



# Restructuring educational and training premises: A case study of Regional Training Center of Heraklion (RTC-Her)

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## Abstract

The reorganization of the Regional Training Center of Heraklion (RTC-Her), that is describing in this paper, focused on the premises, equipment, operation and co-operations of the old in order to meet the needs of the future, to be functional to undertake new roles in teachers' education and training. It was considered necessary to improve the layout of the premises, to register and upgrade the equipment, the way of operation and providing services, to developed collaborations and strategic partnerships with local and other bodies, to promote the voluntary support in restructuring educational organizations, in generally, to open the RTC-Her to the educational community. An additional target of the whole project, which this paper intends to highlight, was this renovation to become hypothesis and modern subject of matter of the whole educational community of Crete which would be inspire for renovations of school infrastructures. While contemporary business and social practices engage people in collaborative efforts to solve complex problems, create and share new ideas, traditional instructional and assessment practices give birth to new approaches of thinking and interfacing the life from other points of view, exploring and exploiting with the better way the existing and available resources. In the years of economic crisis, the voluntary work constitutes gate to progress for the educational communities.

**Keywords:** Teacher Training; Training Centers; Restructuring Public Premises; Rehabilitation; Renovation

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## **1. Introduction**

In Greek Χάος (Haos), Χώρος (Horos), Ήχος (Echos) are the Chaos, Space, Sound, three concepts so seemingly compatible with each other, as shown by the production of no random H-X, as long as this relationship shows a conceptual, conceivable, and transcendent divide (Sgouros, 2005). The first concept, chaos, the cause of existence and creation according to ancient thought, gives indeterminacy to the two other notions the space and the sound, a nebula of approach, if the examination is done with reasoning and not only on experience. Space, a less indeterminate concept, depending on the first, and one contained in it, a meaning that is referring to the imperfectness of our existence, considering that all five of our senses can only be part of the Whole. For an observer, Sound is a natural magnitude or cause which relates to the second admirable sense of people, the hearing. However, indeterminacy, either in this magnitude or in the natural, which is coming from inability in stimulations of our auditory nerve is true, as we have the sub-sounds and ultra-sounds that are a white/un-mapping field for the ear, which, itself, denotes imperfection. Gianni Ranaulo (2001) argues that elements of modern life that radically changed the Architecture are three, electricity, advertising and motion. Electricity has changed the genetic code of Architecture by turning it from dark to gallows, basically changing life in the city, where we now live 24 hours a day, with different flows and epicenters. Advertisement, which came as a visual explosion, overwhelming the private and public space, the interiors of our homes, the squares, the streets, the shops, the magazines, and created new standards, transforming our culture into a culture of image. The most important is the third, the Mobility/Motion which changed our perception of space from two-dimensional to three-dimensional, transforming the image to screen, into scene, the city screen.

The reorganization of the Regional Training Center of Heraklion (RTC-Her), that is describing in this paper, focused on the premises, equipment, operation and co-operations of the old in order to meet the needs of the future, to be functional to undertake new roles in teachers' education and training. Leaving and work in a space that designed 40 and more years before with the duty to prepare the training for teachers who will teach the students who will live and work the next 40 years, the limited that could be as a beginning was an attempt of restructuring the space, to reduce chaotic areas in it so that it can be heard, in the best way the training lectures/sounds, images and movements. The invited architecture had to make the appropriate changes in order this space to serve the current and future needs, since the premises were more than 40 years old, and to support the general updating of the old equipment, in order to be improved the way of operation and providing services, in generally to upgrade the operational ability of the training center. Considering the age profile of buildings in the EU, since the 35% of the EU's buildings are over 50 years old, and the slow replacement rates, the renovation potential of buildings in the EU is huge, up to 110 million buildings could be in need of renovation, based on the estimates that count 210 million buildings in the EU. The extent to which the potential to reduce the energy consumption of existing buildings is realized depends upon the number of buildings renovated and the depth of the renovation (Artola et al., 2016). Even there are numerous studies which model combinations of renovation rates related to the combination of energy-efficiency measures in a renovation, the restructuring of the RTC-Her did not include a study for energy consumption reducing, but, finally, as result, it can be assumed from a general point of view, that the better

reforming of the premises, for the best exploitation of the infrastructure, can save energy. European Energy Efficiency Directive 2012/27/EU defines 'deep renovations' in a very broad way, as renovations which lead to a refurbishment that reduces both the delivered and the final energy consumption of a building by a significant percentage, comparing with the pre-renovation levels, lead to a very high energy performance (Artola et al., 2016).

The Regional Training Centre of Heraklion (RTC-Her) is one of the 16 founded training centers, in 1992, in Greece with range of Crete. The RTC-Her carries out training programs in cities of the four prefectures of Crete, covering the training needs of all the teachers of Primary and Secondary Education of Crete. RTCs are under the guidance of the Greek Ministry of Education, Research and Religious affairs and the Greek Institute of Educational Policy. With the dissemination format of the seminars, training becomes modular, open and decentralized, without geographical disparities, so more effective. The basic idea of the renovation was the new use of the RTC-Her by teachers and students who can work individually and in teams to learn and practice in performing simple procedures in response to pre-formulated problems within the narrow boundaries of school matters (Griffin et al., 2012). An additional target of the whole project, which this paper intends to highlight, was this renovation to become hypothesis and modern subject of matter of the whole educational community of Crete which would be inspire for renovations of school infrastructures. While contemporary business and social practices engage people in collaborative efforts to solve complex problems, create and share new ideas, traditional instructional and assessment practices give birth to new approaches of thinking and interfacing the life from other points of view, exploring and exploiting with the better way the existing and available resources. This motivates for voluntary work and collaborative achievement of targets in a community, as in school communities can be. The year 2011 was the European Year of Volunteering and aimed to support the youth volunteering with the aspect that voluntary activities should not replace professional and paid jobs but provide added value to society. EU suggested the establishment and mutual recognition of a 'European Volunteer Passport' as a complement to the existing 'European Youth Passport', which will record the voluntary work offered by young people and can be presented as proof of qualifications to potential employers (EP, 2010).

