

Matching graduates' skills and labour demands through authentic learning scenarios

Final Report

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4. GESTIÓN Y EJECUCIÓN DEL PROYECTO

4.1 Proporcione una visión general del estado de su proyecto: ¿cuáles son los logros del proyecto hasta ahora? ¿Se están llevando a cabo las actividades y alcanzando los objetivos iniciales del proyecto?

The overall objective of the Skill Up project was to engage university and VET faculty, career practitioners, undergraduates, and employers' stakeholders to create real, practical, scalable ways to enhance new graduates' employability skills by improving the connection between the curricula and the demands of the labour world.

To achieve this overall objective, the following specific objectives were proposed:

1. Map best practices in matching graduates' skills and labour market demands through authentic learning scenarios in partners' HE settings.
2. Improve soft and hard employability skills of undergraduates by means of designing, developing, applying and evaluating authentic learning scenarios in various HE and VET programmes identified by partners as priorities.
3. Enhance access to career counselling and guidance services for undergraduates by training career practitioners by means of a MOOC (Massive Open Online Course).
4. Implement and promote a virtual environment that acts as a hub for attracting stakeholders offering guidance to labour market newcomers and real hands-on experiences in professional world as part of students learning.

Below is a summary of the main accomplishments during the project execution period for each of the specific objectives defined:

Objective 1: Map best practices in matching graduates' skills and labour market demands through authentic learning scenarios in partners' HE settings.

The aim of this phase was to lay the theoretical and methodological foundation of the project and to provide further insights to the design and development of the two financed intellectual outputs (the MOOC and the Hub), identifying and describing good practices in matching graduates' skills and labour market demands from the perspective of authentic learning. To achieve this objective, we employed three methods namely: a focused literature review; the exploratory interviews and the focus group. The activities related to this first objective of the project are described in the Table1.

Phase	Activity	2016				2017									
		S	O	N	D	J	F	M	A	M	J	J	A	S	
Phase 1	Literature review by country				■	■								■	
	First analysis of relevant documents					■									
	In-depth analysis of documents and state of the art by country						■	■	■					■	
Phase 2	Conducting and analysing interviews						■	■						■	
	Drawing up good practices							■							
Phase 3	Designing focus groups							■	■					■	
	Recruiting members								■						
	Conducting focus groups									■					
	Analysing results										■				
Phase 4	Writing final report											■	■	■	■
	Peer review and IAC validation												■	■	
	Publishing results													■	■

Table 1: Phases and activities related to the first objective of the project

The main outputs that have been produced out of the work carried out during this phase of the project are:

- **A report** that describes the theoretical framework and the methodology of the project as well as the good practices identified. The report is downloadable and published in the project website: http://skill-up-project.eu/wp-content/uploads/2017/05/IO1_Report_final_English-1.pdf.
- **An infographic** summarizing the essential employability skills for graduates to acquire and the main elements of an authentic learning environment. The infographic is also published in the project website: http://skill-up-project.eu/wp-content/uploads/2017/05/skill_up_V5.pdf.
- **A Glossary of terms** was defined and published as an accompanying and supportive tool to users in order to provide them with definitions for terms and key concepts that have a specialised meaning in the project, its best practices report and the rest of intellectual outputs. http://skill-up-project.eu/wp-content/uploads/2017/05/Glossary-of-Terms_IO1_Skill-Up.pdf

These three outputs are also accessible directly from the following page of the project website: <http://skill-up-project.eu/results-ios/io1/>.

The results of this first phase of the project were present at:

- The international conference "Transitions, career learning and career management skills. Multidisciplinary and critical perspectives" took place at 19-20 October 2017 at Stockholm University. The paper "Best practices in enhancing graduates' skills for employability: insights from three European countries" presented at the conference is accessible from the project website: http://skill-up-project.eu/wp-content/uploads/2017/05/stockholm_presentation.pdf.
- The Fourth International Conference on Higher Education Advances (*HEAd'18*), June 20-22, 2018 · Valencia, Spain. The paper "Defining a taxonomy of employability skills for 21st-century higher education graduates" was published in the proceedings book of the conference and is downloadable from the conference website: <http://ocs.editorial.upv.es/index.php/HEAD/HEAD18/paper/viewFile/8197/3823>.
- Ornellas, Adriana, Falkner, Kajsa, Edman Stållbrandt, Eva (2018). Enhancing graduates' employability skills through authentic learning approaches. Higher Education, Skills and Work-Based Learning, Vol. 9 Issue: 1, pp.107-120, <https://doi.org/10.1108/HESWBL-04-2018-0049>.

Objective 2: Improve soft and hard employability skills of undergraduates by means of designing, developing, applying and evaluating authentic learning scenarios in various HE and VET programmes identified by partners as priorities.

The aim of this phase was to define a set of indicative principles and guidelines on how authentic learning scenarios can be created, used and evaluated in ways that help bridge the gaps between the formal curricula in HE and VET and the real life/labour market world, so that students acquire relevant soft and hard skills that enhance their employability. To this end, five authentic learning scenarios have been designed and applied in different programmes prioritized by the partners' institutions. The authentic learning scenarios put into practice were:

- Development and Design of a Process Based Information Management. University of Applied Labour Studies (HdBA), Berlin, Germany.
- Authentic Learning in Bachelor Programs. Critical Evaluation from Different Perspectives. Technical University of Applied Sciences (TH Wildau), Germany.
- Building an Authentic Learning Scenario for Learning Finance. Universitat oberta de Catalunya (UOC), Spain.
- Authentic Learning in Administration and Finance on-line Program in Vocational Education Training (VET). Institut de Obert de Catalunya (IOC), Spain.
- Design of a Career Guidance and Counselling (CGC) plan. Stockholm University, Sweden.

