

Funded by Italian Ministry of Interior

National Research Council of Italy







ST



## Innovation in society: training paths and human capital enhancement in Sudan

Under the patronage of





سفارة جمهورية السودان - رزما Antrastrable Stynellos at Wester-Stone



Learning through technology: for a blended educational model. The role of CAP (UNIBA) in the INSO project

Prof. Alberto Fornasari CAP (University of Bari Aldo Moro) alberto.fornasari@uniba.it



## CONTENTS



ſ	Ξ	Ξ	ן
l	Ξ	Ξ	J
2			

Learning environment



Educational guidance to individual studies



Soft skills' acknowledgement, assessment and certification



Final assessment on the project's effectiveness





## LEARNING

## **ENVIRONMENT**





## **Project's platform**



• The web-based learning environment designed to deliver web-based training has been hosted within a Moodle (Modular Object-Oriented Dynamic Learning Environment) e-learning platform.

- Among the resources made available by the platform, the course has made use of:
- video lectures, additional material on PDF and conceptual maps, to convey the knowledge in a perspective of self-training
- assignments and quizzes to evaluate the acquired knowledge and skills
- forums and chats, facilitating dialogue and community building between the students.





MINISTERO DELL'INTERNO		
---------------------------	--	--



INSO

- News forum
- Technical Support
- Chat
- 1 Netiquette
- Rews forum
- Technical Support
- Chat
- 1 Netiquette
- Tempi di frequentazione del corso
  - Accesso vincolato Accesso consentito dal 1 agosto 2018

#### **Assessment of Learning Effectiveness**

- Assessment of learning effectiveness











The design of this learning environment was built on the concept of the social presence, which is a fundamental requirement within a distance-learning course. Fostering social presence means, in a first instance, supporting the community through cohesion. It is necessary to ensure that the students can feel involved in discussions and collaborative activities (Garrison & Vaughan, 2008), as well as to reduce the perception of isolation and the resulting risk of ineffectiveness of the training intervention which may occur in distance learning contexts.





On these assumptions, knowledge is considered a social construction, made easier by the interaction with peers (Hiltz, 1998). In fact, it must be agreed that the "*participation and collaboration* are two fundamental *values* in the communication processes of Web 2.0, and also in the educational processes of formal contexts" (Galliani, 2012).

This is why the primary objective to attain in an online learning environment is to build a learning community (Brown & Campione, 1990; Bereiter & Scardamalia, 1994), meant as a digital sharing "space" (Tu & Corry, 2001), in which the metacognitive aspects of the learning process are emphasized (Limone, 2012).





The learning environment must, therefore, facilitate the establishment of participatory relationships, located and distributed through processes of personal appropriation - from metacognitive reflection (Albanese, Doudin & Martin, 2003) to self-effectiveness (Zimmerman, 1995) – and negotiation/renegotiation of meanings (Lave & Wenger, 1991).

The online learning environment, designed to provide distance learning, has been hosted within:a Moodle e-learning platform (acronym for Modular Object-Oriented Dynamic Learning Environment); a Course Management System (CMS) designed following the principles of social constructivism (Vygotsky, 1978) that extends the idea of constructivism to a group of people who build knowledge for each other, collaborating in the creation of a small culture of shared objects/concepts.



## **Training offering**

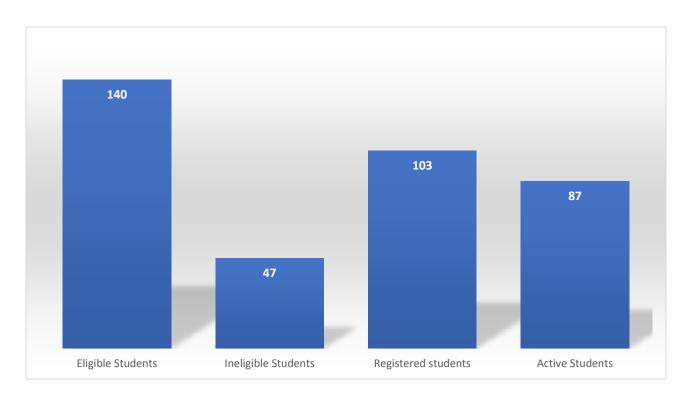
The training offered is composed of 6 didactic modules:



- **1. Building micro-enterprises**. Held by Professor **Albanese**, it contains 19 video lectures and the related in-depth PDF materials;
- 2. Organizations' Sostenibility. Held by Professors Rossi, Pace, Fasciglione and Corbino, it contains 14 video lectures and the related in-depth PDF materials;
- 3. Marketing & Management. Held by Professors Micera and Crispino, it contains 11 video lectures and the related in-depth PDF materials;
- 4. Social networks and relationship dynamics. Held by Professor Fornasari, it contains 9 video lectures and the related in-depth PDF materials;
- Job search techniques. Held by Professor Manuti, it contains 12 video lectures and the related in-depth PDF materials;
- 6. Social media for micro-enterprises. Held by Professor Pirlo, it contains 8 video lectures and the related in-depth PDF materials.