The European Commission calls on Member States not only to focus on employability skills, literacy, numeracy, digital literacy and media literacy, but also on skills that are generally relevant to society, such as transferable, transversal and non-technical skills (leadership, social and intercultural skills, management, business and financial education, volunteering, foreign languages, negotiation) in training and education letters of study, and to prioritize the further development of these competences. Points out that entrepreneurship requires the development of transversal skills such as creativity, critical thinking, teamwork and initiatives that contribute to the personal and professional development of young people and facilitate their transition to the labor market; therefore, it is necessary to facilitate and encourage the participation of entrepreneurs in the educational process (EP, 2017).

The new vision for the RTC-Her was to be able in the future to follow cutting-edge research in the field of education, training, art and technology related to interactivity, as augmented reality, virtual reality, game creation as well as results from research into tools, technologies, methodologies and innovative solutions for education. Particular consideration would be given to the concept of re-modeling, the fact that digital media

are adapted to the current educational reality and the search for new and interesting ways of teaching. In the basic ontological question how we understand the relationship between society and technology, it is not only about what means have the potential but also about how the new media are linked to other aspects of modern society and are an organic element, how one intertwines with the other (Bhaskar, 1989 in Koutsoyiannis, 2017). Public sector innovation can be defined as application by its bodies and organizations, public domain of new or significantly improved features, services, or products. The contribution from all the public sector bodies in the implementation of innovative practices and services is substantial, aiming at maximizing their value expected benefits to economic growth and prosperity and achievement resource savings, in particular difficult economic conditions of Greece (Circular with Prot. No. 24942/25-7-2017 with subject 'Innovation in the Public Sector' by the Greek Ministry of Administrative Reconstruction, General Directorate for Reform Policy & e-Governance). Every step towards strengthening the knowledge economy, innovation and transparency, and the relationship between State and Civil Society is of particular importance.

The purpose of the restructuring was the aesthetic and functional improvement of RTC-Her, the transformation from the old training center to a new educational Hub, and consequently pulling the schools to the same direction. The study of the archival material of the restructuring project tried to find out and attribute the significance of reordering and functional unification of existing educational spaces and equipment in an upper lever realization of living and work together, offering opportunities for easy, convenient and equitable access of halls and services to the employees, trainers and trainees, to teachers, students and their families, to the educational community of Crete and widely.

## **2. Objectives and approaches**

The subject of the study was the reorganization of the RTC-Her in order to clarify and highlight the individual actions so that it could be a good practice for those who want to renovate educational spaces. The interventions were aimed at improving the working and learning environment for the employees, the trainers, the trainees, the teachers and students of the co-housing educational institutions Experimental Gymnasium and Lyceum of Heraklion (EG-Her, EL-Her) and the 1<sup>st</sup> Public Institute for Vocational Training of Heraklion (1<sup>st</sup> PIVT-Her), and for all the visitors to the building. The archival material was in printed and electronic form, consisted of official documents, photos, notes, texts, slides of presentations, videocassettes, books, official books, etc. After all the archival material was gathered, analysis was made and the following categories were created corresponding to the research sub-questions-objects of the research. The categories emerged during the inductive analysis of the subject matter in the field of investigation, inquiry, as a case study with content analysis (Bird, 1990). A relatively small number of documents was examined, where, their gradual selection, and the analysis of the first, affects the following (Bird, 1990, Dimitropoulos, 1996). At the end, 10 categories were determined, the following: 1. About the RTC-Her (mission, location, organization chart, premises), 2. Work organization and monitoring, 3. Secretariat improvement, 4. Recording and upgrading of the equipment, 4. Library of didactic & pedagogy, 5. The offices, 6. Decoration & gifts, 7. Voluntary support, 8. Internship, 9. Educational & training initiatives, 10. Social activities and promotion.

### **3. About the Regional Training Center of Heraklion**

RTC-Her is situated in Heraklion, at Kornarou Ave, in the neighborhood Estavromenos, in the island of Crete, in Greece. Its building is part of the Campus of the Technological Educational Institute (TEI) of Crete, 200m from the Entrance next to TEI Dormitory. In the same building is housing the Experimental Lyceum of Heraklion, the Experimental Gymnasium of Heraklion and the 1st Public Institute of Professional Training of Heraklion.

#### **3.1. The profile and mission**

The RTC-Her carries out training programs in cities of the four prefectures of Crete, covering the training needs of all the teachers of Primary and Secondary Education of Crete. With the dissemination format of the seminars, training becomes modular, open and decentralized, without geographical disparities, so more effective. It can host training and educational activities in collaboration with the co-housing Experimental Schools of Heraklion, the 1st PIVT-Her, the Regional Directorate of Primary and Secondary Education of Crete, the eight (8) Educational Administrations of Crete, the Supporting Educational Structures of Crete such as the four (4) Science Laboratory Centers, the Environmental Centers, the Centers for Students of Special Needs, the ICT's Centers, the Advisory Centers for Youth, the Offices of Educational Activities, the School Advisors who are responsible for the scientific and pedagogical guidance of schools and teachers, the school Directors and Teachers of Crete, Universities, Research Institutes, Bodies and Authorities of Crete in general.

