0	5,7	4,7	6,4	0,034
Writing business plans	5,4	5,8	5,9	4,4	5,7	0,240
Business models	5,4	5,8	5,6	4,2	6,0	0,083
Starting up a business	5,4	5,7	5,1	5,2	5,5	0,933
Different forms of entrepreneurship (i.e. part-time, hybrid entrepreneurs, light entrepreneurs)	5,3	4,8	5,6	4,3	6,2	0,121
Business management	5,2	5,5	5,3	4,6	5,6	0,476
Analyzing competitors	5,1	5,5	5,4	3,6	5,8	0,005
Financing business (both starting and developing)	5,1	4,7	4,7	4,7	5,8	0,218
ABILITY TO TEACH BUSINESS SKILLS	5,0	5,1	5,2	4,1	5,4	0,064
Pitching effectively	4,7	5,3	4,4	3,4	5,6	0,031
Growing a business (growth strategies)	4,3	4,5	4,4	3,3	4,8	0,293
Prototyping the product	4,2	3,7	5,0	3,6	4,4	0,340
Business transfers (buying or selling the company)	3,8	3,8	4,7	3,2	3,6	0,416

Scale 1-7, 1=no ability, 7=strong ability

What is your approach in teaching entrepreneurship, choose the most appropriate option:	Teachers who teach courses directly related to sustainability	I teach courses directly related to sustainability				p
		GENT BE	SeAMK FI	SEDU FI	Other institutions	
		Mean	Mean	Mean	Mean	
Developing a business idea	4,3	4,8	4,5	4,4	3,7	0,824
Business models	4,0	5,0	3,8	4,4	3,1	0,541
Pitching effectively	3,9	5,8	3,0	3,8	3,1	0,046
Starting up a business	3,8	4,2	3,0	4,1	3,7	0,840
Writing business plans	3,8	4,4	3,3	4,1	3,1	0,722
Business management	3,8	4,0	4,0	3,8	3,4	0,964
Analyzing competitors	3,7	4,8	3,3	3,6	3,3	0,504
Different forms of entrepreneurship (i.e. part-time, hybrid entrepreneurs, light entrepreneurs)	3,6	3,0	3,5	4,5	3,1	0,613
ABILITY TO TEACH BUSINESS SKILLS	3,6	3,9	3,5	3,9	3,1	0,827
Financing business (both starting and developing)	3,5	3,2	3,5	3,9	3,3	0,923
Growing a business (growth strategies)	3,0	3,2	3,3	3,3	2,4	0,828
Prototyping the product	3,0	1,8	3,3	3,9	2,6	0,258
Business transfers (buying or selling the company)	2,8	2,0	3,8	3,3	2,1	0,452

Scale 1-7, 1=no ability, 7=strong ability

Teaching sustainable entrepreneurship competence

Teaching diversity competence $\alpha = 0,898$

Please assess your own current abilities in regard to teaching the following aspects of entrepreneurial competence:

- teach students how to bring together economic, social, and environmental conflicts of interest.
- teach students how to find information about sustainability from different sources.
- explain the importance of involving local stakeholders (e.g., in recruitment) for a company.

Teaching foresighted thinking competence $\alpha = 0,936$

Please assess your own current abilities in regard to teaching the following aspects of entrepreneurial competence:

- teach students how to construct and consider different directions for sustainability in the future.
- teach students how to identify risks and opportunities inherent in present and future developments.
- teach students how to take the impact on the short as well as the long term into consideration when analyzing and evaluating scenario's for action.
- teach students how to take both the impact on the local and the global scales into consideration when analyzing and evaluating scenario's for action.

Scale 1-7, 1=no ability, 7=strong ability

Teaching systems thinking competence $\alpha = 0,880$

Please assess your own current abilities in regard to teaching the following aspects of entrepreneurial competence:

- teach students how to identify the key operations of a company that have a negative impact on the environment or society.
- teach students how to analyze strengths and weaknesses of production.
- teach students how to improve production in order to reduce the negative effects on the environment or society.
- teach students how to integrate social, environmental, and societal issues into future plans of a company.

