

**Surveyor College and Graduate Surveyors in Rome**  
**The school and the world of work, study, think, plan and implement.**  
**Theory and practice compared to implement "concrete experience"**

**Cristina Aiuti, Italia**

**Key words:** Access to land

## **SUMMARY**

A concrete experience ..

The idea that we propose rises from the need to combine two requirements: to alert students to the socially weaker and actually putting into practice the knowledge assimilated during the training school.

Based on these requirements we fielded an initiative that aims to encourage final year students of the Institute for Technical Surveyors, through a concrete and stimulating experience, to practice the profession and consequently to join the Roll and on the other entering the world of the disabled to understand their hardships and help them to overcome but not limited to understand the hardships and help them overcome barriers, mental and physical.

The initiative was launched through a Memorandum of Understanding signed between the Board of "Collegio dei Geometri e Geometri Laureati" of Rome, FIABA non-profit organization, of the Municipality 12 of Rome Capital and the Technical Institute for Surveyors "Leon Battista Alberti," with headquarters at ' EUR, in the territory of the Municipality 12 of Rome Capital .

A project to improve the quality of life, to break down physical barriers for the disabled but not limited to, a project designed to create the total places accessibility and then the overall quality, to make it simple gestures of daily life also for so-called "normal people".

In a portion of public road of the EUR district, very important for the presence of offices, services and buildings that have marked the recent period of our country history, but still evolving for the realization of important projects, students will compete in a real experience that will feature them in the phase of surveying, the next graphic rendering, the design for the elimination of architectural barriers, and finally in the drafting of the estimate of quantities and safety and coordination plan. In the activities described above, carried out simultaneously with school commitments, students will naturally be accompanied by teachers of respective subjects and professionals of the respective materials provided by the Board of "Collegio dei Geometri e Geometri Laureati" of Rome. The presence and contribution of non-profit organization FIABA, Italian Fund for the Elimination of Architectural Barriers, will guarantee for the design choices .

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Students, the future surveyors, will be able to touch the various stages of a professional assignment, because the initiative aims also that, will teach them to love the land, their jobs and to make choices according to the users in compliance with the regulations, according to competence and professional ability.

The result will be a project, accompanied by the necessary documentation, that the Municipality 12 of Rome Capital will be able to develop, with the economic contributions that will come in the pipeline that will come with construction planned intervention in the area of ex "Olympic Velodrome", already demolished to create a building with a mix of functions to combine sports activities with the leisure, setting as the core of those activities the aquatic sports.

The experience and the project will be discussed during final exams, the best way to finish the school experience.

**SUMMARY (optional summary in one other language in addition to English, e.g. your own language)**

Un'esperienza concreta..

L'idea che vi proponiamo nasce dalla necessità di coniugare due esigenze: sensibilizzare gli studenti verso i soggetti socialmente più deboli e mettere concretamente in pratica le nozioni assimilate durante il percorso formativo scolastico.

Partendo da queste necessità abbiamo messo in campo una iniziativa che si prefigge lo scopo di incentivare gli studenti dell'ultimo anno dell'istituto tecnico per Geometri, attraverso una esperienza concreta e stimolante, a praticare la libera professione e conseguentemente ad iscriversi all'Albo; e dall'altra affacciarsi al mondo dei diversamente abili, ma non solo, per capirne i disagi ed aiutarli a superare le barriere, mentali e fisiche.

L'iniziativa è partita grazie ad un protocollo d'intesa sottoscritto tra il Collegio dei Geometri e Geometri Laureati di Roma, FIABA Onlus, il Municipio 12 di Roma Capitale e l'istituto tecnico per Geometri "Leon Battista Alberti", con sede all'EUR, proprio nel territorio del Municipio 12 di Roma Capitale.

Un progetto per migliorare la qualità della vita, per abbattere le barriere architettoniche a favore dei diversamente abili ma non solo, un progetto destinato a creare l'accessibilità totale dei luoghi e quindi la qualità globale, per rendere più semplici i gesti della vita quotidiana anche per i cosiddetti "normodotati".

