

**Summary report of the definition of teachers' and students' IM competences**



**Responsible person for Activity 1.2-1.3: Dr Athina Patelarou**

**Working group at HMU: Dr Evridiki Patelarou, Dr Athina Patelarou**

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## 1. INTRODUCTION

### 1.1. Rationale

Activities 1.2-1.3 were embedded into Output 1. The purpose of Output 1 was to achieve a general picture on teaching and learning during the international mobility (IM) across Europe. The expected final result and impact of Output 1 was to guide the users in integrating the digital and IM competencies into the educational activities of the International Week and similar events following defined Guidelines to achieve the educational goals regarding learning and teaching in the content of IM and in providing evidence-based support for change, further supporting the integration of the recommendations into the field of IM in higher education across Europe.

Activities 1.2-1.3 aimed to define the competences on IM for students and teachers in higher education in an international content.

### 1.2. Aim and objectives of the review

The aim of Activities 1.2-1.3 was to gather, evaluate and synthesize current evidence about the IM competences developed in higher education for teachers and learners.

For this purpose a competences set review protocol was developed and steps followed were as described in the methodology part below.

## 2. METHODS

HMU team developed the Competencies Set Review Protocol which included the next stages:

- **Stage 1: Literature review-** A review of literature was conducted to identify core competences for teachers and students.
- **Stage 2: Initial set of potential competencies to be considered for inclusion in the IM core competencies set-** The partners developed an initial set of teachers' and students' IM competences based on content analysis and review.

- **Stage 3: Survey to prioritize a first set of IM core competencies-** After the first phase of the study, a competency proposal list was prepared to be evaluated by external reviewers.
- **Stage 4: Delphi Technique to prioritize and gain consensus on the most essential IM core competences-** A Delphi survey was conducted to determine consensus and clarity around the competencies. Two rounds or more of Delphi were conducted.

## 2.1. LITERATURE REVIEW

### 2.1.1. Review protocol

For Activities 1.2-1.3 a review of literature was conducted to identify core competences for teachers. HMU team prepared a protocol to collect data on the existing knowledge on IM competences in higher education both for teachers and students. HMU team formulated the research question and defined the search strategy.

The literature review sought to obtain relevant information on the existing evidence about the IM competences in the two target groups and was driven by the specific review question: “What are core IM competences for students and teachers in higher education?” The search strategy was signed off by WITEA-ID working group and was also advised by an expert librarian regarding the suitability and relevance of the search strategy. The search was concluded on 4<sup>th</sup> November 2021. The review included research papers published in peer- reviewed journals over the last 10 years that focused on IM competences in teachers’ and learners’ education in higher education.

### 2.1.2 Eligibility criteria

The WITEA-ID working group agreed the eligibility criteria based as below:

<b>Inclusion criteria</b>	Studies focusing on IM competences for teacher and students in higher institutions
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### 2.1.3. Information sources

Extensive searches were conducted in online international scientific databases and national databases from each partner’s country. The WITEA-ID working group agreed that CINAHL, Cochrane Library, ScienceDirect, SCOPUS, EBSCO, Pubmed, Web of Science, EMBASE, and

PsycINFO were comprehensive enough for the electronic literature search. The literature database searches among partners were allocated as below:

**Table 1. Search task allocation**

<b>Databases</b>	<b>MENDELU</b>	<b>UOC</b>	<b>IUC</b>	<b>HMU</b>
ScienceDirect			X	
Web of Knowledge				X
SCOPUS		X		
EBSCO	X			
PubMed	X			
Web of Science				X
Google Scholar			X	
PsycINFO		X		

#### **2.1.4. Search strategy**

The WITEA-ID Working Group agreed on the search strategy (MeSH terms, search algorithm), data extraction and quality assessment process.

**Keywords in alphabetical order:** Competences, Curriculum, Higher Education, International Mobility, Mobility Exchange Programs, Skills

**Agreed Search algorithm:** ((skills OR competences OR competencies) AND (students OR learners OR teachers OR educators OR professors) AND (higher education) AND (international mobility OR international framework OR international exchange programmes OR mobility exchange programmes))

**Applied filters:** For data search filters were applied included English and partner native languages, last 10 years of publication and research study design (observational, quasi-experimental and experimental studies, reviews, reports and guidelines).

### **2.1.5. Data collection process**

The agreed search and MeSH terms were entered into databases and pre-filtered article numbers were recorded. Filters as indicated above were applied and total article numbers were recorded.

