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VIRTUAL MOBILITY AND LEARNING FOR PHD STUDENTS OF SIX EUROPEAN COUNTRIES – STUDENTS’ PROGRAMME EVALUATION

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ABSTRACT

In this paper, the authors, as teachers of the *Virtual Mobility and Learning* ERASMUS Intensive Programme (VML-IP), put forward an analysis of the student’s final evaluation of the Programme as to the most important achievements they assume to have reached. In terms of methodology, this study has an exploratory and descriptive nature; hence, being based on empiric evidence. Thus, in the last face-to-face session, students were asked by the Programme’s coordination to present an overall evaluation of their experience in the VML-IP. Data were collected *in loco*, i.e. through the posters created by each group, as well as the video of the students’ oral presentations. They were later analysed using content analysis. The results unveil that, although the main goal was fulfilled – i.e. to be able to design and implement a course on a ‘Virtual Mobility and Learning’ topic underpinned by solid theoretical background in the area –, the fact is that every group also pointed out several soft competences as a very important part of their experiences, and crucial for their development as students and professionals.

KEYWORDS:

virtual mobility and learning, higher education, programme evaluation, soft competences

INTRODUCTION

In a society that is increasingly information- and knowledge-based, there is a growing need to find more advantageous means to convey information and to communicate. Thus, in addition to physical mobility, other ways have to be found to make communication and information flow more agile, namely through ICT use. Thus, the concept of 'virtual mobility' becomes especially important because of the inevitable "use of computers to retrieve, assess, store, produce, present and exchange information, and to communicate and participate in collaborative networks via the Internet" (Commission of the European Communities, 2005:18).

According to Stonebraker and Hazeltine (2004:209), virtual learning can be defined "as the delivery of learning through electronic mediation which bridges the gap caused when the instructor and student are separated in either time or place". Nonetheless, the tendency is for literature in this field to focus more on the general benefits of virtual mobility and on its social- and community-related impacts (Stonebraker & Hazeltine, 2004), rather than on presenting virtual mobility and learning practical solutions. It is in this scenario that the *Virtual Mobility and Learning* ERASMUS Intensive Programme (VML-IP) appears, as described below.

CONTEXT

The VML-IP was one of the first initiatives that brought together 30 PhD students and teachers from 6 different nationalities (Latvia, Lithuania, Poland, Portugal, Italy and Spain) to develop know-how in the area, i.e. for participants to develop competences in creating, using and endorsing virtual mobility and learning in future teaching processes, as well as to promote evidence-based research to stem future initiatives.

Throughout the programme, the PhD students enrolled in the course organised themselves according to their interests and defined specific sub-topics within the virtual mobility and learning area to work upon. Furthermore, these students organised themselves in 5 groups (6 elements each) – namely, 'Lifelong Learning in Global World', 'Collaborative Work', 'Application of ICT in Different Domains', 'Open Education Resources' and 'Peer Education'.

Even though the VML-IP, as the name says, was all about 'virtual mobility and learning', it was at first delivered in intensive, technology-based face-to-face sessions, to set the foundations for the creation of a virtual learning community. As Lewis and Allan (2005:10) state:

"Many virtual learning communities also involve face-to-face meetings. It is important to note that many virtual learning communities do not carry out all their activities using technology. Many communities combine a range of approaches including online, face-to-face, facilitator-led and resource-based activities."

After the face-to-face sessions, online follow-up sessions within the community were held. The latter were based on the Moodle platform, in order to collaboratively develop research and share papers to be published. In October 2013, in the first follow-up session for the whole community, the participants (students and teachers) presented the work they have developed so far in groups in online environment and had the opportunity to comment on each other's work.

The creation of a virtual learning community, which brought together six international communities (Latvian, Lithuanian, Polish, Portuguese, Italian and Spanish students and teachers), aimed at enabling the participants with innovative ways to manage information and knowledge, as well as lifelong learning. This is believed to have endowed the participants with competitiveness within the complexity of globalization, once it leads to collaborative: i) information and expertise sharing, ii) construction of new knowledge and iii) development of higher order skills. Besides, virtual mobility and learning, when bringing together different

research areas and nationalities, also encourages the creation of innovative (technological) solutions for complex problems, as well as working and learning 'out-of-the-box', promoting creativity within common interests (Lewis & Allan, 2005).