In un tratto della viabilità pubblica del quartiere EUR, molto importante per la presenza di uffici, servizi ed edifici che hanno segnato un periodo recente della storia del nostro Paese, ma tutt'ora in continua evoluzione per la realizzazione di importanti progetti, gli studenti si cimenteranno in una esperienza reale, che li vedrà protagonisti nella fase del rilievo

topografico, della successiva restituzione grafica, nella progettazione per il superamento delle barriere architettoniche, ed infine nella redazione del computo metrico estimativo e del piano di sicurezza e coordinamento. Nelle attività sopra descritte, svolte contestualmente agli impegni scolastici, gli studenti saranno naturalmente affiancati dai docenti delle rispettive materie e da professionisti messi a disposizione dal Collegio dei Geometri e Geometri Laureati di Roma. La presenza ed il contributo di FIABA Onlus, Fondo Italiano per l'Abbattimento della Barriere Architettoniche, sarà sinonimo di garanzia per le scelte progettuali operate.

Gli studenti, futuri geometri potranno toccare con mano le varie fasi di un incarico professionale, perché anche questo l'iniziativa si propone, insegnare ad amare il territorio, il proprio lavoro ed a operare delle scelte in funzione dei fruitori dell'opera, nel rispetto delle normative vigenti, secondo competenza e capacità professionale.

Il risultato sarà un progetto, corredato dalla documentazione necessaria, che il Municipio 12 di Roma Capitale potrà mettere in cantiere con i contributi economici che arriveranno dall'intervento edilizio previsto nell'area dell'ex "Velodromo Olimpico", già demolito per realizzare un edificio con un mix di funzioni tali da coniugare l'attività sportiva con quella ricreativa e per il tempo libero, ponendo come fulcro di tali attività le discipline sportive acquatiche.

L'esperienza ed il progetto saranno discussi durante l'esame di maturità; il modo migliore per concludere l'esperienza scolastica.

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### **1. Theory and practice compared to implement "concrete experience"**

A project that is dear to the Surveyor College and Graduate Surveyors in Rome: to be present in schools, especially in technical schools, an ambitious goal, faced with the knowledge to know how important it is to approach the students to make them share experiences of concrete work.

Especially in this time of great economic and social crisis, in which moral values are no longer in their proper place and the competition clears the knowledge and expertise, it is important to be close to students today - professionals tomorrow - to give their valuable contribution and for the development of Italian society.

The commitment of Surveyor College and Graduate Surveyors in Rome is that to strengthen this relationship, acting as a goal the realization of joint projects, developed and implemented with the students of technical schools and teachers, through a joint way to prepare the world labor, a common pathway characterized by the Education (knowledge) and practice (know how). A project to see side by side with experienced professionals over a decade, the surveyors of tomorrow and the teachers, with one purpose: to convey knowledge and experience to train new professionals ready to respond to market demands.

Immersed in a world that is progressing with extreme rapidity MORE 'than we CAN imagine OURSELVES, we risk losing sight of one of the core values of our society, which is the value of the person. That's why now more than ever we necessary have to make the school more functional of the needs of the market, add to the unique characteristics of each student, and technical expertise, a real educational process, to get on the "market" of labor, with the necessary background knowledge, experience, and especially with the civic consciousness that is the basis of a developed society. We are accustomed to think of school as a training period detached and distant from the problems of work, but school and work are part and parcel of the educational process of young people and the learning path of each individual student.

Certainly the school do not "factory laborer"; his task is to increase knowledge and develop their individual characteristics, character, ability and desires of the student, work towards the practical experience the way for "DAY AFTER".

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Each student has a duty to claim their right to dream and believe that the studies undertaken will lead him to practice the profession for which he studied, which would allow not only professionally but also to flourish, to feel useful in a social system. That's why it is important to intervene with specific projects, it becomes important to connect the world of work with the school.

In this sense, we like to think of joining the world of education, to stimulate student and to show - through the knowledge of professional experience - that you can implement their projects as long to start a proper training process.

The Surveyor College of Rome must be placed in the forefront to help young surveyors of tomorrow, assuming a constant commitment to training and information, transmitting a concrete experience with the processes of analysis, depth of information that are the cornerstones all our business practices, helping each student to identify the method that, outside the school walls, will do just to "make their job", that essentially all of their skills and professional ethics essences, enriched by technology knowledge and law.

