

Dissemination of Telecommunications and Informatics Engineering (LETI)

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(Learning report)

Abstract—In this report I analyzed the soft skills that I acquired and developed during the activity of dissemination of LETI, the importance of that acquisition and reflected about the soft skills I don't possess but consider essential to my future professional and personal life. I also reflected about the skills that employers look for and their importance for the organizations.

Index Terms—Portfolio Pessoal A, dissemination, LETI, NEETI, TagusPark, high schools, learning report, soft-skills, leadership, verbal communication, self-learning, reflect on practice, teamwork, social skills, responsibility, self-esteem, negotiating skills, organizations, employers.

TOO MANY

1 INTRODUCTION

ALTHOUGH a successful career is frequently associated with good academic qualifications and experience, ^{it is} it's often forgotten how important other factors are. The ability to deal with one's feelings and understand the feelings of others in any given situation helps one to complement their cognitive capacities with a humane understanding of issues. This ability is known as Soft Skills [1]. They refer to a set of skills, abilities and traits related to personality, attitude and behavior and determine how we interact with others [2], so they are far more than formal or technical knowledge. In one hand, these skills are essential because most of the employers say that they can find workers who have "hard skills" but many people lack the "soft skills" that a company needs [2], [3], and though most employers do not usually state such a requirement, soft skills are definitely seek in their candidates [2]. In the other hand soft skills are essential in planning and executing any idea because it involves dealing

with people directly [3]. Soft skills are learned behaviors which require training and focused application. Soft skills training include lectures, projects and various other participatory activities. The emphasis will be on learning by doing [1].

2 DEVELOPED SKILLS

I've had the chance to develop some important soft skills during the group activity of dissemination of LETI to high school students. I acquired *self-learning* because throughout this experience I was able to accomplish the tasks I set out and the ones planned by the work group, and I was able to observe myself objectively in each situation and understood how my perceptions of myself, others, and the situation drove my actions. By doing this I also developed *reflection on practice* since I reflected on my performance after every school presentation, modifying things that have gone not so well and adapting myself to adversity. Beyond that, this report, as well, helped me reflect on the entire task of dissemination of LETI and all that it involved. By working with other students, I developed *team work*. The group had to conceive the presentation to show to the schools we here about to visit, and for this matter, we had to listen to each other, accept

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(1.0) Excelent (0.8) Very Good (0.6) Good (0.4) Fair (0.2) Weak	LEARNING					DOCUMENT						
	CONTEXT x2	SKILLS x1	REFLECT x4	S+C x1	SCORE	Structure x0.25	Ortogr. x0.25	Gramm. x0.25	Format x0.25	Title x0.5	Filename x0.5	SCORE
	2	1	3.6	1	7.6	0.25	0.23	0.25	0.25	0.5	0.5	1.97

and respect different ideas and opinions. As a group, we also organized the meeting with Prof. Rui Valadas, defining what was important to ask him. For the group presentations we had to divide tasks, and the content which would be discussed, so we could be prepared for eventual questions from the high school students. This soft skill is very important because it led me to valorize the team goals (not only my personal goals), and have them clear in my mind, letting me work with my pairs to achieve them. Due to the type of work, that involved public presentations, I developed *social skills*, since I've had to effectively and formally present my work and ideas to diverse audiences, captivate their attention, engage feedback and motivate them to come or get interested in LETI. I had to actively listen to others and articulate different ideas. To do so, I had to adapt my *verbal communication* to suit the task in hand. I used a clear vocabulary, which high school students would understand, articulated ideas, kept a good fluency and rhythm and master the subject. *Organizational skills* were also developed during this task since the group of work had to organize meetings, find schools to visit, planning and scheduling those visits. We had to divide tasks so everyone could focus and invest on theirs. I also improved in terms of *leadership*. For Escola Secundária Rainha Santa Isabel I took initiative, schedule the meeting with the school board and present them the group's vision and ideas. I had to create empathy, build trust and therefore a good relationship with the school board. This way, I also developed my interpersonal and professional relationship skills and I learned to know when to follow instructions and when to show initiative. By taking the initiative in scheduling schools and deciding which one to go I was able to develop my *ability to work independently*, which in the future will help me in taking decisions by myself whenever I face a new problem, if I am given the opportunity to make some decisions by myself, which is always good in terms of career projections. I will be able to respond to new problems more steadily and hopefully that would help me climb my career ladder. I also improved *responsability*, as I had to be punctual for meet-

ings, presentations and commitments made not only with schools but also with other entities and also respect deadlines. Due to constant pressure in labor market, I believe I am more prepared to be fully committed to companies and their projects and to endure high-pressure schedules. Another aspect I believe I improved is *self-esteem*. Going to presentations I had to look fully confident in what I was transmitting to my audience in order to be credible, and I had to believe in my work and what I was doing. If I did not believe, the preparations I made before the presentations would not have any meaning nor would I be as confident as I was. It is very important to believe in the work we develop, only that way we can be proud of ourselves. Another matter I improved are the *negotiating skills*. I find them to be quite important in this particular case because I had to negotiate schedulings with schools and also deadlines for presenting our project to entities, managing to find space between academic life and this activity. In a professional environment negotiation power is a very appreciated soft skill which companies tend to value because with good negotiators there are more probabilities of having deals done in the best way possible.

