Article

Fostering Sustainability through Mobility Knowledge, Skills, and Attitudes

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Abstract: International mobility programmes embed higher education (HE) students in a learning process in which they gain key knowledge, skills, and attitudes (KSAs), some of them crucial in pursuing the Sustainable Development Goals (SDGs). We propose an innovative theoretical framework that links such KSAs to the UNESCO's Key Competences for Sustainability and specific SDGs. Moreover, we analysed which KSAs are addressed by institutional initiatives to support mobility students, exposing their contribution to the SDGs. Finally, we revised mobile students' needs of institutional support on KSA's acquisition through focus groups. Results show that the KSAs most addressed by the institutional initiatives are related to several SDGs, but mainly to SDG4 (Quality Education) and SDG8 (Decent Work and Economic Growth). Notwithstanding, additional institutional support may be needed for students to leverage their learning outcomes and transform international mobility into a key driver of the necessary social change towards the achievement of SDGs.

1. Introduction

Higher Education Institutions (HEIs) support lifelong learning, high-quality education, equity, and provide different resources to help prepare global citizens to tackle present-day and future challenges. They play an important role in creating a sustainable future for all citizens, which is a common objective of all 17 Sustainable Development Goals (SDGs), see [1] for the case of European Universities.

More specifically, SDG4 aims "to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all". Particularly, higher education (HE) is mentioned in target 4.3: "to ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university" [2]. However, HE is also recognized as a key element in achieving other goals set out in the Agenda [3], e.g., to end poverty (SDG1) or to ensure healthy lives and promote well-being (SDG3).

In particular, the mandates of the 2030 Agenda, which articulates the 17 SDGs, assign a double role to HEIs: they must incorporate the SDGs into their (graduate and undergraduate) teaching and research; and they must be a society-transforming agent, contributing to fulfil the 2030 Agenda [4] through public science and culture in service to society [1]. In other words, universities are required to implement their missions through the framework of sustainability, becoming engines of societal change [1]. In the first place, HEIs have enormous training potential to qualify those who are to implement these goals by providing students and university staff with the knowledge, skills, and attitudes (KSAs) needed to address the complex challenges of sustainable development along any life path they

take [5]. In the second place, research active HEIs are key components of most countries' research and innovation systems, and their basic and applied research can yield relevant results for the advancement in sustainable development as long as they create links with their socioeconomic environment [6]. Finally, most HEIs carry out outreach activities that are in many cases aligned with the values and culture supported by the SDGs, and their increasing human-centred innovation and public science can enhance sustainability through cooperative models [1].

Focusing on the educational mission of HEIs, the global Agenda set through the SDGs places emphasis on the internationalization of HEIs, since it sees international mobility as an important path to fulfil their educational goals [7]. During mobility experiences, students need to constantly adapt to new circumstances, changing their lifestyles, getting acquainted with other cultural forms and, in some cases, even changing habits and attitudes to adapt to the new host culture. Consequently, during their adaptation to a new international context, mobility students gain and strengthen several competences (understood as a combination of KSAs [8,9]) that will be most valuable for their career development [10] and their participation in society as engaged and global citizens [11]. In this sense, although there is previous research on the contribution of HE mobility programmes to the development among students of an engaged and global citizenship [11], to the authors knowledge, there is no existing literature on the specific contribution of mobility programmes (through their learning outcomes) to the global challenges, including the present SDGs.

In this scenario, the supporting role of HEIs to mobile students is of great added-value and, beyond the administrative dimension, it can boost the potential of mobility programmes to indirectly impact on sustainability issues. Indeed, although mobility programmes in general (and the Erasmus+ programme in particular), constitute a key path for universities to prepare students for present-day challenges (many of them related to sustainability), students often experience difficulties to realize the benefits of mobility and leverage them. In this way, HEIs' support services for mobile students on the acknowledgment and maximization of their learning process (in terms of acquired competences) would increase the impact of such mobility experiences not only on students' professional and personal development, but also on their current capacity to contribute to achieve the SDGs.

In this sense, the objectives of the article are to identify how mobility-related KSAs link up to SDGs, and to explore how HEIs support mobility students to gain such mobility-related KSAs. In this way, we can raise awareness of the contribution to SGDs of support services for mobility students.

The article is organized as follows: Section 2 revises the theoretical underpinnings behind the development of KSAs in international mobility experiences and describes the relation between student mobility learning outcomes (KSAs) and SDGs. Section 3 describes in detail the methodology and Section 4 exposes the results of a quantitative and qualitative analysis. Section 5 includes discussion of the results and some concluding remarks.

2. Attaining SDGs through Competence "Training": The Role of International Mobility Programmes

Universities have always had an international dimension, either with respect to the concept of universal knowledge and related research, or regarding the movement of students and scholars [12]. Even so, one of the main challenges that universities are currently facing is their adaptation to an increasingly international globalized world.

The strategies that universities have adopted to respond to this challenge are diverse: they have attempted to strengthen their reputation in society to attract (inter)national students, and to compete for academics and researchers in the international labour market [13]. They should form citizens for a hyper-connected and globalized world, and their graduates should be able to work in constantly changing, intercultural, and complex contexts. Consequently, they have also offered courses in different languages to strengthen the communication skills of their students and attract international students; and they have

developed inter-university mobility plans to enhance student experiences and offer them a differentiating value on the labour market [13].

Both institutional internationalization and student international mobility have an indirect impact on the previously mentioned SDGs, since they prepare students to thrive in an increasing global context, fostering tolerance, equity, and equality values, amongst others [11,14,15].

Ref. [16] suggests that educating sustainable students must rely on "a whole set of knowledge and skills"; therefore, education for sustainable development cannot take the form of a specific subject in an HE degree, but must take place through experiential education, so it is possible to achieve transformative learning. Experiential education consists of students participating in experiences and reflecting on the competences gained through them [16]. Helping students in become aware of the competences learnt maximizes the learning outcome of the activity and can change the way in which they understand their reality [17], i.e., being transformative [18].