## **2.2. INITIAL SET OF POTENTIAL COMPETENCES**

The partners developed an initial set of teachers' and students' IM competences based on content analysis and review. After the review two members one of the HMU team and one of the MENDELU team selected the competences found in the literature.

## **2.3 SURVEY TO PRIORITIZE A FIRST SET OF IM COMPETENCES**

After the first phase of the study, this was a qualitative analysis of the existing bibliographical documentation on IM competencies and extraction of the different items, we have retrieved a large number of competencies (much of them were very similar or duplicated) but we had to prepare a competency proposal list to be evaluated for external reviewers. So, 3-5 experts from each country's team were invited to score from 0 (totally inadequate) to 5 (totally adequate) the set of items indicating the degree of adequacy of the content of each item.

The experts were invited via email and received an invitation letter explaining the purpose of this procedure, the previous stages 1 and 2 and were kindly asked to fill in the Excel form and return it to the WITEA-ID team by the end of January 2022. HMU team reviewed the proposals with the comments and add all the scores getting a final punctuation. Then the items in each step were sorted in descending order. The possibility of using a cut-off point was examined in order to select the items to get the definitive competency list to be send to the experts for the stage 4 (Delphi Technique).

## **2.4 DELPHI TECHNIQUE**

A Delphi survey was conducted to determine consensus and clarity around the competencies. Two rounds of Delphi was conducted. One or two members from each project partner participated in the participants of Delphi technique.

**-The participants were members of the consortium from all involved countries – experience in digital teaching or involvement in the international mobility exchange in their institution**

were required. Two rounds of Delphi technique were conducted with the experts discussing on the final version of the set of core IM competences for teachers and students.

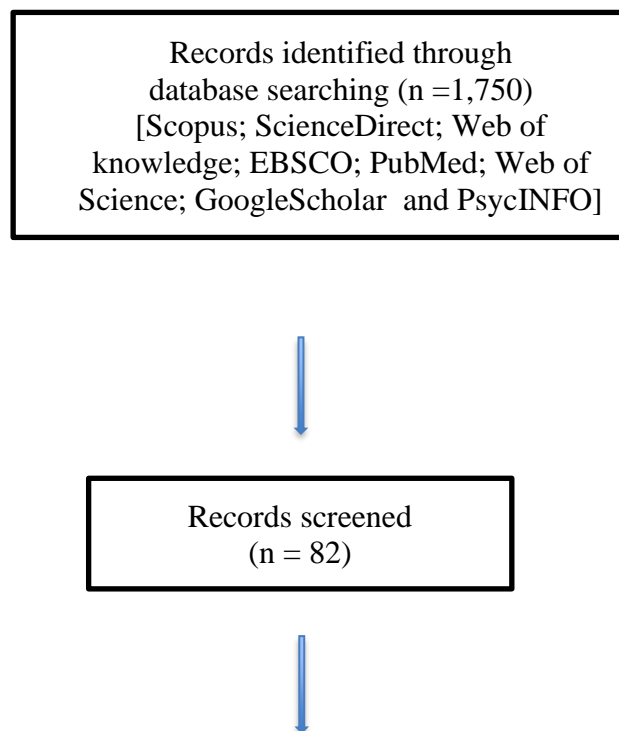
An excel file with the initial set of competences was developed and delivered by mail to the participants. The consortium members who participated in the Delphi technique were asked to participate in two meetings which aimed to establish a consensus on essential IM competences for teachers and students and agree on the final set of IM competences.

### 3 RESULTS

#### 3.1 LITERATURE REVIEW

A total of 1,750 records were retrieved through our searches in Scopus; ScienceDirect; Web of knowledge; EBSCO; PubMed; Web of Science; GoogleScholar and PsycINFO databases. Finally, 28 studies were considered to be appropriate for answering our primary research question.

**Diagram 1. Scientific databases search**



Studies included in review  
(n = 28)

### **3.2 INITIAL SET OF POTENTIAL COMPETENCES**

The partners developed an initial set of teachers' and students' IM competences (based on content analysis and review).

After the review two members one of the HMU team and one of the MENDELU team selected the competencies found in the literature and developed the first version which included 40 competencies. The duplicated competencies and those that were not adequate to the main objective of the review were eliminated. The use of a cut-off point was not agreed as in this case a number of competences of major importance would be eliminated and finally excluded from the final list.

This version was sent to the project's teams for comments and afterwards the team proceeded to the stage 3.