## **Registered students**

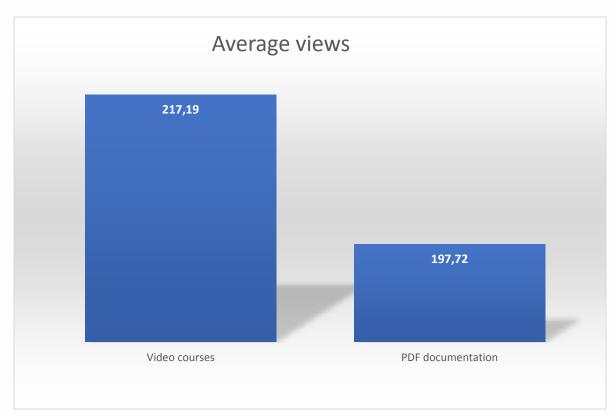




- The project envisaged the involvement of 140 students;
- 47 of them did not own a personal e-mail address.
- As a consequence, only 103 students were involved (68.67% of the foreseen number of students).
- Among them, 16 students have never accessed the platform, and have never benefited from the training provided.
- Therefore, the training activities were carried out by the 84,47% of the eligible students, in other words by 87 students out of the 103 registered on the platform.



## The participation





- 73 video lectures were uploaded on the platform. They have registered an average of 217,19 views per video lesson;
- The individual study was also supported by in-depth material in PDF and concept maps. A total of 102 resources were loaded, each of which was displayed 197,72 times on average;
- Within the forums a lively comparison has been generated, there are, in fact, 257 speeches and, including the chat, 4.215 views;





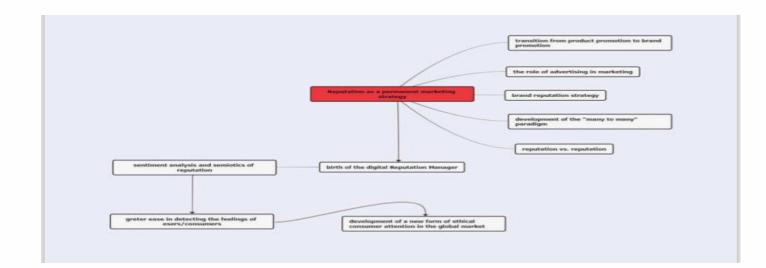
## EDUCATIONAL GUIDANCE TO INDIVIDUAL STUDY





# Educational guidance to individual studies

- INSO
- Study and analysis of the teaching material provided as part of the education program
- Creation of conceptual maps for each module of the training offer



 conceptual maps, created with the "Mindomo" software



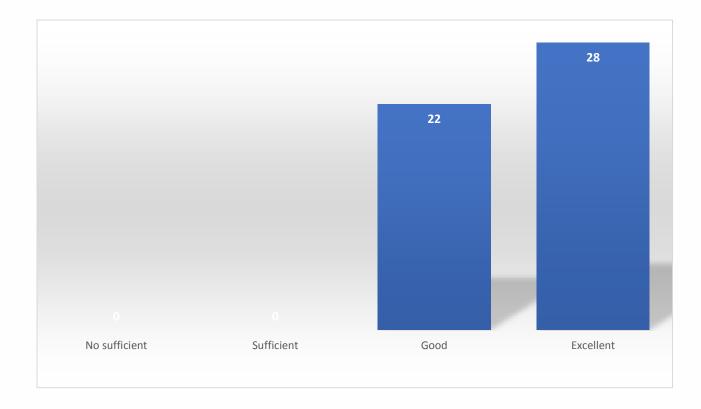
## A questionnaire for the assessment of apprenticeships



- Three multiple-choice questions were generated for each module, for a total of eighteen questions aimed to create a final questionnaire administered on the specific platform used, <u>www.insoelearning.it</u>
- Aim: verifying the levels of knowledge achieved
- This questionnaire, structured in accordance to various levels of evaluation, allowed to achieve a **sufficient** evaluation by answering positively a minimum of six questions out of a total of eighteen, a **good** evaluation for seven to twelve correct answers, and an **excellent** evaluation for thirteen to eighteen answers.