Mobile experiences bring students closer to unknown social and cultural realities and economic contexts, providing the necessary setting for student acquisition of competences considered as fundamental in the transformation of society and in the application of sustainability principles at any area of knowledge or professional sphere [16,19].

In the last decades, the academic community has produced several definitions for the concept "competence" [20]. Basically, authors claim that "the degree of intelligence of the individual does not guarantee professional success" [21], because each individual mobilizes different personal characteristics (values, personality traits, motivations, etc. [8]), in a given situation [22,23]. Hence, the concept "competence" is more complex than only observable behaviour, as competences arise from non-observable psychological and social phenomena [8]: it implies knowing how to act responsibly and how to mobilize, integrate, and transfer knowledge, resources and skills in each context [22,23].

Academics and practitioners in the competence field usually rely on the more operational Boyatzis' definition [8] and the individual characteristics are commonly classified into the following three dimensions: knowledge, skills, and attitudes (KSAs) [24]. The Council of Europe [9] defines KSAs as follows:

- Knowledge: This is the "cognitive" dimension of competence. It refers to all the topics and issues individuals know or need to know about to perform their job. It is commonly associated with the "head";
- Skills: this is the "practical" or applied dimension of competence. This dimension refers to what individuals are able to perform or what they need to be able to perform their job. It is commonly associated with the "hands";
- Attitudes: this dimension refers to the attitudes and values that individuals must espouse in order to perform their work effectively. It is commonly associated with the "heart";

Previous research on student mobility revealed a significant consensus on the potential of international experiences for gaining specific KSAs (we term them mobility-related KSAs), due to the intellectual and personal development they undergo [11,14,25–27]. In each stage of the mobile experience, students encounter different challenges and opportunities for KSA acquisition derived from exposition to different cultural, political, and economic settings and ways, becoming better prepared for their future careers [15].

According to Ref. [28], attitudes constitute the starting point of competence development in intercultural contexts, either triggering or hindering learning: students must have positive attitudes toward other cultures, must be aware of global diversity and cultural plurality, and should also respect and appreciate foreign cultures and recognize the benefits of learning about other cultures [29]. Specifically, openness, respect to cultures, curiosity, and discovery are key attitudes related to the development of intercultural competences [28].

Knowledge and skills are individual characteristics that emerge from the mobility experience, but they need an attitudinal background. Regarding knowledge, Ref. [28] highlighted the relevance of cultural self-awareness, deep cultural knowledge, and sociolin-

guistic awareness, understanding the latter as the acquisition of basic local language skills, the articulation of differences in verbal/non-verbal communication and the adjustment of one's speech to accommodate nationals from other cultures [30]. In this line, Ref. [31] affirmed the importance of the knowledge on one's own culture in achieving cultural empathy.

With regard to skills, Ref. [28] argues that individuals must demonstrate a set of skills necessary for them to function competently in an intercultural environment. Although they are an important dimension well-recognized in nearly every global competence-related study, there is substantial disagreement on what exactly these global skills are. They range widely from personal characteristics, such as leadership or self-management, to acquired capabilities such as second language proficiency, adapting to difficult situations, handling stress and communication skills. In order to categorize these large varieties of skills, Ref. [32] considers the construct of skills to comprise three sub-dimensions: (i) the ability to acquire, analyse, evaluate information, use cultural references to think critically and solve practical learning problems; (ii) the skills to listen, observe, and relate, as well as communicate and connect with people from other cultural backgrounds; and (iii) the capacity to use acquired knowledge to extend one's access to learn the unknown.

Table 1 summarizes the main mobility-related KSAs identified in this literature review (see the first two columns of the table) and, thanks to the UNESCO's Key Competences for Sustainability, links them to the specific SDGs, by taking into account the (cognitive, socio-emotional and behavioural) learning objectives designated for each of the SDGs by [33].

Mobility-related KSAs prepare students for future (personal and professional) situations as global citizens [15] and we argue that they are also essential for key sustainability issues. In general terms, there is agreement that sustainable citizens need to have certain key competences that allow them to cope constructively and responsibly with today's world challenges, to understand the complex world in which they live, to be able to collaborate, speak up, and act for positive change [33–37]. The integration in Table 1 of our literature review on mobility-related KSAs, the UNESCO's Key Competences for Sustainability and the SDGs renders explicit the contribution of (the learning outcomes of) mobility programmes to SDGs attainment (see Section 4.1. Establishing the connection between mobility-related KSAs and the SDGs).

In the remainder of this study, we deepen the analysis of this link among mobility-related KSAs and the sustainable challenges of global societies by setting forth the formulation of this theoretical framework. We also revise how HEIs can support mobility students to acquire mobility-related KSAs and maximize the contribution of their mobility programmes to sustainability (in the long term). Within such mobility contexts and from an SDG perspective, it is essential to know in which mobility-related KSAs HEIs support is most needed.

Table 1. Mobility-related knowledge, skills, and attitudes that contribute to SDGs and UNESCO's Key Competences for Sustainability.