Actually, it is well-known that physical separation can generate a reduced sense of community, disconnectedness, isolation...; consequently, and also because of the duration of the Programme (2 weeks) along with its ambitious objectives, the option was to start with face-to-face sessions. In other words, it would have been too demanding (if possible) for students of six different countries that neither knew each other before the Programme, nor were (most of them) familiarised with virtual learning, to collaborate in the development of competences for creating, using and promoting virtual mobility and learning, in just two weeks. Bearing this in mind, the option was to have face-to-face sessions with the teachers in the morning, group work (with teacher guidance, when needed) in the afternoon and online individual/group work in the evening. This was the solution found to overcome space and time constraints, bringing together international and interdisciplinary know-how, meant to last in the future, through virtual mobility and learning.

This paper aims at presenting a teacher's insight into the students' programme overall evaluation; therefore, in the following sections, the methodology used, as well as an analysis of the results and some final considerations, are put forward.

METHODOLOGY

Considering its context, this study has an exploratory and descriptive nature. In terms of data gathering, in the last face-to-face session, students were asked by the Programme's coordination to think of and comment on the areas in which the groups have improved their performance, i.e. to present an overall evaluation of their experience in the VML-IP has to the competences they have developed. The data used in the study were retrieved in the 5 posters produced by the groups, and, in order to better interpret them, the students' presentations of the posters were video-recorded. Data were analysed using the content analysis technique and, from the data analysis, two major categories emerged (see Figure 1).

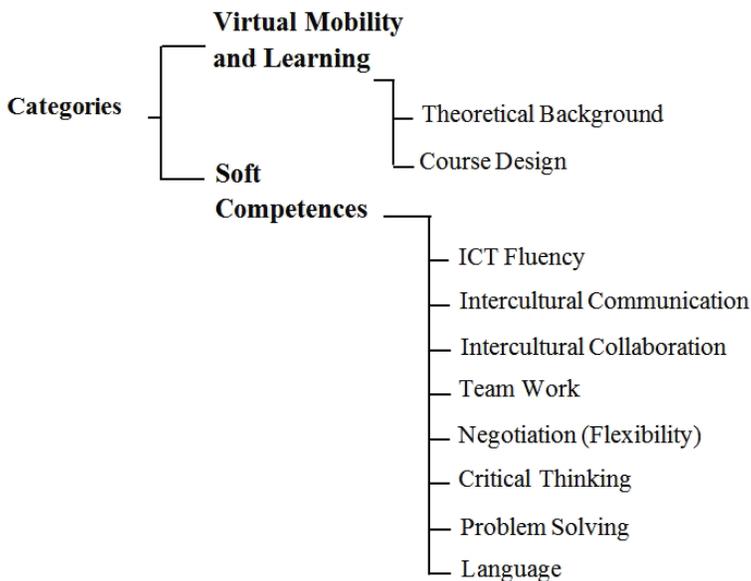


Fig. 1. The students' overall evaluation of the VML-IP: categories

The first major category found was ‘Virtual Mobility and Learning,’ which includes the students’ evaluation of the Programme as to a) the theoretical assumptions that underlie the concept itself and b) how a virtual mobility and learning course could be implemented, in particular concerning the design of learning outcomes and of the students’ assessment, technological possibilities to deliver contents, etc. Therefore, two subcategories were defined, i.e. ‘Theoretical Background’ and ‘Course Design’ (see Figure 1).

Concerning the second major category, it was called ‘Soft Competences’ once the results of the data analysis pointed out that students valued the opportunity to develop and deepen several systemic competences, regarding not only digital and technological fluency (ICT Fluency – see Figure 1), but also international group work, within which some competences are crucial, especially as to communication, collaboration, critical thinking or problem solving. Moreover, ‘Language’ was also considered as very important element, once it could compromise or strengthen the former competences (see Figure 1).

RESULTS

From the beginning, the results of the data analysis immediately unveiled that the main purpose of the VML-IP was fulfilled, once every group assumed to have constructed new knowledge as to the theoretical framework by which the development of a virtual mobility and learning course should be underpinned (see Figure 2).

