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Up-skilling the VET sector to Cloud Computing

KA220-VET - Cooperation partnerships in vocational education and training

NATIONAL REPORT

Ireland

EUROPEAN CAREER EVOLUTION



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The research report consists of three parts: Desk research, Survey and Focus group research and implications and conclusions.

Objectives of the research:

1- To define and to understand the state-of-the-art regarding the specific sector of Cloud Computing in partners countries, analyzing the specific needs and gaps in the sector

2- To assess the professional skills needed in the labor market for a VET provider, designed in accordance with the European lifelong learning instruments (EQF).

1. Desk Research and Best Practices

Best Practice n. : 1

Best Practice Title: Screenagers International, Information and Communication Technology (ICT), digital and social media use in Youth Work

Project Partner: The project involves five partners The National Youth Council of Ireland, The Youth Council for Northern Ireland, Verke, the National Development Centre for Online Youth Work in Finland, wienXtra from Austria and the Center for Digital Youth Care in Denmark

Topic	ICT skills for VET providers; Adapting vocational education and training to labor market needs;
Best practice Title	Screenagers International, Information and Communication Technology (ICT), digital and social media use in Youth Work
Keywords	<i>ICT skills, digital skills, youth work opportunities</i>
Best practice	The aim of the collaborative research was to explore the extent, value and development of the use of ICT, social and digital media as a tool in youth work, and to provide an evidence-base for recommendations to promote the development of ICT in youth work at organisational, national and European levels.
	<p>This project produced the Screenagers international research report, "Using ICT, digital and social media in youth work - A review of research findings from Austria, Denmark, Finland, Northern Ireland and the Republic of Ireland", a synthesis of the five national reports and a summary infographic report. This report presents an overview of key findings from research conducted by the five partners, and more specifically it aims to identify and demonstrate:</p> <ul style="list-style-type: none"> • the use of ICT, digital and social media in youth work; • best innovative practice; • outcomes of the use of ICT, digital and social media in youth work;

- the challenges and barriers, and supports required;
- training available for the youth sector and recommendations for training needs.

Central Research Questions

1. What is the extent of the use of i) social media and ii) digital media in youth work?
2. What types of digital media are used in youth work, and for what purposes?
3. What is the value / contribution of the use of social and / or digital media in youth work for young people, and for youth work practice?
4. What are the challenges of the use of social and / or digital media in youth work and how can these challenges be overcome?
5. Is there training available to the youth work sector, and what supports are required to enable youth workers to apply social and digital media as a tool in their youth work?

Methodology: Variation in Methodological approach

Given the different contexts in which the research was undertaken, it was agreed that a standardised research design with identical data collection tools was not feasible. At the research design stage, the research partners agreed that different methodological approaches to answer the 6 common research questions could be employed, but that fieldwork must include:

- Desk research to provide an overview of the youth work and ICT context
- A survey, to encompass the central research questions
- 4 focus groups (2 with youth workers and 2 with young people)
- 3 case studies

Common findings/ recommendations

- strategic financial investment - in infrastructure, hardware, professional development, and practice development
- meeting the identified training needs of youth workers at all levels, from introductory basic skills training to professional development and bespoke courses, and with a focus on the

<p>practical application of skills</p> <ul style="list-style-type: none"> • the need to challenge resistant mind-sets, and to support a fuller and more creative use of ICT in youth work • ensuring policy commitment within youth work sectors • written guidance for youth workers, laying out principles of best practice and demonstrating impact, which could be supported through national Centres of Excellence and/or through national champions for ICT in youth work 	
<p>Reference Link (if any)</p>	<p>Project: https://erasmus-plus.ec.europa.eu/projects/search/details/2014-2-IE01-KA205-008474</p> <p>Ireland Report on the use of social and digital media in the youth work setting: https://ec.europa.eu/programmes/erasmus-plus/project-result-content/bc855d02-895d-4604-99b0-61d61645d0bc/Screenagers_Report_-_Republic_of_Ireland_FINAL.pdf</p>
<p>Provided By</p>	<p>Coordinator - NATIONAL UNIVERSITY OF IRELAND MAYNOOTH</p> <p>Coordinator Type: Higher education institution (tertiary level)</p> <p>Phone: (353-1)7083553</p>
<p>Language</p>	<p>ENGLISH</p>

Best Practice n. : 2

Best Practice Title: Technology Enhanced Learning Mentoring Support

Project Partner: The project partnership comprised of H2 Learning from Ireland, an e-learning expert as well as 4 VET organisations: VET College from CDETB in Ireland,

South Eastern Regional College, a VET College in the UK; the Solski centre, a VET School in Slovenia; and Malignani, a VET technical institute in Italy.

Topic	<ul style="list-style-type: none"> - Fostering the skills of VET learners in the digitalization era by means of providing them with knowledge and specific skills in the cloud computing sector and its applicability in the labor market. - Creating and matching synergies between the VET sector and the needs of the ICT sector to facilitate access to the job market.
Best practice Title	Technology Enhanced Learning Mentoring Support
Keywords	<i>ICT skills - New Technologies - Digital Competences</i>

Best practice In order to maximise the potential technology can have on learning and teaching, the VET workforce must be supported to develop the skills and competences to enhance digital integration into their classroom practices.

