PRIMĂRIA SECTORULUI 3 BUCUREȘTI

Center for Communication and Information Technology

2015-2018

Summary

1. Introduction

Sector 3 is facing a lot of challenges. For example it has under its responsibility the field of education until high school level. The field of education has been one that the mayor has been promising to focus on during his electoral campaign by promising that he will continuously be focusing on this field. On the other hand the funding that sector 3 are quite limited and that is why accessing EU funding is important for the education field while in the same time making efforts to spend more efficient the existing funds.

Presently we are confronting with the following problems: the students do not get enough training when it comes to information technology. In a world where there is more and more need of abilities to handle information technologies, their lacking does not represent at all a desired situation. Due to legislation, Sector 3 cannot extend its influence over the policies in the educational field; the local administration is not a decision maker in establishing the curricula. However it can influence the policies by creating the logistic means that would allow through extracurricular activities the deepening of these abilities and skills among students. Setting up collaboration with universities and business environment represents a way of improving the secondary and high school level education in sector 3 and influence the educational curricula and policies in the field of information technology.

2. Where are we now?

2.1. The structure of school and high schools

According to Bucharest Municipal School Inspectorate, the public schools in sector 3 in 2013-2014 comprises of 29 secondary schools and 15 high schools; one school that addresses special education (for the disabled?) for students from primary to high school level; one arts school, one independent sports club school (high school), one children club (secondary level).

According to the cited institutions, the private school system in sector 3 in 2013-2014 comprises of: 4 secondary schools, 6 high schools and 2 post high schools.

A total of 20.350 students are enrolled at the secondary and high school level in sector 3.

In the majority of schools the number of students per class is higher in comparison to what the law states, n aspect that makes the educational process difficult to handle.

In the same time, not having sufficient informatics classes contributes to the need to increase the need to study this field.

The current situation of studying informatics at high school level is presented below but it can vary depending on the optional classes the students can chose to participate in:

	Math – informatics focus area	Natural science focus area	Philology focus area	Social Science focus area
9th and 10th grade	1h Informatics, 1h TIC	1h Informatics, 1h TIC	2h TIC	2h TIC
11th and 12th grades	4h Informatics	-	1h TIC	2h TIC

2.2. Current state of the educational logistics

The current state of the educational logistics is quite promising but not at all sufficient.

The students do not have at their disposal a sufficient number of computers that is necessary to their continuous practice while the computers are morally and physically quite damaged. There is still a quite large demand for last generation computers in schools. Another problem is that after the informatics classes are over the informatics lab is closed and not all students can practice on their skills unless they have access to a computer at home.

The situation of logistics in the educational field is not very promising because the material resources are insufficient in the context of the continuous development of informatics. Taking this into account and of the fact that there are more and more students that do not have a computer at home the necessity of a project like the one presented here is real - there is need to support the students that want to develop their informatics skills in sector 3.

2.3. What sector 3 managed to do from the educational point of view.

Sector 3 through the Educational Direction and having the support of the Ministry of Education has changed the focus area of a few classrooms from a technological to a practical skills one. For example it set up a welding class at Anghel Saligny high school.

Another educational program is the Performance Gala which promotes and sustains the students that are enrolled in undergraduate level. There are a series of conditions that the students need to check order to be rewarded through this program.

In the same time during the last year Sector 3 signed partnership agreements with the most important universities in Bucharest: the Economic Studies Academy, University of

Bucharest, The Polytechnic University in Bucharest, The Medical and Pharmacy University „Carol Davila", the Architecture and Urbanism „Ion Mincu", the National Arts University, the National Music University, the National School of Political and Administrative Studies, Titu Maiorescu University. Following these agreements the following actions have been realized: the allocation of one building from the town hall to the Journalism Faculty, the allocation of one building for the Dentists Faculty, the participation at educational fairs that have been happening on the area administered by sector 3.

In July 2014 sector 3 started off a new educational program dedicated to your graduates that want to undertake internships in the local public administration field. The main goal is to make them more familiar with the activity of the sector 3 town hall. This program lasts between 2-4 weeks during which the intern will have the opportunity to interact with the staff of the town hall, will be able to request information and details that would help him make an idea on how public administration works and in the end will receive a diploma that would testify for the internship.