According to the Organization Chart of the RTC-Her, in the recent years, it has Director, Sub-Director for Secondary Education and Deputy Director, Sub-Director for Primary Education, and a 5-members Coordinating Council consisting of the Director, the two Sub-Directors and two voted members, one from Primary and one from Secondary Education. The RTC-Her offer services in four (4) Departments, those of Secretariat, the Economics, the Directorate and Training Activities. In the Secretariat of the RTC-Her are allocated teachers of Primary and Secondary Education who express the desire to be detached for the entire next school year to the Secretariat, by submitting the relevant application form of the Ministerial Call in June 2017.

#### **3.2. The Premises**

In the ground floor are situated the offices, the classrooms, one of them is Thematic dedicated to History, the Science Laboratory, the Amphitheatre, the toilets, the store, the Gym and the Canteen. In the first floor are situated the Thematic Classroom of Mathematics and the two Computer Laboratories with 30 work positions, certificated by the Institute of Computer & Publishing Technology (ITYE 'Diofantos') of the Greek Ministry of Education where operates the Advising Training Center (KSE) of RTC-Her. All the halls have wide windows bringing natural light and fresh air from the courtyard around and modern audio-visual equipment and wireless internet access. The Amphitheatre, of 180 seats, has, additionally, air-condition cooling/heating. The students and attendees enjoy coffee and delicious treats in the Canteen, in the entrance of the building and next to all the meeting rooms.

In the space around, there are many parking places, as RTC is situated away from the center of the city Heraklion, surrounded by gardens and olive trees yards. The building and the natural environment around offer calmness, nice atmosphere and contribute to the success of every event. The spaces and infrastructure offer the ability of hosting a large number of meetings and events since it is one of the largest meeting centers in Heraklion with Amphitheatre, Computer Labs and classrooms, so it can meet any specific needs.

RTC-Her is easy to access by car/bus. The itineraries of the public buses are frequent, every 15 minutes from the port and center of Heraklion. The teachers who serve in the Secretariat offer high quality reception and services, technical support and friendly company to the trainers and trainees. The halls and the uses by the co-housed educational organizations are intertwined. The 4 Directors and the staff enjoy the benefits of good co-operation and peaceful coexistence.

#### **4. The restructuring work**

Functional and Aesthetic Interventions carried out in the Director's Office, Meeting Office, New Secretary Office, Secretariat Reception, Deputy Director's Office for Secondary Education, Deputy Director's Office for Primary Education, Archive, Kitchen (housed with the Archive), Library (housed in the Associate Director's Office), Science Laboratory-Central Hall, Science Laboratory-Preparatory Room of Physics, Science Laboratory-Preparatory Room of Chemistry, Storage of Educational Material (Old Toilet), Corridors, Amphitheater, Storage of Tools and Equipment, Toilet of the Training Halls, Electronic Infrastructure & Upgrading.

The caring about the safety was high in the concern of the restructuring. All the Fire Extinguishers were assembled and checked, an expert invited for inspection, retreading and new bought by the School Committee of the Heraklion Experimental Gymnasium. Advices asked also from the Fire Brigade Administration of Heraklion, from volunteers Firefighters, Ambulance Doctor and a Mechanic Engineer of the Technical Chamber of Greece regarding the safeness of the building. They will also contributed to the preparing training seminar on the Memorandum of Action in case of Fire, Earthquakes, and Disasters in educational spaces. The content of the old Science Lab's pharmacy was listed in order to be renewed when the RTCs' funding normalized again.

##### **4.1. Organization of the interventions**

Beyond the official duty to process the documents, assumptions and seminars, she developed the initiative to reorganize and renovate the premises of RTC-Her, mainly the Offices and the Science Laboratory for more comfortable and enjoyable work with a view to more efficient project to carried out there. Law 2009 / 14-2-1992 and the Presidential Decree 250 / 10-8-1992 specify on the duties of Directors to renovate and reform the RTCs. Since, the last years, the training programs that were materialized in RTCs that ordered by the Ministry of Education, were very few, and since the changes in the sectors of education, research, art, sciences run speedily, also the teachers' training needs, the destruction aimed to prepare the premises and infrastructures for future demanding training and research programs. As it is referred in the Circular with



Prot. No. 24942/25-7-2017 with subject 'Innovation in the Public Sector' of the Greek Ministry of Administrative Reconstruction, General Directorate for Reform Policy & e-Governance) Innovation, it is about significant improvements in public administration and in its services, based on the definitions adopted for the business sector (Handbook of the Oslo) and their adaptation to the Measuring Public Innovation-MEPIN). Each educational institution needs a shared vision, widely accepted, fully in line with the spirit and the morale of the foundation. There is a need for a culture of high trust that empowers administrations, staff, educators and learners, teachers, students and parents, providing opportunities for taking responsibility, transferring leadership and maximizing co-responsibility, involving all in programming and decision making, demonstrating innovation, risk and security, resilience and flexibility, appreciates the diversity of opinions, people learn from everyone, and experience is reviewing progress (Scott, 2007).

#### 4.2. Monitoring of the interventions

There was not an initial plan for the reorganization of the premises and equipment of the RTC-Her, but after the start of creation the new Secretary Office, there were needs and ideas for extending the interventions, as every move had an impact on the dissolution of the other sites and infrastructures. Thus, from the very beginning, the reorganization of all the spaces with a variety of, limited or extensive, functional and aesthetic interventions had been extended. For example, the accumulation of scattered monitoring educational material revealed the need to create the Library of Teaching and Pedagogy for the training of Teachers in Primary and Secondary Education of Crete. Gathering and grouping of materials, instruments, tools, appliances, furniture and other equipment, resulted the need to record and place them in specific places, with a structural way, convenient for future exploitation. For example, the electronic equipment was gathered at the Secretariat's Office, the educational-supervisory material (books, videocassettes, films, CDs, etc.) at the Secretariat Offices, the files of the RTC-Her archive in the archive room, the archive of the old Pedagogical Academy, the old Schools for Training of Primary and Secondary Education (SELME and SELDE) of Heraklion at the Reception Secretariat, etc. This reorganization has resulted in spaces available for new job creation, such as the new Secretary Office, experimental spaces/sites in the Preparatory Rooms of Physics and Chemistry, and the Toilet for the Amphitheater.