The main outputs resulting from this phase of the project were:

- **Students pre-questionnaires and post-questionnaires** applied to gather information from undergraduates on various aspects of employability skills (such as demand, supply, mismatch...) about 400 HE undergraduates in the three partners countries were surveyed in various programmes and courses of the partners institutions. The questionnaires also aimed to evaluate the authentic activities that were implemented. Both pre and post questionnaires can be accessed in the following links:

- Pre-questionnaire: <https://thwildau.lamapoll.de/Skill-Up/>
- Post-questionnaire: <https://thwildau.lamapoll.de/Skill-Up-post>

- **Pilot questionnaire**: Previous to the application of the pre and post questionnaires a pilot questionnaire was applied with undergraduates of four partners institutions. These questionnaires were implemented in three languages: English, German and Catalan. A total of 73 undergraduates answered the questionnaires. The three versions of the questionnaire can be accessed here:

- Questionnaire in Catalan: <https://goo.gl/forms/8fg7PKoPhQ5bLol3>
- Questionnaire in English: <https://goo.gl/forms/FO3g6T0jdaz99idq1>
- Questionnaire in German: <https://goo.gl/forms/c21vj3nXYQsAcDU62>

- **The design of the five authentic scenarios** that can be downloaded from the project website: <http://skill-up-project.eu/results-ios/io2/>.

- **The guidelines** on how to create authentic learning scenarios in higher education to enhance employability skills of students. These guidelines are available both on the project website and on the Hub website. <http://skill-up-project.eu/wp-content/uploads/2019/08/Authentic-learning-handly-guide.pdf>.

- A series of publications reporting the results of the scenarios applied, including the results of the application of the pre and post questionnaires. Some examples are:

-> **Building and Authentic e-learning environment: The case of financial statement analysis** at the IX Annual International Conference on Education and New Learning Technologies. Palma de Mallorca, 2-4 July 2018. Authors: Fitó-Bertran, A.; Martínez-Argüelles, MJ; Plana-Erta, Dolors.

-> Authentic Learning in the on-line program of the Administration and Finance studies in Vocational Education Training (VET). The case: redesigning and analysing the subject of Project on Administration and Finance. At the European Vocational Skills Week (EVSU). Vienna, 5-9 November 2018. Authors: N. Vilanova, R.Candel.

Still concerning the second objective of the project, a **project meeting and a multiplier event** (the ME funded by UOC due to the budget cut suffered by the project) were organised in order to discuss on the application of the scenarios. The multiplier event and the project meeting took place in Barcelona (UOC Premises) on June 19-20, 2017.

Details on the event can be found here: <https://symposium.uoc.edu/11471/detail/seminario-del-proyecto-skill-up-Iconectar-el-puesto-de-trabajo-y-el-aprendizaje-en-la-educacion-sup.html>. Also we have prepared a post in the blog of the project about the event: <http://skill-up-project.eu/2017/06/26/connecting-workplace-and-learning-in-higher-education/>.

Objective 3: Enhance access to career counselling and guidance services for undergraduates by training career practitioners by means of a MOOC (Massive Open Online Course).

The main output resulting from this objective of the project was the [MOOC on e-guidance in higher education to promote graduates' lifelong career development](#). The MOOC aimed at providing career practitioners with the knowledge, strategies and tools necessary for effective guidance in higher education settings. Additionally, the course emphasized ICTs' role in delivering these guidance services. The MOOC's principal target were CGC practitioners working in both higher education and other educational levels previous to tertiary education and students of disciplines such as Labour Relations, Work Sciences, Social Work, Sociology, Psychology or Social Education.

The activities carried out in the previous phases that contributed to the design and production of the MOOC were:

- A virtual **focus group** with different activities including questionnaires to different stakeholders to get in-depth information on how HE and VET institutions are currently developing and integrating employability skills into their programs of study; in which areas new graduates need to improve; and what should be done to strengthen ties between the worlds of education and work. The focus group and questionnaires involved a total of 29 stakeholders including employers' representatives, students close to graduation; alumni representatives, and academic staff and counsellors from the three partner countries institutions. The activities carried out in the online focus group included but were not limited to a common forum for participants' discussion, an engagement activity consisting on a brief questionnaire survey to identify a) cross-disciplinary and specific professional skills that participants believe are crucial today and b) the areas new graduates need to improve from the viewpoint of each group of participants.

The questionnaires can be accessed here:

Questionnaires to labour market representatives: <https://forms.gle/XuuWhGqaSUA5vDuW9>

Questionnaires to students and graduates: <https://forms.gle/WKHj889a4c6zWS5U7>

Questionnaires to lectures: <https://forms.gle/VR4NSr3JBxFJ16498>

Questionnaires to counsellors: <https://forms.gle/3vdPHZp6XesRbXhRA>

All the **activities and the platform** supporting the focus group activities can be found here: (<https://pilots.elearnlab.org/skillup/course/view.php?id=3>). The information summarizing the activities, the platform used etc can be found here: <https://drive.google.com/drive/folders/11ikRWK9bBt0Gkn1BaRympc6pg57VLGxr>. A results analysis can be found here: https://drive.google.com/drive/folders/1f8wsHZ5T6i_VC8kD_wAc10AaA8NfoqqX

- A **benchmarking** has been completed and target audiences have been defined: graduates in disciplines such as Labor Relations, Work Sciences, Social Work, Sociology, Psychology and Social Education, among others, as well as the entire educational community, including other educational levels and sectors: <https://drive.google.com/drive/folders/0B12d2krvNnScNTBBdmVhb3Q4UDA>.

- A **Round-table** on career guidance in HE and the role of ICT in counselling organised and funded by the Project Coordinator (UOC) on 23rd January 2018. In this panel the project Consortium aimed at bringing together experts from Sweden and Spain to revolve around some reflective questions that gave rise to further insights on the role of guidance and counselling in higher education settings. Extensive information on the round-table can be found at the following links:

-> <http://skill-up-project.eu/2018/01/23/skill-up-project-organises-a-round-table-on-career-guidance-in-he-and-the-role-of-ict-in-counselling/>.

-> http://www.uoc.edu/opencms_portal2/opencms/EN/ri/difusio-publicacions/noticies/noticies-OSRT/2018/noticia_skillups.html.

- A **promotional video** (<https://www.youtube.com/watch?v=W-KVCrfigT0>) used by partners to disseminate the course.

- The conceptualization of the course was presented and discussed in the multiplier event of the project "**Extending the scope: Authentic learning, and Career Counseling and Guidance in Higher Education**" held in Stockholm on September 20, 2018. More information about the multiplier event can be found here <http://skill-up-project.eu/multiplier-events/multiplier-s/>.

The first edition of the MOOC started on 25 February 2019 and lasted for 5 weeks. Each week was dedicated to a module of content taking about four to five hours to complete.