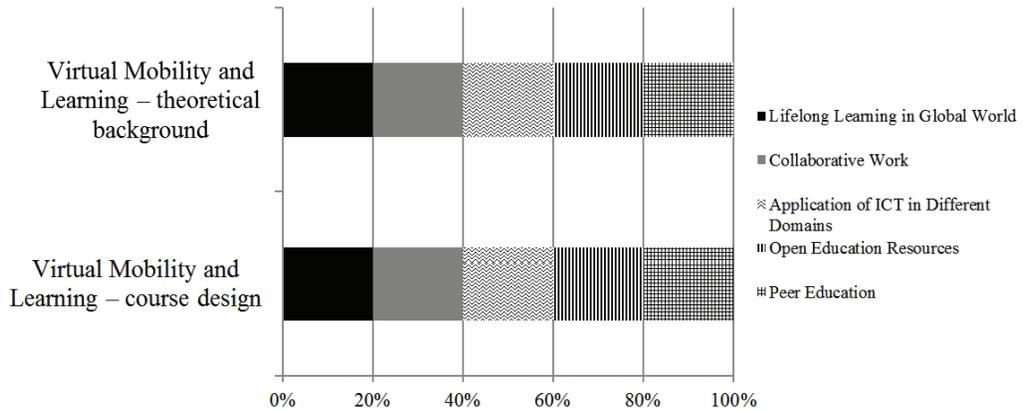


Fig. 2. The students’ overall evaluation of the VML-IP: category *Virtual Mobility and Learning*, subcategories *Theoretical Background* and *Course Design*

In fact, the names given to each group also reinforce this idea, once they bring together contexts, purposes and ways to develop and enhance virtual mobility and learning, i.e. ‘Lifelong Learning in Global World’, ‘Collaborative Work’, ‘Application of ICT in Different Domains’, ‘Open Education Resources’ and ‘Peer Education’ (see Figure 2).

Another aspect that was underlined by every group (100% of the students) was the development of ICT fluency (see Figure 3), in particular as to the use/functionalities of Moodle platform – to structure the course and work in group – and the use of Adobe Connect to create learning resources (in particular, videos).

In fact, and although (most) students are part of the so-called ‘net generation’ (Hartman et al., 2005), the truth is that many still have difficulties in handling ICT. Nevertheless, with the increasing relevance of ICT within society, it is more and more important to ponder how these

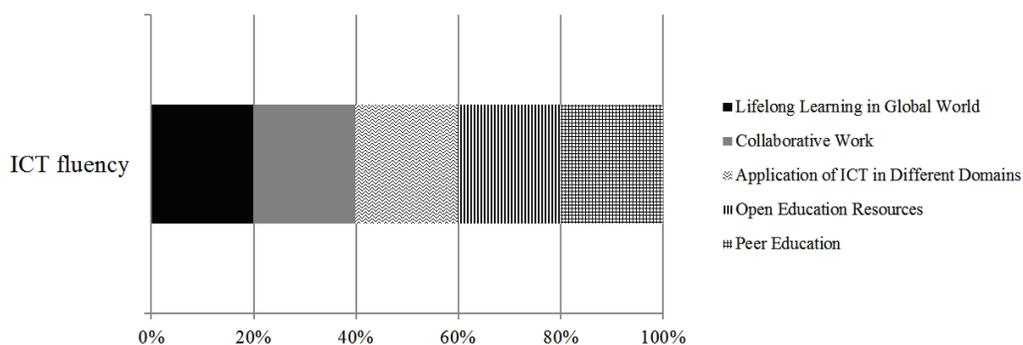


Fig. 3. The students' overall evaluation of the VML-IP: category *Soft Competences*, subcategory *ICT Fluency*

can be integrated into the curriculum, especially because of the implications it may have in teaching and learning. Nonetheless, ICT can be used as instruments or integrated into the curriculum. In general, on the one hand, when ICT are used from an instrumental perspective, it tends not to be planned in advance and to mirror a teacher-centred process that usually does not promote the development of more complex technological competences. On the other hand, ICT integration into the curriculum implies prior planning, because it strongly influences the way students achieve the educational objectives and develop soft competences (i.e. autonomy, collaboration, technological fluency, etc.). In other words, ICT integration in pedagogical context happens when technology is used to meet the pedagogical objectives and simultaneously to encourage meaningful learning. Bearing this in mind and once the participants in this Programme have different nationalities, different contexts and different research fields, it seems to have been very important that the VML-IP design started with a more technological module, which granted, from the beginning, some equity to students in terms of ICT use.