## **Results achieved**





From the foregoing analysis, it can be seen that 50 students actually completed the test (57, 47%) and in particular that 22 of them obtained a **good** evaluation (44%) while 28 obtained an **excellent** evaluation (56%)



## Sample mortality rate



The mortality rate is 42, 53% (37 students out of 87 active). This could be mainly due to **two factors**:

- the difficulties in getting to the university premises easily;
- some of the students may have completed their study cycle before the final exam, notwithstanding the fact that the final exam has been regularly scheduled;





## SOFT SKILLS' ACKNOWLEDGEMENT, ASSESSMENT AND CERTIFICATION







### Involve the project's target audience in the soft skills' assessment process

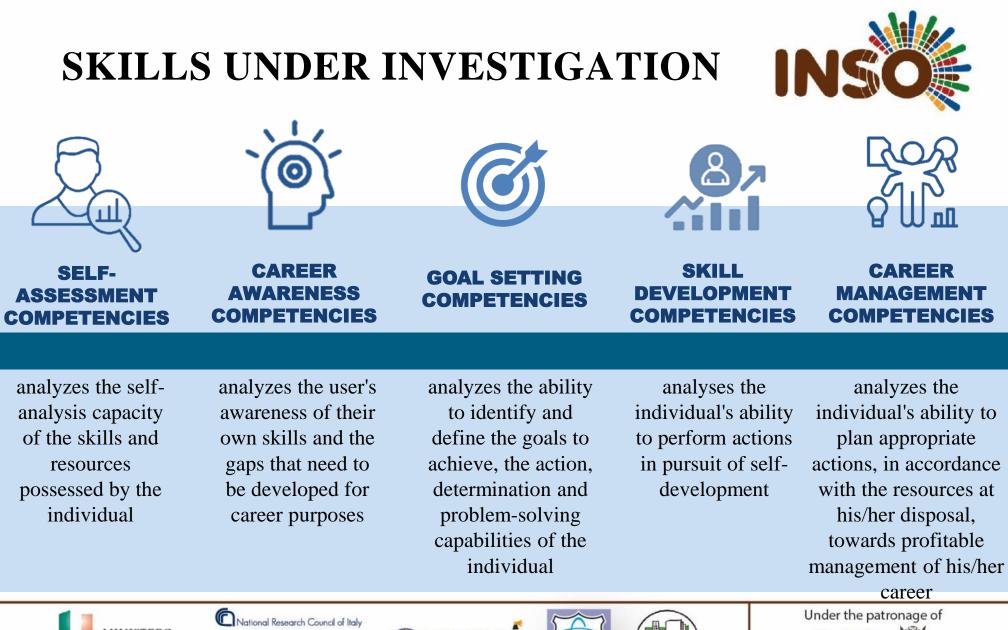
Which soft skills?

## **Career Development Skills**



Competences that support the individual in identifying his/her abilities/skills, developing professional learning objectives and making career decisions.













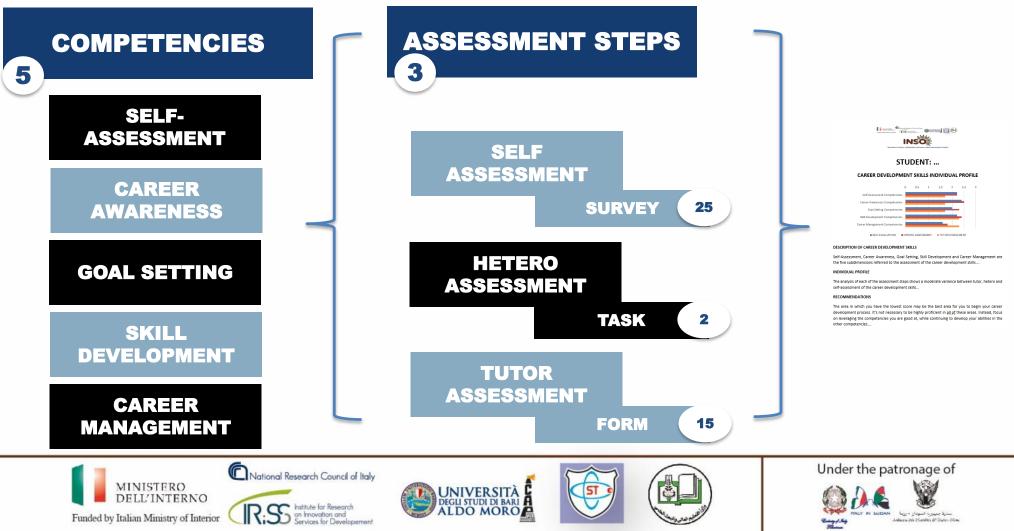




## METHODOLOGY

INSO and summarized in

The five sub-dimensions have been analyzed in three steps, through three tools, and summarized in an individual folder.



## TOOLS





#### "Self-evaluation survey: Career Development Competencies Assessment"

This is a questionnaire for the self-evaluation of transversal skills related to the ability to plan actions aimed at developing and maintaining one's career. It aims to capture the perception and awareness that the individual has about the possession of the skills mentioned above. Each area of competence is attested by 5 items, for a total of **25 closed questions**, proposed to the user on a scale of scores ranging from 1 to 3 (1=not true - 2= somewhat true - 3=very true).