TELMS project addressed the need for appropriate use of TEL within education provision and the facility to support the staff to embed this in the classroom. Within this project a TELMS Programme was developed and delivered to VET teachers from across partner countries. The Programme facilitated partners in establishing an ILT peer mentoring initiatives allowing them to explore how TEL can be embedded across the curriculum using a peer mentoring strategy. It has also promoted professional development of staff in ICT methodologies.

TARGET GROUP

The target groups reached within the project were:

- VET organisations and providers
- VET teachers
- VET learners
- Policy Makers, Research Bodies and Experts.

GOALS ACHIEVED

Within the 2 years of the project duration TELMS has achieved all of the objectives set out in the original project application, namely:

- 1.To develop a Teacher Peer Mentoring Programme in the effective use of ILT & associated learning and teaching strategies,
- 2.To develop a Teacher Toolkit,
- 3.To develop TELMS Online Platform,
- 4.To train 8 mentors at a transnational short-term staff training event in Northern Ireland,
- 5.To support the 8 mentors to establish & deliver an ILT Pedagogy Mentoring Programme to 16 teachers in the partner institutions,
- 6.To disseminate project outcomes across EU Member States.

OUTPUTS

The project has developed the following Intellectual Outputs::

1. Train the Teacher Mentoring Programme - this programme was developed and delivered by SERC during a one week training activity for VET teachers from partner organisations. The programme has built teachers' capacity and ensured that they could mentor their peers in the utilisation of a range of appropriate technologies and associated digital learning strategies.
2. TELMS Teacher Toolkit available online through TELMS Online Platform to support the training and provide valuable resources and guidance on implementation of the peer mentoring strategy in the classroom.
3. TELMS Online Platform to facilitate access to innovative training resources for TEL.

Participation in the TELMS project gave partners opportunity to upskill their teachers and develop the organisation's capacity by facilitating learning experiences for the staff which ultimately have impacted on the learners; and provided access to new materials to support the teachers' professional development through the implementation of a pedagogy mentoring programme.

The project website www.telms.eu contains a wide array of resources and it is expected that the TELMS Online Platform will grow into a permanent and evolving resource that can be used to support the ongoing professional development of VET teachers in digital education and training

across Europe.	
Reference Link (if any)	<p>Project description: https://erasmus-plus.ec.europa.eu/projects/search/details/2016-1-IE01-KA202-016891</p> <p>TELMS platform: www.telms.eu</p>
Provided By	<p>Coordinator: H2 LEARNING LTD (Dublin - Ireland)</p> <p>Coordinator Type: Small and medium sized enterprise</p> <p>Phone: +35314806201</p>
Language	ENGLISH

Best Practice n. : 3

Best Practice Title: Enabling the potential of handicraft CRAFT 4.0

Project Partner: Agentia pentru Dezvoltare Regionala Nord-Est (Romania); Business Innovation Center Innobridge (Bulgaria); CENTRE DE DIFUSIO TECNOLOGICA DE LA FUSTA I DEL MOBLE DE CATALUNYA (Spain); CIVIC COMPUTING LIMITED (United Kingdom); European Digital Learning Network (Italy); MÄLARDALENS UNIVERSITET (Sweden)

Topic	<ul style="list-style-type: none"> - Fostering the skills of VET learners in the digitalization era by means of providing them with knowledge and specific skills in the cloud computing sector and its applicability in the labor market. - Creating and matching synergies between the VET sector and the needs of the ICT sector to facilitate access to the job market.
Best practice Title	Enabling the potential of handicraft CRAFT 4.0
Keywords	<i>ICT skills, digital skills, digital manufacturing, youth work opportunities</i>
Best practice	Craft 4.0 aimed to create training tools for craftspeople in the areas of

digital modelling and digital/ additive manufacturing. Furthermore, the project aims to improve digital competences in the craft sector and in doing so enhance the craftmaking process. Providing an opportunity for the craftsman to cultivate product design and development skills, increase sectoral networking locally and internationally while also increasing customer engagement, with the purpose of improving and developing individual craft businesses.

Project Activities and Participants

Craft 4.0 consisted of three main outputs underpinned by multiple project activities.

- A survey of 160 craft professionals from the partner countries providing direct insights into specific requirements for the development of a focused training strategy
- A collection of 25 case studies sourced from the Craft 4.0 partners providing insights from established designers/ craftspeople who have adopted digital technology in their craft process
- Organisation of 6 focus groups by the partners with 100 participants from the craft sector who are interested in developing their digital making skills, further informing and refining the design of the proposed training content.

GOALS ACHIEVED

The Craft 4.0 Training Platform : The development of an online training platform which would be used to host the training content and support the learning needs of the craft sector in the area of digital modelling, digital manufacturing and additive manufacturing processes. The structure and functionality of the platform was developed during a 3 day design workshop hosted by Malardalens University and involving 12 participants from the partner organisations.