Bringing together several nationalities also gave rise to culture intertwining. Hofstede (1980:25) defines culture as:

"the collective programming of the mind which distinguishes the members of one human group from another (...), the interactive aggregate of common characteristics that influence a human group's response to its environment."

Thus, one of the aims of the VML-IP was really to enrich its outcomes from the cultural point of view, once the courses to be designed by the students should be 'culture friendly', that is, they should take into account cultural aspects of the involved countries that could represent constraints to the (real) implementation of their courses. Consequently, and in terms of intercultural learning environments, as Hasler (2011:268) points out:

"[they] need to be designed in a way that will enable equal participation of members from different cultures, in order to make students aware of their own and foreign cultures, to increase their understanding, to give them the opportunity to develop competencies, to increase their language proficiencies, and to eventually form transcultural or global identities."

In this context, to grant the success of intercultural communication – i.e. situated active relationship, through language, between individuals of different cultural origins –, it was crucial for students to be open-minded, flexible and willing to be aware of cultural differences. This was also highlighted by 80% of the students (4 of the 5 groups, see Figure 4), and 1 of the groups ('Open Education Resources') even pointed out (orally) that cultural intertwining endowed them with a more holistic/comprehensive perspective over virtual mobility and learning and this was, in fact, one of the main pillars the VML-IP was built upon.

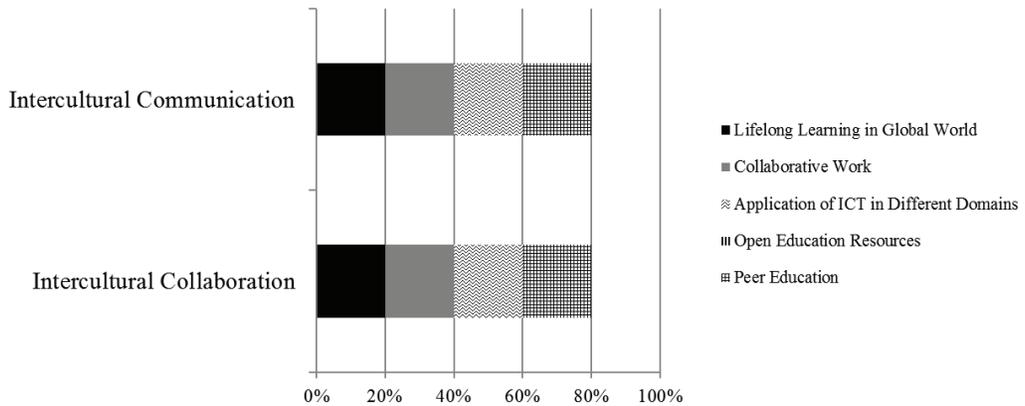


Fig. 4. The students' overall evaluation of the VML-IP: category *Soft Competences*, subcategories *Intercultural Communication* and *Intercultural Collaboration*

As said above, in this Programme, students were asked to design courses that, in the future, could be implemented in each of the six countries involved. Consequently, in the guidelines given to students, it was mentioned that groups should include at least one student of each nationality, because it would be of outmost relevance to foresee any cultural constraints that could be unintentionally included in the course design or even to predict eventual reactions to contents or activities. This was, as well, one of the main learning outcomes of VML-IP – i.e. to be able to act and interact in intercultural virtual settings –, especially because it prepares students for working effectively in culturally heterogeneous environments and encourages them to embed culturally diverse knowledge in both academic and professional contexts (Watson et al., 2008).

As to intercultural literacy, authors such as Hasler and Friedman (2011:266) state that:

"[it] has become one of the core competences in today's globalized world (...) [and can be defined] (...) as a multidimensional construct including the competences, understandings, attitudes, language proficiencies, participation, and identities that are necessary for successful living and working in a cross-cultural environment".

Although it is intimately related with 'Intercultural Communication', 'Intercultural Collaboration' may be considered as a richer concept, once collaboration goes beyond communication, implying effective communication with people from other cultures, but occurring in coordinated interaction and processes, in which group members construct knowledge together through negotiation and sharing (Stahl, Koschmann & Suthers, 2006). In this context, 'Intercultural Collaboration' can be assumed as a far-reaching, imperative soft competence to develop in a globalised world. In fact, the students of 4 groups (80% of the students, see Figure 4) pointed out that, in their experience within the VML-IP, it was one of the most relevant competences they had the opportunity to develop.

