



DO IT research and evaluation COIL – Surveys of participating students

DEVELOPING ONLINE INTERNATIONAL TEAMWORK - DO IT project 2021-1- CZ01-KA220-HED-000027558



VSB TECHNICAL | FACULTY |||| UNIVERSITY OF ECONOMICS OF OSTRAVA







Goals and Expected Impact of the Surveys

- To analyze the current situation and approaches to digital education from the perspective of students participating in COIL (Collaborative Online International Learning)
- To **understand the preferences of participants**. The opinions of the stakeholders help to identify the strengths and weaknesses of the current state as well as the threats and opportunities for the future.
- To evaluate the change in the knowledge, language and communication, digital and soft skills, intercultural competences and awareness of students who receive the above mentioned types of training during the project.
- Through a questionnaire survey at the beginning and end of the project, the benefits of these types of training will be evaluated and methodologies can be adapted for other project outputs.
- The questionnaire **survey may highlight weaknesses in these training methods** (COIL or BIP), which may help other HEIs within the EU to avoid these weaknesses.



Pre COIL Survey



Methodology of Pre COIL Survey

Research Method	Online survey
Sampling Method	Convenience Sampling
Sampling Size	153 respondents

Assessed COILs

Course	Frequency	Percent
Cross Cultural Awareness	70	45,8
Economics of International Trade	18	11,8
Megatrends in International Business	18	11,8
International Monetary Relations	13	8,5
International Marketing	9	5,9
ESG in Financial Management	8	5,2
Personal Income Tax	7	4,6
Age Management and Occupational Health and Safety	3	2
Not mentioned	7	4,6
Total	153	100



Sample Structure – Pre COIL Survey

Level of study	Frequency	Percent
Bc	118	77,1
MSc	35	22,9
Total	153	100
Type of study	Frequency	Percent
Full-time student	147	96,1
Part-time student	6	3,9
Total	153	100
ERASMUS student	Frequency	Percent
No	141	92,1
yes	12	7,9
Total	153	100
Participation on mobility	Frequency	Percent
No	112	73,0
Yes, once	31	20,4
Yes, twice and more times	10	6,6
Total	153	100
Respondent age	Frequency	Percent
19-21	26	17,1
22-24	68	44,7
25-30	40	26,3
31-41	14	9,2
42+	5	3,2
Total	153	100

Country	Frequency	Percent
Australia	1	0,7
Bulgaria	1	0,7
Canada	1	0,7
Curacao	2	1,3
Czech Republic	21	13,7
Netherlands	57	37,3
Equador	1	0,7
France	1	0,7
Germany	1	0,7
Ghana	2	1,3
India	1	0,7
Ireland	2	1,3
Italy	1	0,7
Malaysia	1	0,7
Mexico	2	1,3
Morocco	1	0,7
Mosambique	1	0,7
Palestine	1	0,7
Poland	24	15,7
Portugal	2	1,3
Sovakia	3	2
Spain	4	2,6
Taiwan	1	0,7
Turkey	11	7,2
Ukraina	10	6,5
Total	153	100

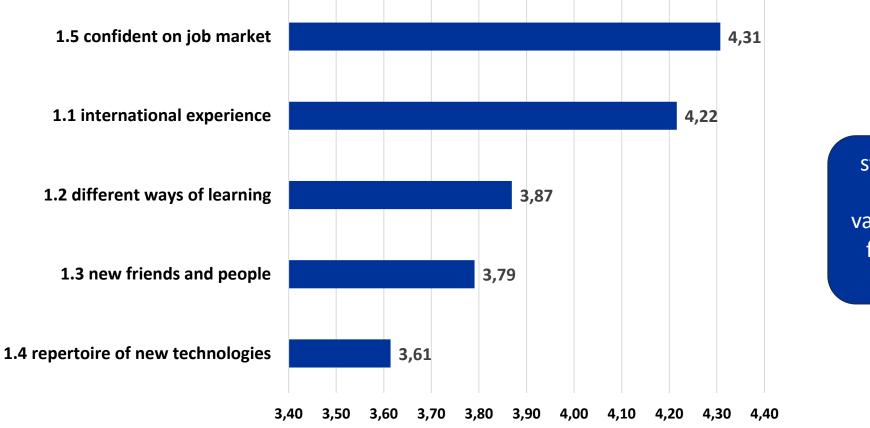
Previous hybrid collaboration experience	Frequency	Percent
No	101	66,0
Yes, once	32	20,9
Yes, twice and more	20	13,1
Total	153	100
University	Frequency	Percent
University Amsterdam University of Applied Science	Frequency 83	Percent 54,2
•		
Amsterdam University of Applied Science	83	54,2
Amsterdam University of Applied Science VŠB-TU Ostrava	83 35	54,2 22,9

the sample structure seems to be disbalanced but reflects the structure of the universe (participation on mobility, ERASMUS+ student, previous hybrid collaboration experience)



Importance of Gaining Various Experiences

How important is it for you to gain various experiences during your studies?