3 SKILLS EMPLOYERS LOOK FOR

do not

Although it is known that employers don't usually state soft skills as a requirement, I found it important to research which ones are most sought after in the job ads. This way, in a work of Ahmed, Capretz and Campbell [4], there was made a list of soft skills required for software development in jobs advertisements. Nine soft skills were identified. The first one was communication skills, defined as the ability to convey information so that it's well received and comprehended. The second was interpersonal skills, defined by the authors as the ability to deal with other people through social communication and interactions. The third was analytical and problem-solving skills, meaning to be capable of understand and solve complex problems and make good decisions based on available information. The fourth was to be a team player, in other words someone who

can work effectively as part of a team and contribute toward the desired goal. The fifth was organizational skills, defined as having the capacity to efficiently manage various tasks and to remain on schedule without wasting resources. The sixth was to be a fast learner as the ability to learn new concepts, methodologies and technologies in a short timeframe. The seventh was the ability to work independently, which means that one can carry out tasks with minimal supervision. The eighth was to be innovative, defined as the ability to create new and creative solutions. The ninth and last one was to be open and adaptable to change, defined by the authors as the ability to adapt to changes when carrying out a task without showing resistance. Through this analysis I found out that the project of dissemination of LETI to high school students allowed me to develop some of the most seek and important soft skills. As we can see on 2, I developed communication skills and interpersonal skills, which are the first and second soft skills that employers valorize the most. From this list, I also developed organizational skills, ability to work independently and team work. This shows me that I'm making a good progress relatively to soft skills. However there are other skills that employers find important I must develop.

4 THE FUTURE

Since I now developed some soft skills, I have to take time to hone and enhance them. Besides that, although this task of dissemination of LETI to high school students have been a project that led me to acquire and developed some soft skills, I consider that I should continue to bet on projects that allow me to learn and enhance new soft skills. Analyzing several soft skills, I see that there are some of them that I have developed less, but are essential to my future life as an engineer, as I could see in the last section. One of them is *creativity*. Although we created a presentation to show to high school students, this task didn't allow me to develop this soft skill, at least in the level I wanted. Creativity is the ability to adapt traditional methods, concepts or technologies to new applications, and the ability to plan new

approaches to make improvements or solve problems [5]. This skill is highly valued by employers and can help in solving problems [6]. By developing this skill, I may captivate the public more easily, engage new ideas and be *innovative*. Another soft skill I find important to have is *problem-solving skill* [5]. This skill gives the ability to analyze a problem and find the best solution [5]. I also want to be *open and adaptable to change*. These two skills are essential because, this way, I will not stop when I come across adversity or things that are new and unknown to me. On the other hand, I need to be a *fast learner*, so I can obtain new information and concepts in a short time, which can differentiate me from other candidates in job interviews. Beyond the skills listed in 2, I consider crucial to develop other skills I do not possess or are not developed in the way I want to. One of them is *writing skill*. This one allows the individual to communicate his/her message with clarity and ease. It's fundamental if you are called upon to write a report or to communicate ideas. Besides that, writing a C.V. or résumé with no spelling or grammatical mistakes is essential if you want a new job. Correct punctuation, grammar and spelling are key factors because the reader will form an opinion of the author, based on both the content and presentation, and errors are likely to lead them to form a negative impression [7]. The other one is *research skills*. I need to have the ability to identify a problem, determine what sorts of informational resources are needed to respond to it, find those resources efficiently, evaluate the gathered information and use it effectively to address the problem. Research skills are fundamental because they help the researcher to create new knowledge and understanding through critical thinking, problem solving and analysis of facts [8]. This skill is essential for example, if I need to write an article or if I want to write a thesis.

5 IMPORTANCE OF SKILLS I ACQUIRED

Having high marks on subjects is not the only criteria for success in professional or personal life [1]. However, it's known that soft skills predict success in life [9]. This way, the acquisition

and development of the skills listed in Section I was very important. They played an important role in the development of my personality, thereby enhancing my career prospects [1]. Although soft skills alone can't guarantee any job, when applied together with the knowledge I already possess, they are a very useful tool [2]. This happens because companies are looking for candidates who are smart and can present themselves well, which means that soft skills are a must for the students who want to go for job or higher studies [1]. As stated by Rani in [1] soft skills empower the students to understand "Who They are" and how best they can come across as competent individuals in any given situation.

6 IMPORTANCE OF SOFT SKILLS TO ORGANIZATIONS

Possess soft skills is very important for the employee/job candidate but we must also think of the importance that this topic has for organizations. Soft skills enhance positive work attitudes, work outcomes and behaviors [10]. Soft skills are significantly correlated with job performance and job satisfaction, because when employees feel good about them and feel appreciated and accepted, they will work better for the organization and stay longer [10]. This benefits the organization.

7 CONCLUSION

I learnt that instead of just focusing on meeting academic requirements I should strive towards mastering soft skills. This activity proved to be a very good way of developing some areas I did not think much about in the past, and gave me the opportunity to hone and enhance them, turning me into a better individual and capable of facing new problems that may arise. However, some skills the activity did not require at all are still worth developing in the future and surely will be as they are quite important, not only in professional but also personal life.

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In this type of document (technical), the conclusion should start with a summary of the subject addressed and then should highlight the results.