With the discussions, suggestions and decorative choices, the space's aesthetic improved, so the working and learning environment of the employees, trainers and trainees was upgraded. Students in internship from the co-housing 1<sup>st</sup> PIVT-Her and teachers volunteers supported the initiative with the most convenient and valuable way. The Secretaries, in collaboration with the Director and the rest volunteers, worked cooperatively, in the management model of distributed leadership for joint work production and participation in decision making. Also, there was inquired websites on restructuring offices and laboratories to get some ideas for future interventions, more specified to the use of RTC-Her premises in the next years.

Another subject which negotiated by the staff of RTC-Her during the restructuring period was the design with plants. Scientists have said in recent years that plants do not just decorate our sill, but they can have real health benefits when they are in our room, such as palm areca, Aloe Vera, ivy, lavender etc. (ViralGr, 2018)

### 4.3. Recording of the equipment

The recording of the existing situation and the monitoring of the restructuring became by keeping notes and taking photos, in all the phases of any intervention and the situation that prevails at the reorganization premises each time. There were taken 665 photos, in totally, with repeated samplings, varying in number 1-15 in each hall, for the recording of the existing situation and the ongoing restructuring procedure of the RTC-Her halls, during the school year 2016-2017, starting at 25 of October 2016 and finishing in 9 August 2017. The number of the taken photos is written next to each hall name and the number of samplings in parenthesis, as follows: Amphitheatre-13 (1), Warehouse-37 (2), Storage-104 (5), Archive-23 (3), Reception of Secretariat-38 (5), Secretariat Office-17 (4), Secretariat Office New-57 (14), Vice Director A Office-12 (3), Vice Director B Office-23 (5), Director Office-75 (15), Conference Room-90 (15), Corridors & Stairs-52 (3), Outdoor-15 (3), Computer Laboratory-22 (3), History Classroom-6 (1), Kitchen-38 (7), Toilets for Offices-8 (1), Toilets for Training Halls-35 (2).

Especially for the Sci-Lab, the monitoring of the restructuring started from 25th October 2016 and ending on 24th of August 2017, with 404 taken photos which recorded the existing primary situation and the ongoing restructuring procedure in the Preparatory Rooms of Chemistry and Physics, and in the Central Hall.

The concentrated equipment, after being photographed, recorded in Excel files in the digital archive of RTC-Her, making it easy and convenient to use in the future. The photo galleries reveal significant details of the project for restructuring of the RTC-Her, useful for future study, also, to motivate RTCs and other educational Institutes to renovate their premises and upgrade the offering services following the modern, international trends (<https://wp.me/P8OefN-2U>).

The digital recording of all the mentioned electronic equipment was done in EXCEL documents by two Students of the 1st PIVT-Her under the guidance of the Secretary and the Director. EXCEL Documents contained information about the trade type, the number, the operating status of the devices and their location. Involving staff in the planning of resource use can help in the sharing responsibility, whilst avoiding inconsistency in the use of equipment, in which the quality of children's learning opportunities can be damaged. Details of the materials' organization depend on the curricula and the halls, but will probably store some everyday equipment in classrooms where they used, some more expensive and unusual and specific collections in the central store, and others to access by students and trainees which develop their responsibility, while ensuring their safety. A clear labelling and recording system which shows where an item is kept, when it is to be used and how it is to be looked after or replenished (Hollins, 1998).

### 4.4. Upgrading of the infrastructure

The Secretariat of the RTC-Her upgraded to operate remotely from the RTC-Her building for 24 hours a day, utilizing applications and shared Internet documents, such as CamScanner, Viber, Skype, Emails, Office, teleconference through Big Blue Button (BBB), etc., developing the ability to remotely access the archives of the Secretariat's.

On an external hard drive, the full digital archive of the 25 years operation in the training sector of Crete was recorded by the Secretary. Gmail and Google Diary helped much into communications for the



undertaken works, with Viber, WhatsApp, Skype and other Web2.0 means. So, the Secretariat can remotely operate 'on the cloud' for 24 hours a day, utilizing applications and shared Internet documents and remote access to the Secretariat's PC.

The Archive of the RTC-Her is situated in the Archive-Room, with the kitchen. It is contained in paper folders inside metallic closing libraries/stands. It starts from 1992 when the RTC-Her was established. In the cupboards of the Secretariat-Reception there is also the Archive of the old Academy and School of Primary and the Secondary Training of Teachers which functioned before the establishment of the RTC-Her in 1992. For a better approach and exploitation of the Archival material, some files changed place in order the Archive of RTC-Her to be separated from the old Archive, so the newest part housed in the Kitchen and in the office of the Deputy Director of Secondary Education. The rest remained in the Secretariat Reception's cupboards (<https://wp.me/P80EfN-2X>).