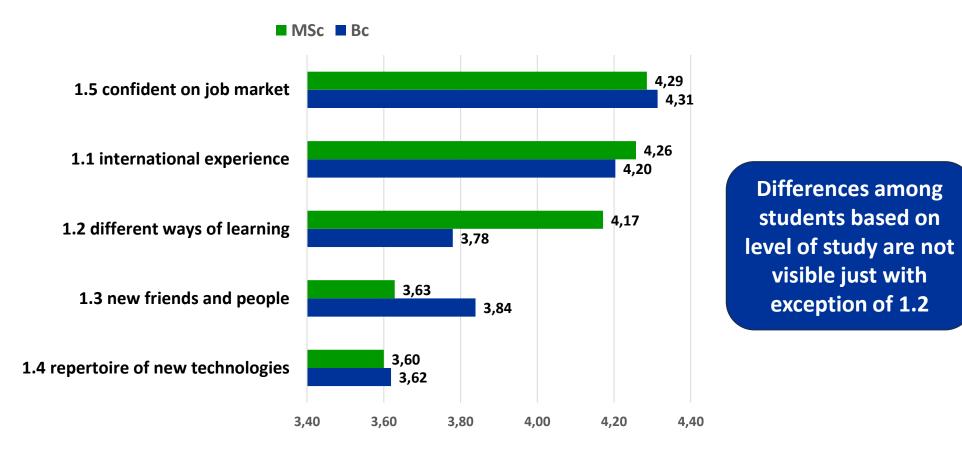
students prefer skills that are valuable for their future careers (1.5 and 1.1)

1 (not important at all) to 5 (extremely important)

- **1.1** I want to gain some international experience during my studies.
- **1.2** I want to experience different ways of learning during my studies.
- **1.3** I want to find new friends and meet new people during my studies.
- 1.4 I want to increase the repertoire of new technologies I am familiar with and use as a result of my studies.
- **1.5** I want to feel more confident on a job market as a result of my studies.

Importance of Gaining Various Experiences Based on Level of Study

How important is it for you to gain various experiences during your studies?



1 (not important at all) to 5 (extremely important)

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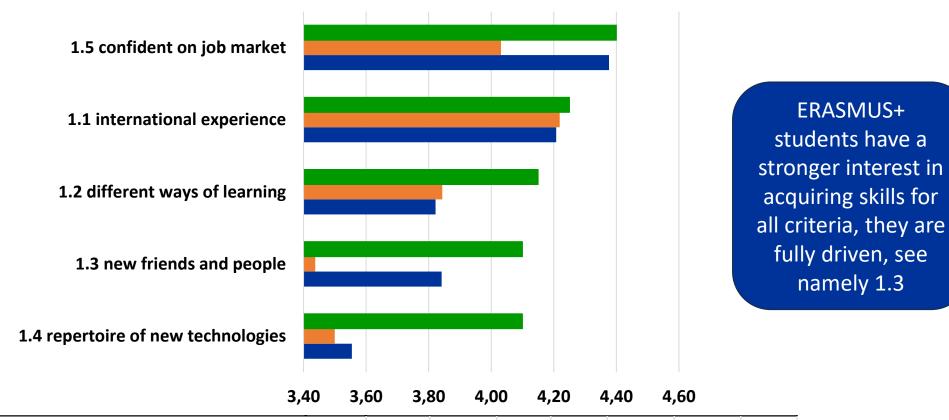
- **1.1** I want to gain some international experience during my studies.
- **1.2** I want to experience different ways of learning during my studies.
- **1.3** I want to find new friends and meet new people during my studies.
- **1.4** I want to increase the repertoire of new technologies I am familiar with and use as a result of my studies.
- **1.5** I want to feel more confident on a job market as a result of my studies.



Importance of Gaining Various Experiences Based on Previous Hybrid Experience

How important is it for you to gain various experiences during your studies?