The practical work experience through the implementation of a project, as well as a way to establish and build their own "I work", is a way to enhance the training of the student. Such work experience is the most wonderful opportunity to strengthen the training program.

School-work is important because enhancing this relationship? Move closer to work, is to understand in advance what to expect once one has the qualifications and then what will be for future surveyors the labor market, is exercised in the form of liberal profession employed by an organized structure. In this new perspective, the role of a comprehensive policy in support of an educational and training project based on alternating school-work is strategic because it allows the young to know the world of work and while the company to be able to help steer curricula of the school system, so as to make it more in line with the labor market.

The initiative, which is described below is only the first in a series that the Surveyor College and Graduate Surveyors in Rome intends to develop in the Italian school.

To realize the above mentioned concepts needed to find an argument as to deepen the students, it was exciting and it had also contained ethical, and, above all, it was necessary to identify partners with whom to share the initiative, and why not, the adventure.

We thought at first to sensitize students to the problems of the architectural barriers , and then breaking down the barriers, then realize that the initiative that gradually took shape in reality could be directed to the community. Creating space without barriers is definitely meeting people with disabilities, but also makes life easier for so-called "normal people". In a world

without barriers every move with greater ease.

At this point the choice of a person with whom to share the initiative fell on FIABA Onlus (Italian Federation Elimination of Architectural Barriers) which for years was fighting for total quality, or for a world without barriers of any kind. The choice of the other partners at this point was "forced" because the School Institute, Surveyor College and Fiaba Onlus non-profit organization based in the territory of the Municipality - Rome Capital 12.

The initiative has been sealed with the signing of a Memorandum of Understanding between Surveyor College and Graduate Surveyors in Rome, Fiaba Onlus, the Municipality - Rome Capital 12 and the Technical Institute for Surveyors "Leon Battista Alberti," based in the zone EUR, right in the territory of the Municipality of 12 Rome Capital, and was presented October 2, 2011, during the Faiba Onlus DAY, an event that takes place nine years from the first week of October with the aim to raise awareness to the problem the disabled and others.

On 4 October, the initiative has been shown to students at the Technical Surveyors "Leon Battista Alberti," who enthusiastically accepted the challenge to succeed in organizing the classroom experience into a reality.

The project consists of taking the subject to a stretch of public road of the EUR district, very important for the presence of offices, services and buildings that have marked a period of recent history of our country, but still evolving to the realization of important projects. In this regard, students will engage in a real experience, that they will feature in the phase of surveying, the next graphic rendering, the design for the elimination of architectural barriers, and finally in the drafting of the bill of quantities and safety plan and coordination.

Next to their respective subjects and teachers of professional surveyors who participate in this initiative, ready to make available their experience, without limiting the real stars of the initiative will be solely and only students. The presence and contribution of non-profit organization Fiaba Onlus, Italian Fund for the Elimination of Architectural Barriers, will be a guarantee for the design choices made.

A project to improve the quality of life, to break down physical barriers for the disabled but not limited to, a project designed to create the overall accessibility of places and the overall quality, to make simple gestures of daily life also for so-called "normal people", a project that will help young students to approach the world of work through practical experience and stimulating, in compliance with the regulations, according to competence and professional ability to undertake a project to start a freelance .

In a rapidly changing world, where there are no more distances and where the ether allows us to be close but physically distant, unfortunately there are still many barriers that limit us and influence us in everyday life.

The design of these guys is this: delete with a thorough study of matter, and the rule of law of the place, the architectural barriers in the stretch of road between Via della Civiltà Romana del lavoro, and the Square of Concordia, for the realization of a 'area without limitations, without obstacles, and the locations where access may be available for all without distinction. The removal of architectural barriers is a great example of civilization and is part of the process of training in our profession should be in constant update.