Competence Dimension	Sub-Dimension		Related Key Competences for Sustainability	Related SDGs *
Knowledge [28,31,38]	-	Cultural self-awareness: knowledge on one's own culture in the global context.	Systems thinking Self-awareness	1, 2, 3, 4, 5, 8, 10, 16
	-	Deep cultural knowledge: knowledge about the other culture in question.	Collaboration	1, 2, 3, 4, 5, 8, 10, 16
	-	Global knowledge: understanding of global issues, processes, trends, and systems.	Systems thinking Anticipatory	1 to 17
	-	Sociolinguistic awareness.	Self-awareness	4, 8
	-	Specific HE knowledge (HE system, methods, and field-related knowledge).		4, 8
Skills [32,39]	-	Ability to acquire, analyse, evaluate information, use cultural references to think critically, and solve practical learning problems.	Systems thinking Critical thinking Integrated problem-solving Normative	3, 4, 8, 10, 16, 17
	-	Skills to listen, observe, and relate, as well as communicate and connect with people from other cultural backgrounds.	Collaboration	4, 8, 10, 16, 17
	-	Capacity to use acquired knowledge to extend one's access to learn the unknown.	Self-awareness	4, 8
	-	Ability to set goals and priorities through the selection and distribution of tasks and resources. It also encompasses time management, organization, responsibility, and self-reliance.	Strategic Integrated problem-solving	4, 8
Attitudes [28,29]	-	Openness, curiosity, and discovery to intercultural opportunities.	Collaboration	4, 8, 10, 16, 17
	-	Tolerance and respect to cultural differences and ambiguity.	Collaboration	3, 4, 5, 8, 10, 16, 17

* Note: SDG1—no poverty, SDG2—zero hunger, SDG3—good health and well-being, SDG4—quality education, SDG5—gender equality, SDG8—decent work and economic growth, SDG10—reduced inequality, SDG16—peace and justice strong institutions, SDG17—partnerships to achieve the goal.

3. Materials and Methods

The main objective of this study is to explore how universities can leverage mobility programmes to impact sustainable development. In so doing, we considered mobility experiences as learning events beyond the subject-specific contents acquired during lessons at an international university. In fact, the whole Erasmus experience entails the development of a number of soft KSAs essential for the achievement of the SDGs. Consequently, we explored: (i) the relation among mobility-related KSAs and SDGs; (ii) which of these KSAs are targeted by the support services offered to mobile students; and (iii) for which of these KSAs further institutional support is needed.

To perform this analysis, we first established the relationship between the mobility-related KSAs, the UNESCO's Key Competences for Sustainability (eight general competences for sustainability have been identified: systems thinking competence, anticipatory thinking competence, normative competence, strategic competence, collaborative competence, critical thinking competence, self-awareness competence and integrated problem-solving competence.) and the specific (cognitive, socio-emotional and behavioural) learning objectives designated for each of the SDGs by Ref. [33]. The establishment of these con-

nections makes explicit the potential contribution of mobility programs (through KSA development) to the achievement of the different SDGs (see Table 1).

Then, we adopted a two-fold approach, studying the perspective of both institutions and students with regard to mobility-related KSAs. First, we carried out an in-depth analysis of 32 initiatives aimed at improving the Erasmus learning experience, the KSAs they target and their relation to the SDGs. Second, we investigated through focus groups the KSAs that Erasmus students are able to acknowledge and convey, as well as the support they request from (home and host) universities. In so doing, we provide an answer to our research questions: How can universities support mobility students to gain mobility-related KSAs and maximize the contribution of their mobility programmes to sustainability? In mobility contexts, in which KSAs this support is most needed?

The 32 initiatives analysed were previously selected on the basis of different variables, aiming to cover the widest spectrum in each of them: geographical location, stage of mobility (before, during and after mobility), and type of HEIs and related institutions. They came mostly from universities (26–81.25% of the sample) but also from other institutions such as NGOs (2), community colleges (1), institutes (1), companies (1), and foundations (1). Answers came from institutions from 14 different countries, mostly from Europe: Belgium (8), Greece (4), Italy (4), Portugal (3), France (2), Germany (2), Sweden (2), Finland (1), Poland (1), Romania (1), Spain (1) and The Netherlands (1); but also from the United States of America (1) and Canada (1).

The 32 initiatives can be classified into initiatives aimed at supporting students before mobility (17 initiatives) and during mobility (15 initiatives). We intended to also study initiatives aimed at supporting students after mobility, but to our knowledge there are no initiatives of this kind.

As for the analysed initiatives supporting students before they participate in mobility experiences, they showed two distinct purposes: (i) encouraging students to participate in international mobility programmes (including seminars on the international job market and international weeks/days to promote mobility); and (ii) training students in those mobility-related KSAs (comprising pre-mobility language courses, informative meetings prior to mobility and workshops/courses/tools on mobility-related KSAs). As for those initiatives supporting students during mobility, they have the following objectives: (i) the integration of the incoming students in the host city, university and/or culture (including welcome meetings, student accompaniment services and volunteering activities for incoming students); and (ii) to provide explicit support for KSAs development (comprising language courses, a conceptual framework and a survey on international competences gained during volunteering activities while participating in a mobility experience, and a digital learning toolkit and training to maximize the students' personal skills development, these initiatives belonged to an NGO on the field of HE mobility and to a consortium participating in a European project KA 203) (a full description of the 32 initiatives is available in a Technical Annex upon request to the corresponding author).

The full analysis of the initiatives includes a description of the activity, the KSAs targeted and other intended benefits, duration, target audience (including undergraduate, graduate and PHD students at different stages of the mobility experience, as well as academic and administrative staff), assessment, implementation, dissemination, and incentives for participation. However, for the purposes of this study, we focus mainly on KSAs targeted and their relation to the SDGs.

To address our second research question (in mobility contexts, in which KSAs institutional support to students is most needed?) we organized six focus groups. The focus group process consisted of in-depth face-to-face interviews with outgoing and returned Erasmus students, in which they were encouraged to talk and reflect about their perceptions, opinions, beliefs and attitudes towards mobility trough different questions posed by the facilitators. The focus group methodology is a self-contained method that serves as a data source for the identification of new ideas formed within a social context [40].

The six focus groups were held at three universities (Aristotle University of Thessaloniki in Greece, Universidad Autónoma de Madrid in Spain, and Ghent University in Belgium). Specifically, each university conducted two focus groups, one with outgoing students and another one with returned students. In total, 22 students participated in the six focus groups. The duration of each focus group was approximately 1.5 h and experienced researchers facilitated the discussion.