The Craft 4.0 Training Content : The development of extensive training content specific to the project in the form of video tutorials, presentations and tests, providing craft professionals with learning resources to help develop their practice and business through adoption of digital making technologies. In total there are 47 modules including 37 videos (177 minutes), 10 presentations and 4 tests. In particular, the decision to produce as much video content as possible is notable. Although not allowed for in the original plan, the partners felt that this was the most suitable format for the type of learning and target audience.

IO3 involved 3 deliverables:

1. The project partners conducted a pilot test of 200 participants from 7 countries. 45% of

the participant were from the Craft Sector, 38% from training providers and 17% described as others which included students.

2. Evaluation of the Pilot Test
3. The platform was evaluated via survey and a direct feedback loop to the project partners. The survey consisted of 19 multiple choice questions and 6 free text questions. There were 200 responses with 561 individual comments/ suggestions amounting to 7,700 words.

Results and Impact

The 3rd deliverable of IO3 was a report on the Pilot Test which summarised the outcomes of the pilot test and project generally. The overall satisfaction levels with the platform were very high. The survey evaluated the satisfaction level across 4 categories which included the Training Materials, Training Methodology, Training Platform, and Training Course Impact.

The overall satisfaction levels with the platform were very high with the satisfaction level across the 4 categories greater than 8.5 out of 10 and average satisfaction level being 8.77 out of 10.

Generally the feedback from the sector regarding the project was overwhelmingly positive. Further details and insights are delivered in the Pilot Test Report which is available on the Project Results Platform and Craft 4.0 Website.

At the time of this report, there were 4,100 site visits, 1,295 video views and 2,400 minutes of video watch time.

<p>Reference Link (if any)</p>	<p>Project description: https://erasmus-plus.ec.europa.eu/projects/search/details/2018-1-IE01-KA202-038787</p>
<p>Provided By</p>	<p>Coordinator: TECHNOLOGICAL UNIVERSITY DUBLIN Coordinator Type: Higher education institution (tertiary level) Website: http://www.tudublin.ie Phone: +35314023000</p>

Language	ENGLISH
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Best Practice n. : 4

Best Practice Title: Digital youth work in youth centres

Project Partner: APS LAFENICE ASD (Italy), DYPALL NETWORK: ASSOCIACAO PARA O DESENVOLVIMENTO DA PARTICIPACAO CIDADA (Portugal), EUROGEO VZW (Belgium), Ballyfermot Youth Service (Ireland)

Topic	<ul style="list-style-type: none"> - Fostering the skills of VET learners in the digitalization era by means of providing them with knowledge and specific skills in the cloud computing sector and its applicability in the labor market. - Creating and matching synergies between the VET sector and the needs of the ICT sector to facilitate access to the job market.
Best practice Title	Digital youth work in youth centres
Keywords	<i>Digital Youth Work - Digital Skills And Competences -</i>
Best practice	<p>This project focuses on digital youth work in the context of youth centres and will explore the concept, challenges and good practices of such youth work: as well as map key competences needed for quality youth work in the digital sphere. It will support educators and youth work by providing them with skills and methodologies through training activity and webinars that will equip them with know-how to complement their existing youth work practices in youth centres with digital youth work.</p>
Objectives	<p>The project aims at mapping effective digital tools and models already implemented and tested in youth spaces around Europe, as well as at equipping youth workers with necessary skills and guidelines to implement these formats into the reality of existing youth centres and youth houses. This way youth spaces will be able to take advantage of the benefits of the digital solutions and foster youth participation in decision-making processes in a modern, sustainable and entertaining way. The project will contribute to mainstreaming the best digital practices</p>

across Europe, make youth organisations more aware of the importance of available digital solutions and equip them with tools that allow them to sustain their actions regardless of the circumstances.

The main objectives of the project are:

To map already existing, effective digital solutions in youth work within youth centres;

To equip youth workers with knowledge and skills necessary to implement digital solutions into youth spaces;

To reflect how to create sustainable, digital youth spaces that take full advantage from the digital tools and foster youth participation through different digital channels;

To reflect on how to follow the evolving technological trends while maintaining the principles of youth work within the context of youth centres and similar youth spaces.

Activities

Project consortium comprised of partners from Portugal, Belgium, Italy and Ireland will carry out a research on the state of the art of digital youth work in youth centres around Europe throughout the project, the results of which shall be turned into a Publication at the end of the project which will contribute to the achievement of the objective to map already existing, effective digital solutions in youth work within youth centres. The training course on key competences for digital youth work in youth centres will “equip youth workers with knowledge and skills necessary to implement digital solutions into youth spaces by providing them with information, tools and methodology that they can use in their daily work with young people through a series of workshops and experiential learning sessions based on non-formal education.

The Set of key competences for digital youth work in youth centres that will be created as an intellectual output of the project will allow for reflection on how to follow the evolving technological trends while maintaining the principles of youth work within the context of youth centres and similar youth spaces. It will elaborate on quality tools and quality systems that need to be in place to ensure that the digital youth work within youth centres is done respecting the core principles of youth work. This intellectual output will be used as a base for designing the training and it will also be presented in the Final Seminar that will also be a space for reflection that will contribute to achieving this particular objective.