As to intercultural communication and collaboration it can also be mentioned that, even though these were not explicitly included in the poster presented by the group 'Open Education Resources', these students felt the need to mention it orally, justifying that these competences were assumed as implied in group work because of the multicultural nature of the groups themselves.

As it was already mentioned, in the beginning of the VML-IP, students were asked to organise themselves in groups and were told that each group should include different

nationalities. This was the structure for multicultural student group work, which, according to Popov et al. (2012:303), implies:

"[the] collaboration of two or more individuals from different (national) cultural backgrounds, who have been assigned interdependent tasks and are jointly responsible for the final results, who see themselves and are seen by others as a collective unit embedded in an academic environment."

Notwithstanding, the true value of intercultural group work lies in the effect it has on the participants and their future actions. Regarding this, 3 groups (60% of the students, see Fig 5) pointed out 'Team Work' as a complex competence that implied a great deal of coordination, leadership and negotiation between the elements of each group, which would not have been developed, if the work were to be done individually. Moreover, from their point of view deeper rather than more superficial approaches to the learning process also tend to emerge from working in groups, because of the discussions it can generate and the fact that it also facilitates greater transfer of previous knowledge to new individual and group learning processes.

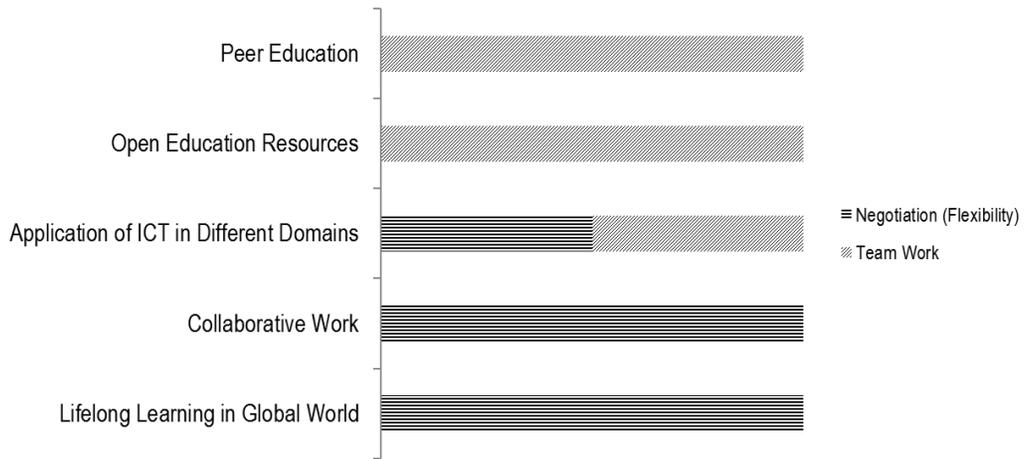


Fig. 5. The students' overall evaluation of the VML-IP: category *Soft Competences*, subcategories *Negotiation (Flexibility)* and *Team Work*

It is, though, interesting to notice that 1 of these groups ('Application of ICT in Different Domains'), as well as the remaining 2 groups ('Lifelong Learning in Global World' and 'Collaborative Work'), also highlighted 'Negotiation (Flexibility)' as central competences (Figure 5). In this case, although working in groups was also underlined in the posters' oral presentations, the focus was on the problems that they had to solve their impasses in group work and manage their differences to reach consensus as to the decisions they had to make within the activity proposed. Actually, the latter 2 groups admitted that they tried hard to deal with the difficulties found and, to some extent, they manage to overcome them. Nevertheless, the group 'Application of ICT in Different Domains', which referred 'Team Work' and 'Negotiation (Flexibility)' (Figure 5), considered that it was very hard to work collaboratively also because of their differences in terms of scientific background and the solution found was to work cooperatively. In other words, instead of sharing decisions to fulfil the activity proposed (to design and implement a 'virtual mobility and learning'-related course) – collaboration –, the students divided the activity into sections, by scientific area (of the students), and the final outcome was mostly based on the individual work of the participants – cooperation.