**Table 2. Initial list of IM competences retrieved after the literature review (in alphabetical order)**

<b>Initial list of IM competences</b>	
	1. Academic skills (and knowledge enhancement)
	2. Analytical skills (and knowledge enhancement)
	3. Cognitive competence
	4. Communication skills (including inter-cultural communication)
	5. Confidence
	6. Creativity
	7. Critical thinking and reflection
	8. Cross-cultural awareness and sensitivity
	9. Curiosity
	10. Decision-making
	11. Divergent thinking
	12. Educational knowledge
	13. Flexibility/adaptability
	14. Independent learning
	15. Initiative and enterprise
	16. Inter-cultural skills, understanding, and sensitivity
	17. Inter-personal skills, competence, and connections
	18. Intra-personal competence
	19. Language competence
	20. Leadership abilities
	21. Maturity and personal growth
	22. Metacognition
	23. Motivation
	24. Organizational skills
	25. Personal skills
	26. Problem-solving
	27. Professional skills

	28. Reflexivity
	29. Responsibility
	30. Sector competencies/skills
	31. Self-management
	32. Self-reflection
	33. Self-regulation
	34. Social networking (and knowledge)
	35. Social skills
	36. Socialization skills (ability to adapt to a social context)
	37. Teamwork and ability to work with others (including those from different cultural context)
	38. Technical knowledge
	39. Tolerance
	40. Ability to pass on skills and qualities to others

### 3.3 SURVEY TO PRIORITIZE A FIRST SET OF IM COMPETENCES

Following the Competencies Set Review Protocol and after the Stage 1: Literature review and Stage 2: Initial set of potential competencies to be considered for inclusion in the IM core competencies set 17 experts from all partners participated in the Stage 3: Survey to prioritize a first set of IM core competencies. The competency proposal list with 40 items was evaluated by external reviewers from all partner countries.

**Table 3. Experts' Characteristics**

		Age	Sex	Affiliation	Experience (years)	Current role
<b>UOC</b>	Expert 1	53	F	Department of International Relations	20	Acting head, Erasmus International Mobility Inter-Institutional Agreements
	Expert 2	55	F	Assistant Professor- Department of Philology	25	Erasmus Departmental Coordinator
	Expert 3	55	M	Assistant Professor- Department of Sociology	25	Deputy Erasmus Coordinator
	Expert 4	54	F	Department of International & Public Relations	30	Acting Head, Erasmus International Mobility
<b>HMU</b>	Expert 1	41	F	Assistant Professor	7	Erasmus Departmental Coordinator, Department of Nursing