## HETERO



#### "Soft skills evaluation task"

It consists of the assignment of an assignment, where the individual is asked to identify with the preparation process for a job interview. The soft skills are evaluated through **two open-ended macro questions** to which the person must answer using a maximum of 15 lines each. The recipients have the project platform at their disposal to carry out the test.



#### "Student's Career Development skills Assessment

Assessment form for the Career Development Skills, given to the tutors in reference to the students they followed in the internship experience, consisting of 15 closed questions on a scale of 1 to 3 (1=less than acceptable - 2= acceptable/good - 3= very good).

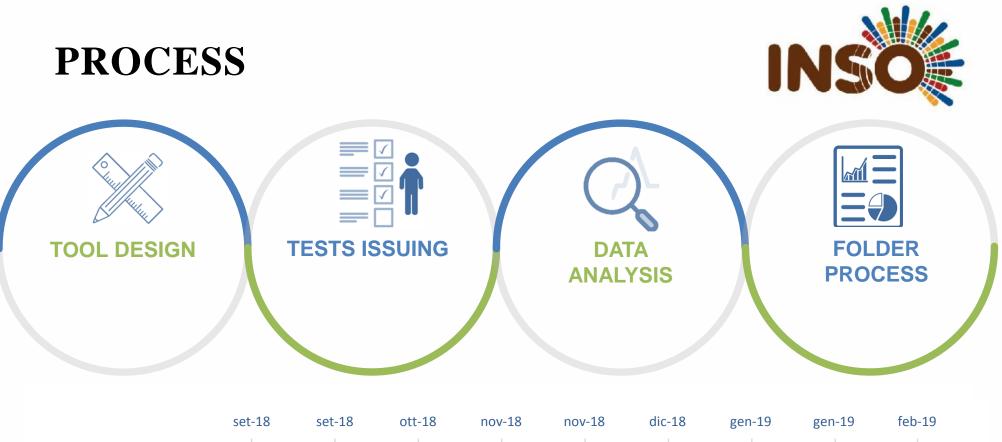














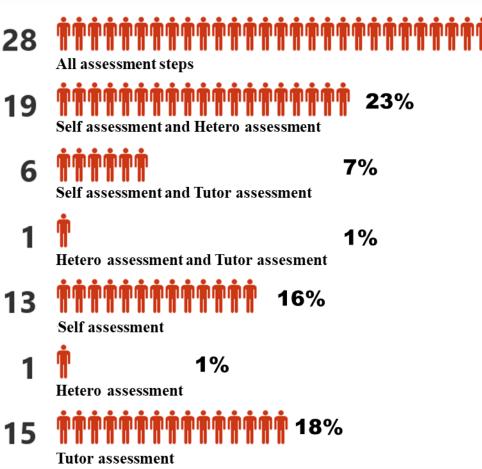


## ATTENDEES 83

The three tests were not collected for all the participants.



34%







# OUTPUT: CAREER DEVELOPMENT NSO

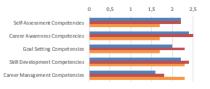
Synthesis graph showing the results of the investigations on the competences investigated

#### INDIVIDUAL PROFILE



#### STUDENT: ...

#### CAREER DEVELOPMENT SKILLS INDIVIDUAL PROFILE



SELF EVALUATION HETERO ASSESSMENT TUTOR ASSESSMENT

#### DESCRIPTION OF CAREER DEVELOPMENT SKILLS

Self-Assessment, Career Awareness, Goal Setting, Skill Development and Career Management are the five subdimensions referred to the assessment of the career development skills....

#### INDIVIDUAL PROFILE

The analysis of each of the assessment steps shows a moderate variance between tutor, hetero and self-assessment of the career development skills...

#### RECOMMENDATIONS

The area in which you have the lowest score may be the best area for you to begin your career development process. It's not necessary to be highly proficient in all of these areas. Instead, focus on leveraging the competencies you are good at, while continuing to develop your abilities in the other competencies....

#### DESCRIPTION OF CAREER DEVELOPMENT SKILLS

#### RECOMMENDATIONS













## FINAL ASSESSMENT ON THE

## **PROJECT'S EFFECTIVENESS**







## THE ASSESSMENT ACTIVITIES

In order to **measure the effectiveness** of the INSO Project, we have carried out a tutoring and mentoring work regarding the training activities provided by the course, through the construction of an evaluation tool aimed at the students attending the lessons.





## THE QUESTIONNAIRE

It was suggested to evaluate the **effectiveness of the Inso Project**, with the intention of highlighting the considerations that emerged during the course and some important suggestions about possible actions to be taken to improve the implementation of new training interventions in the areas covered by the Project.