- Module 1: Introduction to the MOOC
- Module 2: The function of career guidance and counselling in times of uncertainty
- Module 3: A lifelong approach to career guidance and counselling in higher education
- Module 4: The use of ICT in delivering lifelong guidance
- Module 5: Summary and assessment

The MOOC reach more than 300 registered from about 20 countries. 70% of those registered currently working in career guidance and counselling and 50% working in CGC in university settings. The MOOC had a

very high completion rate of 29%, despite the fact that 70% of the participants declared that this was the first MOOC they had enrolled in.

A detailed report with the main results of the pre and post questionnaire applied with the MOOC participants can be found here: <https://docs.google.com/document/d/1IWTelKl1Mgec-2WSmeq4Ms9GVFYUYkOU/edit>.

Also we have prepared some infographics to disseminate the main MOOC figures that can be found here:

- <https://drive.google.com/drive/folders/1WPv5vCOSNqT4yKVSyzXVVIKGMg1zZdIO>.

- <https://twitter.com/aornellasbcn/status/1118158324640489472>.

Up to now, the results of the MOOC were presented in the project's final multiplier event "**Building alliances to boost new graduates' employability skills**" held in Barcelona on 13 June 2019. More information about the final multiplier event can be found here <http://skill-up-project.eu/multiplier-events/multiplier-bcn/>.

Also we have presented the MOOC in a synergy session at the 28th EDEN Annual Conference held in Bruges on 16-18 June, 2019. <https://twitter.com/aornellasbcn/status/1141294572473131008>.

Currently we are working in a series of academic papers with the results of the various surveys applied during the course related to the professional and digital skills of career practitioners.

Due to the success of the course and despite the end of the project in June, the partners are currently working together to launch a new edition of the MOOC in the last quarter of 2019.

Following the hashtag #skillupmooc it is possible to see the activity of the course generated in Twitter: <https://twitter.com/hashtag/skillupmooc>.

Objective 4: Implement and promote a virtual environment that acts as a hub for attracting stakeholders offering guidance to labour market newcomers and real hands-on experiences in professional world as part of students learning.

This output provides a virtual platform that brings together employers representatives, academic staff, and career practitioners to better prepare students for work. The platform <https://hub.skill-up-project.eu/> acts as a HUB that connect HE and VET system and the workplace. The hub reinforces the dissemination, transfer and multiplication of all knowledge and resources generated through the Skill Up project.

The HUB provides:

- **Undergraduates and new graduates** with career orientation and resources to assess and improve their skills for the labour market. Also, with a channel to find opportunities for virtual and international internships.

- **HE and VET academic staff** with a space to share knowledge, resources and best practices in order to create authentic curricula activities that take account of professional world real needs as part of students learning. Also with a channel to contact and cooperate with the labour market.

- **Employers representatives** with a channel to recruit qualified international students and recent graduates and collaborate with academic staff to improve students' skills for employability.

- **Career practitioners** with accessible and affordable professional development, resources and tools for effective career orientation in higher education settings and to spread their guidance and mentoring services through virtual environments.

The activities carried out throughout the project that contributed to the conceptualization and development of the HUB were:

- A **benchmarking** of the existing platforms linking education and labour market. The results can be found here:

https://docs.google.com/spreadsheets/d/1HedTsKjaTQFI3DIU65CAArumX_OmIOyPfojzyxm_las/edit#gid=0

- A **survey** [<https://forms.gle/groxdzJVhWyCgFWQ6>] on skills for the employability of recent university graduates answered by 88 employers representatives. One of the questions of the survey was related to the types of services employers think could offer a platform that connects universities with the world of work with the aim of improving the skills for the employability of new graduates.

- A **brainstorming** on the functionalities of the hub developed by the partners during the partners meeting that took place on the occasion of the **multiplier event "Extending the scope: Authentic learning, and Career Counseling and Guidance in Higher Education"** held in Stockholm on September 2018. The results of the brainstorming can be found here: https://docs.google.com/document/d/1b-sAd_InS4BsALjyO83Qly4M3M5imF9K7UJgnhD4PKE/edit#.

The HUB was presented in the project's final multiplier event "**Building alliances to boost new graduates' employability skills**" held in Barcelona on 13 June 2019. More information about the final multiplier event can be found here <http://skill-up-project.eu/multiplier-events/multiplier-bcn/>.

Also we have presented the HUB in a synergy session at the 28th EDEN Annual Conference held in Bruges on 16-18 June, 2019. <https://twitter.com/aornellasbcn/status/1141294572473131008>.

4.2 Describa detalladamente las actividades del proyecto financiadas a través de la partida de gestión y ejecución del proyecto que se han llevado a cabo hasta ahora.

The activities developed and supported by the grant for Project Management and Implementation during the overall project period are listed below, first related to each of the specific objective of the project and then to other global concepts and issues.

Objective 1

-The **final report**. A previous work of peer-review and text and editing proofread has been produced. The report is downloadable and published in the Project website:

http://skill-up-project.eu/wp-content/uploads/2017/05/IO1_Report_final_English-1.pdf.

-**Infographic**: Although this activity was not planned in the project proposal, for a greater impact on disseminating the results of the project, an infographic summarizing key issues on employability skills and authentic learning environments has been produced (the infographic was duly published in the website: http://skill-up-project.eu/wp-content/uploads/2017/05/skill_up_V5.pdf).

Objective 2

Students pre-questionnaires and post-questionnaires applied to gather information from undergraduates on various aspects of employability skills about 400 HE undergraduates in the three partners countries were surveyed in various programmes and courses of the partners institutions. Both pre and post questionnaires can be accessed in the following links:

- Pre-questionnaire: <https://thwildau.lamapoll.de/Skill-Up/>
- Post-questionnaire: <https://thwildau.lamapoll.de/Skill-Up-post>

- **Pilot questionnaire**: Previous to the application of the pre and post questionnaires a pilot questionnaire was applied with undergraduates of four partners institutions. These questionnaires were implemented in three languages: English, German and Catalan. A total of 73 undergraduates answered the questionnaires. The three versions of the questionnaire can be accessed here:

- Questionnaire in Catalan: <https://goo.gl/forms/8fg7PKoPhQ5bILoI3>
- Questionnaire in English: <https://goo.gl/forms/FO3g6T0jdaz99idq1>
- Questionnaire in German: <https://goo.gl/forms/c21vj3nXYQsAcDU62>

- **Authentic learning scenarios**: Partners implemented authentic learning scenarios in each of the institution. All the scenarios can be found in the Project website: <http://skill-up-project.eu/results-ios/io2/>

