Dissemination of Telecommunications and Informatics Engineering (LETI)

Luís Miguel Afonso Saramago

(Activity report)

Abstract—The dissemination of LETI took a step above in what it used to be. Núcleo de Estudantes de Engenharia de Telecomunicações e Informática (NEETI) decided to take care of that matter and after a brainstorming of ideas and aspects from inside and outside NEETI an effort was made and a presentation was conceived to convince High School Students to attend and study LETI. High Schools were visited and also received in Instituto Superior Técnico - TagusPark (IST-TP).

Index Terms—Portfolio Pessoal A, dissemination, LETI, NEETI, TagusPark, high schools, activity report, presentation.

1 Introduction

THIS report is about the dissemination of LETI and the steps made towards achieving the goals that were proposed. It will describe the ideas, meetings made with important people from Instituto Superior Técnico (IST), the selection of ideas, the presentation itself and also the visits paid to high schools and the visits from high schools to IST-TP.

2 IDEAS, MEETINGS AND HOW IT ALL STARTED

In October, NEETI was invited by Prof. Teresa Vazão to make a team which would be responsible for the dissemination of LETI, taking roles such as making a new presentation that would appeal high school students taking Technologies and Science course (especially those in 12th grade) and also find schools to visit, planning and scheduling those visits.

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2.1 Team assembled and first reunions

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In a transition phase of NEETI, a team was formed to specifically work in this matter, consisting initially in two people, expanding to three after two weeks. The team, formed by Pedro Dias and Gabriel Freire, gathered and thought of ideas to invigorate the dissemination in terms of speech and the presentation. Rapidly we came to conclusion that it would be easier for us to be heard by high school students than teachers themselves, due to the proximity in age. We also had some topics already gathered to be included in the presentation, such as what the course consists, the main subjects that are focused in the course, career oportunities, success stories and also the role of NEETI in academic life, our activities and projects. However, we still thought that some details were lacking, so a meeting was scheduled with a person that was visiting schools in the past, that person being Prof. Rui Valadas.

2.2 Meeting with Prof. Rui Valadas

On Wednesday, November 6th 2013 at 4:00pm I met with Prof. Rui Valadas to hear his feedback about the visits to high schools he did and the feedback he got. It was a class-like visit with 1h30m of duration in which he taught some very basic aspects of networking, like seeing

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if there was connection between two devices, develop a very small network and how the data was transfered between terminals. Although a very good idea, it turned out to be counterproductive, since those young students would not concentrate for the whole class-presentation. So I realized that I had to do something between 35-50 minutes so that we could have the audience with us during the presentation. It also became clear that we could not give a class-presentation. First because we are not teachers nor graduates, so we are not qualified to give lessons and could transmit something that is not quite right in the presentation, and second because it would not be very appealing to students, as admited by Prof. Rui Valadas. We also agreed that he would give us the list of schools that he managed to visit, in order to schedule visits to those schools.

2.3 Final presentation

After a brainstorming of the ideas that we already had and those received from Prof. Rui Valadas, we got our final conclusions and bases to make the presentation, which would include the above mentioned topics in section 2.1, but this time with more examples, reports from former students already engaged in labor market and also content related to IST-TP, such as life in campus, activities, acess and surroundings. We also included NEETI projects, the SHELF and Study@Tagus Android application. However this presentation would only be completed in January 14th, due to projects and tests workload, we started to visit schools even before that, along with dissemination scholarship holders, with them presenting LETI and IST-TP, and us presenting NEETI and its activities.

3 Going to schools

On December 4th we went to our first school, hoping that what we had prepared would be effective to persuade young men and women to come or at least get interested in LETI. The next day we went to another school, and after that we received a school at IST-TP. The next school would be in Estremoz, my High School,

hoping that I could bring more people from there.

3.1 Escola Secundária Quinta do Marquês (ESQdM)

This was the first school visited. I went with Gabriel and had a small presentation about NEETI since Daniel Tanque, one of the scholarship holders, was in charge of the presentation about LETI and IST-TP. I showed SHELF and Study@Tagus while interacting with them and talking about NEETI. This one was the best school we visited, mainly because the audience already had an interest in LETI. The presentation was made in their freetime, they had no classes that afternoon but we still got around 40 people. When the presentation was concluded we still talked with them in small groups, elucidating the more interested-looking ones about exams, future perspectives, employability and even wages. Overall I feel like we had success, expecting that in September this feeling can turn into reality with filled vacancies, preferably in the first phase of applications.

3.2 Escola Secundária Leal da Câmara

The day after we visited ESQdM in Rio de Mouro. I went to this school along with Rita Pires who is another scholarship holder and repeated the same method used the day before. However, this audience was not so much interested in hearing from us but still I feel we had some attention from them and our message got through, however this time no one approched us to make questions. I feel that even if we try our best to change our methods (and it is always good to reflect upon what we did and change aspects that we think that could be improved) there are some audiences that cannot be reached that well. Curiosly, this presentation was done in their class-time, and this time we also had professional course students, and gathered around 30 people. I did not get as much positive feedback as I received earlier, but still found it positive to have been there.

3.3 Escola Secundária de Gama Barros

This was by far the worst experience I had while disseminating LETI. The audience was

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visiting IST-TP and consisted in students of Informatic Technician professional course. They had absolutely no interest in the presentation nor the visit and it was hard to make it through with all the noise they made, showing little respect to what were trying to instill to them. Again we talked about NEETI, showing our App and SHELF. Their reaction was the same in everything we told and showed them: abscence of mind and noise. Some audiences are harder to captivate than others but this was simply impossible to captivate, with me realizing these kids had no intention whatsoever in studying LETI at IST-TP.