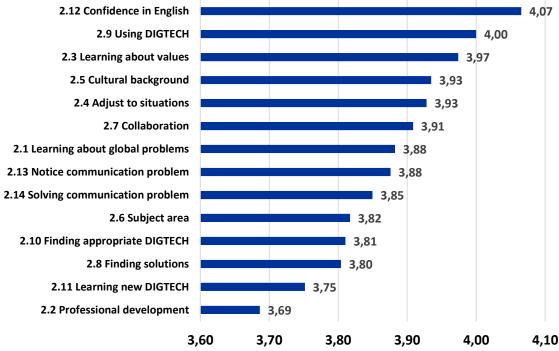
1 (not important at all) to 5 (extremely important)

- **1.1** I want to gain some international experience during my studies.
- **1.2** I want to experience different ways of learning during my studies.
- **1.3** I want to find new friends and meet new people during my studies.
- **1.4** I want to increase the repertoire of new technologies I am familiar with and use as a result of my studies.
- **1.5** I want to feel more confident on a job market as a result of my studies.



Perception of Competencies

Do you consider yourself having the following competencies?



1 (strongly disagree) to 5 (strongly agree)							
2.1 I am interested in learning more about dif	ferent internat	ional pers	pectives on	global pro	blems.		
2.2 I believe in the value of online internatior	nal collaboratio	n as a tool	for my own	n <mark>professio</mark>	nal devel	opment.	
2.3 I am interested in learning about people's	standards and	values and	l how they	see the wo	orld.		
2.4 I am able to adjust to new people, places a	and situations.						
2.5 I can work effectively with people from di	fferent cultura	backgrou	nds than m	ine and un	derstand	others' pe	rspective
2.6 I am interested to learn how people in oth	er countries st	udy and w	ork in my s	ubject area			
2.7 I am able to work in teams to solve proble	ms through col	laboration					
2.8 I explore problems with others to find solu	utions respection	ng everyor	ne's needs.				
2.9 I can use digital technologies to collabora	te with others (e.g., teach	iers, studei	nts) on a ta	sk.		
2. 10 I can find appropriate digital technology	when given a t	ask and ex	periment v	vith it.			
2. 11 I am excited when learning a new digital	technology.						
2. 12 I am confident communicating in English							
2. 13 I can notice if there is a communication p	problem within	my team					
2. 14 I can work towards solving a communicat	tion problem w	ithin my te	eam once l	notice it.			

Students feel stronger in professional competencies, but they miss digital skills and confidence in English

Perception of Competencies Based on University

Do you consider yourself having the following competencies?

		University			
	AUAS	UEW	UAM	VŠB	
	Mean	Mean	Mean	Mean	Sig.
2.1 learning more about different international perspectives	3,73	4,21	4,00	3,91	0.134
2.2 value of online international collaboration	3,66	3,68	4,00	3,74	0.972
2.3 learning about people's standards and values	3,98	3,97	5,00	3,94	0.753
2.4 adjust to new people, places and situations	3,93	4,06	4,00	3,80	0.650
2.5 work effectively with people from different cultural backgrounds	4,00	4,18	3,00	3,57	0.030
2.6 learn how people in other countries study and work	3,80	3,88	3,00	3,83	0.650
2.7 work in teams to solve problems	3,89	4,26	4,00	3,60	0.030
2.8 explore problems with others to find solutions	3,86	3,82	4,00	3,66	0.806
2.9 digital technologies to collaborate with others	3,82	4,21	5 <i>,</i> 00	4,20	0.027
2.10 I can find appropriate digital technology when given a task	3,71	4,09	3,00	3,80	0.806
2.11 I am excited when learning a new digital technology	3,66	3,76	4,00	3,94	0.027
2.12 I am confident communicating in English	4,25	4,47	4,00	3,23	0.700
2.13 I can notice if there is a communication problem	3,86	4,09	3,00	3,74	0.017
2.14 I can work towards solving a communication problem	3,93	3,76	3,00	3,77	0.174

👖 DOit!

Significant differences were identified among the university students in terms of teamwork, working with people from different cultural backgrounds, noticing a communication problem or learning a new digital technology

COIL Assessment - feelings of participants

Are there any **feelings** (positive or negative) you would like to share before participating in a COIL project?

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- Most of students felt excited, eager to work in international environment, curious. It seems interesting that approx. half of students seemed not have either positive or negative feelings. It seems like some people are really skeptical about the outcome of international work, worrying about technical issues, not being excited at all, even didn't like the idea. As mentioned in previous surveys' results the language barriers cause the anxiety.
- There is connection between the age of students, the more experienced they are the more skeptical and less excited there was.



