



Title of the project: Practice based research to enhance the innovation capacity of SMEs through learning and ICT supported collaboration
Key Action: Cooperation for innovation and the exchange of good practices
Action: Strategic Partnerships
Field most impacted: Strategic Partnerships for vocational education and training
Main objective of the project: Development of Innovation

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ReInnovate a key element for innovation, training and formation

The capacity of research skills to improve entrepreneurial capacity in SMEs

A report outlining the research undertaken by the REINNOVATE project to demonstrate how research skills can be used to develop an entrepreneurial mindset within an SME and provide competitive advantage to SMEs, was realised.

The purpose of this report is to give an insight into the delivery of the Smart Research as 21st Century Skill for Business pilot programme. It gives an overview of how the programme was delivered and the learning experience encountered by the students.

It examined whether participation in the programme has had a positive effect on the teamwork, self-directed learning and problem solving skills of those who took part. Also, this report will describe the learners' experience and satisfaction with this pilot programme to understand whether it accomplished its goals and how it may be improved. It will also examine the quality of the outputs delivered and if they satisfied the learning needs of those employed in SMEs.

Between December 2019 and June 2020 a total of 178 learners across the partner countries of Ireland, Germany, Lithuania, Romania and Spain registered for the Smart Research as a 21st Century Skill for Business programme and an analysis of this pilot programme now follows.

The report is based on the quantitative and qualitative data gathered from those learners that participated in the pilot programme, Smart Research as a 21st Century Skill for Business. The data collected and analysed includes metrics in relation to learner participation and activity; the pre and post questionnaire; the learner satisfaction survey, content analysis of reflective learning journals; and interviews/focus groups with participants.

Each of these research approaches is described in detail hereunder.

Learner participation & activity

A summary of learner participation across all partner countries is given in Table 1. The participation and activity breakdown for each partner country is fully described in the subsequent sections.

Count of participants by partner country

	# Participants Registered	# Participants completed all modules
Germany	21	20
Ireland	27	11
Lithuania	19	15
Romania	23	21
Spain	88	1
All partners	178	68

Ireland

Learners that took part in the University of Limerick accredited version of the programme (University of Limerick Certificate of Study, at NFQ level 8, 6 ECTS per module) were all registered with the University of Limerick (n=27). This programme was delivered over an 18-week period between 17th February 2020 and 26th June 2020. The course schedule incorporated a 2-week online induction at commencement.

Participation

A total of 27 students registered on the UL accredited version of the programme (m=52%; f=48%). A breakdown of registered learners by sector is given in Table 2.

Count of registered learners by sector, Ireland

Sector	Count	Sector	Count
Administrative & Support	4	Information & Communication	3

Activities			
Education	3	Life Sciences	1
Electronics/Design & Manufacture	2	Medical device	1
Engineering/Design	1	Retail	2
Engineering/Manufacture	5	Tourism	4
Finance	1		

A summary of learner participation across the 4 modules in the programme includes the number of registered students, the number of students that participated and the number of students that successfully completed each module and received certification.

A high dropout rate of 59% for the programme was recorded (measured as a % of registered students that did not achieve certification for all modules). An investigation of the dropout rate across modules and timeframes shows that an increase in the dropout rate occurred between 24th February and 23rd March, which coincides with the implementation of restrictions due to the Covid-19 pandemic, however, beyond this time frame the dropout rate remained largely stable.

An analysis of emails and correspondence from those that did not complete the programme, i.e. dropouts, was conducted and the main reasons for the high dropout rate were:

1. Impact of Covid-19 on their personal and work lives
2. No longer had access to their workplace due to restrictions and could not proceed with their projects
3. Time to complete the programme (lack of time available at work, lack of personal time)
4. Family/personal issues arose (illness, work pressures, family commitments)

Germany

From analysis of earlier work completed by IAT on projects related to the training needs and qualification methods of SMEs in Europe, it was known that the method most used within SMEs is internal training for concrete tasks the SME employees have to do. In Germany there are some qualification programs for SME employees who are paid if they participate within such programs.

However, unfortunately, participation is very low, where employees explained that the topics are too general and do not help immediately in their jobs. The employees are interested in being qualified for their work places. We, therefore, expected a similar situation within Reinnovate.

IAT developed and sent two press releases to 200 German SMEs regarding the Reinnovate training program and also published the training program on the IAT web site. 50 employees from these companies expressed interest in the Reinnovate training program, however, due to the Corona Crisis, some of them were working only partially and they could not participate in the program.

Of those employees that expressed an interest 40% work in technical jobs, most in IT domains.

21 learners started the courses and 20 finished the 4 modules. A breakdown of learners that completed the training program is given by sector in Table 4.

17 participants finished 11 from 16 activities, 2 finished 8 and 1 finished 6 activities. It is planned that activities, which were difficult for some participants, will be discussed until the End of July within a group discussion with participants who did not solve them and other interested people from their companies.