Critical thinking and problem solving are soft competences that also emerged from the students' evaluation of their experience in VML-IP. According to Paul and Elder (2006):

“Critical thinking is, in short, self-directed, self-disciplined, self-monitored, and self-corrective thinking. It requires rigorous standards of excellence and mindful command of their use. It entails effective communication and problem solving abilities and a commitment to overcome our native egocentrism and sociocentrism.”

Consequently and once it focus on restructuring thought elements implicit in all in-depth reasoning, transcending subject matter divisions, the development of critical thinking should be encouraged and seen as an important competence, especially in the context of Higher Education.

In the students’ programme evaluation, it is, then, relevant to notice that ‘Critical Thinking’ was spontaneously underlined by 40% of the students (2 of 5 groups, see Fig 6).

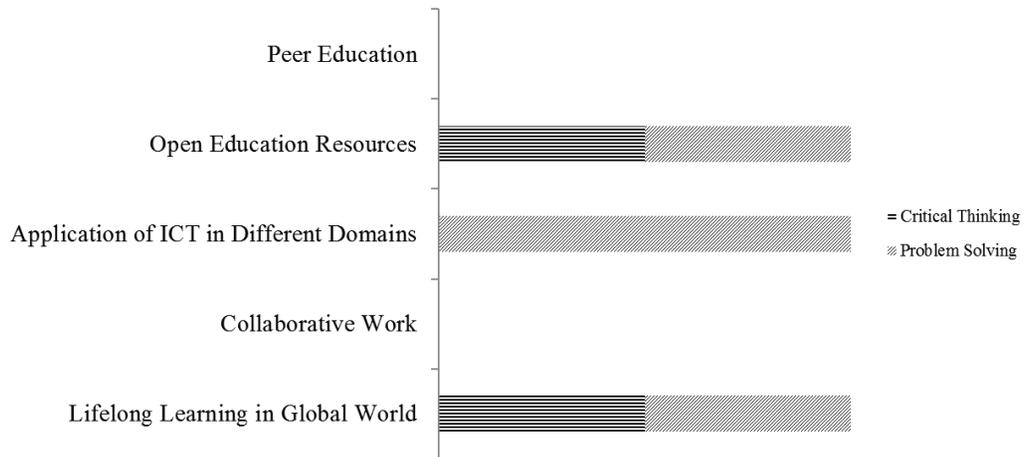


Fig. 6. The students’ overall evaluation of the VML-IP: category *Soft Competences*, subcategories *Critical Thinking* and *Problem Solving*

Moreover, the groups mentioned above (‘Open Education Resources’ and ‘Lifelong Learning in Global World’, see Figure 6) also highlighted ‘Problem Solving’ as deeply interconnected with ‘Critical Thinking’. In other words, it was perceptible and relevant (at least) to these students, the fact that the VML-IP was based on meaningful tasks that were put forward as a problem that each group should solve within the two available weeks, with some guidance from the teachers. Thus, there is evidence that the Programme’s structure, somehow, enabled them to develop their critical thinking as individuals and groups, especially because it was one of the VML-IP coordination’s goals.

From the data analysis, one last category emerged – ‘Language’. In fact, another of the main learning outcomes defined by the VML-IP coordination was the development of foreign language competences, not only as to English (as *lingua franca*) but also as to every official language of the countries brought together in the VML-IP (Latvia, Lithuania, Italy, Poland, Portugal and Spain), as a natural result of mobility. In this context and because the participants enrolled in the Programme not only had manifold mother tongues, but also had different proficiency levels in what regards English, the development of foreign language competences was put forward as an important asset. As presented in Figure 7, 4 groups (80% of the students) highlighted this aspect in written in their posters, but 100% of the groups mentioned its importance orally, i.e. the students pointed out the difficulties felt (and somehow overcome), because of the lack of a good command of English, and how they valued learning some terms and expressions in the native tongues represented in the VML-IP.