Scale 1-7, 1=no ability, 7=strong ability

Teaching normative competence $\alpha = 0,950$

Please assess your own current abilities in regard to teaching the following aspects of entrepreneurial competence:

- encourage students to take initiative to make improvements in students own practice based on norms, values, targets, and principles of sustainability.
- explain what is seen as “good sustainable practice” in my field.
- teach students how to apply norms, values, targets, and principles of sustainability to practice.
- encourage students to challenge not sustainable ways of individuals or a company.
- teach students how to identify opportunities for sustainable development.

Scale 1-7, 1=no ability, 7=strong ability

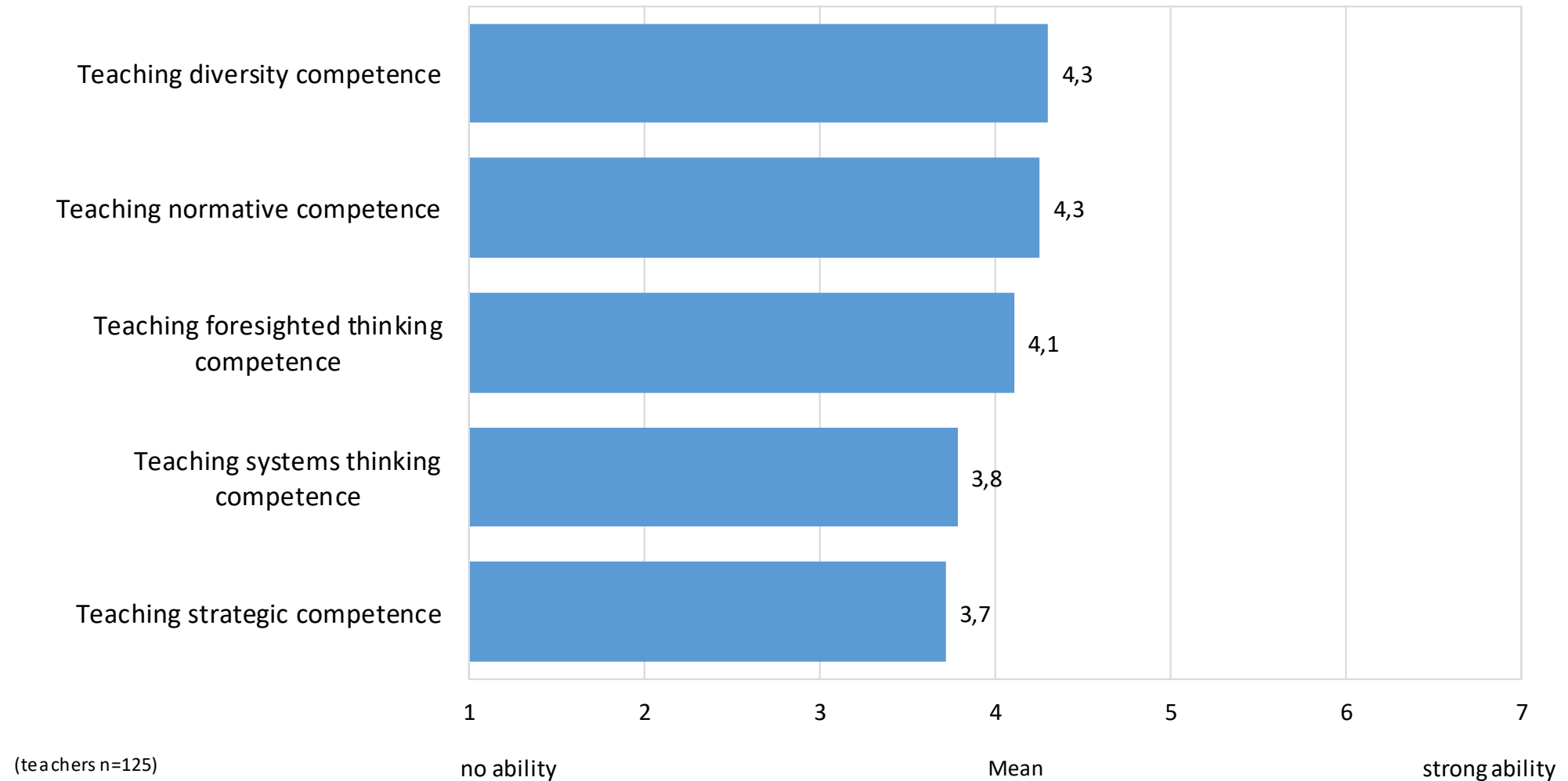
Teaching strategic competence $\alpha = 0,887$