After COIL Survey



Assessed COILs

Methodology of After COIL Survey

Research Method	Online survey
Sampling Method	Convenience Sampling
Sampling Size	153 respondents

Course	Frequency	Percent
Cross Cultural Awareness	70	45,8
Economics of International Trade	18	11,8
Megatrends in International Business	18	11,8
International Monetary Relations	13	8,5
International Marketing	9	5,9
ESG in Financial Management	8	5,2
Personal Income Tax	7	4,6
Age Management and Occupational Health and Safety	3	2
Not mentioned	7	4,6
Total	153	100



Sample Structure – After COIL Survey

Level of study	Frequency	Percent
Bc	90	66,2
MSc	46	33,8
Total	136	100
Type of study	Frequency	Percent
Full-time student	128	94,1
Part-time student	8	5,9
Total	136	100
ERASMUS student	Frequency	Percent
No	117	86,0
yes	19	14,0
Total	136	100
Participation on mobility	Frequency	Percent
No	100	73,5
Yes, once	23	16,9
Yes, twice and more times	13	9,6
Total	136	100
Respondent age	Frequency	Percent
16-18	22	16,2
19-21	52	38,2
22-24	42	30,9
25-27	17	12,5
28 +	3	2,2
Total	136	100

Country	Frequency	Percent
Australia	1	0,7
Bulgaria	3	2,2
Canada	1	0,7
Czech Republic	38	27,9
Netherlands	36	26,5
Equadoria	1	0,7
Germany	1	0,7
Ghana	1	0,7
India	1	0,7
Ireland	1	0,7
Italy	2	1,5
Malaysia	1	0,7
Mexico	2	1,5
Morocco	1	0,7
Palestine	1	0,7
Poland	13	9,6
Sovakia	4	2,9
Spain	1	0,7
Taiwan	2	1,5
Turkey	19	14
Ukrainia	5	3,7
Romania	1	0,7
Total	136	100

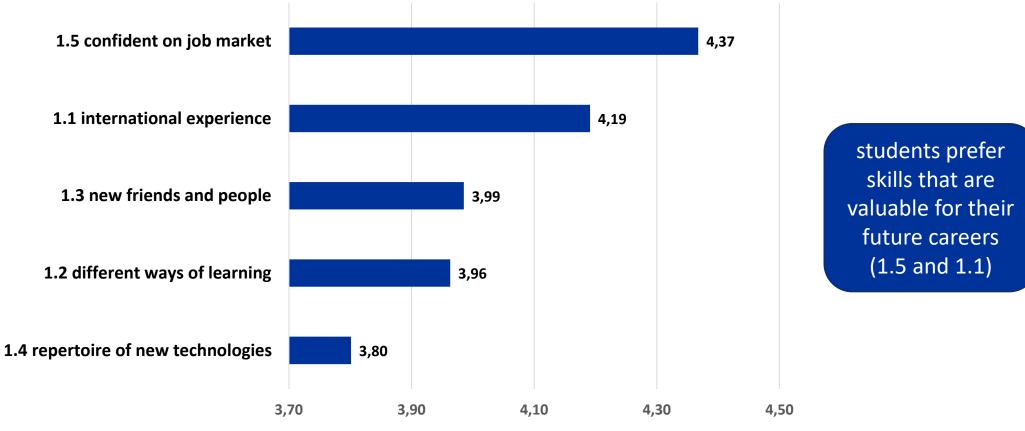
Previous hybrid collaboration experience	Frequency	Percent
No	65	47,8
Yes, once	40	29,4
Yes, twice and more	31	22,8
Total	136	100
Previous hybrid collaboration experience	Frequency	Percent
Amsterdam University of Applied Science	56	41,2
University of Economics Wroclaw	24	17,6
VŠB-TU Ostrava	38	27,9
University AMASYA	8	5,9
ŠKODA-AUTO University	8	5,9
HAKKARI University	2	1,5
Total	136	100

the sample structure seems to be disbalanced but reflects the structure of the universe (participation on mobility, ERASMUS+ student, previous hybrid collaboration experience)



Importance of Gaining Various Experiences

How important is it for you to gain various experiences during your studies?

