Workshop 2 "How to facilitate mobilities in STEM"

How can European mobility in the STEM sector be facilitated? Which measures & concrete actions were proposed? What existing tools and resources can support?

Group 1

International barriers

- Lack of information about the host city
- E+ coordinators visit the city and provide information to outgoing students (incl photos etc) on all topics that they might want to know
- ST mobility could be used for this
- Visa issues No more visa requirements
- Communication issues?
- Requirements on EU level; create a common information scheme
- Problems with EWP & other systems, which all work differently
- Simplify requirements of what data is collected and why.

Individual barriers

- Financial barriers, working students (who don't want to lose their jobs), responsibilities at
- home grants might not help because they may still have to pay rent at home, etc.
- Grants! Inclusion support, top-ups
- Housing exchange for students switch homes with other E+ students
- Comfort zone
- Send students in pairs or buddy-system (e.g. local student as an E+ buddy)
- Instead of a preparation session or welcome session for several days in a row, might be good to have it in shorter sessions but spread out more

Institutional barriers

- o Teachers' language skills and courses not being taught in English
- \circ Involve more staff in BIPs (or other ST mobility) so they get more comfortable with
- o teaching in English over a shorter time
- o more resources are still needed
- students aren't motivated to go abroad
- o start informing students earlier, even in secondary school
- use E+ ambassadors
- organise preparatory courses but also conclusion courses where students discuss how the experience can be used later – make them e.g. 2 ECTS each, so that students can get credits for them (esp if they didn't get 30 ECTS abroad)

Group 2

The aim was to discuss barriers and solutions, faced by students who want to go abroad. Most obstacles were identified on the institutional level. For instance, students at some universities only have a few destinations to choose from. The solution for the HEI is to expand each year by one partner or organize an internationalization week at home (invite people to promote mobilities e. g. students, that have already been on a mobility). Another discussed problem is the individual barrier: lack of motivation/ no added value for the students. International experience is not mandatory to be employable, however it is an "add-on". The solution would be to invite HR managers to the university to explain the career paths or give alumni talks. Another major barrier for the students is the cost of spending a term abroad and support the family at home at the same time. It is necessary to increase the support for students with children and advertise already existing opportunities better.

Group 3

Facilitate mobilities:

- o extra credits to convince students; additional incentives for professors
- o to teach in English/for students to attend lectures in English;
- specific challenge is students who change their minds (they have already signed agreements and then come and change their minds)
- educate students about top-up opportunities (e.g. to bring their family, for students with disabilities)

Measures:

- o welcome day/welcome week (familiarize everybody with internationalisation);
- o better support from admin staff (e.g. HR) and international mindset;
- $\circ~$ cancellation interview (if somebody cancels they have to come talk to somebody at the IO);
- o support students and establish one-on-one counselling to help overcome challenges

Group 4

1. Embedding mobility windows in the curriculum (typically in the 2nd or 3rd year), making it easier for students to go abroad without disrupting their study path; Offering flexible program designs, adaptable to student needs and aligned across institutions; Improving recognition of studies and internships completed abroad; Enhancing institutional infrastructure, such as international offices and dedicated coordinators; Promoting outgoing opportunities more actively; Encouraging faculty mobility and structured bilateral agreements.

2. Creating institutional roles or networks (international coordinators, facultylevel advisors); Providing housing solutions (subletting systems for outgoing students to free rooms for incoming students); Offering motivation incentives and visibility for engineering mobility opportunities; Establishing quota systems to ensure fair distribution of mobility chances; Designing mobility-compatible engineering programs, with aligned KPIs and shared metrics across institutions; Promote a narrative of shared European scientific heritage, emphasizing the international history of STEM knowledge; Addressing specific student concerns, e.g., for introverted students in computer science or those fearing disruption to their career path; Provide with a diverse variety of mobilities and decrease their administration demand: BIPs, virtual mobility, engaging internationally at home, buddysystem; Affordable language courses; Offer courses in English, even if the primary study language is different (incl. implement one semester taught in English, which can align with Erasmus+ mobility windows + develop common STEM classes taught in English to standardize options for international students).

3. Erasmus+ framework and related EU

mobility programs (BIPs, short-term, Top-ups); International and academic offices for logistical and procedural support; Internal regulations of the university (for curriculum planning and language policy); Faculty and peer mentoring to guide students through the mobility process; Exchange databases, bilateral agreements, and internship placement programs; Internal institutional systems that track KPIs and facilitate recognition of mobility credits; Existing networks and institutional social media platforms; Use storytelling and media to present historical and contemporary STEM figures who exemplify international collaboration.

4. Low mobility in certain countries (e.g., Ireland), requiring cultural and systemic changes; Housing shortages and lack of capacity in high-demand cities like Amsterdam; Bureaucratic and attitude-related barriers within EU institutions; Need for better communication strategies and institutional alignment to ease mobility logistics; Importance of recognizing diverse student profiles, such as those hesitant to participate due to personality traits or rigid study/career paths.

Group 5

Participants discussed facilitating European mobility in the STEM sector by addressing various barriers. To overcome institutional challenges, they proposed a framework with 70% core modules and 30% electives to enhance flexibility for students abroad. To assist with visa issues, they suggested designating a department to help students navigate the process. Mandatory English courses for staff and free language courses for students were recommended as solutions. Participants emphasized the need for short-term mobility options and proposed a job-sharing portal that allows outgoing students to exchange positions with incoming students. They also highlighted improving grading systems by introducing classes without grades for international students. To encourage studying abroad, participants suggested promoting the cultural benefits of international experiences and fostering cooperation between industries and universities through traineeships and networking opportunities.

Group 6

Facilitated mobilities:

- Embed Erasmus targets in institutional KPIs and extend staff mobility to department heads.
- Build mutual trust via faculty exchanges and shared programme governance.
- \circ Increase flexibility to accommodate term/semester overlaps.
- Offer language-competence courses

Measures:

- o Develop a centralized, institution-level database of courses for students, faculty and
- \circ $\;$ administrators to match curricula and streamline recognition.
- Introduce "Erasmus ambassadors" (peer mentors) and pre-departure preparation to reduce isolation.
- Negotiate national-level cooperation on visa transparency and adapt programmes for
- o partner countries.
- Pilot small "top-up" grants for parents and risk-averse students to incentivize participation.

Supportive tools and resources:

- o erasmusplay.com
- o ESN

Group 7

Participants discussed in groups proposing various measures.

• National level barriers: visa issues (for non-EU participants), bureaucracy;

- Institutional level barriers: lack of partners, difference in academic calenders, lack of staff in IO, lack of elective modules
- Personal level barriers: lack of motivation or need (due to good job chances), social aspects, lack of international mind-set

Group 8

Following barriers were chosen for the solution sprint: Housing, finances, motivation because of age, nomination & application choas (different nomination and application procedure for each university), lack of confidence to go abroad.

<u>Housing solution</u>: distribution of ressources; buddy entwork; connection of incoming and outgoing through an app that will allow to rent the outgoing housing for the incomings. Problem that can occur: app matching, trust, insurance issues.

<u>Finances solution</u>: alternative way of living/spending for example using connections more.

<u>Motivation because of age solution</u>: Short-term BIPs, Top-up, virtual only mobility, projects with industry abroad.

<u>Nomination & application chaos solution</u>: one portal for nominations and applications. Using existing tools: already existing system that bundles OLAs

<u>Lack of confidence to go abroad solution</u>: peer to peer – invite students who did an E+ stay to info sessions for an exchange; BIP, Short-term mobilities encourage students to go abroad for a full semester and provide an international experience for those who would otherwise not get one.