Many interventions improved the operational ability of RTC-Her, as the installation of headlights in the Amphitheater, the purchase of an internet camera and a mini projector for the development of teleconferences, the meeting tables in the offices and the Preparatory Rooms of the Sci-lab, software and hardware keeping updating the Computers of RTC-Her. The Secretary repaired and upgraded the computers of the two Computer Laboratories in order to serve the training needs of training action called Epimorfosi b-epipedo, carried out in the Training Support Center 'PEK Irakleiou', and the seminars of the Heraklion School Counselors (<https://wp.me/P80EfN-2W>). The Big Blue Button (BBB) and skype tele-training capabilities developed by creating accounts and understanding the relevant know-how and utilizing appropriate equipment. The Secretary secured a teleconferencing room in the Institute of Educational Policy using Big Blue Button system (BBB) and a Channel in YouTube.

Regarding the Website, the posts of previous years concentrated in some areas of the website and a new website with the developed initiatives was created referring to the school years 2016-2018 (<https://pekherinitatives.wordpress.com/>). A huge abandoned gas hood to the metal recycling area of Heraklion, which remained on the corridor in front of the Amphitheater and the Classrooms for more than a year.

The old toilets / warehouses were cleaned and reconstructed to function as storage facilities for equipment not used in the RTC-Her, mainly in Sci-Lab. The old Women's Toilets next to the Amphitheater and the classrooms were cleaned and prepared to be put back into operation. The United Nations General Assembly in 2015, adopted the further support the sustainable management of waste through the application of the 3Rs (reduce, reuse and recycle). By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse (UN, 2015).

## **5. Restructuring of the science laboratory**

A huge restructuring effort carried out inside the Sci-Lab of the RTC-Her during the school year 2016-2017 with the collection, categorizing, storage of the equipment and the transformation of Physical and Chemistry Preparation Rooms, additionally, into workspaces. The Sci-Lab was established in 1970 around, funded by

the International Bank, for the educational needs of Teacher Academy of Crete. It was very well equipped by the Greek Pedagogical Institute and the Ministry of Education. A great variety of devices and utensils, which used in the Science Education and Training in the last half of previous century, some of them in large quantities were scattered in the Science Lab and the store of the RTC-Her. Many of them were placed in metallic cabinets for future exhibition, idea which was born during the restructuring of RTC-Her in the school year 2016-2017. The reorganized Sci-Lab can support 21st century schools and Training Programs for teachers of Primary and Secondary Teachers, in real and virtual environments, live and remotely, with the additional aim that the whole project to become a good practice and dissemination source of expertise in schools (DT, 2015). According Scott (2007), schools should focus in the future on facilitating the change of the ability to look at the problems of the present and the way of living, by promoting changes in the behavior and shifting the habits or making a turn to how to see the things.

Most books were found in various places and in a poor condition, in the Sci-Lab, where gathered and grouped together, separated one copy and recorded at the Offices, the rest copies offered as gifts to the volunteers of the restructuring project of RTC-Her. Metal lockers, with glass frontages, were transported from the Science Laboratory to the Office of the Deputy Director where the recorded books placed, numbered with the random number introducing in the EXCEL Document. The students of the 1st PVIT-Her contributed significantly to this project. With the same way, scattered video-cassettes, slides CDs, DVDs from the Archive-Cuisine and the Labs, transported to the same place.

## **6. The renovation of the offices**

The restructuring of the Offices of the RTC-Her carried out in November and December of 2016 and concerned the Offices of the Secretariat, the Conference and the Director which are together in line and in connection (<https://wp.me/P80EfN-1B>). The Conference's Office opens to the Director's Office and the Secretariat's Office is next to the Secretariat Reception. The main goal was to be created a new Secretariat's Office, close to the Secretariat Reception, and be transported from the opposite side of the corridor, in order all the employees of the Administration to work closely and have more functional communication and collaboration.

The restructuring of the Offices of the RTC-Her forced to be finished until the end of December 2016, before the end of the economic year, so that the expenses to be possible to covered. This effort was proved successful on time since the next year, 2017, the state funding process did not allow any costs for the maintenance and operation of the RTCs of Greece the way of funding RTCs changed and the cover of expenses was impossible. The intense efforts proved to be a salvation for the restructuring project, since one year later, unfortunately, the Minister of Education abolished the RTCs.

The Conference Table was the focus issue of the Offices' restructuring since it would become the connection style between the 50 years' old wooden Director's office furniture and the new comfortable in use. The Supervisor Architect, the Secretary and the Director of RTC-Her carried out a detailed searching for ideas and prices in stores and many sites. The Director of RTC-Her visited also some stores in Heraklion, asked for

prices for some samples. The final decision was not to buy a factory Conference Table but to be designed by the Supervisor Architect and constructed by a carpenter. The design of new European Council building in Brussels, which recently renovated, defined a new opinion in re-use of the traditional materials with modern synthesis to host meetings, and guides the restructuring of public halls to conserve the history and tradition of the building and furniture (ENB, 2017).

The Coat Hunger was a demanding structure inside the Conference's Office, which opens to the Director's Office, an accessor that also could contribute much into completing the connection of styles between the old furniture's style of the 50 years old wooden Director's Office and the comfortable in use new. Since the Supervisor Architect designed the Conference Table, she also designed, in accordance, and the Coat Hunger and made the arrangements with the carpenter.

A detailed searching for ideas and prices in stores and many sites carried out in order the lights to accompany the new design and décor of the offices. The Supervisor Architect and the Secretary of RTC-Her, in collaboration, chose the lights for the three reconstructing offices. They hired and forced the Electrician to remove the old and numerous Fluorescent lights, fast, before the end of the economic year, so the expenses to be eligible and able to covered.