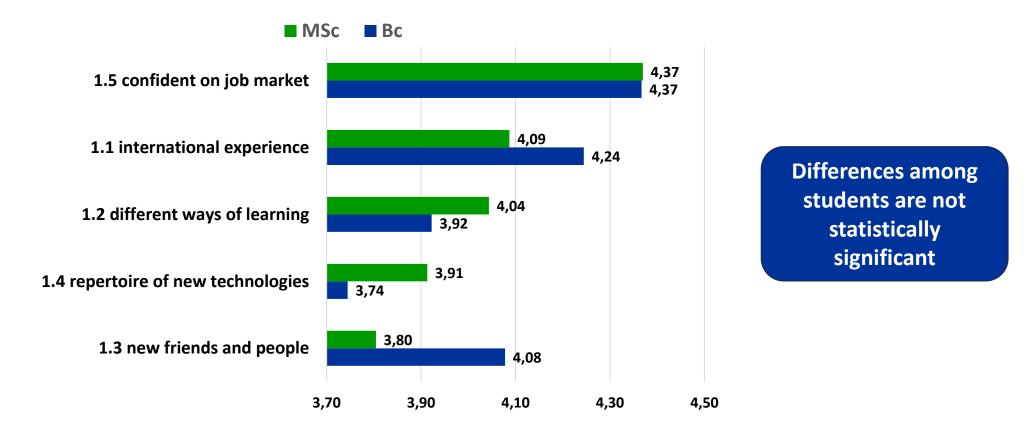


1 (not important at all) to 5 (extremely important)

- **1.1** I want to gain some international experience during my studies.
- **1.2** I want to experience different ways of learning during my studies.
- **1.3** I want to find new friends and meet new people during my studies.
- **1.4** I want to increase the repertoire of new technologies I am familiar with and use as a result of my studies.
- **1.5** I want to feel more confident on a job market as a result of my studies.
 - iket as a result of my studies.

Importance of Gaining Various Experiences Based on Level of Study

How important is it for you to gain various experiences during your studies?



1 (not important at all) to 5 (extremely important)

- **1.1** I want to gain some international experience during my studies.
- **1.2** I want to experience different ways of learning during my studies.
- **1.3** I want to find new friends and meet new people during my studies.
- **1.4** I want to increase the repertoire of new technologies I am familiar with and use as a result of my studies.
- **1.5** I want to feel more confident on a job market as a result of my studies.



Importance of Gaining Various Experiences Based on Previous Study Mobility

How important is it for you to gain various experiences during your studies?

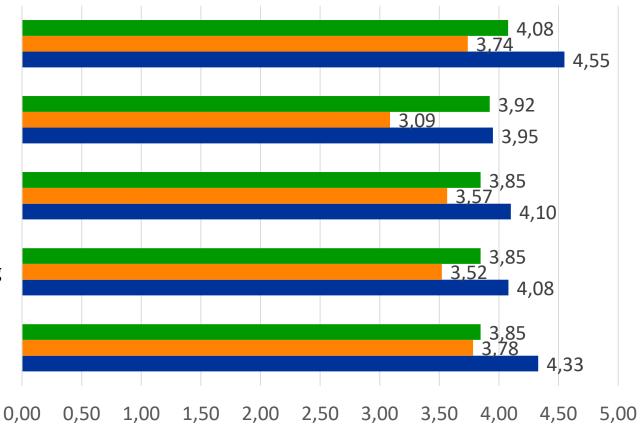
1.5 I want to feel more confident on a job market

1.4 increase the repertoire of new technologies

1.3 I want to find new friends and meet new people

1.2 I want to experience different ways of learning

1.1 I want to gain some international experience



■ Yes, twice ■ Yes, once ■ No

1 (not important at all) to 5 (extremely important)

- **1.1** I want to gain some international experience during my studies.
- **1.2** I want to experience different ways of learning during my studies.
- **1.3 I want to find new friends and meet new people during my studies.**
- 1.4 I want to increase the repertoire of new technologies I am familiar with and use as a result of my studies.
- 1.5 I want to feel more confident on a job market as a result of my studies.

Students who have one study mobility experience differ significantly in all statements agreement rate



Importance of Gaining Various Experiences Based on Attended Course

How important is it for you to gain various experiences during your studies?

	Economics of International Trade	Cross Cultural Awareness	International Monetary Relations	Megatrends in International Business	Personal Income Tax	Age Management and Occupational Health and Safety	Effects of Climate change	Chinese students communication	Foreign Trade	Intercultural Management	
	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Sig.
1.1 I want to gain some international experience	5,00	4,64	4,40	2,00	4,07	4,36	4,38	4,18	3,20	5,00	0.001
1.2 I want to experience different ways of learning	5,00	4,00	4,00	2,00	4,43	4,09	4,14	3,36	3,40	5,00	0.001
1.3 I want to find new friends and meet new people	5,00	4,71	4,40	2,00	4,00	3,82	4,10	3,82	3,40	3,67	0.021
1.4 increase the repertoire of new technologies	5,00	3,50	4,60	3,00	3,57	4,00	3,72	3,55	4,60	4,17	0.137
1.5 I want to feel more confident on a job market	5,00	4,79	4,60	4,00	4,36	4,45	4,24	4,27	4,20	4,83	0.457

1 (not important at all) to 5 (extremely important)

- **1.1** I want to gain some international experience during my studies.
- **1.2** I want to experience different ways of learning during my studies.
- **1.3** I want to find new friends and meet new people during my studies.
- **1.4** I want to increase the repertoire of new technologies I am familiar with and use as a result of my studies.
- **1.5** I want to feel more confident on a job market as a result of my studies.