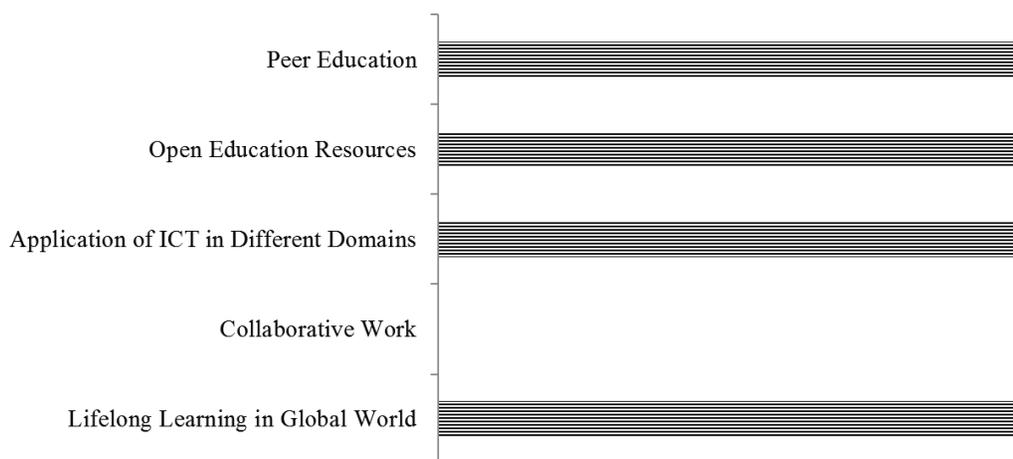


Fig. 7. The students' overall evaluation of the VML-IP: category *Soft Competences*, subcategory *Language*

In the last decades, some researchers and scholars have been discussing if English represents a threat to other national languages and to multilingualism. Authors as House (2003) defend that English should not be seen as a menace, by making a distinction between 'language for communication' and 'language for identification'. In the context of the VML-IP, English was not a language for identification, once the students were not English native speakers; it, though, was defined as language of communication. As Firth (1996:240) describes it, a language of communication serves as a "contact language between persons who share neither a common native tongue nor a common native culture". As to this, the students of the VML-IP were asked by the coordination to do a brief (15m) presentation of their countries in six different days. This was a well-accepted initiative and, out of curiosity, in general the students presented the country's geography, most famous places (monuments), traditional food, but also some terms and expressions in their mother tongue, as part of their national identity (language for identification).

Besides, House (2003:557) still points out "the most important ingredients of a lingua franca: negotiability, variability in terms of speaker proficiency, and openness to an integration of forms of other languages". In other words, the development of language fluency can be seen as an inmost part of the development of most of the aforementioned competences, namely intercultural communication and collaboration, negotiation, critical thinking, among other.

FINAL CONSIDERATIONS

In this work, evidence was found that underpin the assumption that, especially in virtual mobility and learning, the development of specific/core competences should go hand in hand with the development soft competences. In fact, because of the constant and unavoidable technological development, people are impelled to frequently upgrade their knowledge and competences to meet professional (and personal) challenges – not only as to the functionalities of the ICT tools, but also as to the most effective and efficient ways to use ICT to communicate, as well as to convey, search for and validate information, for instance. In fact, this was one of the aspects that emerged in this study, once the initial modules that addressed ICT use from a more technological point of view, from the students' perspective, helped to promote equity among students. Furthermore, the results also highlight that knowledge and competences not only in terms of technological fluency, but also as to language proficiency and intercultural relationships,

are critical and should not be taken for granted, once they can condition (or even inhibit) the success of a virtual mobility and learning community.

As mentioned above, team work and collaboration were also seen, by most students, the teachers and the coordination of VML-IP, as important soft competences to be developed – not only because it brought different people together, but also because the participants were from six different countries and belonged to different scientific fields. It is, though, important to point out that having identical interests/motivation can be crucial in a context of virtual mobility and learning.

On balance, the categories that stemmed from the analysis of the data provided by the students clearly unveil that the way VML-IP was structured and offered was advantageous, in particular because of its theoretical, practical and technological facets. In other words, it drove students to develop competences and knowledge in a real virtual mobility and learning scenario, aiming at creating teaching and learning products also to be applied in real contexts. Besides, this was not a hermetic Programme, once the students enrolled were education professionals of several teaching levels and there were also professionals from other arenas (e.g. lawyers, politicians...) – that can maximize this experience in future virtual mobility and learning initiatives in their countries, and probably from an international and intercultural perspective – taking Virtual Mobility and Learning to a higher level.