## **7. Creation of a library for didactic and pedagogy**

A Library of Didactic & Pedagogy for the training of Primary and Secondary School Teachers was a challenge for the new Director. According to Article 14 of the Presidential Decree 250/1992, which is referred to the operation of RTCs, on the support of the training, libraries, workshops and laboratories are organized and function in each RTC for the needs of teaching staff and trainees. After 25 years, an ongoing discussion in current days, tries to identify key challenges and opportunities in the evolving field of e-lending via public libraries based on new e-lending models, concluding a dialogue between libraries and publishers on e-lending and e-book purchasing across all EU. Member States, will be among the key enabling factors for e-lending in the future (Mount, 2016).

The effort of creation a Library with Pedagogic and Didactic Books, in printed form, started more intensive in May 2017, when addresses queries for donating books, to many institutes and Scientists. The purpose was to be concentrated and retained the valuable treasure of knowledge and wisdom, which is not in digital form, and transferred to the future generations of teachers and students of Crete. Official Documents-request sent to many educational organizations and Publishers of Athens and others, some of them responded to the request. The first donor of Books was the Pedagogical Institute of Cyprus, which immediately corresponded to our request and offered 40 titles of books in printed form, each in 4 copies, with didactic and pedagogic content to the Library of the Regional Training Center of Heraklion (official document of PI-Cy with protocol number 2252/14-11-2017). The titles selected by the Director of RTC-Her from the long catalogue of the printed editions of the PI of Cyprus. The experience of the development of this Department in the Training Sector of Crete could also upgrade the role and operation of the school libraries

in Crete, and in Cyprus also, and develop more the connections of school education to the Research and Higher Education at local, national and global level.

Frank Huysmans (2016) with an in-depth analysis, describes how public libraries assist patrons and educational institutions in enhancing knowledge, skills and attitudes needed to critically engage with media and information. Schools and (especially) parents play a major role in local communities, so a library domain, well-positioned can support parents and schools in their socialization and education efforts. Public libraries and their partner organizations to work towards more concerted efforts to support citizens of all ages in acquiring the knowledge, skills, attitudes and ethical stance to become more media and information literate. In so doing, children, youth, adults and elderly people of all social backgrounds will be better equipped to face the challenges - and grasp the opportunities - of living in a society saturated with information and media (DT, 2015).

The Old Book of Library of RTC-Her was scanned and transformed in pdf document. At the moment, the Library is hosted in the Deputy Director's Office for Secondary Education of the RTC-Her. The Secretary collected training material that had been sent in the past, for the training programs held in the RTC-Her and uploaded on the RTC-Her website. 'ITYE Diofantos' sent, in organized and easily accessible form, a list of the available publications, which posted on the Library's website (<https://wp.me/P8OefN-2V>). A lecture about the initiative of creation a Library for Didactic & Pedagogy in the RTC-Her addressed in the Conference "Teaching sciences in schools with creativity and innovation: transforming the theory into practice", Crete 6-11 December 2017 (Kalathaki, 2017). Schools can be developed into standards of good practice for children and their communities. They can build sustainable development in their learning experience, encourage innovation and improve new learning conditions and quality of life (Scott, 2007).

## **8. External support and collaboration**

For the opening of RTC-Her premises in the co-housed institutions, other educational institutions and teachers, active and retired, took place many lively and remote discussions, workshops, meetings, visits, guides, conferences, laboratory activities. In the general reforming phase, emphasis was given in the development of collaborations among the 16 RTCs in Greece in order to be promoted issues concerning the training framework, the economics, future activities, problems, etc. The first opening ceremony was for Saint Vasilios Pie Cutting of New Year 2017, on Thursday 09/02/2017 to the co-housed educational organizations and the educational community of Crete with lectures about the future of Training and Science Education in Crete, Greece and widely.

High on the list of priorities of the new Director was the development of collaborations and strategic partnerships with educational and training institutions of Crete, the rest of Greece and abroad, particularly with the co-operating Experimental Schools and the 1st PIVT-Her, the Universities and Research Institutions of Crete, the Region of Crete, the Educational Administrations of Crete, etc. From the outset, cooperation sought with the rest RTCs of Greece and funding through European programs. A proposal for a European Erasmus+ Program KA2 with the title "ASSEL-Applied Science for School Entrepreneurial Labs" was

submitted, after granting a PIC number for participation in European Programs. The Program was about the promotion of innovative interventions those Ministry of Education and the Institute for Educational Policy was implementing in Secondary Schools for teaching through exploration and discovery and introducing entrepreneurial directions in school education through the 'Synthetic Creative Works' in Gymnasia, "Creative and Research Works" in General Lyceums, "Creative Activities Zone" and "Research Work in Technology" in Vocational Lyceums, "Thematic Week", the "School Activities Programs Education and Career" in Junior and High Schools. This Program would offer ideas and methodological tools to combine educational activities with the school courses and projects, in accordance to the curricula, during the collaborative implementation and dissemination of its results.

As long as the voluntary work has to be rewarded, many awards offered to teachers who offered voluntary support to the restructuring of the center's premises and the creation of Library. Honorary sessions were organized during training events, where awarded persons who significantly contributed to the work and existence of the RTC-Her, such were the 1<sup>st</sup> Head of the Sci-Lab who was Assistant Professor of the Greek Pedagogic Institute, also the architects, designer, students, professors, teachers, advisors and secretaries of RTC-Her. The volunteers and donors of books to the newly created Library of Didactic & Pedagogy awarded in the Honorary Reception Ceremony of the Conference "Teaching sciences in schools with creativity and innovation: transforming the theory into practice", which carried out in Crete 6-11 December 2017.