Objective 3

- A virtual **focus group** with different activities including questionnaires to different stakeholders to get in-depth information on how HE and VET institutions are currently developing and integrating employability skills into their programs of study; in which areas new graduates need to improve; and what should be done to strengthen ties between the worlds of education and work. The questionnaires can be accessed here:

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Questionnaires to students and graduates: <https://forms.gle/WKHj889a4c6zWS5U7>

Questionnaires to lectures: <https://forms.gle/VR4NSr3JBxFJ16498>

Questionnaires to counsellors: <https://forms.gle/3vdPHZp6XesRbXhRA>

All the **activities and the platform** supporting the focus group activities can be found here: (<https://pilots.elearnlab.org/skillup/course/view.php?id=3>). The information summarizing the activities, the platform used etc can be found here: <https://drive.google.com/drive/folders/11ikRWK9bBt0Gkn1BaRympc6pg57VLGxr>. A results analysis can be found here: https://drive.google.com/drive/folders/1f8wsHZ5T6i_VC8kD_wAc10AaA8NfoqqX

- **Round-table:** organised and funded by the Project Coordinator on 23rd January 2018: In this panel the project Consortium aimed at bringing together experts from Sweden and Spain to revolve around some reflective questions that gave rise to further insights on the role of guidance and counselling in higher education settings:

<http://skill-up-project.eu/2018/01/23/skill-up-project-organises-a-round-table-on-career-guidance-in-he-and-the-role-of-ict-in-counselling/>

http://www.uoc.edu/opencms_portal2/opencms/EN/ri/difusio-publicacions/noticies/noticies-OSRT/2018/noticia_skillups.html

- A **promotional video** (<https://www.youtube.com/watch?v=W-KVCrfigT0>) used by partners to disseminate the course.

- All the **videos and materials** that supported the MOOC (development, proofread, etc).

-> The playlist with all the videos of the MOOC can be accessed here:

<https://www.youtube.com/playlist?list=PLYC6Kwamb2vc7oyNSYDPjIDKa-P6rM8k6>

-> The contents of the course can be accessed here: https://mooc.skill-up-project.eu/courses/UOCx/001/2019_T1/about

Objective 4

- A **survey** [<https://forms.gle/groxdzJVhWyCgFWQ6>] on skills for the employability of recent university graduates answered by 88 employers representatives.
- The template of Wordpress and plugins used to implement de HUB platform. <https://hub.skill-up-project.eu>.
- The technological implementation of the HUB platform.

Project meetings and multiplier events

Project partners regularly have met face to face and also virtually. Every meeting counts with an initial agenda and the subsequent minutes of the minute, approved by all partners.

- **Kick-off meeting** (<http://skill-up-project.eu/2017/06/13/skill-up-kick-off-january-2017/>). Held in Berlin, 12th and 13th January 2017 and hosted by Th Wildau. In the case of the kick off meeting, the management plan as well as communication strategies to be developed were presented. The final day of the meeting was devoted to discuss on the critical issues identified in the project, stressing the necessity for high continuity between outputs and, the importance of focusing on the quality of the outputs to be produced.

- **Project meeting and a multiplier event** (<http://skill-up-project.eu/2017/06/26/connecting-workplace-and-learning-in-higher-education/>), held in Barcelona on June 19-20, 2017 and hosted by UOC. The multiplier event, funded by UOC, counted on the participation of the consortium members who also presented the main results achieved so far. The event counted on the contribution of two keynote speakers: Joan Miquel Verd, Director of the Sociological Research Centre on Everyday Life and Work (QUIT) and associate professor at the Department of Sociology of the Universitat Autònoma de Barcelona (UAB), and Eva Edman Stålbbrandt, senior lecturer and director of study at the Department of Education of the Stockholm University, and also a member of the project team. They focused on how authentic learning approaches in higher education can enhance employability skills of new graduates. The project meeting was dedicated to follow up the ongoing results of the project and to plan the next steps. Details on the event can be found here:

<https://symposium.uoc.edu/11471/detail/seminario-del-proyecto-skill-up-Iconectar-el-puesto-de-trabajo-y-el-aprendizaje-en-la-educacion-sup.html>

<http://skill-up-project.eu/2017/06/26/connecting-workplace-and-learning-in-higher-education/>

- **Project meeting** (<http://skill-up-project.eu/2018/01/22/second-project-meeting-of-the-skill-up-project-held-in-barcelona/>) **and round-table** (<http://skill-up-project.eu/2018/01/23/skill-up-project-organises-a-round-table-on-career-guidance-in-he-and-the-role-of-ict-in-counselling/>), held in Barcelona on January 22-23, 2018 and hosted by UOC. The round-table was funded by the UOC.

- Multiplier event and project meeting held in Stockholm on September 20-21, 2018 and hosted by Stockholm University. <http://skill-up-project.eu/2018/09/23/successful-multiplier-event-on-authentic-learning-and-career-counseling/>. More information about the final multiplier event can be found here <http://skill-up-project.eu/multiplier-events/multiplier-bcn/>. This Multiplier Event was attended by 19 local participants and 6 international participants.

- Final multiplier event and project meeting held in Barcelona on June 13-14 and hosted by UOC. <http://skill-up-project.eu/multiplier-events/multiplier-bcn/>. The multiplier event, “**Building alliances to boost new graduates’ employability skills**”, provides the overall results of the Skill Up project. This Multiplier Event was attended by 12 local participants and 7 international participants. The final project meeting was a space to do a global evaluation of the project by the partners and to set up the next steps on dissemination and sustainability of the outputs of the project once the project has finished.

More documentation about the multiplier events and the project meetings can be found in the following links:

https://drive.google.com/drive/folders/0B0_rrCJtnJz7d1hXSFI4dFlxUTQ

https://drive.google.com/drive/folders/0B0_rrCJtnJz7N2twYmFGOW9Rd1E

Website and brand development

As for the public website, the Skill-Up public website plays an important role in disseminating project information and it is already available. The website target audience includes higher education and VET teaching staff, career counsellors, undergraduates, graduates, employers’ stakeholders as well the European Commission and the general public. The web address of the Skill Up public website is available at: <http://www.skill-up-project.eu> The main objective of the public website is to provide general information about the project objectives, current activities, project partners and achievements of the Skill Up Project. This information includes relevant news, publications and products (published results/outputs). Once every result is published, the public website will also serve as a primary point of reference for downloading documents and any other public deliverable from the project.