There are significant differences between the students based on the course they attended, specifically for the statement 1.1,1.2 and 1.3

Perception of Competencies Based on University

Do you consider yourself having the following competencies?

	AUAS	UEW	VŠB	AMASYA	ŠKODA	Hakkari	
	Mean	Mean	Mean	Mean	Mean	Mean	Sig.
2.1 learning more about different international perspectives	3,79	3,54	4,11	4,50	4,13	5,00	0,037
2.2 value of online international collaboration	3,66	3,33	3,53	4,75	3,00	4,50	0,070
2.3 learning about people's standards and values	3,75	3,63	3,74	4,63	3,88	5,00	0,098
2.4 adjust to new people, places and situations	3,89	4,08	4,08	5,00	3,75	4,50	0,028
2.5 work effectively with people from different cultural backgrounds	3,89	4,00	3,66	4,75	3,75	4,00	0,071
2.6 learn how people in other countries study and work	3,66	3,46	4,03	4,88	3,63	4,50	0,015
2.7 work in teams to solve problems	4,02	4,29	4,03	5,00	3,75	4,00	0,013
2.8 explore problems with others to find solutions	3,80	3,63	3,84	4,75	3,75	4,00	0,099
2.9 digital technologies to collaborate with others	3,88	4,29	4,45	5,00	3,75	5,00	0,001
2.10 I can find appropriate digital technology when given a task	3,75	4,21	3,92	4,88	3,25	4,50	0,006
2.11 I am excited when learning a new digital technology	3,61	3,83	3,71	4,50	2,88	4,50	0,023
2.12 I am confident communicating in English	4,16	4,33	3,47	4,13	3,25	3,50	0,008
2.13 I can notice if there is a communication problem	3,84	4,21	3,97	5,00	3,38	4,50	0,021
2.14 I can work towards solving a communication problem	3,66	3,75	3,71	4,75	3,38	4,00	0,052

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Significant differences were identified between the students from different universities in terms of f. e. using digital technologies to collaborate with others, confidence in English or adjusting to new people, places and situations.



COIL Assessment

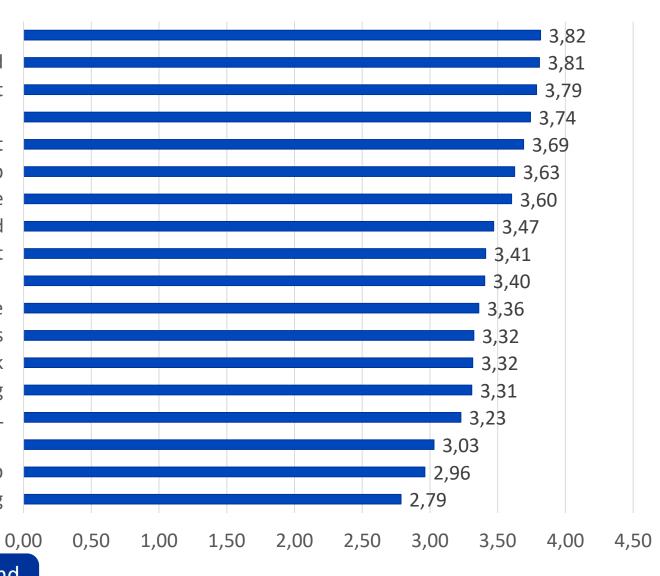
What were your experiences with your recent participation in COIL?

1 (strongly agree) to 5 (strongly agree)

- 3.1 goals and tasks of my COIL project were clearly explained
- **3.2 I am satisfied with the digital platform used**
- 3.3 I find the information on evaluation criteria sufficient
- **3.4** the workload (time commitment) on the project was adequate
- **3.5 I find the project tasks complicated and time consuming**
- **3.6 I faced some problems in organizing meetings**
- 3.7 workload of the project was balanced between team
- 3.8 I faced some communication problems with my group
- 3.9 I enjoyed collaboration with my group
- 3.10 I find COIL a valuable educational method
- **3.11** After COIL I feel better prepared for online project work
- **3.12** I enjoyed taking part in a COIL project
- **3.13 I want to participate in COIL in the future**
- **3.14 I intend to recommend others to participate in COIL**
- 3.15 It is clear for me what are the rules of a COIL project
- **3.16 I find COIL as an efficient way to learn new things**
- **3.17 I find COIL method innovative**
- **3.18 I find COIL exciting**

Individual COIL Assessment

What were your experiences with your recent participation in COIL?