A standardized methodology was applied to design and conduct the focus groups at the three universities, which included specific instructions on: the number of participant students, the method (face to face), audio recording, language used (mother tongue), and questions that should be posed for students' discussion. Specifically, methodological guidelines were developed following the recommendations of Refs. [40–42], among others. These guidelines included aspects related to the whole process (designing, developing, and conducting the focus group), the location, the role and importance of the facilitators, the analysis and reporting, etc. The objective of these standardized recommendations for the three universities was to achieve homogeneous results and to overcome possible difficulties (e.g., preventing a dominant participant from forcing others to agree) that may arise during the design and development of the focus groups. The specific questions discussed by students during focus groups that are relevant for the purposes of this study were the following: what is the purpose of Erasmus? Can you define the KSAs you expect to gain (gained) during your mobility experience? In what way do you think this experience will be valuable for your career? These topics of discussion allowed us to obtain the necessary information to explore our research questions without influencing students' answers.

4. Results

4.1. Establishing the Connection between Mobility-Related KSAs and the SDGs

Table 1 also shows the link between the mobility-related KSAs to the UNESCO's Key Competences for Sustainability. These competences represent what sustainability citizens particularly need to deal with today's complex challenges [33]. They do not replace specific competencies necessary for action in certain situations and contexts, but they encompass these and are more broadly focused.

As can be seen in Table 1, all the UNESCO's Key Competences for Sustainability are linked to the mobility-related KSAs. However, this link is stronger in competences such as collaboration, system thinking, and self-awareness, competences which are impacted by approximately 30% of the mobility-related KSAs identified in the previous section. An example is the connection between the "knowledge of one's own culture in the global context" (mobility-related KSAs) and the systems thinking or self-awareness competences (UNESCO Key Competences for Sustainability), which aim to recognize and understand relationships, analyse complex systems, as well as reflect on one's own role in the local community and in the global society.

The existence of a relationship between the mobility-related KSAs and the UNESCO Key Competences for Sustainability allows us to deduce that mobility-related KSAs are a driver for change and for achieving the goals set out in the SDGs. Logically, mobility-related KSAs encourage the achievement of "an inclusive and equitable quality education and promote lifelong learning opportunities for all" as stated in SDG4. They have a strong impact on SDG8 "decent work and economic growth", because as mobility students gain new experiences, they are able to develop a vision for their own economic life; to broaden their work possibilities; to identify their individual rights and to clarify their work-related needs. In fact, these two SDGs are the only ones addressed by 100% of the mobility-related KSAs. Mobility-related KSAs are also a means to strengthen achievements across many other SDGs, through the development of the capacities required to achieve them. This is the case for SDGs 10 (Reduce Inequality Within and Among Countries) and 16 (Promote Peaceful and Inclusive Societies and Institutions), which are addressed by 64% of mobility-related KSAs, and to a lesser extent for SDGs 3 (Ensure Healthy Lives) and 17 (Partnership for the Goals), which are impacted by 45% of mobility-related KSAs.

By way of example, skills such as the ability to listen, observe, and relate with people from other cultural backgrounds as well as attitudes such as openness towards people from other cultures or respect for cultural diversity are key elements for developing in the mobility-student a sense of belonging to a common humanity, sharing values and responsibilities (learning objectives of different SDGs such as SDG16 or 17).

4.2. Fostering Sustainability through Institutional Support to Mobility-Related Knowledge, Skills and Attitudes

HEIs and other related institutions implement initiatives and services to support mobility students in making the most of their international experience. In this section, we revise the specific KSAs impacted by the 32 analysed initiatives, i.e., the KSAs in which students receive institutional support.

Focusing on the support to knowledge acquisition (Figure 1), we find that, in our sample, the types of knowledge that more initiatives address are cultural knowledge (82.35% before mobility, outgoing students, and 73.3% during mobility, incoming students), self-awareness (76.5% and 73.3%, respectively), and sociolinguistic awareness (47.1% and 80%, respectively). Furthermore, the type of knowledge that less initiatives aimed at improving are technical knowledge (better supported during mobility) and knowledge on the educational context.
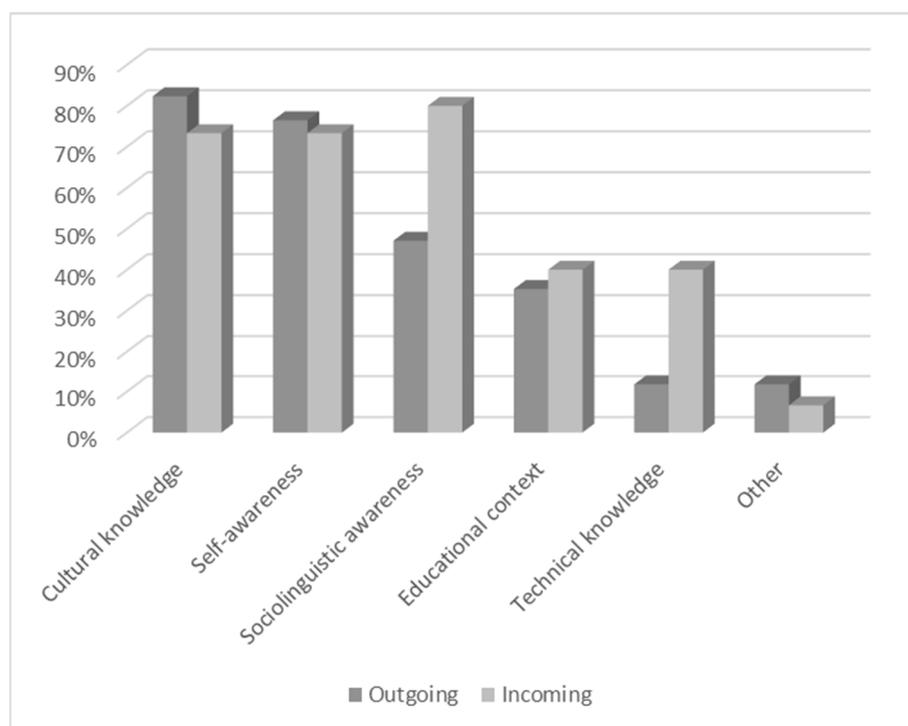

Figure 1. Types of knowledge addressed by the initiatives supporting mobility students before and during mobility.