The website has been implemented using standard SEO Guidelines (Search Engine Optimization Guidelines) to ensure that it is correctly referenced by the major search engines. The website is updated constantly throughout the lifetime of the project.

Brand Manual: https://drive.google.com/drive/folders/0B0_rrCJtnJz7ZkhUOXM3YVh1Wk0

Website compiled info: <https://drive.google.com/drive/folders/0B8J6zJSEgeydZ2hRd01VcHVFRmc>

-**Website feeding:** In accordance with the management ongoing activities, the website is being fed under regular basis. Example of the produced items:

<http://skill-up-project.eu/2017/06/13/welcome-to-our-new-skill-up-website-and-blog/>

<http://skill-up-project.eu/2017/06/13/skill-up-kick-off-january-2017/>

<http://skill-up-project.eu/2017/10/30/skill-up-project-at-the-research-conference-on-career-learning-and-career-management-skills-of-the-stockholm-university/>

<http://skill-up-project.eu/2017/10/30/skill-up-project-and-career-counselling-role-at-university-of-stockholm/>

-Project Communication tool: Moodle offers multiple ways to communicate with Project Partners. To this end, an internal Communication platform was built to support this exchange of internal communication: <https://pilots.elearnlab.org/skillup/login/index.php>

Internal Communication Tool document:

<https://drive.google.com/drive/folders/1N1d2Mloo9xrkTqi8owBOMDxWZpx1ey0l>

-Project communications: Project dissemination Plan: A Project dissemination strategy has been elaborated: https://drive.google.com/drive/folders/0B0_rrCJtnJz7WGUJRG5pQTU3dTA

The Project Dissemination Strategy describes the processes whereby reports, surveys, MOOC, a Platform and other relevant documentation and information are made available, promoted and disseminated. The Plan sets the guidelines on the information that the project provides, the target groups to reach and, at an appropriate point in time, to influence development and change for graduates' employability skills in Europe. Skill Up Project Partners will use a range of dissemination methods to ensure that this aim is achieved: published papers, meetings, the traditional and new media, attendance at seminars, conferences and workshops and via a Project Website with a MOOC and a Hub, as main outputs of the project. The dissemination Plan gives an account of issues such as the corporate image (the project has built a corporate identity which includes image, brand and style), the logo, the language and the dissemination channels, among other items. The specific guidelines and templates are already set in a brand guidelines already in place. The corporate style will be adhered to by all Project Partners in all printed and electronic materials related to the project.

-Project Website Report: A report with the key features of the website has been elaborated in order to include a description on the content developed and how Skill Up website information is organized.

See: https://drive.google.com/drive/folders/0B0_rrCJtnJz7WGUJRG5pQTU3dTA

-Project Quality Assurance Reports: These series of evaluations took place to assess the project coordination as well as the information provided during the meetings. All the reports can be found here: https://drive.google.com/drive/folders/0B0_rrCJtnJz7SXFbVEdXMWkyZWM

4.3 ¿Cómo se está llevando a cabo el seguimiento del proyecto? ¿Quién lo está realizando?

The work was monitored by UOC. For this, the scientific part was coordinated, tutored and directed by the main researcher and the scientific manager of the project. Both were responsible for monitoring the work of the partners, holding virtual meetings.

The economic and financial management part was centralized in the Research Support Office of the University, where a project manager monitored the justifications every six months, verifying the eligibility

of all expenses, the proof of their relationship with the project, the correct imputation of hours, checking the Timesheets, payrolls, etc. This person dealt with the management of the Mobility Tool and the justification of the project.

The Skill Up project management followed the framework, methodology and recommendations of the PMI (Project Management Institute) and the PMBOK (Project Management Book for Knowledge). A budgetary monitoring has been implemented under the strict supervision of the UOC's Admin Office (AO, The Research and Knowledge Support Office at UOC) and the Project Manager. Both were in charge of the administrative and financial procedures related to the expenditures and time management, payments, evaluation and follow-up of the project. The AO worked closely with the Project Coordinator (PC) and the Project Manager.

In terms of content monitoring and project progress, Project leader Prof. Adriana Ornellas was assisted by the rest of partners, but also and most importantly, by the international advisory committee established by the project. This Committee consisted of a number of members coming from partners member states, each of whom were highly qualified and prestigious persons, not involved in the project. They were a group of experts giving advice to the researchers, Intellectual Outputs leaders or project consortium partners in the context of an EC-funded project.

Their task was to provide scientific advice on how research and its results (Intellectual outputs, dissemination of intellectual outputs) were being developed, based on progress reports, products developed as intellectual outputs (e.g. surveys, Hub, etc.). The advisory group did not have formal authority to govern the Project Consortium. Rather, the advisory group served to make recommendations and/or provide key information for the development of Intellectual Outputs, products, results or dissemination of results.

Some of the specific tasks were to follow-up of the activities of the Project and of the results; validating some project's contents and results, advice on any intervention for the improvement of activities/results, participation in some meetings, both video-conference or face-to-face, providing feedback about the labour market needs versus new graduates skills for employment, disseminating the project results through their institutions and formal contact networks.

4.4 ¿Cómo han contribuido los socios al proyecto hasta el momento? ¿Se ha reajustado la distribución de las tareas desde la solicitud?

The project was based on the experience and knowledge of the staff involved in areas such as employability skills, authentic learning approaches in higher education, career guidance and counselling, e-learning environments and ICT-based methodologies.

The Open University of Catalonia (UOC) as project leader was responsible for the overall management of the project on a daily basis, for the liaison among partners and the Erasmus+ National Agency and for the

coordination and elaboration the technical/financial/quality reports. A Project Manager from the R&I Funding Unit of the UOC with expertise in e-learning and ICTs projects monitored the project as well as advised, and assisted the project coordinator. The UOC also brought to the project the expertise of its faculty staff in e-learning environments in higher education, ICT-based methodologies and MOOC development.

Since at the beginning of the project the contribution of the partners was slightly unbalanced (project partner HDBA started their contribution later than other partners) UOC led the outputs related to the first objective of the project and coordinated the final report that established the theoretical and methodological framework of the project. All the partners contributed to this report by reviewing the literature on employability skills of graduates in their countries and identifying and describing good practices on authentic learning scenarios in their institutions.