## TIMING AND METHODS OF DELIVERY



The **questionnaire** was administered remotely through the use of an **e-learning platform (MOODLE)** in the period of time between 19 December 2018 and 24 January 2019.

## ATTENDEES

Of the 87 participants attending the course,

**34** students or young graduates answered the questionnaire.





The **questionnaire** aimed to evaluate the effectiveness of the training project, comparing the expected objectives with the results obtained,

through three

#### evaluation criteria:

1. students' satisfaction with the usefulness of the course (customer)

2. evaluation of learning in terms of self-perception

(self assessment)

3. transferability - impact on working career





In the questionnaire, an important section was dedicated to the study of the territorial **context**, which constituted a transversal variable of analysis of the training activity.

Its **purpose** was to understand the important aspects of the country of origin of the young students, as well as the choices of education and work made or intended to be made.



## 1. Usefulness of the course - customer



#### Do you think that the objectives of the module have been achieved?

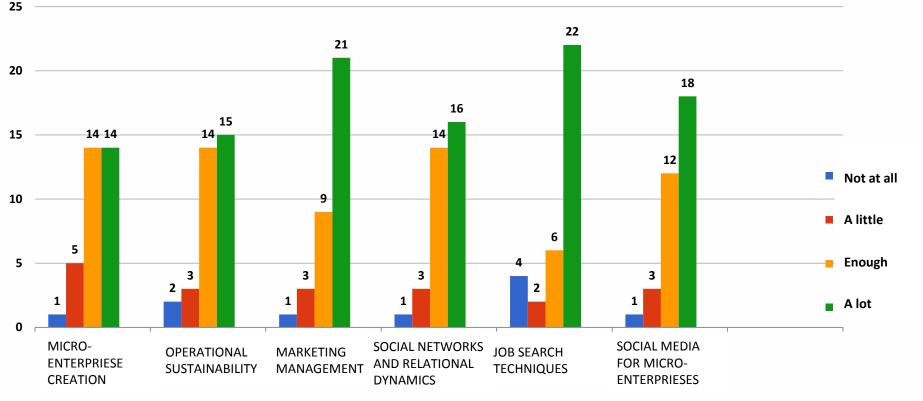


Fig. 1 - Section 1 - Appreciation/usefulness



## 1. Utilità del corso - customer



Fig. 2. The topics covered in the module have been useful for your studies and job search?

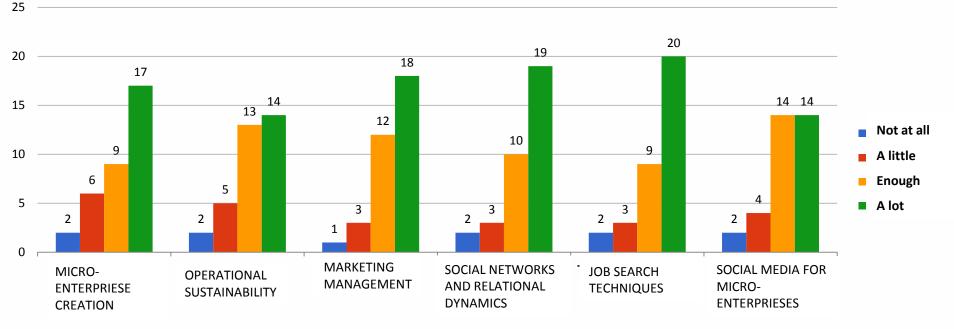


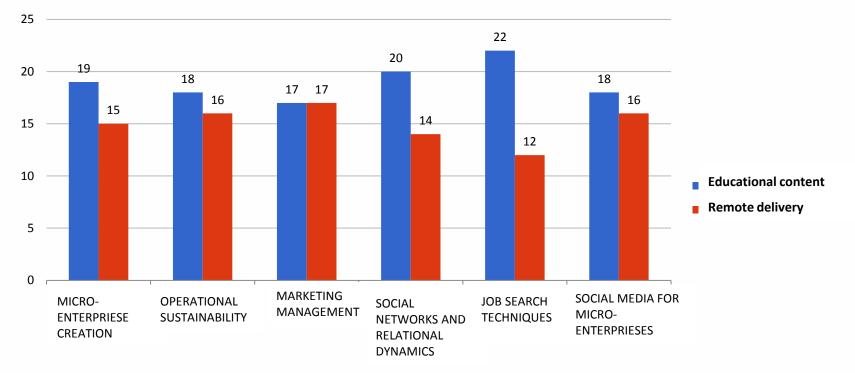
Fig. 2 - Section 1 - Appreciation/usefulness



## 1. Usefulness of the course - customer



Fig. 3. What would you improve in the modules between the educational content and the distance learning?