3.4 Escola Secundária Raínha Santa Isabel (ESRSI)

This case was the one that pleasured me the most since I would be visiting my former high school. I prepared this visit with much anticipation and because I knew the audience I was facing, prepared it with special attention, something I could not do in other schools. In December I sent an e-mail to ESRSI Director, and two days later a reply from one of his Deputy Directors who was my Biology teacher in 10th grade, which made things much easier since I maintain very good relationship with her, so we scheduled a meeting. In December 23rd I met with ESRSI's Deputy Director Vanda Messenário and discussed the visit templates, duration, audience and availability. She said the school was very interested in having a former student speaking about his life after leaving the school to encourage their students to fight and study hard for getting a better life, so no real obstacles were made. The biggest handicap I had was that the visit should be made in the afternoon, when 12th grade students have freetime, because 12th grade teachers would not be willing to give time away being close to national exams, so I had to stick with this clause. I also asked to include Electronics and Automation Technician professional course, fearing that I would not get at least 10 people in audience because lots of the students are from the other towns of Estremoz's county and there is a lack of public transport to those villages. Buses are at 1:45pm

and the next ones only at 5:25pm, so there was a risk of having no students of 12th grade. The date was confirmed to February 4th 2014 at 1:55pm. I asked NEETI's marketing division to make a poster for me to send to ESRSI in order to get 12th grade students interested and curious about the presentation and also made a Facebook event inviting the majority of them to be there. I also made a different PowerPoint, modifying the one we had already with a new design and some modified content. As I knew the crowd I was about to encounter, I knew which questions they exactly wanted to know, and some of them very basic and even underwhelming to ourselves, like "What is Engineering?" and "What is an engineer?". I also had a very good ace up my sleeve, that ace being the first student from ESRSI coming to LETI in the first year of the course, Davide Figo, and after finishing his Master degree he having been working in Dubai, New York, London and working with very big companies, the most sounding name being NASA. I was hoping that with that example I would persuade them to think that if they want they can be just as successful as Davide, or at nearly as sucessful. I had great hopes. The day came and I arrived at ESRSI to make the best presentation done so far, only to find out that only 5 students from 12th grade were attending. Nevertheless, and with more 20 professional course students, I regained vitality and started the presentation which lasted for 45 minutes. In the end of it the audience asked about details I did not directly specified like entry average and tuition. Even though I did not get as much 12th grade students as I would like, I still classify this visit a complete success, mainly because I showed them something they never knew or heard about in their lifes and that exists, and with them being interested and excited about it I feel like I reached them exactly how I wanted to and personally it was an indescribable and awesome feeling, especially when some said "I never thought this existed and that you were responsible for the evolution of the Internet!". That is something which made me glad I returned to my older school and tell them a little bit about this part of my life.

4 INSPIRING FUTURE

We had received an invitation from Prof. Teresa Vazão to participate in Inspiring Future, a day in high schools dedicated to colleges from the most distinct areas. The task was go to the school that was destinated that day and, along with some students from Alameda who also do dissemination, talk with high school students who get to our stand and elucidate them about the courses available at IST. So I went first to Escola Secundária de Caneças, then Escola Secundária D. Pedro V and finally Escola Secundária José Gomes Ferreira. Starting with the first one, I think the day was very well organized and there were always people passing by, so there were no dead periods at all. It was also there that I found the biggest concentration of people wanting Informatics Engineering and 90% of them changed their minds when I talked about LETI (or so they told me). There is still some ignorance, even in the civilization about LETI, and after those 90% of students saying "Maybe it's this what I am looking for", I feel like a step forward was made in the right direction. It was easily the most rewarding and enjoyable school to go in Inspiring Future.

The other 2 schools were a little different story though. While in the first one it seemed that there were no classes during that day, in the other 2 classes were taking place, so we had periods of 45 minutes without appearing a soul. It doesn't make it very rewarding going to a school to talk about your college and your course and there is no one to hear, only in their break (15 minutes) there is time to talk to them. Still we managed to talk with some people and although there was not the the amount of people interested in Informatics Engineering, we could disseminate LETI and IST, explaining how to get to each campus and courses available in each one, entry averages and career oportunities.

5 CONCLUSION

In this report I described how I got involved in disseminating LETI, how the preparation was made, people who were contacted, how the schools were approached and how the negotiations were done. It was also described the content of the presentations, how the presentations changed and evolved during time with experience accumulate, and how I worked through this commitment I made, not only with NEETI but also with Prof. Rui Cruz. Overall, it was rewarding experience, and I feel that we went in the right direction of disseminating the course and IST-TP (mainly), and that this work should continue next year, hoping that the vacancies will be filled in September. If that happens, this work will be a complete success, and so far I think it has been a success, because never before it was made something similar.

In the type of document (technical), The Conclusion should start with a Surnary of the subject addressed and then should highlight the results.

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APPENDIX POSTER USED IN ESRSI

Sessão de divulgação



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APPENDIX ACTIVITY COMPROVATIVE

Eu, Carlos Eduardo Vilaça, Presidente do NEETI, certifico através deste documento que o aluno Luis Miguel Afonso Saramago, $n^{\rm o}$ 70591,

Entrou para a equipa de divulgação de LETI/METI, um projeto do NEETI, no início do primeiro semestre do ano letivo 2013/2014. Revelou enorme gosto pela atividade e um esforço valioso para atingir os objetivos estabelecidos.

20 de junho de 2014

Carlos Eduardo Vilaça