Please assess your own current abilities in regard to teaching the following aspects of entrepreneurial competence:

- teach students how to turn social, environmental, or societal challenges into opportunities for an organization/company.
- teach students how to motivate others to invest in sustainability.
- teach students how to monitor the sustainability performance of a company.

Scale 1-7, 1=no ability, 7=strong ability

Teaching sustainable entrepreneurship competence



Background questions vs. sum variables

Sustainability-driven Entrepreneurship Questionnaire for teachers SUM VARIABLES	All respondents (n=125)	GENT BE (n=21)	SeAMK FI (n=29)	SEDU FI (n=40)	Other institutions (n=35)	p
	Mean	Mean	Mean	Mean	Mean	
Teaching ideas and opportunities	4,6	4,9	4,6	4,3	4,9	0,269
Teaching resources	4,7	4,9	4,7	4,4	5,0	0,187
Teaching how to into action	4,7	5,0	5,1	4,2	4,9	0,014
Ability to teach business skills	3,4	3,8	3,7	3,0	3,5	0,326
Teaching diversity competence	4,3	4,2	4,5	4,4	4,1	0,722
Teaching foresighted thinking competence	4,1	4,1	4,3	4,2	3,8	0,686
Teaching systems thinking competence	3,8	3,9	3,7	3,9	3,7	0,965
Teaching normative competence	4,3	4,4	3,9	4,6	4,2	0,421
Teaching strategic competence	3,7	3,7	3,5	3,9	3,7	0,751

Scale 1-7, 1=no ability, 7=strong ability

Sustainability-driven Entrepreneurship Questionnaire for teachers SUM VARIABLES	All teachers n=125)	Teachers' age					p
		Younger than 40 years (n=22)	40 - 44 years (n=19)	45 - 49 years (n=21)	50 - 54 years (n=32)	55 years or older (n=31)	
	Mean	Mean	Mean	Mean	Mean	Mean	
Teaching ideas and opportunities	4,6	4,0	4,9	5,0	4,8	4,3	0,109
Teaching resources	4,7	4,2	4,8	5,1	4,8	4,7	0,241
Teaching how to into action	4,7	4,2	4,7	5,0	4,9	4,7	0,368
Ability to teach business skills	3,4	3,0	3,8	4,2	3,6	2,8	0,025
Teaching diversity competence	4,3	3,6	4,6	4,7	4,6	4,1	0,093
Teaching foresighted thinking competence	4,1	3,4	4,2	4,4	4,4	4,0	0,151
Teaching systems thinking competence	3,8	3,3	4,1	4,1	3,7	3,7	0,416
Teaching normative competence	4,3	3,5	4,7	4,3	4,3	4,4	0,216
Teaching strategic competence	3,7	3,2	4,4	3,9	3,6	3,7	0,241