3.2 I am satisfied with the digital platform used 3.1 goals and tasks of my COIL project were clearly explained 3.15 It is clear for me what are the rules of a COIL project 3.4 the workload (time commitment) on the project was adequate 3.3 I find the information on evaluation criteria sufficient 3.9 I enjoyed collaboration with my group 3.17 I find COIL method innovative 3.10 I find COIL a valuable educational method 3.12 I enjoyed taking part in a COIL project 3.7 workload of the project was balanced between team 3.13 I want to participate in COIL in the future 3.16 I find COIL as an efficient way to learn new things 3.11 After COIL I feel better prepared for online project work 3.18 I find COIL exciting 3.14 I intend to recommend others to participate in COIL 3.6 I faced some problems in organizing meetings 3.8 I faced some communication problems with my group

DOit!

3.5 I find the project tasks complicated and time consuming

The highest satisfaction is with the used digital platform and explanation of tasks and goals of COIL project.

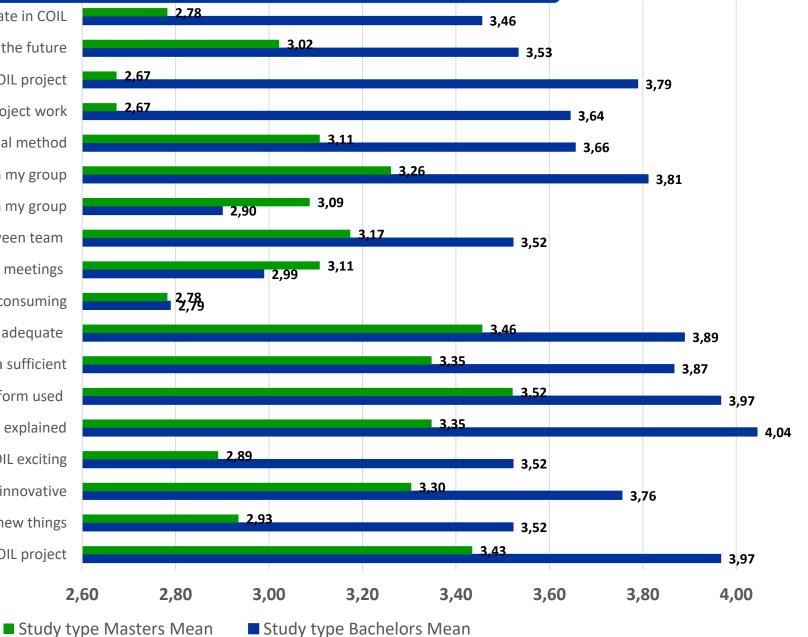


COIL Assessment Based on Study Level

What were your experiences with your recent participation in COIL?

3.14 I intend to recommend others to participate in COIL 3.13 I want to participate in COIL in the future 3.12 I enjoyed taking part in a COIL project 3.11 After COIL I feel better prepared for online project work 3.10 I find COIL a valuable educational method 3.9 I enjoyed collaboration with my group 3.8 I faced some communication problems with my group 3.7 workload of the project was balanced between team 3.6 I faced some problems in organizing meetings 3.5 I find the project tasks complicated and time consuming 3.4 the workload (time commitment) on the project was adequate 3.3 I find the information on evaluation criteria sufficient 3.2 I am satisfied with the digital platform used 3.1 goals and tasks of my COIL project were clearly explained 3.18 I find COIL exciting 3.17 I find COIL method innovative 3.16 I find COIL as an efficient way to learn new things 3.15 It is clear for me what are the rules of a COIL project Students of bachelor programmes evaluate this method better - they find it clearer, more innovative, exciting and

enjoyed group collaboration more.



4,20



COIL Assessment Based on University

What were your experiences with your recent participation in COIL?