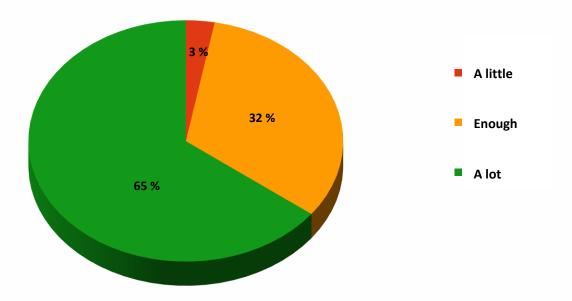


## 2. Perception of learning



Fig. 4. How much do you think you have improved your learning on the issues

covered by the training compared to before the start of the project?



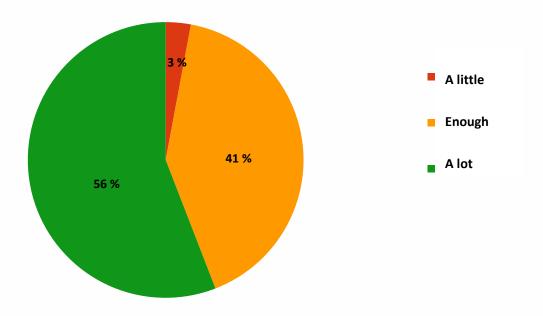


## 2. Perception of learning



Fig. 5. Do you feel more confident in managing content related to

training topics than before the start of the project?

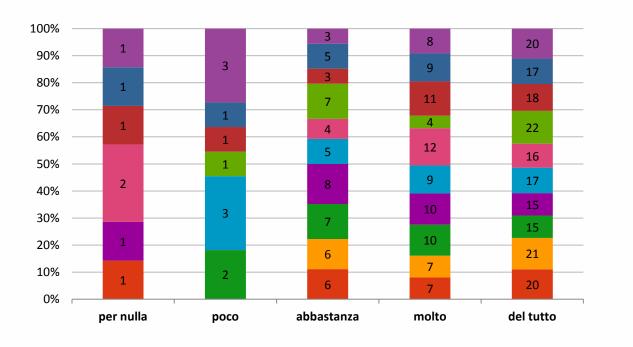




## 2. Perception of learning



#### Fig. 6. Thinking of a future job, you think you have the ability to...



- Achieve the objectives assigned Respect working hours and times Learning new working methods Concentrate your energy on the job Complete the task assigned **Relate effectively with any customers** Have good relations with the managers Working with people who are different in age and experience from mine Working in groups
- **Collaborate with other colleagues**











## 2. Perception of learning



Fig. 7. How much do you think your perception of working efficiency has

improved after the course (confidence related to your skills)?

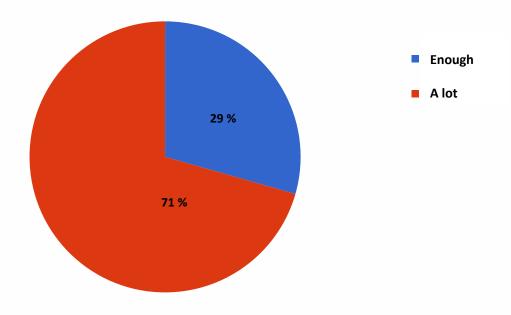
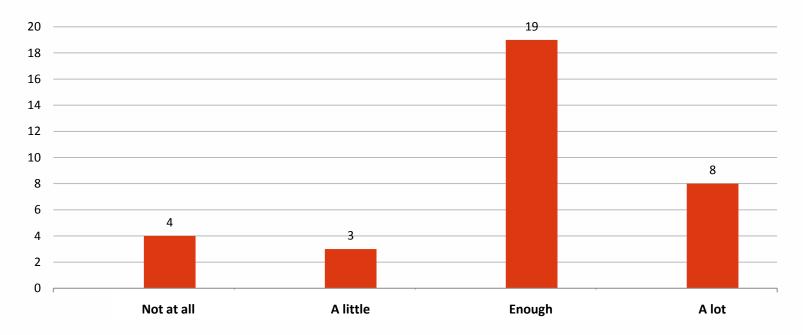






Fig. 8. You had the opportunity to use the knowledge learned in some university tests or



#### in some professional experiences?



### Where?

- In the marketing activities that I carry out
- In society and with your co-workers
- In e-learning activities
- In the path of building up of my professional career
- When I learn from other people what I have to do
- In any context

### Why?

- To teach the new generations the basic knowledge gained in the course
- To act independently
- The work is more flexible
- To teach people how to learn
- To improve the success of my business and contribute to the development of my country
- It is just the perfect way to work and be successful
- Because I want to improve the society I live in
- Because I need this knowledge in my life