3. What do we want to achieve? The importance of setting up the Communication and Information Technology Center

3.1. Realization of a communication and information technology center including social media through using an already existing building;

A communication and information technology center is based on the idea of supporting students from the secondary schools and high schools in sector 3; it will make available for them all the necessary requirements in order to develop their technological knowledge: modern classes and computers, internet access, additional programs, voluntary coordinators for the classes – high school and university teachers. The center will be function on a whole floor of a school/ high school in our sector and it will be extended in case it will attain good results and according to the demand.

The objectives of this project are:

1) The increase in the level of informatics knowledge

-Materials in the field of informatics: for beginners, intermediary and advanced

- Recruiting qualified teachers (from high school and undergraduate level)

2) Increase in the quality and diversification of the informatics 'offer

-Setting up a virtual library and collaboration with other libraries in Romania that would support the free of charge access to information

-Organizing informatics courses

- Supporting students in their preparation for school competitions and international projects in the field of informatics etc.

3) Efficient promotion of opportunities offered by the center

- Organize an opening conference for the center which will introduce it to the citizens of sector 3;

-Participation in the informatics classes in schools/ high schools of one of the center's representatives

- Online courses on informatics.

3.2. Setting up an information system on students 'activity (online catalogue of the center)

The online catalogue envisioned a clear evidence of all students that have benefited from the facilities of this center: name, school, time spent in the center, the courses he was involved in. An online catalogue will keep a clear situation on the participation of students in this center.

3.3. Training in the field of communication and information technology

One of the functions of this center is represented by the training provided in the field of communication and information technology. The training will be provided by setting up a clear and transparent program. The courses will be provided by university teachers that are willing to share their knowledge.

Within this center the following activities will be realized:

- daily/ weekly courses in informatics that would prepare the participants to take ECDL exams or the exam for digital competencies – an exam that every high school student has to take before their high school graduation exam;

- daily/ weekly organizing of course for programming/ web design for high school students that are passionate about these subjects and want to follow this path during their college.

3.4. Realizing a virtual library and promotion

The virtual library offers free of charge access to materials that age necessary to students in order to prepare for the exams they will undertake in the future and for the voluntary activities they want to follow.

We will connect this library with some school and university libraries in Romania in order to make available all the necessary information.

The objectives of setting up the library:

- satisfying the need to informatics knowledge;
- supporting the students that lack financial resources;

-encouraging reading.

3.5. Envisioned effects

We estimate to accommodate in the center around 70% of sector 3 pupils in the first year of functioning of the center.

By 2018 we could set up more such centers that would serve to a smaller number of schools so that this program can cover each school in sector 3.

The envisioned effects after the project implementation are the following: increase in the level of knowledge on informatics of secondary and high school students, increase in the number of students that participate in the school contests on informatics, increase in the number of informatics teachers, increase in the number of high school students that will have entrepreneurial initiatives related to informatics.

3.6. Effect indicators

We consider that this project will have a strong effect on the school network in sector 3 at least what concerns informatics and the access to information. We have analyzed closely the effect indicators for 2015-2018 which are the following:

1. **Increase in the number of students that benefit from the center's services.** The objective of the project is the following:

- In 2015 one lab having 20 computers is opened. We estimate that 17 students/ school/ week will benefit from the center's services which mean 17x 47 = 799 students/ week.
- In 2016 4 labs are opened having a total of 80 computers; 68 students. School/ week will benefit from the services which means 68x 47 schools = 3196 students/ week.
- in 2017 10 labs are opened with a total of 200 computers; minimum 170 students/ school/ week will benefit which means 170 x 47 schools = 11985 students/ week.

For a 40 h/ week functioning schedule 20 pupils will be present for an hour in one lab. It results that during the 4 years of the project's developing a center of 20 computers is established for each 3 schools.

2. **Increase in the number of centers.** The main objective of this project is that in 4 years from its starting point 1 center for each 3 schools is set up. According to the calculations above, in 2018 15 centers will be set up, each having 20 computers.

3. **Increase in the number of courses taught in center by university professors.** In the project it is mandatory to provide courses (as a follow up of the collaboration partnerships with the universities and high schools in sector 3) – at least 2 such informatics courses/ week at which maximum 20 pupils will attend.

- In 2015 2 courses/ week will be carried out;
- In 2016 4 centers are opened thus 8 courses/ week will be carried out;
- In 2017 10 centers are opened thus 20 courses/ week will be carried out;
- In 2018 15 centers are opened, thus 30 courses will be carried out;

4. **Increase in the number of access to the digital library**

SCENARIO 1 – the library can be access only through the center: the objective is that half of the beneficiaries will benefit of the digital library

- In 2015 399 access entries/ week is estimated;
- In 2016 1598 access entries/week are estimated;
- In 2017, a minimum 3995 access entries/week is estimated;
- In 2018 minimum 5992 access entries/ week are estimated.