	AUAS	UEW	VŠB	AMASYA	ŠKODA	Hakkari	
	Mean	Mean	Mean	Mean	Mean	Mean	Sig.
3.15 It is clear for me what are the rules of a COIL project	3,80	3,54	4,13	4,25	2,25	4,00	0,001
3.16 I find COIL as an efficient way to learn new things	3,34	3,00	3,42	4,38	2,50	4,00	0,007
3.17 I find COIL method innovative	3,39	3,29	4,03	4,63	2,75	4,50	0,001
3.18 I find COIL exciting	3,18	2,92	3,66	4,38	2,50	4,00	0,002
3.1 goals and tasks of my COIL project were clearly explained	3,84	3,38	4,05	4,88	2,50	4,50	0,001
3.2 I am satisfied with the digital platform used	3,71	3 <i>,</i> 58	4,00	4,75	3,25	4,50	0,018
3.3 I find the information on evaluation criteria sufficient	3,79	3,46	3,68	4,50	2,75	4,50	0,011
3.4 the workload (time commitment) on the project was adequate	3,84	3,33	3,84	3,88	3 <i>,</i> 63	4,00	0,539
3.5 I find the project tasks complicated and time consuming	2,70	2,50	3,03	3,25	2,63	3,00	0,532
3.6 I faced some problems in organizing meetings	3,04	3,29	2,97	3,38	2,00	3,50	0,313
3.7 workload of the project was balanced between team	3,45	3,08	3,29	4,63	3 <i>,</i> 38	3,50	0,096
3.8 I faced some communication problems with my group	2,95	2,88	2,97	3,88	2,00	4,50	0,106
3.9 I enjoyed collaboration with my group	3,61	3 <i>,</i> 58	3,47	4,13	3,88	4,50	0,584
3.10 I find COIL a valuable educational method	3,46	3,21	3,47	4,38	3,00	5,00	0,018
3.11 After COIL I feel better prepared for online project work	3,43	2,92	3,26	4,38	2,50	5,00	0,004
3.12 I enjoyed taking part in a COIL project	3,50	2,83	3,47	4,63	2,75	4,50	0,005
3.13 I want to participate in COIL in the future	3,25	3,21	3 <i>,</i> 45	4,50	2,75	4,50	0,016
3.14 I intend to recommend others to participate in COIL	3,13	3,00	3,39	4,38	2,50	4,00	0,014

For ŠKODA University students, individual statements were rated with lower levels of agreement, for example, statements that they would recommend participation in the project to others or would participate again in the future. In general, the highest level of agreement was among students from AMASYA University.



COIL Assessment - feelings of participants

Are there any other **feelings** (positive or negative) you would like to share after participating in your recent COIL project?

What were some main **barriers** that you faced while participating in your recent COIL project?

- Approx. 50% of students didn't share any feelings about the project. Most of those who commented were very happy to take part in the project, improving their language skills, being happy with the level of lectures and teachers.
- Some students noticed that students from China weren't ready to take part in a project mainly because of the language barrier.
- Approx. 50% of students encounters some barriers (more that after BIP project), most of them weren't happy with group collaboration, language obstacles, technical issues and organizational issues. Time difference seemed also to be a problem.





Prior to participating, no significant differences emerged in the first group of statements in the first (Q1). (the third group (Q3) of statements was not measured before)

Only for second group of statements, significant differences prior to COIL course were identified when comparing students from different universities. Wroclaw University rated the statements the highest. They stated that they are able to work effectively with people from different cultural backgrounds, that they are able to work in teams and solve problems, use digital technology to collaborate with others, are excited when they can learn a new digital technology and notice when a communication problem occurs.

2. Difference between students from different courses

Course-specific differences highlighted a high rating in cross-cultural effectiveness and teamwork among certain courses, with statistically significant differences in skills such as problem-solving and digital technology use for international collaboration.

Students who attended "Foreign Trade" course generally rated the project least positively. "Age Management and Occupational Health and Safety" course was rated the most positively.

3. Differences between study level and study mobility experience

Bachelor's students rated the COIL experience more positively than Master's students, finding the method clear, innovative, and exciting, and reporting higher enjoyment from group collaboration.

Students with more mobility abroad reported fewer communication issues and were more likely to recommend COIL to others.

4. Differences between universities

Ratings varied widely by university for the second and third question. AMASYA University participants showed the highest overall project enjoyment and collaboration satisfaction. On the other hand, for the ŠKODA university students it was much lower.

Recommendation for COIL Teachers

- focus on developing soft skills and working in teams
- display examples of how digital technologies can be used to develop competences
- the attention should be paid to the content of the tasks to be addressed in COIL courses, focusing on estimating the time commitment and adapting it to the level of the students
- care should be taken about student communication and teamwork both in the course itself, and immediate action should be taken if problems arise, this is more important for COIL courses than in the case of BIP courses, where personal interaction is possible
- the target group should be taken into account, as there are differences between students according to their level of study and their experience with mobility and involvement in other online hybrid methods