In other words, the identified initiatives aimed at facilitating two main areas of student personal and professional development: daily life outside their comfort zone (sociolinguistics, cultural awareness, and self-awareness); and although to a minor extent, the new academic life (educational context and technical knowledge). Consequently, these types of knowledge are closely related to Key Competences for Sustainability [33], such as self-awareness, collaboration or systems thinking competences (see Table 1), and therefore are fundamental to address several of the SDGs (mainly SDG4, Quality Education and SDG8, Decent Work and Economic Growth, but also SDGs 1, 2, 3, 5, 8, 10, and 16), especially through the appreciation of cultural diversity and the capacity to analyse global and intercultural issues.

As for the skills (Figure 2), there are some differences between the initiatives supporting outgoing or incoming students. Most initiatives address adaptability (76.5% and 86.7%, respectively) and communication skills (76.5% and 73.3%, respectively). Other skills most initiatives addressed are language skills, especially those aimed at helping students during the mobility (47.1% and 86.7%, respectively), followed by teamwork or problem solving. The main concern seems to be the students' adaptation to their host country. This is considered essential and directly linked to diverse SDGs (mainly SDG4, Quality Education and SDG8, Decent Work and Economic Growth). Additionally, it is worthy highlighting that very few initiatives support the development of key sustainability skills such as creative thinking, analytical, or negotiation skills. This may indicate that, in our sample, these skills are rather addressed through university courses but not through institutional initiatives tailored to mobility students.
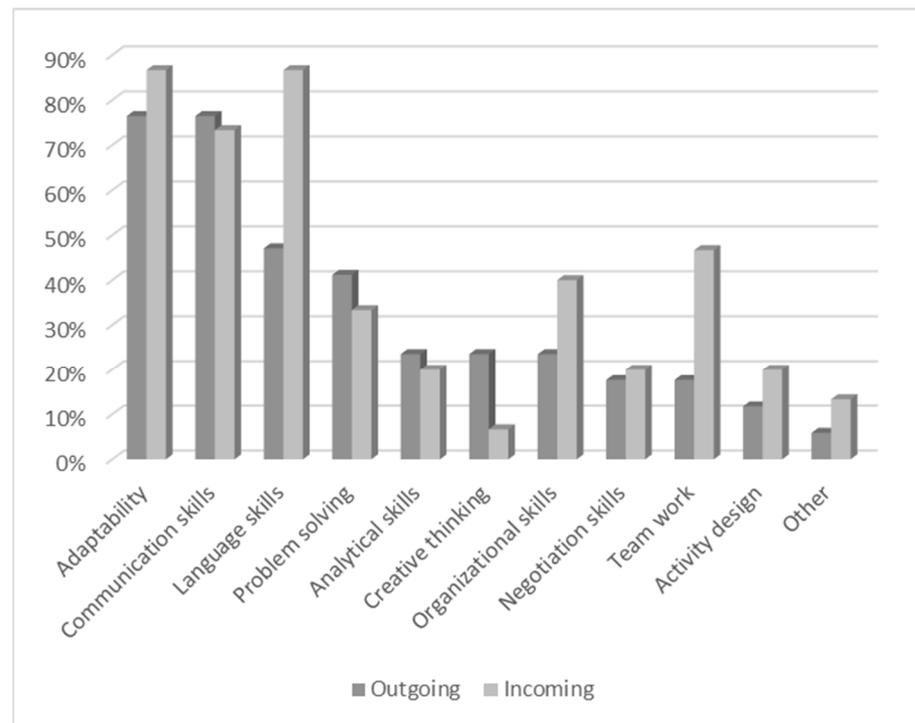

Figure 2. Skills addressed by the initiatives supporting mobility students before and during mobility.

Finally, the main attitudes addressed by those initiatives supporting outgoing and incoming students (Figure 3) are open mindedness (88.2% and 60%, respectively) and transcultural understanding (82.5% and 73.3%, respectively), but also confidence in the case of incoming students (47.1%). Both types of initiatives aim mostly at improving empathic attitudes and mental appraisals that support tolerance and understanding towards foreign cultures, attitudes considered essential to achieve SDGs, mainly SDG4, Quality education; SDG8, Decent Work and Economic Growth; SDG10, Reduced Inequalities; SDG16, Peace, Justice and Strong Institutions; and SDG17, Partnerships for the Goals. Furthermore, more than half of the initiatives in the sample also encouraged attitudes such as proactivity and engagement. On the contrary and surprisingly enough, few initiatives supported the development of students' European identity (52.9% and 40%) or key European values such as equality and equity (35% and 40%). The latter case is noteworthy, since both equality and equity are an essential part of many SDGs such as SDG4, Quality Education; SDG5, Gender Equality; SDG8, Decent Work and Economic Growth; SDG10, Reduced Inequalities; or SDG16, Peace, Justice and Strong Institutions.
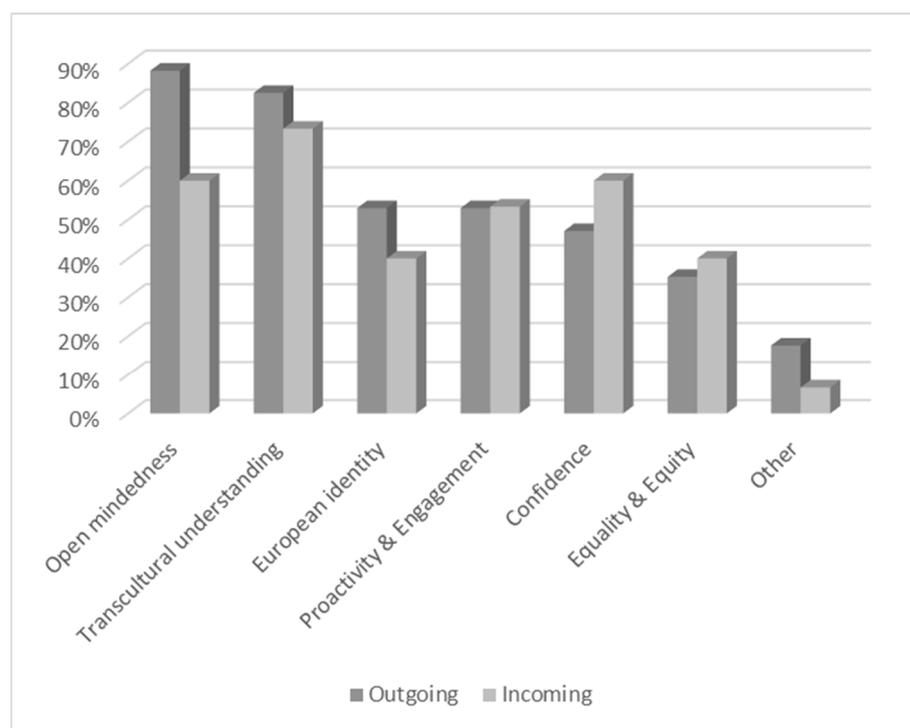
Figure 3. Attitudes addressed by the initiatives supporting mobility students before and during mobility.