Webinars that will be another intellectual output of the project will contribute to the goal of

reflecting how to create sustainable, digital youth spaces that take full advantage from the digital tools and foster youth participation through different digital channels as they will be aimed at youth workers from youth centres and will serve as a tool to support them in their efforts to transfer their work with young people in youth centres to the digital space and how to ensure outreach and equal involvement of young people using digital tools, all the while maintaining the core principles of youth work. This is something that is also going to be presented and explored at the Training and Multiplier Event.

Impact

The main tangible results of the project will be the three Intellectual Outputs (IO) created, namely:

- State of the art research: how are the youth centres and youth houses fostering digital youth work (existing practices, their added value, implementation methods, challenges and skills needed to implement them);
- Set of competences for youth workers to create digital environments for youth centres and youth spaces;
- Webinars to train youth workers on digital competences in youth centres.

The results expected during the project and after its completion are the following:

- Increased knowledge on digital youth work among youth workers in youth centres, NGOs and Municipalities;
- Raised awareness of youth work practitioners of the importance of introducing digital youth work all the while maintaining the quality standards, values and principles of youth work;
- Trained and skilled youth workers equipped with tools to implement digital youth work in their daily work in the youth centres;
- Increased capacity of youth workers to respond to the need of practising youth work in the digital sphere especially in restraining situations such as the one we are currently living with the covid pandemic;
- Point of reference, criteria and ideas for all youth centres that want to implement or improve their digital youth work;
- Ensuring digital youth work practises within the context of youth centres that fit the standards



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of quality youth work	
Reference Link (if any)	Project description: https://erasmus-plus.ec.europa.eu/projects/search/details/2021-1-IE01-KA220-YOU-000029141
Provided By	Coordinator: Ballyfermot Youth Service (Dublin) Coordinator Type: Non-governmental organisation/association/social enterprise Website: http://WWW.BALLYFERMOTYOUTHSERVICE.IE Phone: +353879251006
Language	ENGLISH

2. Field research

2.1 Analysis of Survey Results

The survey has been built in order to be submitted to both target groups: VET providers and VET learners.

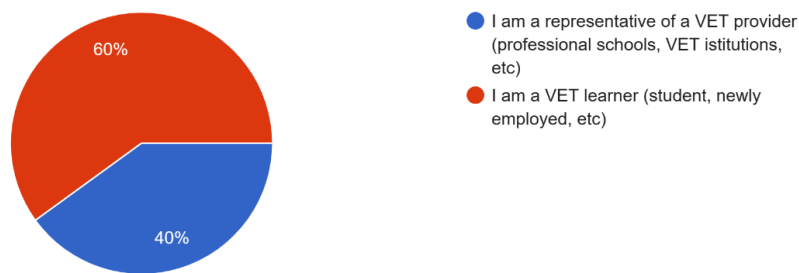
In Ireland, the survey was completed by 21 participants in total.

VET learners = 12 (60%)

VET providers = 8 (40%).

Are you representative of a VET provider or a VET learner?

20 risposte



NOTE: The graph is missing one answer to the first question.

VET PROVIDERS

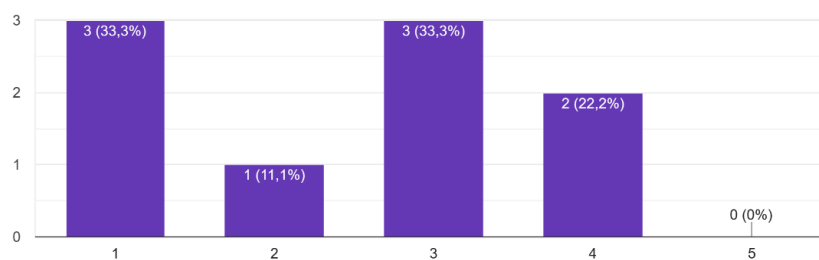
In regard to the specific field in the VET sector, the main answer has been educator/teacher. The following are the answers received:

- Hotel
- Educator
- Human science teacher
- Educator high school
- Vocational training, organizing internships for students abroad
- teacher
- educator
- vocational projects
- english teacher

2. In relation to the familiarity with cloud computing and its applications in the workplace, the answers are split. In general, it is understood that most of the respondents don't have great familiarity with Cloud computing and its applications. In fact, only the 22% of respondents report being really familiar with it.

How familiar are you with cloud computing and its applications in the workplace?

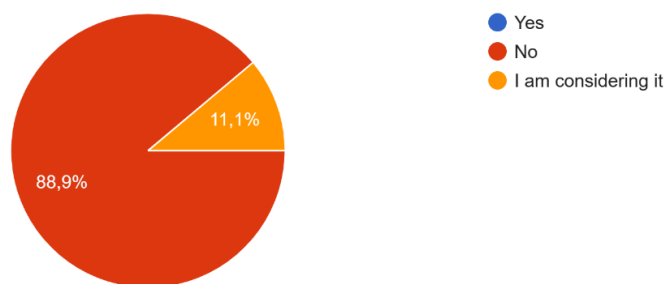
9 risposte



3. In regard to educational path on Cloud Computing offered by their company, all answers are negative. This is very important to underline the absence of training paths around the theme.

Do you, or the institution you work with, already offer any kind of educational path on cloud computing?