Scale 1-7, 1=no ability, 7=strong ability

Sustainability-driven Entrepreneurship Questionnaire for teachers SUM VARIABLES	All teachers n=125)	Teaching experience in years				p
		Less than 10 years (n=36)	10 - 19 years (n=38)	20 - 29 years (n=35)	30 years or more (n=16)	
	Mean	Mean	Mean	Mean	Mean	
Teaching ideas and opportunities	4,6	4,8	4,8	4,4	4,2	0,391
Teaching resources	4,7	4,8	4,9	4,6	4,5	0,479
Teaching how to into action	4,7	4,8	4,9	4,7	4,3	0,573
Ability to teach business skills	3,4	3,5	3,9	3,1	2,7	0,093
Teaching diversity competence	4,3	3,9	4,8	4,3	4,0	0,069
Teaching foresighted thinking competence	4,1	3,7	4,5	4,3	3,8	0,132
Teaching systems thinking competence	3,8	3,5	4,3	3,6	3,5	0,100
Teaching normative competence	4,3	4,0	4,6	4,2	4,1	0,535
Teaching strategic competence	3,7	3,7	4,0	3,6	3,4	0,574

Scale 1-7, 1=no ability, 7=strong ability

Sustainability-driven Entrepreneurship Questionnaire for teachers SUM VARIABLES	All teachers (n=125)	Do you have experience of working as an entrepreneur (previously or currently, included part-time)?		p
		Yes (n=49)	No (n=76)	
	Mean	Mean	Mean	
Teaching ideas and opportunities	4,6	5,2	4,2	0,000
Teaching resources	4,7	5,2	4,5	0,001
Teaching how to into action	4,7	5,3	4,4	0,001
Ability to teach business skills	3,4	4,4	2,8	0,000
Teaching diversity competence	4,3	4,6	4,1	0,172
Teaching foresighted thinking competence	4,1	4,4	3,9	0,113
Teaching systems thinking competence	3,8	4,1	3,6	0,120
Teaching normative competence	4,3	4,3	4,2	0,906
Teaching strategic competence	3,7	4,1	3,5	0,049

Scale 1-7, 1=no ability, 7=strong ability

Sustainability-driven Entrepreneurship Questionnaire for teachers SUM VARIABLES	All teachers (n=125)	Have you worked in business life?		p
		Yes (n=78)	No (n=47)	
	Mean	Mean	Mean	
Teaching ideas and opportunities	4,6	4,8	4,4	0,147
Teaching resources	4,7	4,8	4,6	0,226
Teaching how to into action	4,7	4,9	4,4	0,035
Ability to teach business skills	3,4	3,9	2,6	0,000
Teaching diversity competence	4,3	4,4	4,1	0,255
Teaching foresighted thinking competence	4,1	4,2	4,0	0,469
Teaching systems thinking competence	3,8	3,9	3,5	0,149
Teaching normative competence	4,3	4,2	4,3	0,949
Teaching strategic competence	3,7	3,8	3,5	0,264

Scale 1-7, 1=no ability, 7=strong ability

Sustainability-driven Entrepreneurship Questionnaire for teachers SUM VARIABLES	All teachers (n=76)	How many years you have worked in business life?			p
		4 years or less (n=33)	5 - 9 years (n=20)	10 years or more (n=23)	
	Mean	Mean	Mean	Mean	
Teaching ideas and opportunities	4,7	4,2	5,0	5,4	0,003
Teaching resources	4,8	4,4	5,0	5,4	0,005
Teaching how to into action	4,9	4,4	5,3	5,4	0,007
Ability to teach business skills	3,9	3,5	3,8	4,5	0,084
Teaching diversity competence	4,4	4,1	4,6	4,7	0,282
Teaching foresighted thinking competence	4,2	3,8	4,4	4,5	0,231
Teaching systems thinking competence	3,9	3,5	4,1	4,4	0,098
Teaching normative competence	4,2	4,0	3,9	4,8	0,162
Teaching strategic competence	3,8	3,6	3,6	4,3	0,285