4.3. Analysis of the In-Depth Interviews with Students: Conclusions from the Focus Groups in Relation to the SDGs

In this section, we present the main results withdrawn from the discussion among the (outgoing and returned) Erasmus students participating in the focus groups, in order to explore in which KSAs institutional support to students is most needed.

Students mainly described the Erasmus experience as an opportunity for personal and academic growth, which they expected to lead to better career development prospects, these results match the conclusions from our literature review (e.g., [14,15]). Accordingly, mobility students may leverage the mobility learning outcomes (KSAs) for employability purposes, which in turn would impact on sustainability issues (SDG8, Decent Work and Economic Growth).

Most students reported that Erasmus led them to "a European feeling and a more international understanding of the world," which shows that the sense of European belonging is valued by the students, even though it is not developed as a priority in the initiatives analysed in the previous section. Furthermore, it is closely related to the current challenges aimed at SDGs, which can only be addressed through the appreciation of cultural diversity and the acknowledgement of the cooperation importance. Consequently, students may need institutional support to understand the specificities of their culture in an international context and to integrate the European values and culture in a global understanding of their citizenship.

On the specific subject of competence development, both outgoing and returned students provided similar answers for the KSAs they expect to develop/have developed, which may entail that Erasmus+ fulfils students' expectations in this area. Regarding knowledge, both outgoing and returned students commented on academic or subject related knowledge (experiencing new learning techniques and methods of teaching), non-native languages knowledge, etc., knowledge related to SDGs 4 (Quality Education) and 8 (Decent Work and Economic Growth) were the most mentioned. Nevertheless, returned students also mentioned the attainment of additional kinds of knowledge necessary to better understand the rest of the SDGs and the challenges associated to sustainability:

socio-political knowledge (through their interaction with new ways of life, medical systems, history, and different approaches to politics, ecology, feminism, religion, etc.) and cultural knowledge and transcultural understanding (both on the host country and the home country of other international students).

As for the skills expected to be gained during mobility, outgoing students mentioned their expectations on improving their social and language skills and becoming more independent. They expected to become better able to apply the knowledge acquired in their HE training (which can impact a wide spectrum of SGDs) and to be able to analyse and identify their own learning needs in their professional development (SDG4, target "promote lifelong learning opportunities").

In the case of the returned students, they agreed in the improvement of their professional and personal skills, more specifically: adaptability, problem solving, independent living skills, language skills, and communication skills, which helped them to become more self-confident in terms of networking and interacting in intercultural environments. Once again, their answers seem to reveal that they recognize the importance of their own skills for improving their life, in particular for well-being and employment, which is directly related to SDGs 3, 4, and 8, among others.

Finally, regarding attitudes, outgoing and returned students referred to becoming more open-minded and undergoing a deep personal transformation, changing the way others see them. Indeed, returned students expressed having become more confident, self-aware of their abilities, and respectful thanks to their new intercultural understanding. They also became more sensitive to global issues such as ecology, environment, or feminism. All these attitudes are needed to develop global citizenship, to deal with the SDGs and to relate different sustainability challenges to each other.

It may be interesting to provide returned students with possibilities to share these KSAs with their peers and display them at their home institutions in order to further reinforce it through its extrapolation to their home reality and to help students to participate in the achievement of specific SGDs. This may be a key value added in internationalization at home practices helping non-mobile students to develop the necessary attitudes for acquiring mobility-related competences; as we already explained in the literature review, attitudes constitute the starting point of competence development in intercultural contexts [28].

5. Conclusions

HEIs can play a key role as drivers of the necessary social change towards the achievement of SDGs. In this study, we emphasized the importance of internationalization, in terms of acquisition of soft competences during student mobility experiences in the spirit of building responsible global citizenship able to cope with current challenges and SDGs.

Our qualitative approach provides valuable insights for HEIs' practitioners on support services and activities regarding mobility students and SDGs. In fact, in this study, we identified the KSAs that students may gain during mobility experiences and established a link among the mobility-related KSAs and the Key Competences for Sustainability and the SDGs. Moreover, we revised which of those KSAs are encouraged through institutional support services to mobile students through the in-depth analysis of institutional initiatives; and we analysed of the mobility learning outcomes from the perspective of the students' life experience through focus groups. All this information can help practitioners to redesign, coordinate, and complement the different components of their internationalization strategy: it makes explicit the contribution of mobility to sustainability (and employability) issues and it provides insights on the areas in which institutional support is still scarce and the types of assistance that students can welcome in the learning process associated to mobility experiences. It can help in better communicating the relevance of international mobility in forming citizens able to acknowledge and tackle both local and global sustainability issues.