9 risposte



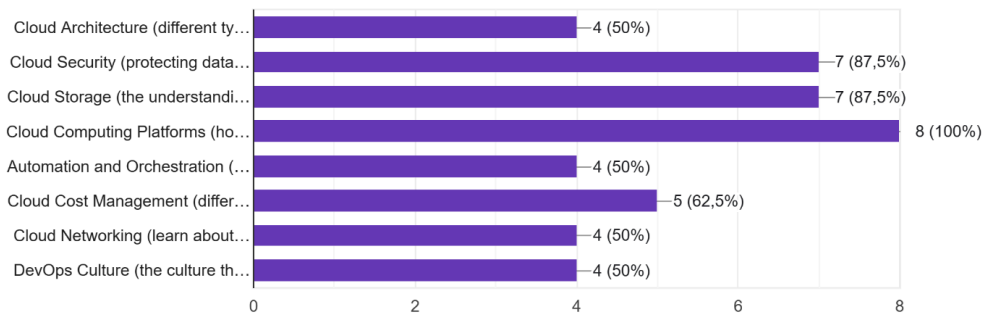
4. Due to the lack of services offered on Cloud computing, there are no answers to the question "If you, or the institution you work with, are already carrying any kind of education path on cloud computing, have you encountered any challenges when teaching cloud computing to VET students, and if so, what were they?".

5. The three main cloud computing skills where VET providers think are most important are: Cloud Computing Platforms (100%), Cloud Security (87.7%) and Cloud Storage

(87.7%)

In your opinion, what are the most important cloud computing skills that VET students should learn?

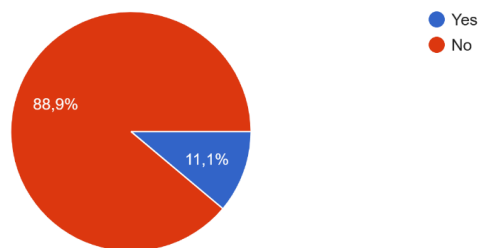
8 risposte



6. When asked if they received any requests from employers for VET graduates with cloud computing skills, just one person replied positively.

Have you received any requests from employers for VET graduates with cloud computing skills?

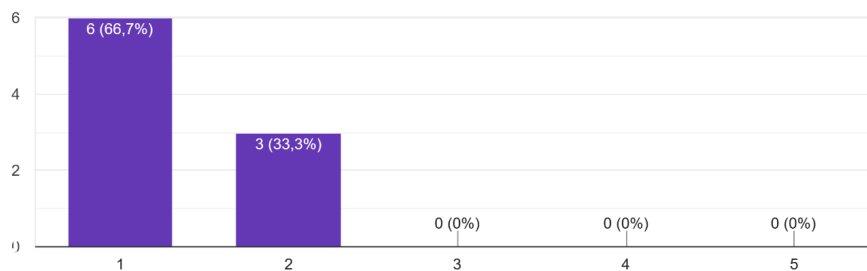
9 risposte



7. The VET providers are mostly **not** confident in their ability to teach cloud computing skills to VET students.

How confident are you in your ability to teach cloud computing skills to VET students?

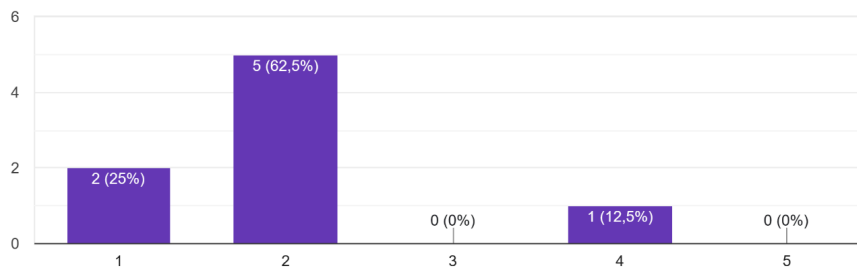
9 risposte



8. In general, there is a poor demand among VET students for cloud computing courses.

How much demand do you see for cloud computing courses among your VET students?

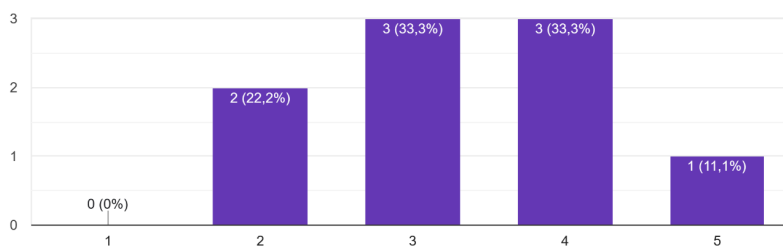
8 risposte



9. It's important to notice that VET providers mostly think it's important to stay up-to-date with the latest developments in cloud computing

How important is it for VET providers and educators to stay up-to-date with the latest developments in cloud computing?