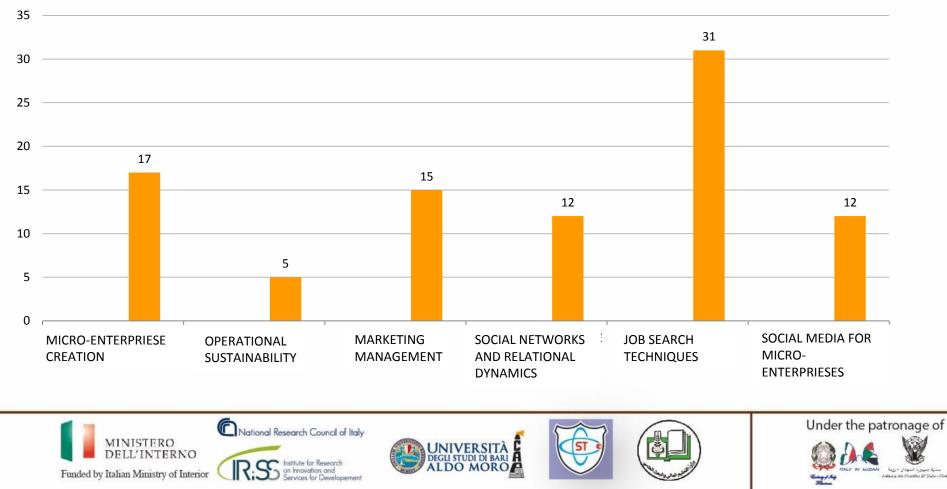






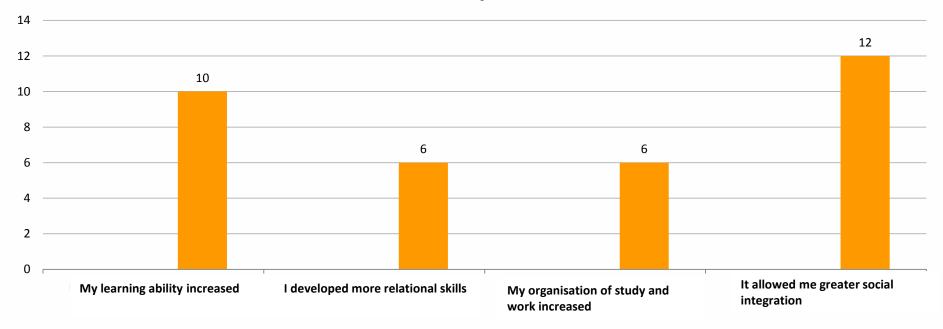


# Fig. 9. Which modules do you think will make it easier for you to find a job?





# Fig. 10. Which modules do you think will make it easier for you to find a job?







### **Country of origin:**

50% Sudan

47% South Sudan

3% Eritrea

**68**% of those responding still live in the same city in which they were born, while **32**% live i city

Cities: Sudan and South Sudan.





### Describe your country ...

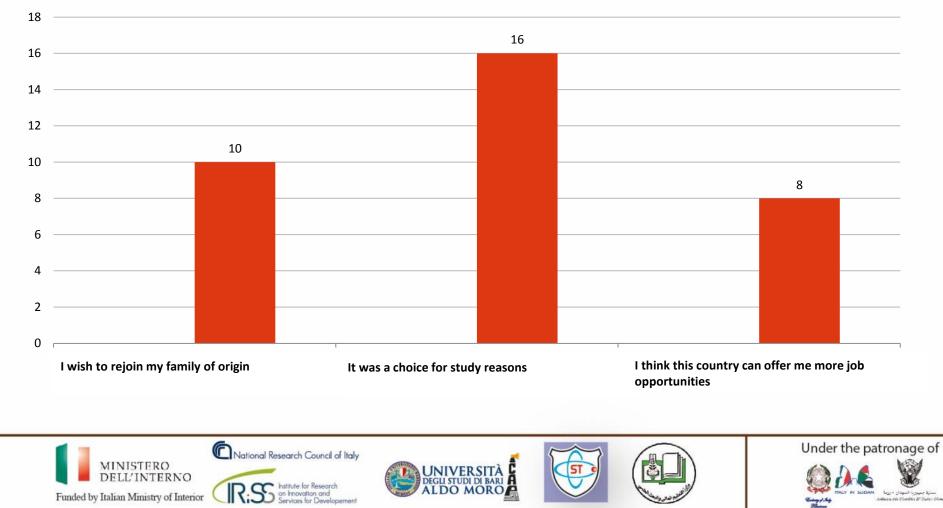
- It is a rich country in terms of natural, cultural and human resources.
- My country is the best place in which you can find a lot of resources and materials, but they are not used, because there are no technological tools that can help transform them and make them useful.
- It's a country where people cooperate to achieve results.
- My country has many cultures and traditions that make you feel in a small world, with all its differences we live together, without any hate. We help whoever needs it and together we try to make it better than other countries.
- It's a nice place that I call home, but war and domestic problems are destroying it.