Scale 1-7, 1=no ability, 7=strong ability

Sustainability-driven Entrepreneurship Questionnaire for teachers SUM VARIABLES	All teachers (n=125)	What is your approach in teaching entrepreneurship?		p
		I teach courses directly related to entrepreneurship (n=33)	I teach other courses but I apply aspects of entrepreneurship in my teaching (n=71)	
	Mean	Mean	Mean	
Teaching ideas and opportunities	4,6	5,3	4,7	0,061
Teaching resources	4,7	5,3	4,9	0,079
Teaching how to into action	4,7	5,3	4,9	0,148
Ability to teach business skills	3,4	5,0	3,3	0,000
Teaching diversity competence	4,3	4,8	4,5	0,302
Teaching foresighted thinking competence	4,1	4,4	4,3	0,803
Teaching systems thinking competence	3,8	4,0	4,0	0,911
Teaching normative competence	4,3	4,3	4,6	0,341
Teaching strategic competence	3,7	4,1	3,9	0,402

Scale 1-7, 1=no ability, 7=strong ability

Sustainability-driven Entrepreneurship Questionnaire for teachers SUM VARIABLES	All teachers (n=125) Mean	What is your approach in teaching entrepreneurship?			p
		I teach courses directly related to entrepreneurship (n=33) Mean	I teach other courses but I apply aspects of entrepreneurship in my teaching (n=71) Mean	I don't teach entrepreneurship at all (n=21) Mean	
Teaching ideas and opportunities	4,6	5,3	4,7	3,1	0,000
Teaching resources	4,7	5,3	4,9	3,5	0,000
Teaching how to into action	4,7	5,3	4,9	3,4	0,000
Ability to teach business skills	3,4	5,0	3,3	1,6	0,000
Teaching diversity competence	4,3	4,8	4,5	3,0	0,000
Teaching foresighted thinking competence	4,1	4,4	4,3	2,9	0,000
Teaching systems thinking competence	3,8	4,0	4,0	2,7	0,001
Teaching normative competence	4,3	4,3	4,6	3,2	0,002
Teaching strategic competence	3,7	4,1	3,9	2,6	0,002

Scale 1-7, 1=no ability, 7=strong ability

The same result as in previous dia including the evaluations of teachers' who don't teach entrepreneurship at all.

Sustainability-driven Entrepreneurship Questionnaire for teachers SUM VARIABLES	All teachers (n=125)	What is your approach in teaching sustainability?		p
		I teach courses directly related to sustainability (n=24)	I teach other courses but I apply aspects of sustainability in my teaching (n=82)	
	Mean	Mean	Mean	
Teaching ideas and opportunities	4,6	4,9	4,6	0,336
Teaching resources	4,7	4,8	4,8	0,958
Teaching how to into action	4,7	4,8	4,8	0,921
Ability to teach business skills	3,4	3,6	3,5	0,761
Teaching diversity competence	4,3	5,1	4,4	0,037
Teaching foresighted thinking competence	4,1	5,3	4,1	0,001
Teaching systems thinking competence	3,8	4,9	3,8	0,001
Teaching normative competence	4,3	5,5	4,3	0,000
Teaching strategic competence	3,7	4,8	3,7	0,001

Scale 1-7, 1=no ability, 7=strong ability

Sustainability-driven Entrepreneurship Questionnaire for teachers SUM VARIABLES	All teachers (n=125) Mean	What is your approach in teaching sustainability?			p
		I teach courses directly related to sustainability (n=24) Mean	I teach other courses but I apply aspects of sustainability in my teaching (n=82) Mean	I don't teach sustainability at all (n=19) Mean	
Teaching ideas and opportunities	4,6	4,9	4,6	4,4	0,586
Teaching resources	4,7	4,8	4,8	4,4	0,363
Teaching how to into action	4,7	4,8	4,8	4,4	0,467
Ability to teach business skills	3,4	3,6	3,5	3,1	0,595
Teaching diversity competence	4,3	5,1	4,4	3,0	0,000
Teaching foresighted thinking competence	4,1	5,3	4,1	2,7	0,000
Teaching systems thinking competence	3,8	4,9	3,8	2,4	0,000
Teaching normative competence	4,3	5,5	4,3	2,4	0,000
Teaching strategic competence	3,7	4,8	3,7	2,3	0,000

Scale 1-7, 1=no ability, 7=strong ability

The same result as in previous dia
including the evaluations of teachers'
who don't teach sustainability at all.