The analysis of the relationship between mobility-related KSAs and the achievement of the SDGs shows that all 17 SDGs are addressed by the mobility-related KSAs, albeit to

different extents, as two of these SDGs (4 and 8) are linked to 100% of the KSAs. While other SDGs are only addressed by some KSAs, which serve as a means to achieve these goals.

Our analysis of the institutional initiatives shows two distinct ways for supporting students' KSA development: (i) those that impact in an indirect way in the student KSA learning process, both through passive initiatives (based on delivering relevant information for the mobility period to students) and active initiatives for student integration in the host university/city/culture; and (ii) those that directly and explicitly address the student KSA development through specific training activities. Combining both types of initiatives would be a good practice since they complement each other.

Few of these services or institutional initiatives address technical knowledge and creative thinking, probably because they are tackled in university courses but not through institutional initiatives tailored to mobility students. Other key values such as equality and equity are hardly addressed in the initiatives analysed. Despite focus groups' results, which show that these attitudes are internalized by Erasmus students, they constitute the basis for many SDGs (e.g., SDG4, Quality Education; SDG5, Gender Quality; or SDG10, Reduced Inequalities), so increasing the institutional support to students in their development and acknowledgment would indirectly strengthen the contribution of HEIs to the attainment of several SDGs. On the contrary, values such as transcultural understanding, seem to focus the efforts of the activities and services provided by HEIs, before and during mobility, aiming at improving empathic attitudes and mental appraisals that support tolerance and understanding towards foreign cultures.

Most interestingly, we did not identify any institutional initiative supporting returning students. This is consistent with the results of the ESN survey [43], in which Erasmus students reported the lack of support services after the mobility period. This absence misses the opportunity to reinforce the mobility learning outcomes (KSAs) by helping students to extrapolate them to their home context, this can create economies of scales and spill overs that may multiply the impact of mobility on SDGs. Furthermore, university practitioners should extend the scope of those initiatives promoting interaction between outgoing, incoming, and returned students.

Although the academic community recognizes the importance of academic and administrative staff of the HEIs in guiding students' acquisition of KSAs during the mobility experience [32,38], we found no initiatives aiming at assisting staff in supporting students to gain mobility-related KSAs, related or not to SDGs. Not having trained staff, universities may be losing a good opportunity to maximize the learning outcomes from mobility programmes.

Finally, it is worth noting that institutions do not gather any feedback from students on the effectiveness of the initiatives analysed here. This is essential to monitor and revise their support services to mobile students, but additionally it would help to make more explicit their learning and SDGs' objectives.

In sum, this research is a starting point of the scientific community in this direction, as the development of crosscutting competences in internationalization experiences to achieve all SDGs is still a little studied field. Although mobility programmes are a fantastic opportunity for students and HEIs, it is still challenging to maximize the students' learning outcomes (KSAs) considering the sustainable development. Future research can expand this idea to new countries and more institutions; or can analyse the actual impact of a specific initiative on SDGs indicators.

References

1. European University Association (EUA). *Universities without Walls. A Vision for 2030*; European University Association: Brussel, Belgium, 2021.
2. United Nations. *Transforming Our World: The 2030 Agenda for Sustainable Development*; General Assembley 70 session; United Nations, Department of Economic and Social Affairs: New York, NY, USA, 2015.
3. SDSN Australia/Pacific. *Getting Started with the SDGs in Universities: A Guide for Universities, Higher Education Institutions, and the Academic Sector*; Australia, New Zealand and Pacific Edition; Sustainable Development Solutions Network—Australia/Pacific: Melbourne, Australia, 2017.
4. Red Española para el Desarrollo Sostenible (REDS). *Cómo evaluar los ODS en las Universidades*; REDS: Madrid, Spain, 2020.
5. Miñano, R.; García Haro, M. *Implementando la Agenda 2030 en la Universidad. Casos Inspiradores*; Red Española para el Desarrollo Sostenible (REDS): Madrid, Spain, 2020.
6. Grimpe, C.; Hussinger, K. Formal and informal knowledge and technology transfer from academia to industry: Complementarity effects and innovation performance. *Ind. Innov.* **2013**, *20*, 683–700. [CrossRef]
7. Egron-Polak, N.L.E.; Marmolejo, F. Higher education internationalization: Adjusting to new landscapes. In *The Globalization of Internationalization: Emerging Voices and Perspectives*; de Wit, H., Gacel-Avila, J., Jones, E., Jooste, N., Eds.; Taylor & Francis: New York, NY, USA, 2017; pp. 31–41.
8. Boyatzis, R.E. *The Competent Manager: A Model for Effective Performance*; John Wliley and Sons: New York, NY, USA, 1982.
9. Council of Europe. Youth Work Competence. 2018. Available online: https://www.coe.int/en/web/youth-portfolio/youth-work-competence (accessed on 2 June 2020).
10. Coelen, R.; Gribble, C. *Internationalization and Employability in Higher Education*; Routledge: London, UK, 2019.
11. Killick, D. Seeing-ourselves-in-the-world: Developing global citizenship through international mobility and campus community. *J. Stud. Int. Educ.* **2012**, *16*, 372–389. [CrossRef]
12. de Wit, H.; Hunter, F.; Howard, L.; Egron-Polak, E. *Internationalization of Higher Education*; European Parliament, Directorate-General for Internal Policies; European Union: Brussels, Belgium, 2015.
13. Petzold, K.; Bucher, H. The Academic Mobility Regime: Analysing Perceptions of Students and Academic Staff. *Int. Rev. Soc. Res.* **2018**, *8*, 98–108. [CrossRef]
14. Shaftel, J.; Shaftel, T.; Ahluwalia, R. International Educational Experience and Intercultural Competence. *Int. J. Bus. Econ.* **2007**, *6*, 25–34.
15. Dvir, Y.; Yemini, M. Mobility as a continuum: European commission mobility policies for schools and higher education. *J. Educ. Policy* **2017**, *32*, 198–210. [CrossRef]
16. Wright, T.S. Sustainability, internationalization, and higher education. *New Dir. Teach. Learn.* **2009**, *118*, 105–115. [CrossRef]
17. Dewey, J. *On Experience, Nature, and Freedom*; The Liberal Arts Press: New York, NY, USA, 1960.
18. Freire, P. *Pedagogy of the Oppressed*; Seabur: New York, NY, USA, 1970.
19. Watt, E. Education Is Key to All of the New Sustainable Development Goals. 2015. Available online: http://theirworld.org/news/education-is-key-to-all-of-the-new-sustainable-development-goals (accessed on 8 June 2020).
20. Camara, B.P. *Dicionário de Competências*, 1st ed.; Editora RH: Lisboa, Portugal, 2017.
21. McClelland, D.C. Testing for Competence rather than Intelligence. *Am. Psychol.* **1973**, *28*, 1–14. [CrossRef] [PubMed]
22. Zarifian, P. *El Modelo de Competencia y los Sistemas Productivos*; Cinterfor: Montevideo, Uruguay, 1999.
23. Le Boterf, G. *Travailler Efficacement en Réseau: Une Compétence Collective*; Editions Eyrolles: Paris, France, 2008.
24. Meng, Q.; Zhu, C.; Cao, C. An exploratory study of Chinese university undergraduates' global competence: Effects of internationalisation at home and motivation. *High. Educ. Q.* **2017**, *71*, 159–181. [CrossRef]
25. Carlson, J.S.; Widaman, K.F. The Effects of Study Abroad during College on Attitudes toward Other Cultures. *Int. J. Intercult. Relat.* **1988**, *12*, 1–17. [CrossRef]