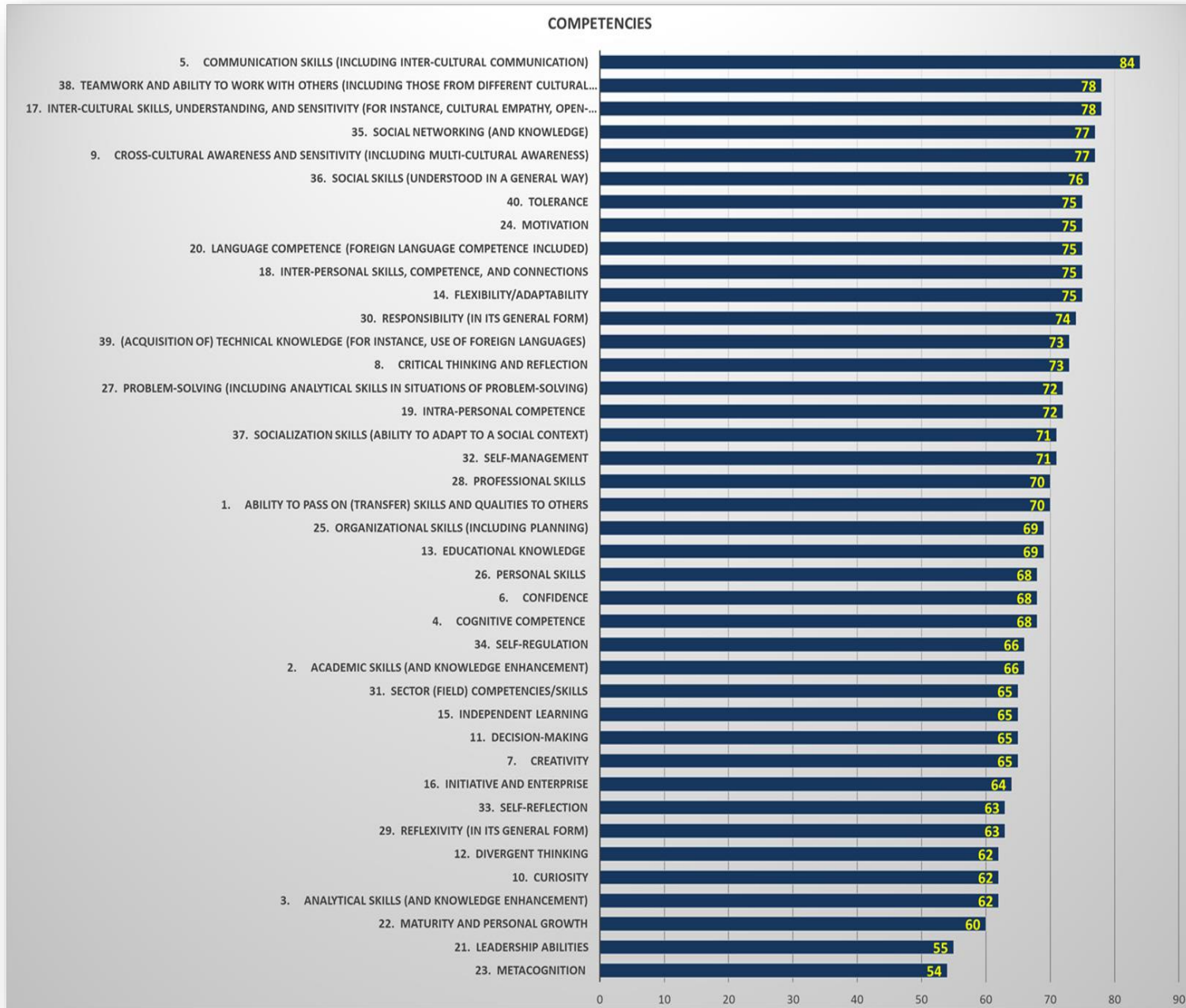
	Expert 2	42	F	Assistant Professor	10	Erasmus Departmental Coordinator
	Expert 3	45	M	Assistant Professor	15	Erasmus Departmental Coordinator
	Expert 4	45	M	Associate Professor	8	Erasmus Departmental Coordinator
<b>MENDELU</b>	Expert 1	32	M	Assistant Professor	3	Assistant Professor - Department of Law and Social Sciences
	Expert 2	29	F	administrative	3	Administrative worker of international relations office.
	Expert 3	45	F	administrative	4	Erasmus Coordinator
	Expert 4	50	F	Assistant Professor	10	English teacher
	Expert 5	42	F	Assistant Professor	17	Faculty of regional Development and International Studies
<b>IUC</b>	Expert 1	57	F	University	32	Head of international relations office.
	Expert 2	43	F	IUC	17	Executive Secretary
	Expert 3	42	F	UniDu	14	Head of international relations office.

**Table 4. Experts' scores & List of competences after prioritization**

<b>IM competences</b>		<b>SCORE</b>
<b>1.</b>	5. Communication skills (including inter-cultural communication)	<b>84</b>
<b>2.</b>	17. Inter-cultural skills, understanding, and sensitivity (for instance, cultural empathy, open-mindedness, willingness to except others different than you, being able to “fit” into other cultural contexts)	<b>78</b>
<b>3.</b>	38. Teamwork and ability to work with others (including those from different cultural context)	<b>78</b>
<b>4.</b>	9. Cross-cultural awareness and sensitivity	<b>77</b>
<b>5.</b>	35. Social networking	<b>77</b>
<b>6.</b>	36. Social skills	<b>76</b>
<b>7.</b>	14. Flexibility/adaptability	<b>75</b>
<b>8.</b>	18. Inter-personal skills, competence, and connections	<b>75</b>
<b>9.</b>	20. Language competence	<b>75</b>
<b>10.</b>	24. Motivation	<b>75</b>
<b>11.</b>	40. Tolerance	<b>75</b>
<b>12.</b>	30. Responsibility	<b>74</b>
<b>13.</b>	8. Critical thinking and reflection	<b>73</b>
<b>14.</b>	39. Technical knowledge	<b>73</b>
<b>15.</b>	19. Intra-personal competence	<b>72</b>
<b>16.</b>	27. Problem-solving	<b>72</b>
<b>17.</b>	32. Self-management	<b>71</b>
<b>18.</b>	37. Socialization skills	<b>71</b>
<b>19.</b>	1. Ability to pass on skills and qualities to others	<b>70</b>
<b>20.</b>	28. Professional skills	<b>70</b>
<b>21.</b>	13. Educational knowledge	<b>69</b>
<b>22.</b>	25. Organizational skills	<b>69</b>
<b>23.</b>	4. Cognitive competence	<b>68</b>
<b>24.</b>	6. Confidence	<b>68</b>
<b>25.</b>	26. Personal skills	<b>68</b>