The outputs related to the second objective of the project also was led by UOC jointly with the Stockholm University. Key here was conjoining the needs and interests of partners in curriculum development and the delivery of innovative methodologies for implementing authentic learning approaches that can boost the employability of students. All the partners (except the Foundation Factor Humà) designed, developed, applied and evaluated authentic learning scenarios in their institutions and wrote reports analyzing the results on the improvement of the employability skills of undergraduates. As a specialist in authentic learning approaches, the Stockholm University contributed here coordinating the guidelines with indications on how to develop and evaluate authentic learning scenarios. These guidelines are available to download both on the Skill Up website and the Skill Up HUB.

The Stockholm University as an institution well-experienced in programmes in career guidance and counselling, also led jointly with the UOC the intellectual output related to the MOOC, mainly advising on the content of the course. The development of all modules, resources, videos and surveys of the course were assumed by the UOC as a specialist in the development of this type of training. All the partners contributed to the dissemination of the MOOC throughout their networks of contacts as well as their social networks.

The Foundation Factor Humà, brought the employer representation to the consortium, providing a more realistic view of the labour market needs and facilitating the transferability and dissemination of results and outputs at the national level through its network affiliated companies. Also, Factor Humà as an essential partner to guarantee the sustainability of Skill Up, led jointly with the UOC and actively participated in the development of the HUB platform aimed at connecting academic staff, career guidance services, graduates and undergraduates with the labour world.

Project partners also have contributed in a variety of tasks of the project namely:

- All the partners contributed with the indication of a high quality professional to be part of the International Advisory Committee.
- The Technical University of Applied Sciences Wildau (TH Wildau) highly contributed to the project with its expertise on empirical analysis and development and design-thinking-workshops that was applied in

designing the multiplier events. TH Wildau was also responsible to organize the kick off meeting of the project. The partner also was the responsible to implement all the pre and post questionnaires used to evaluate the implementation of the authentic learning scenarios.

- The participation of the Open Institute of Catalonia (IOC) in Skill Up helped to pave the way for the transfer of our results to other educational levels beyond higher education, specifically to VET systems.

- All the partners contributed to the online focus group: recruiting of participants, developing activities for the discussion of authentic learning scenarios, moderating, summarising an activity and participating at the focus group.

- All the partners contributed in drafting and executing questionnaires on employability skills of new graduates in several languages (German, Catalan, Swedish and English), implementing it and recruiting participants.

- Dissemination contributions (blog post contribution and impact contribution. See clipping doc:https://docs.google.com/document/d/1p1-uAssyXCoEVia7PFHNsjIEWEYLN5RVU2G_CCHK3co/edit.

Also visibility of the project in each partners website can be checked here: <https://drive.google.com/drive/folders/0B8J6zJSEqeydZ2hRd01VcHVFRmc>

4.5 Si su proyecto implica a otras organizaciones que no participan de manera formal en el proyecto, describa su implicación.

A very significant collaboration established within the framework of the project that is worth highlighting was with researchers from the Czech Republic, involved in the development of an application to support career counselors in providing their services effectively to all students who need it. The online app for career counselling called Salmondo (www.salmondo.eu) received support from European Commission through Seal of Excellence award. Salmondo is a web app designed for students and career counsellors. It aims to support career practitioners in helping students to plan their career and personal goals, and to make decisions regarding their future career and study pathway. The app was included in the MOOC of Skill Up as one of the activities of the course. In the activity we proposed participants to test and evaluate a demo version of the tool providing them with a prefilled account so they could see how to work with the app and its modules. After trying the demo of Salmondo, we proposed participants to fill a questionnaire evaluating various aspects of the tool. So, the win-win in this collaboration was that participants of the course could try a valuable resource for career orientation, while the creators of Salmondo received feedback from career practitioners from different countries and educational system that helped them to improve Salmondo. Salmondo also will be available as a resource for career practitioners in the Skill Up HUB. The questionnaire answered by participants evaluating Salmondo can be accessed here: <https://goo.gl/forms/iLAXhprTr6yiMPcV2>.

A **survey** [<https://forms.gle/groxdzJVhWyCgFWQ6>] on skills for the employability of recent university graduates was answered by 88 employers representatives from the network of one of the partners of the project, the Foundation Factor Humà. This helped us to disseminate the project and to gather significant information and requirements to implement the HUB platform..

Members of other organisations such as the Regional Government of Catalonia or the company Future4Work, a consultancy specialized in transferring to the organizations the emerging trends in the world of human resources, or the Federal Institute for Vocational Training (BIBB: Bundesinstitut für Berufsbildung) have participated as part of the International Advisory Committee.

Their task was to provide scientific advice on how research and its results (Intellectual outputs, dissemination of intellectual outputs) was being implemented and to assess the quality of the results.

It is worth mentioning that some academic institutions not making part of the consortium participated in some of the Skill Up activities: this is the case of Professor and HEI representative as Joan Miquel Verd Pericàs, director of the Sociological Research Centre on Everyday Life and Work (QUIT) and associate professor at the Department of Sociology of the Universitat Autònoma de Barcelona (UAB), who participated in the seminar held at UOC in June 2017. Also, Maria Luisa Rodriguez-Moreno. PhD in Philosophy and Education Sciences. Emeritus Professor of Vocational Orientation and Vocational Training at the University of Barcelona, participated in a round-table organised by Project coordinator in January 2018.

4.6 Si fuese relevante, describa las dificultades que han encontrado para gestionar la implementación del proyecto y cómo las han abordado usted y sus socios.

The most relevant difficulties that the project has encountered was the lack of resources due to the budgetary cuts that the project has faced initially when it was approved. Due to the low budget granted for some of the activities to be developed, we have been obliged to co-finance from the different partners (mainly from the UOC and TH Wildau) many of the activities carried out (e.g. self-funding participation in conferences to widespread the project development and findings; co-funding some dissemination activities such as the Barcelona multiplier event that took place in Barcelona on 19th June 2017 and the round-table on career guidance organised on 23rd January 2018 in Barcelona.

At the technical and consortium level there has been no significant difficulty to comment.

9. SEGUIMIENTO

9.1 Impacto

¿Cuál ha sido el impacto hasta el momento sobre los participantes, las organizaciones, los grupos objetivo y otros implicados?