Participation is not obligatory but some participants expressed their interest. With regarding to teamwork – due to the Corona Crisis this was possible only in the first months of the training program. Some uncompleted activities were:

1. Research methodology search	4. e-Portfolio
2. Referencing	5. Frame of reference on conflict
3. Reflective Learning Journal	

Learners by sector, Germany

Sector	Count	Sector	Count
Cyber security/ICT/software development	4	Banking	1
Service sector	2	Jurisdiction	1
Education/vocational training	2	Mechanical engineering	1
ICT & culture	2	Research and consulting for trade unions	1
Automotive industry	1	Construction industry	1
Tourism	1	Consulting for industry and service sector	1

Lithuania

The programme ran from 8th January 2020 and completed on 25th June 2020.

Participation

19 learners participated in the programme. A breakdown of registered learners by sector is given in Table 5.

Learners by sector, Lithuania

Sector	Count	Sector	Count
Architecture-Construction- Electric installation	5	Furniture	1
Car rental	2	Health service supplies	2
Cleaning	1	Laser engraving	1
Couching	1	Security service	2
Employment services	1	Solar energy	1
Foods for babies and children	1	TV@Media	1

Dropout rate

Of the 19 learners that registered for the programme, 15 learners successfully completing the programme. 4 learners could not continue with the learning. The dropout rate for Lithuanian learners was 21%.

Reasons for dropout

The Impact of Covid-19 on their personal and work lives was the reason for dropout as meant that 4 learners were unable to complete the programme.

Success rate

Conversely, the success rate (measured as the % of students that completed the programme) was 79%.

Learner activity

Learner activity represented by the number of course views and posts across all of the modules are summarised in Table 8 and presented in Figure 6 and Figure 7.

Romania

The programme commenced with an induction and was delivered between week ending 5th December 2019 and 19th June 2020.

Participation

23 learners registered for the courses and 21 learners finished all 4 modules. A breakdown of learners that completed the training program.

Learners by sector, Romania

Sector	Count
Automotive, Heavy Construction Machinery & Equipment	5
Automotive, Computer Services	3
Medical	1
Metals, Minerals, Textiles & Natural Materials	1
Printing, Photo & AV	2
Computer Hardware, Software & Telecom	9

Dropout rate

A very low dropout rate of 9% for the programme was recorded (measured as a % of registered students that did not complete all modules).

Success rate

Conversely, the success rate was excellent at 91% (measured as the % of students that completed the programme).

Learner activity

Learner activity represented by the number of course views and posts across all of the modules are summarised in Table 8 and presented in Figure 6 and Figure 7.

Spain

As foreseen, the call for applicants for the pilot course was launched on the first week of October 2019. The call was disseminated through digital media: it was posted on Chamber of Commerce of Seville's website and its Social Networks, such as Facebook, LinkedIn and Twitter. Technicians involved in the project also posted and disseminated the call in its personal social networks accounts.

Additionally, we launched a mailing to SMEs from our database. We drew on two events which took place in The Chamber of Commerce's head offices and in EUSA (private University) to introduce the Project and the call to around 40 participants. We distributed brochures during these events.

The course started on 4th November 2019 and was expected to finish on May 2020.

Due to low involvement from learners registered and high dropout rates, and trying to revert the situation caused by COVID-19 crisis, we launched a second call for applicants on April 2020.

The Chamber of Commerce set in a battery of measures to face the crisis and support SMEs in business processes in the new environment. These measures were webinars, courses, consulting and advising among other activities, and were presented as "Plan Impulso+" ("Boost Plan+", in English).

Among these activities, Pilot course call for applicants was disseminated again, and published on Chamber's website and social networks. The course started on 15th April 2020 until mid-June 2020.

Participation

The students were registered through an application form we developed for the pilot course, since we were not able to manage the applications through Google Form or other platforms due to data protection reasons. For the second call, we were already able to manage registrations through Google Form.

We collected the following data (Name and surname; Company; Sector; Phone; E-mail; Level of education and Modality of the course to be carried out: through ICT platform or UL Moodle).

A total of 86 students registered (first call=9; second call=77) and a breakdown of registered learners by sector is given in Table.

Count of registered learners by sector, Spain

Sector	Count
Aerospace, metal, engineering and related sectors	34
Agriculture and agri-food industry	7
Consulting	8
Hospitality, tourism and event management	15
Other sectors	13

First call: 9 students registered to carry out the course through ICT platform, 0 learners completed the course

Second call: 77 students registered, 1 learner successfully completed the full course.

20 learners were actually following up the course at the beginning: 9 completed module 1, 4 completed module 2 and 2 completed module 3.

Dropout/Success rate

First call:

- 9/9 learners' dropout. No one formally declared he/she was withdrawing the course, but no one continued with the activities.
- 0/9 successfully completed the course.

Second call:

- 7/77 learners wrote us to formally dropout the course since the beginning.
- 1/77 successfully completed the course (4 modules)
- 9/77 completed module 1
- 4/77 completed module 2
- 2/77 completed module 3

Reasons for dropout

We have to note that, although 77 participants were registered, most of them never entered the platform for the first time. We experienced many problems with the credentials to access the ICT platform for the first time, since many students let us know they did not receive any mail with credentials, and we asked to resend their credentials again. We did an exhaustive tracking of all the learners to make sure that everybody received the username and password to access for the first time, but many students did never reply our mails nor entered the platform. 31 learners have never entered to the platform.