<b>26.</b>	2. Academic skills	<b>66</b>
<b>27.</b>	34. Self-regulation	<b>66</b>
<b>28.</b>	7. Creativity	<b>65</b>
<b>29.</b>	11. Decision-making	<b>65</b>
<b>30.</b>	15. Independent learning	<b>65</b>
<b>31.</b>	31. Sector competencies/skills	<b>65</b>
<b>32.</b>	16. Initiative and enterprise	<b>64</b>
<b>33.</b>	29. Reflexivity	<b>63</b>
<b>34.</b>	33. Self-reflection	<b>63</b>
<b>35.</b>	3. Analytical skills	<b>62</b>
<b>36.</b>	10. Curiosity	<b>62</b>
<b>37.</b>	12. Divergent thinking	<b>62</b>
<b>38.</b>	22. Maturity and personal growth	<b>60</b>
<b>39.</b>	21. Leadership abilities	<b>55</b>
<b>40.</b>	23. Metacognition	<b>54</b>

**Diagram 2. Diagram of competences after score Prioritization**



### 3.4 DELPHI TECHNIQUE RESULTS- FINAL SET OF COMPETENCES

The Delphi Technique was contacted to determine consensus and clarity around the identified competences and prioritize them. One- two experts for each partner organization participated in two round Delphi and finally the experts agreed to accept the first version of the 40 items list which was developed based on the experts surveys as the final set of core IM competences (Table 5).

**Table 5. Final list of IM competences**

<b>Communication skills (including inter-cultural communication)</b>
Inter-cultural skills, understanding, and sensitivity
Teamwork and ability to work with others
Cross-cultural awareness and sensitivity
Social networking
Social skills
Flexibility/adaptability
Inter-personal skills, competence, and connections
Language competence
Motivation
Tolerance



Responsibility
Critical thinking and reflection
Technical knowledge
Intra-personal competence
Problem-solving
Self-management
Socialization skills
Ability to pass on skills and qualities to others
Professional skills
Educational knowledge
Organizational skills
Cognitive competence
Confidence
Personal skills
Academic skills
Self-regulation
Creativity
Decision-making
Independent learning
Sector competencies/skills

Initiative and enterprise
Reflexivity
Self-reflection
Analytical skills
Curiosity
Divergent thinking
Maturity and personal growth
Leadership abilities
Metacognition

### 3. CONCLUSIONS- RECOMMENDATIONS

The academic literature has increasingly sought to demonstrate the benefits of the Scientific Cooperation Mobility. Among advocates of international student and teacher mobility, there is a long-standing belief that the experience of living and studying/working in a different country is a powerful tool for developing intercultural competencies. Global competencies, intercultural communication and effectiveness, cultural intelligence, cultural literacy and global leadership skills are common terms in the fields of IM.

The present research revealed that participating in international mobility events is an important factor in developing and improving a large amount of competencies as they become involved and integrated into a diverse community. International literature stress that core competences like communication skills, inter-cultural skills, understanding, and sensitivity, teamwork and ability to work with others, cross-cultural awareness and sensitivity and social skills are developed in the field of globalization and IM for both students and teachers.

Thus, institutions will need to update and promote the teaching of new skills based on a new collective and moral consciousness as undermined by the research findings recently indicated in OECD's (2018) Global Competence in order to prepare confident members of the academic community ready to act on issues of universal significance in today's interconnected world. IM competencies have to be cultivated in a spirit of globalization through:

- Enhancement of training in intercultural communication (cultural awareness and competency and intercultural communication) for students and staff.
- Enhancement of research in intercultural communication (cultural awareness and competency and intercultural communication).
- Indicative research areas of intercultural communication include: the values of language training; cultural and global awareness; cultural "competence"; cross-cultural engagement in teams; language studies; sensitivity and willingness to engage with others in a cultural setting; intercultural differences; stereotypes; personal space; values and ethics; verbal versus nonverbal communication.

- Consideration of cross-cultural instructional design when creating an online course and inclusion of the perspectives of international students and staff when establishing programs, building relationships, and improving experiences in higher-education classrooms.
- Enhancement of research in the area of barriers and motivators for IM among students and staff with the aim to link barriers and motivations to show parallels and identify areas for further research and intervention.
- Enhancement of research on the design, development and implementation of effective interventions and strategies to enhance IM among students and staff.
- Establishment Contact with Peers (classmates or colleagues) while the international student and staff is still in his or her home country either through organizations- alumni or through social media networks etc.

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