### 8.1. Voluntary support

In the years of the economic crisis, the voluntary support to Education is the best solution and a gate to progress. Waiting state funding for any strategic plan of the educational Institutions it is futile as many are expecting. In October 2016, it was asked help from relatives, friends and teachers to contribute as much as they could to the project for the reorganization of the Offices (document with protocol number 214/14-12-2016). Many of them responded to the request, mainly relatives of the Secretary and the Director. This way of voluntary work could be disseminated as a good practice and source of know-how in schools, to restructuring their premises. Non-formal learning, including that through volunteering, can play a very important role by stimulating the development of transferable knowledge, intercultural competences and life skills, such as teamwork, creativity and the spirit of initiative, while also reinforcing self-esteem and an appetite for learning (EP, 2017).

The main volunteers in the whole reorganization initiative of RTC-Her were the two Secretaries, in the school year 2016-2017, who carried out the whole plan with appetite and love. Beyond the work subjects of their specialty, the students of the 1<sup>st</sup> PIVT-Her in internship offered important volunteer work in arranging the Sci-Lab's equipment and in designing WEB 2.0 Teachers' Training Programs.

The initiative and the general coordination of all the voluntary interventions in the school years 2016-2018 had its Director. Some educational systems in Europe give particular emphasis on leaders and school leadership that determine the pace and direction of change, facilitate open communication, encourage

creative thinking and innovation, motivate staff and students for greater successes and operate as example, first by applying the principle of lifelong learning (EC, 2007).

Voluntary work groups helped to collect scattered printed and analogue audiovisual material for the creation of the Library of the Heraklion Peninsula, for the organization and cleaning of the Sci-Lab, for the collection and organization of its equipment and for the creation of a Museum Collection with laboratorial instruments, devices and utensils of the last half of previous century. The funding of the Museum Collection asked from the Greek Ministry of Culture. In consultation with the Head of the 1st Science Laboratory Center of Heraklion, we removed the expired, useless and dangerous chemical reagents from the Chemistry Preparatory hall. The Secretary organized the removal of the huge abandoned gas hood to the area of metal recycling in Heraklion. Of particular importance is the participation of the students and the architect from the Department of Architecture and Decoration of the co-located 1st IEK of Heraklion, who voluntarily faced the corridors, the Science Laboratory and its two Preparations as an annual Project in their class so that, at the end of the school year to make detailed suggestions of the required aesthetic and functional interventions for the redevelopment of these spaces.

## 8.2. Internship support

The issue of skills is vital. In the Report on a new skills agenda for Europe, the European Commission calls on the Member States to focus on employability skills, literacy, numeracy, digital literacy and media literacy as well as those skills that are generally relevant with society, such as transferable, transversal and non-technical skills. Training and education programs and curricula need to prioritize the further development of these skills, and cross all VET programs, to strengthen the European industry (EP, 2017). In Greece, student's internship is compulsory and supervised by the General Secretariat for Lifelong Learning (article 3 of the number 5954/23-6-2014 Ministerial Circular, Government Gazette 1807B/2014). In the summer of 2017, two students of the 1st PIVT-Her had internship the RTC-Her regarding the electronic infrastructure, the recording and upgrading of the archival material. Upon their arrival, the Students were informed by the Director about the mission and the work of the RTC-Her, the legislative framework of its operation and were guided to its premises. The Secretary took care of acquaintance with the digital and general electronic equipment of the Secretariat, the Computer Laboratories, the Amphitheater and the Thematic Classrooms of History and Mathematics. Students were given laptops in addition to the ability to use the PCs of the Secretariat. Among the others, the students who involved in the project of RTC-Her restructuring had a very useful experience for their enterprising future since green entrepreneurship with '5Rs' (Reuse, Refuse, Rethink, Recycle, Reduce) sustainable pillars will be a challenge for them. RREUSE is the European umbrella organization for a network of social enterprises operating in the reuse, repair and recycling sector. It provides an example of how social enterprise business models may be replicable cross-border. Across sixteen European countries, individual social enterprises combine social and environmental objectives in the collecting, sorting and redistribution of textiles, electronic waste, furniture and recyclables. Within the network, there have been 77 000 full-time jobs created, as well as awareness raising campaigns, business support and exchange of best practices amongst members (Liger, 2016).



They collaborated and worked jointly with the Director to record the infrastructure and prepare future seminars on ICTs, so they had the experience to learn up close the management of administrative issues and Secretariat's function of the Public Administration Service. The European Education and Training 2010 'ET 2010' work program, in the context of the revised Lisbon Strategy, facilitates the exchange of information, data and good practices through mutual learning and peer evaluation (EC, 2007). Also, the European Solidarity Corps support young people carrying out voluntary service in their own or another country, bringing together two complementary strands, the volunteering and the occupational. It includes a wide range of activities in areas such as education and youth activities, health, social and labor market integration, site construction, renovation and management, reception, support and integration of migrants and refugees, post-conflict reconciliation, environmental protection and nature conservation (EU-SC, 2017).

### 8.3. Gifts and decoration

Decorative and functional ideas were searched about the equipment, furniture, arrangements in corridors, halls, labs and offices, the security systems, etc. From visits to similar institutions, research institutes, libraries, offices, navigation in websites and elsewhere collected good practices and useful equipment that could improve the existing situation. An extensive research was carried out on the 'Pinterest' website to search for decorative ideas for the corridors, the entrance, the canteen and the offices which, the students of Architecture and Decoration of the 1st PVIT-Her discussed in their course, so that they could be used in their study for the renovation that they materialized in school year 2016-2017 for the spaces of RTC-Her.

For the decoration of the premises of the RTC-Her, existing objects were utilized, some were made by volunteers. The inquiry in materials revealed old and useless objects, which served in new compositions and constructions, in new places and uses, which gave the sense of fresh and spaciousness in the renewed halls. The Department of Agriculture of the 1st Vocational Lyceum of Chania offered decorative structures of dried plants, in many syntheses for the walls and tables of the offices. The cleaner's hobby was the artefacts, and she made decorative compositions with utensils from the Science Laboratory.