#### Fig. 11. Why did you choose this country?





### What would you like to improve on the local reality you live in?

Schooling and education (8)

Technology and e-learning (6)

Health and quality of life (5)

Knowledge and culture (3)

Highest job opportunities and wages (3)

Respect and peace amongst men (2)







### Attendants' age

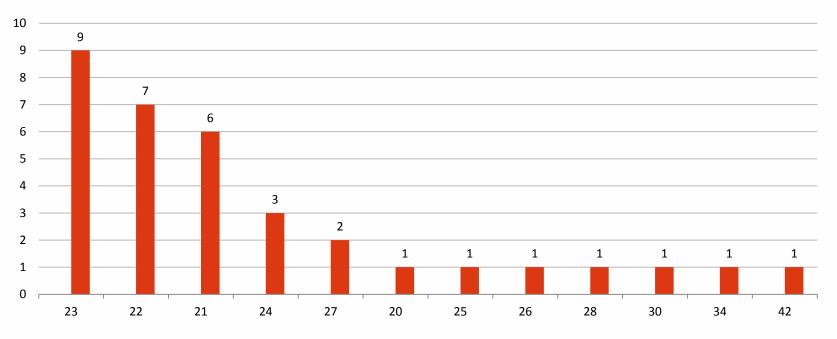


Fig. 12. Section 4 – How old are you?







### **Attendants attending University:**

Academic Year: 4th year (4), 5th year (3), 3rd year (1)

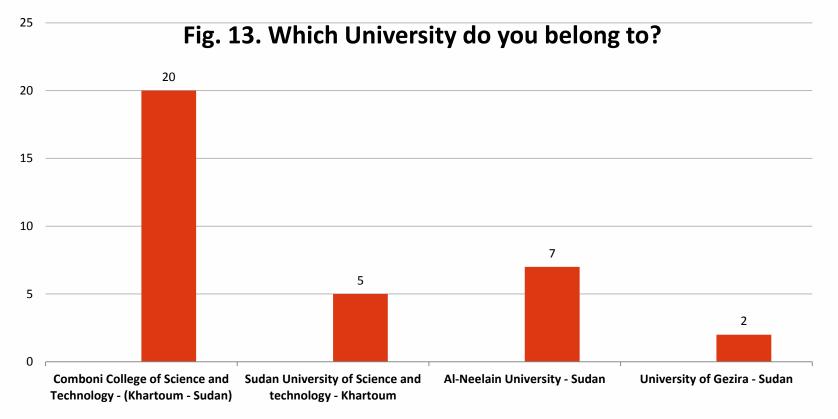
### **Graduated attendants:**

Year of completion of the degree: 2018 (26)







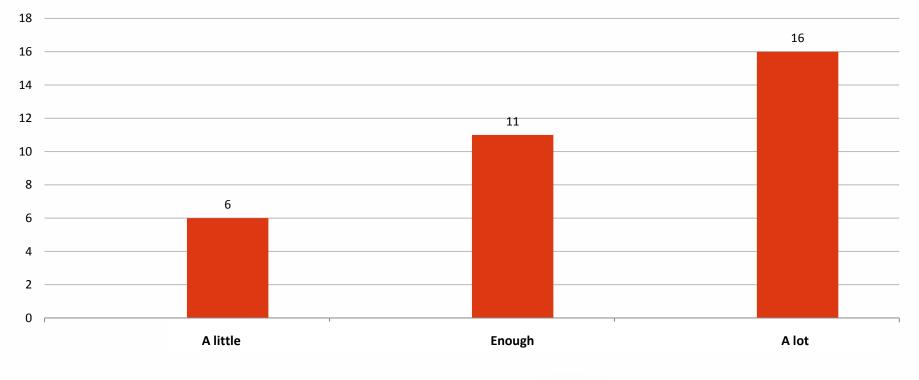








# Fig. 14. In the face of what the INSO Project has given you, has your perception of the context in which you live changed?





#### Why?



- Because I have acquired basic knowledge and skills on the topics proposed by the Project (7)
- Thanks to the knowledge acquired in several fields, the Project has helped me to better understand what surrounds me and to change the way I think and how to manage things (7)
- The INSO project allowed me to acquire the knowledge and skills necessary to better manage my working career (5)
- Has contributed to improving my awareness of sustainable development (4)
- It taught me how to create a new job and look for new business opportunities that I didn't know (3)
- It made me aware of my values and those of the context in which I live (2)
- It has helped me to find a balance between study and working career (1)
- It has made it easier for me to apply the knowledge acquired in society (1)
- It made me more creative and prepared in the project activities (1)