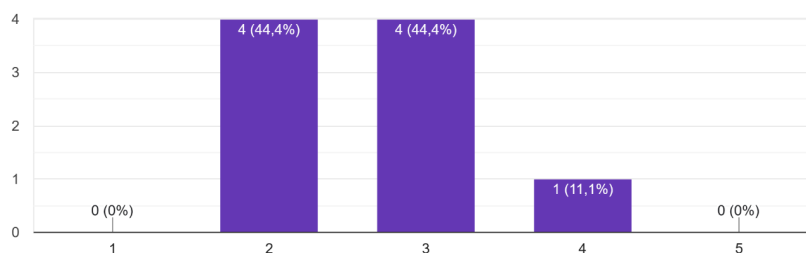
9 risposte



10. VET providers are mostly interested in receiving professional development materials or take part in specific educational mobilities on cloud computing to strengthen their teaching skills

How much would you be interested in receiving professional development materials or take part in specific educational mobilities on cloud computing to strengthen your teaching skills in this field?

9 risposte

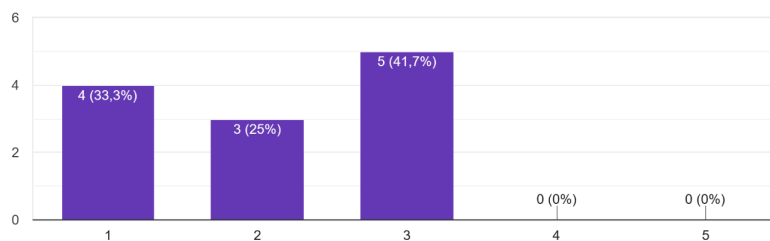


VET LEARNERS

1. The level of familiarity with cloud computing technology is very different among the VET learners interviewed. Although 41.7% replied that they are somewhat familiar with cloud computing, 33% are not familiar at all and 25% are only slightly familiar with cloud computing.

What is your current level of familiarity with cloud computing technology?

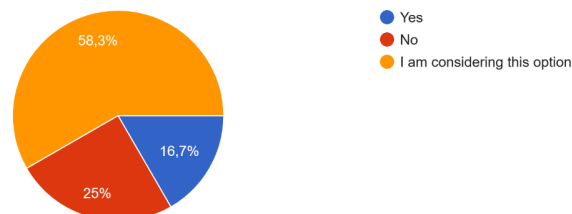
12 risposte



2. Only 16.7% of respondents attended courses or training around cloud computing, however 58.3% is considering this option. This reply shows interest among VET learners around the topic.

Have you taken any courses or training related to cloud computing?

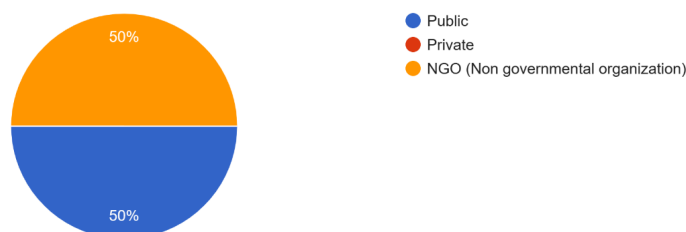
12 risposte



3. About the kind of organization that held the course on cloud computing, answers are perfectly split into "Public" and "NGO"

what kind of institution the provided was?

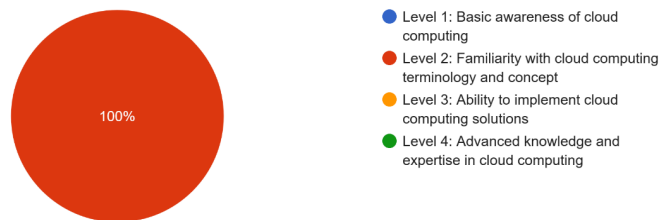
2 risposte



4. Respondents agreed that their level of expertise after the course is Level 2: Familiarity with cloud computing terminology and concept

what level of cloud computing expertise do you possess after taking the course?

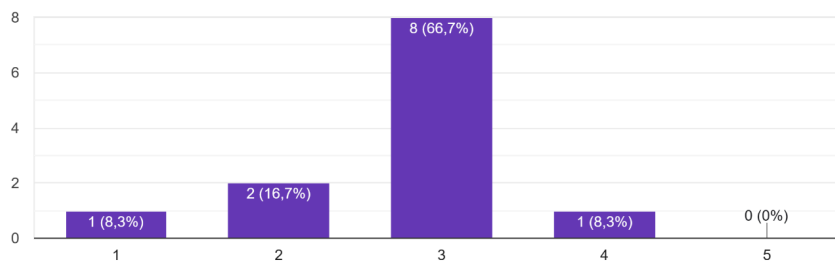
2 risposte



5. Most of VET learners (66.7%) agree that is important to possess cloud computing skills for their professional future career.

How important do you think cloud computing skills are for your future career?