Many gifts and treats brought friends and collaborators when they visiting the RTC-Her, food and drink for the people who were working in the restructuring project. The Educational-Training Program "Natural Remedies", which implemented in Chania, fueled RTC-Her with natural soaps, toothpastes, wax-ointments, liquors, that produced in the Science Lab, gifts for visitors and trainers of the center.

### 8.4. Hosted educational and training activities

According to the legislative for Regional Training Centers, they only offer training programs that have been approved by the Greek Ministry of Education. Two Seminars ordered by the Greek Ministry of Education, Research and Religious Affairs and implemented in RTC-Her on the New Curricula of Religions of Elementary Schools and Gymnasiums and the other was on training Lyceum's teachers on Creative Works. Complementary to these Seminars, and as an initiative, developed the training activity in school years 2016-2018, and it is uploaded on the website <https://wp.me/P8OEfN-2w>

A training action called Epimorfosi b-epipedo, which is focusing on ICTs for teachers, carried out in the Training Support Center 'PEK Irakleiou'. The Center is housing in the RTC-Her and applies Training Programs of the Computer Technology Institute and Press "Diophantus" of the Ministry of Education, Research and Religious Affairs. In May 2017, a Training Program on Natural Sciences, Technology, Physical Education and Health was carried out for 14 teachers of Secondary Education. It is a Program of "traditional model" training, which only includes face to face training sessions, in the framework of the "Training of teachers for the exploitation and implementation of digital technologies in the didactic activity (Second Level Education Training)" of the Operational Program "Development of Human Resources, Education and Lifelong Learning", NSRF (2014- 2020) with beneficiary organization of the Action, the Institute of Computer Technology and Publications "Diophantos". The program repeated in the next school year.

Two Educational Congress took place in the RTC-Her during the school year 2017-2018 on 'Education and training in professional life: international trends and prospects' and on "Teaching sciences in schools with creativity and innovation: transforming the theory into practice", in December 2017.

Many other Educational and Training Activities took place in the RTC-Her during the School Years 2016-2018. It was hosted the Training Program within the framework of the Developmental Program "Governance, Sustainability and Regional Innovation" by the University of Crete and the Region of Crete in July 2017 for employees and officials in the Region of Crete and local Municipalities. A seminar on 'Natural Remedies' took place in the newly restructured Science Lab' in June 2017 by the Science Teachers of Chania with their School Advisor. The study of the restructuring of RTC-Her by decorators & architects of the 1<sup>st</sup> PIVT-Her, presented also in the same month. A visit with an experiential training activity for Vet Teachers coming from Lithuania took place in April 2017. A workshop of the Regional Administration of Primary & Secondary Education of Crete in the Framework of Erasmus KA2 "Explore More" materialized in March 2017. The 1<sup>st</sup> Vocational Lyceum of Chania, bringing decorating gifts for the renovated offices, visited the RTC-Her and participated with a music presentation, in the cutting of Saint Vasileios Pie for the New Year 2017.

The Coordinating Council of RTC-Her, in December 2016 designed Voluntary Training Programs for Primary and Secondary Teachers of Crete. The training programs were good educational practices, which could be applied locally in the 4 prefectures of Crete.

## 9. Conclusion

European Commission considers that the key drivers of EU 2020 should focus, among the other priorities, in empowering people in inclusive societies, in acquisition of new skills, fostering creativity and innovation, with developing of entrepreneurship and a smooth transition between jobs that will be crucial in a world which will offer more jobs in exchange for greater adaptability (EC, 2009). For twenty five years, a great number of training programs carried out by the RTC-Her, also a large number of various Educational and Training Activities took place in the premises of the Center with infrastructure that had designed to meet the needs of the last ¼ of the previous century. The schools of the RTC-Her responsible area, and widely, can build their sustainable development of their learning environment and their resources. The above described

restructuring of the RTC-Her can help them to develop discussions, suggestions and decorative choices to improve the space's aesthetic and function, so the working and learning environment of the offices, classrooms, laboratories, etc. to suit more to the demands of the schools for the 21st century communities. The state funding is not as important as is the exploitation of the human resources and the existing infrastructure. The students' internship and teachers' voluntarism contributed to the success of the Director's initiative to renovate the RTC-Her premises and equipment. Students of the 1st PIVT-Her, in the framework of their internship, supported the restructuring in many fields close to their studies, regarding the electronic infrastructure, the recording and upgrading of the archival material. Voluntary work groups helped to collect scattered printed and analogue audiovisual material for the creation of the RTC-Her Library, for the organization and cleaning of the Sci-Lab, for the collection and organization of any equipment for the Science Museum Collection, more focusing on instruments, devices and utensils aged of about 50 years. In order to be inspired the Director and the students of 1st PIVT-Her, decorative and functional ideas were searched in many websites regarding the equipment, furniture, halls, labs and offices, the security systems, etc. At the same time, developed many collaborations and partnerships with educational and training institutions of Greece and abroad, which ensure funding and know-how support to training activities.

The main goal for the educational institutes is to open to the society by building and developing neighborhood's relationships, by functioning as cores of learning for the local communities (Rauch, 2000). In the years of economic crisis, the involvement of the whole community, in various ways and works, the support by the young people and the voluntary work constitute guaranteed gate to progress for the educational communities. The main goal for the educational institutes is to open to the society by building and developing a neighborhood relationship, by functioning as the cores of learning for the local communities (Rauch, 2000).

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