REFERENCES

1. Commission of the European Communities (2005). Mobilising the brainpower of Europe: enabling universities to make their full contribution to the Lisbon Strategy. Brussels, COM(2005) 152 final, 20.4.2005. Accessed at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2005:0152:FIN:EN:PDF>. Date of retrieval 13 August 2013.
2. Firth A. (1996). A discursive accomplishment of normality. On 'lingua franca' English and Conversation Analysis. *Journal of Pragmatics*, 26, pp. 237-260.
3. Hartman J., Moskal P. & Dziuban C. (Ed.) (2005). *Educating the Net Generation*. Educause. ISBN 0-9672853-2-1. Accessed at: www.educause.edu/educatingthenetgen/. Date of retrieval 10 May 2013.
4. Hasler B., & Friedman D. A. (2011). Spatial behavior in virtual worlds: Two field studies on inter-avatar distance. Proceedings of the 2011 Conference of the International Communication Association, Boston, MA, May 26–30, pp. 265-304.
5. Hofstede G. (1980). *Culture's consequences: International differences in work-related values*. Thousand Oaks, CA: Sage.
6. House J. (2003). English as Lingua Franca: A threat to multilingualism?, *Journal of Sociolinguistics*, 7(4), pp. 556-578.
7. Lewis D. & Allan B. (2005). *Virtual Learning Communities: A Guide for practioners*. Society for Research into Higher Education & Open University Press, 204 p.
8. Paul R. & Elder L. (2006). *The Miniature Guide to Critical Thinking Concepts and Tools*. Foundation for Critical Thinking Press.
9. Popov V., Brinkman D., Biemans H., Mulder M., Kuznetsov A. & Noroozi O. (2012). Multicultural student group work in higher education An explorative case study on challenges as perceived by students. *International Journal of Intercultural Relations*, 36, pp. 302–317. doi:10.1016/j.ijintrel.2011.09.004.
10. Stahl G., Koschmann T., & Suthers D. (2006). Computer-supported collaborative learning: An historical perspective. In: R. K. Sawyer (Ed.), *Cambridge handbook of the learning sciences* (pp. 409–426). Cambridge, UK: Cambridge University Press.

11. Stonebraker P. & Hazeltine J. (2004). Virtual learning effectiveness – An examination of the process, *The Learning Organization*, Vol. 11 No. 3, USA: Emerald Group Publishing Limited, pp. 209-225. ISSN: 0969-6474. DOI 10.1108/09696470410532987.
12. Watson W., Cooper D., Neri Torres M. & Boyd, G. (2008). Team processes, team conflict, team outcomes, and gender: An examination of U. S. and Mexican learning teams. *International Journal of Intercultural Relations*, 32(6), pp. 524–537.

SANTRAUKA

Šiame straipsnyje Erasmus intensyvioje programoje "Virtualus mobilumas ir studijos" dalyvavę dėstytojai pateikia studentų atlikto šios programos galutinio vertinimo rezultatų analizę, kurioje pristatomi svarbiausi studentų pasiekimai šioje programoje. Metodologiniu požiūriu tai yra žvalgomasis ir aprašomasis tyrimas, grindžiamas empiriniais duomenimis. Paskutiniame kontaktiniame užsiėmime programos kordinatorius paprašė studentų pateikti bendrą jų patirties dalyvaujant virtualaus mobilumo programoje vertinimą. Duomenys buvo surinkti in loco, t.y. kiekvienai student grupei parengiant plakatus ir nufilmuotus studentų pasisakymus. Ši medžiaga vėliau buvo analizuojama taikant turinio (content) analizės metodą. Tyrimo rezultatai atskleidė, kad pagrindinis virtualaus mobilumo programos tikslas – suteikti gebėjimus parengti ir įgyvendinti virtualaus mobilumo ir studijų kursą, pagrįstą šios srities teorijomis buvo sėkmingai įgyvendintas. Visų grupių atstovai taip pat nurodė keletą bendrųjų kompetencijų, kurių lavinimas buvo labai reikšminga dalyvavimo virtualaus mobilumo programoje patirties dalis ir kurios yra itin reikšmingos jų - studentų ir profesionalų lavinimuisi.

PAGRINDINĖS SĄVOKOS:

virtualus mobilumas ir studijos, aukštasis mokslas, programos vertinimas, bendrosios kompetencijos

DELIVERED 2014 February

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