The most significant contributions of Skill Up lies in the typology and scope of the Intellectual Outputs that deeply impact across a wider teaching and learning community in HE and VET in the partners countries and beyond. These outputs include practice guidelines to inform academic staff and career guidance and counselling practitioners on how to match graduates' skills and labour world demands through authentic approaches; a MOOC on E-guidance in Higher Education to Promote Graduates' Lifelong Career Development; and the platform Skill Up Hub to strengthen the links between education, training and labour market to better prepare graduates for life and work.

Up to now the impact resulting from the activities and events carried out within the framework of the project goes beyond simply the consortium itself reaching regional, national and international levels. Specifically:

- The establishment of a cross-border, interdisciplinary and intersectoral cooperation, developing links with other European institutions and giving the curricula of the partners institutions an international dimension.
- The four partner universities and the VET school were benefited from the improvement of the syllabus and resources of its programmes and courses where new authentic approaches supported by ICT were designed and implemented.
- About **400 students** participating in the authentic activities (and in the pre and post questionnaires) implemented in the partners institutions had the opportunity to improve their skills for employability. As highlighted by the Stockholm partners "*The authentic learning scenario created in a course within the bachelor's program in study and career guidance at Stockholm university had high impacts in relation to employability of higher education graduates. In some respects, the authentic scenario bridges the gap between learning within real-life communities of practice and learning taking place within formal institutions. The university teachers thought the scenario was of high relevance for the bachelor's program. The scenario gave opportunities for the students to be better prepared for the transition from education to work. The students' skills were applied at real workplaces and to real counselling activities. The course helped the students to improve skills like Creative thinking, Teamwork, Subject specific skills, Communication and interpersonal skills and Analytical thinking*".
- The **29 various stakeholders** (students, graduates, employers, counselors, lecturers) participating in the international online focus group had the opportunity to gain insights and to discuss important issues related to demand and supply of skills for employability with people from different countries and educational realities.
- Up to 60 participants in the Seminar "Connecting workplace and learning in higher education" and the Round table on "Career guidance in HE and the role of ICT in counselling" were informed about the preliminary results of the project raising the visibility of the project.

- The team of the Foundation Factor Humà has been involved in the objective of improving the employability of graduates. They have made efforts to connect high education with the labour market. They have also worked to make partner companies aware of the importance in developing graduates' skills. Over 7500 employers representatives, human resources staff and employers being part of the network of Factor Humà Foundation have now access to the published findings of the project.
- More than **80 employers representatives** being part of the network of Factor Humà Foundation had the opportunity to contribute to the conceptualization of the outputs of the project by answering the "Survey on skills for the employability of recent university graduates" [<https://forms.gle/groxdzJVhWyCgFWQ6>].
- More than **300 career guidance and counselling practitioners** from 20 countries have registered to the Skill Up MOOC having access to up-to-date materials, resources, theories and methodologies related to lifelong guidance and the use of ICT to provide career orientation. Almost 100 participants (a success rate of 30%) have finished the course and received a certification and a virtual badge.
- The German partner HdBA is the internal university of the Federal Employment Agency and works closely together with the organizations of the Federal Employment Agency, as the studies are dual structured, i.e. theory and practice alternate, so that students regularly complete internships in different areas. In the future, they will work even more closely with the internship organizations to guarantee authentic learning not only there, but to support the transfer even more actively. In the course of the project, they have already received feedback that this approach has met with acceptance, not only among the students, but also among their partners in practice.
- Up to 25 participants attending the Multiplier Event held in Stockholm [<http://skill-up-project.eu/multiplier-events/multiplier-s/>] could know the results of the authentic scenarios carried out within the framework of the project and also contribute to the conceptualization of the MOOC by giving feedback on the preliminary design of the course.
- Up to 19 participants of the final Multiplier Event "Building alliances to boost new graduates' employability skills" [<http://skill-up-project.eu/multiplier-events/multiplier-bcn/>] had the opportunity to know the overall results of the Skill Up project and to share experiences and discuss research on issues related to skills for employability in 21st-century society and career guidance and counselling.

9.2. Difusión y utilización de los resultados del proyecto

En caso de que sea aplicable, ¿a quién ha difundido los resultados del proyecto dentro y fuera de su proyecto de asociación hasta ahora? Defina en particular el público objetivo a nivel local / regional / nacional / UE / internacional y explique su elección.

Skill Up focused on two specific target groups of three different sectors: educators and teaching staff, including counsellors of HEI and VET institutions, and the labour market representatives. All these audiences are key to maximize the long-term effects of the project and also its sustainability. With this goal the following dissemination actions were carried out:

At a **local and regional level** we can highlight mainly two events addressed to educators and teaching staff, counsellors of HEI and VET institutions:

- The Seminar "Connecting workplace and learning in higher education". Aimed at sharing and reflecting on the project's ongoing results the Seminar hosted by the UOC took place on 19 June, 2017 and had a local impact with the attendance of higher education and VET teaching staff, career counsellors and employers' representatives from Barcelona. The event and its training topic contributed to the dissemination of the first outcomes, and was designed to share and reflect on the ongoing results of the project and map out the work on the second cycle. Project partners and participants from HE and VET settings submitted contributions organized in thematic sessions. The event counted with 60 attendants.

See for example:

- https://www.uoc.edu/portal/en/ri/difusio-publicacions/noticies/noticies-OSRT/2017/noticia_SkillUP_seminar.html

- https://twitter.com/UOC_research/status/874591184597004288

- <https://ioc.xtec.cat/educacio/?start=35>

- Round-table event hosted by the UOC and with local impact was the round-table on "Career guidance in HE and the role of ICT in counselling" (see: <http://skill-up-project.eu/2018/01/23/skill-up-project-organises-a-round-table-on-career-guidance-in-he-and-the-role-of-ict-in-counselling/>). The round table with an audience of 40 people aimed to shed light on how guidance and counselling in higher education can support graduates make successful transitions from education to the labour market. The event is linked to the IO3 of the project and was recorded to be used as a potential content to the MOOC. Also was a window to disseminate the MOOC among potential and powerful collaborator from the educational world such as educaweb.com whose directors attended the roundtable and were willing to collaborate with us disseminating the MOOC in their platform that has a great national impact.

Such event was distributed in the Skill Up project website, but also at UOC R&I newsletter reaching over 500 recipients and also via social networks with an average impact of 400 impressions per tweet and 5 total interaction (average figures).