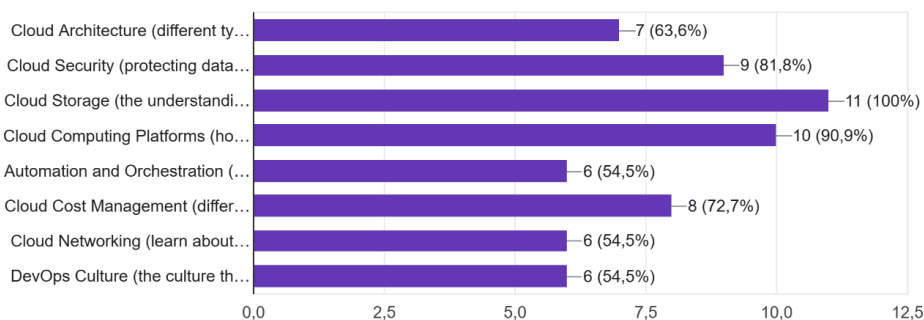
12 risposte



6. In relation to the most important cloud computing skills that VET students should learn, the opinions are different. The most chosen skill is "Cloud Storage" (100% of respondents agreed) however there is a quite general interest around all cloud computing skills. In fact, all skills received at least 54.5% of the responses.

In your opinion, what are the most important cloud computing skills that VET students should learn?

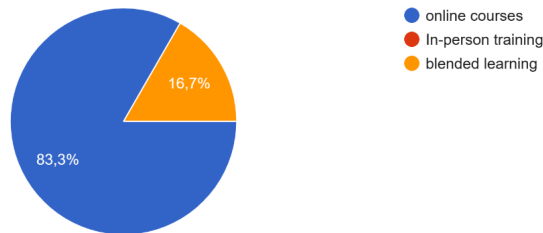
11 risposte



7. Most of VET learners prefer an online training format around cloud computing (83.3%)

What kind of training format do you prefer for learning cloud computing skills?

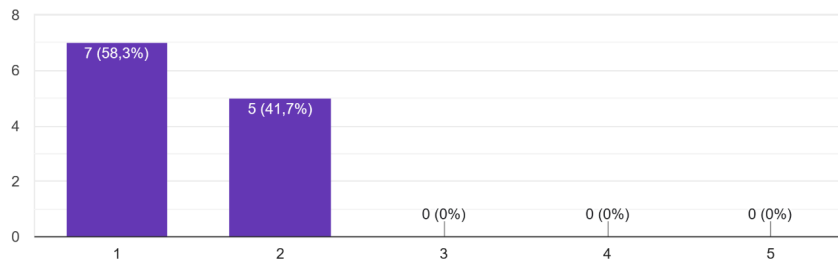
12 risposte



8. There is a general low confidence around personal ability to use cloud based software and services, due to the fact that most of the respondents do not have skills around the topic.

How confident are you in your ability to use cloud-based software and services?

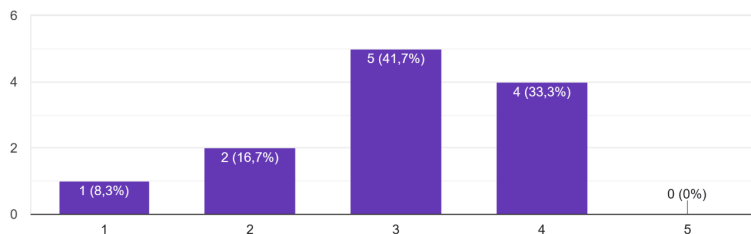
12 risposte



9. There is a general positive interest in learning more about cloud computing, almost all candidates would like to take part in some activity related to this field.

How much would you be interested in receiving professional development materials or take part in specific educational mobilities on cloud computing to strengthen your competences in this field?

12 risposte



2.2. Analysis of Focus Group Study

This focus group was held under the desk research of the "Up-skilling the VET sector to Cloud Computing" Project with aim of to defining and understanding the state-of-the-art regarding the specific sector of Cloud Computing in partner countries, analyze the specific needs and gaps in the sector, and assess the professional skills needed in the labor market for VET providers. The focus group followed the directions in the research guideline that was elaborated at the beginning of the project.

The following topics were discussed:

1. General Information about Respondents
2. Information about VET situation on the labor market and the existing education opportunities in the cloud computing sector
3. Challenges/obstacles that VET learners are facing to establish a career in the ICT and cloud computing-related professions
4. Comments and personal opinion

Participant Demographics

Moderator: Project referent person of European Career Evolution - Clarissa Caputo

Participants of the focus group research:

- 3 students from Graphic & Communication high school
gender: 1 girl & 2 boys
age: 20 years old
- 1 tutors educator in high school of multiple courses
gender: male
age: 39 years old

Summary of results

(Including representative quotes, results of yes or no questions, and quantitative data)



Outcome 1: General Information about Respondents

Do you know what cloud computing is?

All: not really

Note: the participants didn't know what Cloud Computing means but after a brief explanation they all agreed that they know the subject, even if they never gave it a proper name.



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Do all of you have a cloud account? Are you confident in using cloud computing tools and platforms in your daily life? Do you use online storage?

M - In our school we need to use cloud computing every single day, we use it for sharing documents and homeworks with our teachers, we need it in order to download important files and to keep working on projects started in class. All of us have a personal cloud profile and we need to access to it daily.

L - Yes, we couldn't go to school without it, over the past years everything for our course is made digitally and we need cloud services just for simple school tasks, we cannot use the normal e-mail.

D - I use online storage for school but also just for myself for many things, like pictures and videos or to work on personal digital projects. It's useful especially because you can leave any project and never lose it, get it back in a different computer at any time you need, I do use it very often.