SCENARIO 2 – the library can be accessed from both the center, from pupils' homes and from their schools; the objective is that half of the pupils in sector 3 access the digital library which is the equivalent of 10.175 pupils.

The estimated values for 2015- 2018 are presented below:

INDICATOR	2015	2016	2017	2018
No of students that become beneficiaries of the center/ week	799	3196	7990	11985
No of labs	1	4	10	15
No of access/ weeks for the virtual library (scenario 1)	399	1598	3995	5992

When calculating these indicators we had as reference data the values provided by the School Inspectorate of Sector 3 and the general and specific objectives of the project's strategy.

4. What are we going to do in order to achieve our goals?

4.1. Phase A

- Get the agreement of sector 3 local council for applying PMI and developing this project;
- Contacting schools;
- Making the location real (a room in an already existing building);
- Set up the locations for 2016, 2017, 2018.

4.2. Phase B

- making contact with universities that can support through voluntary activities the professors teaching the courses;
- Logistics: furbishing, rooms' compartmentalizing;
- set up the virtual library and make contact with other libraries including university libraries that can support free access to information;
- set up an online catalogue that will provide information about the degree in which the center is used on categories of pupils, on activities and on the added value the center brings (per specific timeframes: per month, semester, year);
- set up activities and a schedule for the center's running.

4.3. Phase C

Carry out an opening conference that will announce the opening of the center in sector 3.

How much does it costs?

5.1. Needed budget:

The needed budget for this project will be detailed for the 4 years (2015, 2016, 2017 and 2018). The needed funds for renovations, hardware and software equipment, furniture and utilities are taken into account energy, heating, sanitary needs).

5.1.1 Year 2015:

5.1.1.1 Renovate the part of the building that will host the center: 100 sq meters.

- Layout, tender book with the lists of quantities of works: 200 lei (a medium price for layout has been considered of 20 lei/ sq meter);
- Works' execution for the interior: brick work, floorboards, toilets, heating, windows, doors: 30.000 lei ;
- Technical assistance during the period of renovation works: 2.000 lei;

5.1.1.2 Equip all rooms with furniture: chairs, desks, filing cabinets: 20.000 lei

5.1.1.3 Technical equipment: 20 computers, beamer, and software: 150.000 lei

5.1.1.4 Utilities: phone, energy, hating, sanitary: 5.000 lei/month x 6 months = 30.000 lei .

Total for the first year of functioning: 234.000 lei

5.1.2 Year 2016:

5.1.2.1 Utilities: phone, energy, hating, sanitary 5.000 lei/month x 12 month = 60.000 lei/year;

5.1.2.2 Costs for setting up 3 new locations of the center in the second half of the year: 3 x 234.000 lei = 702.000 lei

Total for the second year of functioning in 4 locations: 762.000 lei

5.1.3 Year 2017:

5.1.3.1: Functioning costs for location 1: 60.000 lei

5.1.3.2: Functioning costs for location 2: 60.000 lei

5.1.3.3: Functioning costs for location 3: 60.000 lei

5.1.3.4: Functioning costs for location 4: 60.000 lei

5.1.3.5: Setting up costs for 6 new locations in the second half of the year: 6 x 234.000 lei = 1.404.000 lei

Total for the 3rd year of functioning in 10 locations of the center: 1.644.000 lei

5.1.4 Year 2018:

5.1.4.1 Functioning costs for 10 locations: 60.000 lei x 10 = 600.000 lei /year

5.1.4.2 Setting up costs for 5 new locations in the second half of the year: 5 x 234.000 lei = 1.170.000 lei

Total for the fourth year of functioning in 15 locations: 1.770.000 lei

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Type	**Year 2015**	**Year 2016**	**Year 2017**	**Year 2018**
Functioning	30.000	150.000	420.000	750.000

costs				
Setting up costs	204.000	612.000	1.224.000	1.020.000
TOTAL	**234.000**	**762.000**	**1.644.000**	**1.770.000**

5.2. *Funding*

Taking into account the harsh economic context we are in at this moment, not putting even bigger pressure on the local budget would be a wise thing to do. Thus we will try to access European funding in order to carry out this project and to sustain it for a period of at least 4 years.