At a **national level** the IAC members are disseminating the project results through their institutions and formal contact networks, and our consortium members have disseminated the project via web and social networks and participated in different events, targeting specific but also general audience:

General audience: Publication of an article in the German press Märkische Allgemeine on the Project (TH Wildau):

https://www.th-wildau.de/files/Presse-Medien/MAZ/Campus_2Februar2017.pdf

<http://www.maz-online.de/Lokales/Dahme-Spreewald/Fit-fuer-den-internationalen-Arbeitsmarkt>

Human Resources and labour market representatives:

<https://factorhuma.org/es/>

<https://factorhuma.org/es/actualitat/blog-factor-huma/13089-conectar-con-el-mercado-laboral-el-reto-de-la-empleabilidad-de-los-jovenes>

<https://twitter.com/FundFactorHuma/status/876736962127953921>

<https://twitter.com/FundFactorHuma/status/876741543947894784>

<https://twitter.com/FundFactorHuma/status/876696755806638080>

<https://twitter.com/FundFactorHuma/status/876439680920760320>

<https://twitter.com/FundFactorHuma/status/875624167843913728>

<https://goo.gl/WgoCuv>

<https://goo.gl/3Aeqvx>

Project partner Fundació Factor Humà sends newsletters monthly to approximately 7500 people. The project has been included in 2 occasions:

- 4/24 to a group of 82 people (People's Directors of the partner organizations) to explain the project and the Focus Group.
- 13/06 to 7500 people, in the bulletin of news the news was added "Connect with the labor market. The youth employability challenge".
- In the web banner 3500 users of the average view it (monthly data).

HdBA partner disseminated to Austrian and German public administration, public servants, and audience in general the project in Austria: 05.02.2018 in Wien: Workshop "Demographic Change and Knowledge Transfer from Outgoing Staff to Newcomers to Public Service" [Demografische Entwicklung und Wissenstransfer von ausscheidenden zu neu aufzunehmenden öffentlich Bediensteten], with over 40 participants, And 09.02.2018 in Stuttgart: Fourth Future Workshop of the Forum Social Engineering in cooperation with the project "Prevention 4.0" of the Federal Ministry of Education and Research: New ways of participation in virtual space (IV): Deepening of the deliberations of a IT-based work of the works council in organizations, with over 50 participants.

Th Wildau partners have carried out actions of dissemination at a national level to the following target audience: students, lecturers and employees of the TH Wildau; personal networks of scientists; career service network Germany e.V. (Career Service Netzwerk Deutschland e. V.); followers of the TH Wildau facebook and twitter account; NEGZ (The National E-Government Competence Center):

<https://translate.google.de/#view=home&op=translate&sl=de&tl=en&text=Das%20Nationale%20E-Government%20Kompetenzzentrum>.

- research report of the TH Wildau 2017 (p. 37) (<https://www.th-wildau.de/forschung-transfer/projekte-publikationen-und-patente/forschungsbericht0/>)

- research report of the TH Wildau 2018 (p. 39) (<https://www.th-wildau.de/forschung-transfer/projekte-publikationen-und-patente/forschungsbericht0/>)

In October 2017 the results of the first objective and the first phase of the project were presented at the International Conference of Transitions, career learning and career management skills. Multi-disciplinary and critical perspectives. October 19-20, 2017 at Stockholm University. It was presented by Adriana Ornellas, Eva Edman Ståbrandt and Kajsa Falkner. The presentation contained an overview of The Skill Up project, our understanding and a taxonomy of employability skills, some result, our understanding of authentic learning and two examples of authentic learning scenarios in higher education. The event counted with the attendance of 150 people. The target audience was national and international researchers: <http://media.kavnet.se/2017/10/A.-Ornellas-E.-Edman-Sta%CC%8Albrandt-K.-Falkner-Barcelona-Spain-Stockholm-Sweden.-Best-practices-in-enhancing-graduates-skills-for-employability-three-European-countries.pdf>).

At EU level:

- The multipliers events of the project held in Stockholm and Barcelona counted with the participation of researchers, academic and employers representatives from several European and non-EU countries (eg. Rumania and Cuba).

- IOC partners presented the project at the 1st European Vocational Skills Week... (see: <http://skill-up-project.eu/2017/12/05/skill-up-project-presented-at-the-1st-european-vocational-skills-week/>). The audience was of 50 people.

https://ec.europa.eu/social/vocational-skills-week/european-vocational-skills-week-2017_en

Social Networks:

<https://twitter.com/search?q=%23skillup>

- Project coordinator Adriana Ornellas presented a paper with preliminary results of the project at the 4th International Conference on Higher Education Advances (HEAd'18) organised in Valencia (Spain) June 20 – 22, 2018.

- UOC and IOC partners Adriana Ornellas, Núria Vilanova and Robert Candel presented the project presented the project in the Synergy Session *“Matching Graduates’ Skills and Labour World Demands through Authentic Learning Scenarios at the 28th EDEN Annual Conference “Connecting Through Educational Technology”* organised in Bruges, Belgium 16-19 June 2019.

At an international level:

- At Universidad de Pinar del Rio in Cuba in March 2018 Adriana Ornellas, Eva Edman Ståbrandt and Kajsa Falkner presented the project for university staff.

- Within the framework of a post-doctoral stay funded by the UOC, the project coordinator presented Skill Up to staff of the Office of Career Strategy of Yale University [<https://ocs.yale.edu/>].

- Ornellas, A., Falkner, K., Edman Stålbrandt, E. (2019) "Enhancing graduates' employability skills through authentic learning approaches", *Higher Education, Skills and Work-Based Learning*, Vol. 9 Issue: 1, pp.107-120. <https://doi.org/10.1108/HESWBL-04-2018-0049>.

Project Website and partners' websites:

Last but not least the project website is also a resource for dissemination, providing information about the project and its progress (see: <http://skill-up-project.eu/>). Also its blog/news section is updated under regular basis: <http://skill-up-project.eu/blog/>

Project partners also display in their websites information on the Skill Up Project, thus contributing to the wider Project promotion and dissemination:

Fundació Factor Humà: <https://factorhuma.org/ca/>

IOC: <https://ioc.xtec.cat/educacio/en/>

HdBA: <http://www.hdba.de/forschung/drittmittelprojekte/skill-up/>

Stockholm University: <https://www.edu.su.se/samverkan/eu-projekt>

TH Wildau: <https://www.th-wildau.de/margit-scholl/>

UOC: http://research.uoc.edu/opencms_portal2/opencms/ES/ri/projectes-publicacions/projectes/detall/list.html?idProject=2016/00164/001