Candidates agreed that one of the main good aspect of cloud services is the high safety level, no risk to lose documents and fast accessibility

Tutor - We *teachers and tutors* have a personal account as well for cloud computing with the school platform and sure we need to use it to upload documents or to access to files related to our job, however it's a completely different use. We don't need it as much as our students, specifically the Graphic course. To be honest we cannot say it is essential for our job, we could work without it. But sure, it helps a lot.

What kind of Cloud platforms do you use?

Students: The main one is Classroom, used in school for most of our needs, but we also use very often Google drive and Credit cloud

Tutors: Classroom and Google drive for personal use

Do you think that having cloud computing skills can improve your possibilities in the labor market?

D - Well yes, it is impossible for us to follow our course and do our job without this kind of skills.

L - Using these platforms allows us to work fast and easily, we could not imagine how to do it otherwise. Also, we are children of modern times, we are used to these kinds of

solutions.

Did you use Cloud computing also when you worked in a company during some internship?

M - Yes all the time! Every company has its own digital world, they have platforms where they share files and documents, if you need anything you just go there.

L - I had the same experience, the platform used in my last internship was very useful also to keep track of everyone's job, at the end of the day we had to upload our work on the shared drive and we could see what our colleagues had done during the day. Also, if you needed to take some notes about the work to do the next day, you could do it in the same place. Very useful.

What kind of companies did you have your internship with?

All: 3D creation, graphic, communication & scripting for companies

Outcome 2: Information about VET situation on the labor market and the existing education opportunities in the cloud computing sector (for VET providers)

How well known is cloud computing in the ICT and Irish education training system?

Do you think it is a demanded skill in the sector?

M - Well I feel that over the past years in our school we use cloud computing more and more often, I am not sure if it is just about our Institute though. Our sector of study and job requires these skills for sure. If a graphic designer doesn't know how to store documents online and how to access cloud platforms, he can't work well in my opinion.

D - Yes, in our sector for sure this kind of skills are demanded both from the school and the companies. In school, we learn them from the beginning because we couldn't work without.

Tutor - For teachers and educators the situation is different, we don't need cloud services so much, we learned about it over the past years as we adapted to new ways of working. Covid for sure made all of us thinking about different solutions. For communication and graphic, sure this is a great skill to have and they need it.

Is there a subject/course or training in your school curricula about cloud computing?

L - No, we just learn about cloud computing going to class

Tutor - For teachers, we just had to follow one day course in school about the use of the



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Outcome 3: Challenges/obstacles that VET learners are facing to establish a career in the ICT and cloud computing-related professions

What are the challenges and obstacles that VET learners are facing to establish a career in the ICT and cloud computing-related professions?

L - Artificial intelligence

D - Nothing specific, just general fear to don't find a job (*his colleague replied that it is impossible*)

*What are the current training opportunities about cloud computing in Ireland / Cork ?
If yes, what are they? Are they public or private?*

Tutor - Tutors and teachers don't really need great skills about cloud computing, in case it is required the school organizes a day of training, also for the rest of students it is less required. We need to consider that graphic sectors spend a lot of time in front of a computer, but other courses need less competences around it.

Students replied that they don't know about specific cloud computing courses in Cork or Ireland.

3. Implications and Conclusions

Taking into consideration the results of the survey and the focus group, we can state that the topic of cloud computing in Ireland/Cork still needs to be properly disseminated.

In fact, both the online survey and the focus group revealed an important disparity between those who are familiar with the topic and those who are totally unfamiliar with it. The numbers even out, making it difficult to draw univocal conclusions.

A high number of people in the survey - both VET providers and VET learners - admitted that they were not very familiar with the topic. However, the focus group revealed that the very concept of cloud computing is not well known to most, in other words there is a lack of awareness around what cloud computing really consists of. In fact, after workshop participants were given a definition, they all agreed that they know more about the subject than they initially thought.

This raises the possibility that some people in the questionnaire who answered that they did not know the subject of cloud computing might be confused about its practical, day-to-day uses. This reflection also arises because during the workshop it emerged that cloud platforms are widely used in schools. In recent years, more and more schools in Ireland have been using online document organisation platforms and not only that, since through these platforms it is possible to carry out numerous school and professional activities. Teachers and educators have to adapt to these uses as well, although it looks like their knowledge of the subject is limited to the bare minimum.

The survey and workshop certainly revealed a medium level of interest from VET providers to strengthen their skills on the topic of cloud computing, especially such skills seem necessary in increasingly modernised schools.

As far as VET learners are concerned, the situation is similar. There is a tie between those who do not feel close to the topic of cloud computing and those who are moderately familiar with it. However, the reflection proposed above also applies here, so it could be that more students know about the topic of cloud computing if the school includes any cloud platform.

Certainly, students who attend courses related to digital communication are facilitated in learning these skills and consider them essential for their future. Observing how the use of cloud platforms is also widespread in school, we can assume that the teaching of cloud-related skills will become more common in the years to come.

Probably more awareness around the topic of cloud computing and its applicability both in the business world and on a daily basis would be effective in enabling VET learners and providers to recognize the importance of the topic and explore it further with specific courses.