26. Byram, M.; Nichols, A.; Stevens, D. *Languages for Intercultural Communication and Education*; Multilingual Matters: Clevedon, UK, 2001.
27. Marcotte, C.; Desroches, J.; Poupart, I. Preparing Internationally Minded Business Graduates: The Role of International Mobility. *Int. J. Intercult. Relat.* **2007**, *31*, 655–668. [CrossRef]
28. Deardorff, D.K. Identification and assessment of intercultural competence as a student outcome of internationalization. *J. Stud. Int. Educ.* **2006**, *10*, 241–266. [CrossRef]
29. Hunter, W. Knowledge, skills, attitudes, and experiences necessary to become globally competent. UMI Dissertation Services, Lehigh University, Bethlehem, PA, USA, 2004.
30. McKinnon, S. What Is Intercultural Competence? Global Perspectives Project. GCU LEAD. 2012. Available online: https://www.gcu.ac.uk/media/gcalwebv2/theuniversity/centresprojects/globalperspectives/Definition_of_Intercultural_competence.pdf (accessed on 15 January 2020).
31. Reimers, F. Educating for Global Competency. In *International Perspectives on the Goals of Universal Basic and Secondary Education*; Cohen, J.E., Malin, M.B., Eds.; Routledge: New York, NY, USA, 2009; pp. 183–202.
32. Piacentini, M. Developing an International Assessment of Global Competence. *Child. Educ.* **2017**, *96*, 507–510. [CrossRef]
33. UNESCO. *Education for Sustainable Development Goals: Learning Objectives*; UNESCO: Paris, France, 2017.
34. de Haan, G. The development of ESD-related competencies in supportive institutional frameworks. *Int. Rev. Educ.* **2010**, *56*, 315–328. [CrossRef]
35. Wiek, A.; Withycombe, L.; Redman, C.L. Key competencies in sustainability: A reference framework for academic program development. *Sustain. Sci.* **2011**, *6*, 203–218. [CrossRef]
36. Rieckmann, M. Future-oriented higher education: Which key competencies should be fostered through university teaching and learning? *Futures* **2012**, *44*, 127–135. [CrossRef]
37. UNESCO. Global Citizenship Education: Topics and Learning Objectives. 2015. Available online: http://www.gced-compass.com/uploads/2/6/0/5/26050784/unesco_gced.pdf (accessed on 30 May 2020).
38. González, J.; Wagenaar, R. Tuning Educational Structures in Europe. 2003. Available online: http://tuningacademy.org/wp-content/uploads/2014/02/TuningEUI_Final-Report_EN.pdf (accessed on 29 April 2020).
39. Ornellas, A.; Falkner, K.; Stålbrandt, E.E. Enhancing graduates' employability skills through authentic learning approaches. *High. Educ. Ski. Work-Based Learn.* **2018**, *9*, 107–120. [CrossRef]
40. Breen, R.L. A Practical Guide to Focus-Group Research. *J. Geogr. High. Educ.* **2006**, *30*, 463–475. [CrossRef]
41. Krueger, R.A.; Casey, M.A. *Focus Groups: A Practical Guide for Applied Research*, 4th ed.; Sage: San Francisco, CA, USA, 2009.
42. Smithson, J. Using and analysing focus groups: Limitations and possibilities. *Int. J. Soc. Res. Methodol.* **2000**, *3*, 103–119. [CrossRef]
43. Josek, M.; Alonso, I.; Fernández, J.; Pérez-Encinas, A.; Falisse, M.C.; de Votch, L.; Zimonjic, B. The International-Friendliness of Universities: Research Report of the ESNsurvey 2016. Erasmus Student Network AISBL. Available online: https://esn.org/ESNsurvey (accessed on 20 January 2020).