Our experience begins October 15, 2011, at the school where the students are of two fifth classes, those closest to the completion of studies, who will discuss the work they are preparing to take the next exam. The teachers in the matters of interest to them, work with professional surveyors who have decided to make available their experience, all depending on the specific phase of the project. Even for teachers and practitioners, is a whole new experience that brings with it a host of unknowns: the students will be able to work together to develop their school? How students react to a teaching method different from that hitherto have known? Professionals will be able to assist students in the different phases of the project using terminology they can understand?

It starts with the topographic survey, coordinated by members of the Topography committee, who explained to students the methods for setting the topographic survey, first taught to know the place where to survey will be done in order to make a good "eidotipo" (sketch made by hand, which also contains all the elements of the soil which must be put in evidence for the purposes of the relief) and then determine where to put the topographic nails for identifying the stations. Then they proceeded to divide into working groups a limited number of students, so that everyone has had the opportunity to learn and try to read personally the topographic-instrument. So the students could personally appreciate the differences between traditional tape measure tools, and advanced as the theodolite and electronic distance with automatic reading of data (called the total station), and GPS satellite instruments. The topographic survey is performed in three consecutive Saturdays and students undertake to define every little detail.

Completed the topographic survey we passed to the next step which regards the calculation of the coordinates once about the stations and twice about the detail-points. The calculated coordinates are inserted into the CAD program in order to perform, with the aid of the eidotipo, the analytical representation of the state of places, it has become necessary to go back on the site, with the aid of the tape, to draw the position of some details. The analysis of the survey has as its highline the problems relating to remove architectural barriers.

The enthusiasm and participation of young people were engaging and makes us believe even more that our contribution is important to train these guys to be surveyors of tomorrow.

On 20th December the work done through the projection of slides prepared by the students concerning the surveying and 3D graphic rendering was presented to other students of the institute and those of similar institutions in the municipal area.

The study of existing legislation relating to architectural barriers allows students to the analysis of possible interventions, keeping in the foreground, as always happens in the design, the comparison between benefits and costs and in particular the evaluation of the impact that the works yield planned in the context in which you are working.

The design work becomes interesting for the active collaboration of our colleague disability, which puts all his knowledge not only notional but also made up of experiences, available to young students, who follow with great interest the advice of a professional. It was definitely exciting to watch a two-hour lecture given by a colleague on the wheelchair in which he represented the difficulties that students encounter every day, moving home, when traveling on business or simply for leisure purposes. The silence in which students attended the lecture is proof that we were able to raise their consciousness, even after all this was one of the objectives we set ourselves at the beginning of this experience.

At the time of writing the design is nearing completion; then follow the preparation of the "safety plan and coordination" and the bill of quantities of work to be carried out. Even in these activities, students will be assisted by faculty and professional experts. The interest shown to date by all parties involved in the initiative gives us hope. We believe we have fielded a useful operation, in some respects similar on school / work, and can produce the same effects.

Their goal is to get better prepared for the examination of maturity .. our is bringing them closer to the profession.

The completed project will then be presented and placed on site from 12 ° Capital Municipality of Rome, with the funds that come from the fees provided for assistance to the area of the former Velodrome (EUR).

An ambitious project we knew, that is engaging professional surveyors, teachers and especially "THEM," our future " THE STUDENTS".

## **REFERENCES --**

### **BIOGRAPHICAL NOTES**

Since March 2011 the College Board of Surveyors and Surveying graduates of Rome  
Coordinator of the Commission of the Territory Government  
Coordinator of the Commission of Public Works

#### **FROM 1997 TO PRESENT.**

Owner of Studio Technical Surveyor Cristina Aiuti.

Excellent knowledge of the sector: Planning, Design, Land, Building amnesty, Design for NOTS. and Exemptions for ASL, Fire Prevention.



Consultant for the planning for the transformation of cinema studios of "de Laurentis" Rome's Cinecitta World (loc. Castel Romano)

Consulting, design, municipal permissions for some Volkswagen dealer showrooms

Planning of fire prevention of the Faculty of Archaeology of Rome.

Technical Consultant for the planning authorization for new construction of a shopping center

Consulting and design to permit issuance to Innocenziano College Building (Piazza Navona)

Design and release CPI for all Sheraton Golf Hotel Rome

Consulting, design and collaboration to release CPI for Hilton Rome Airport Fiumicino

Consulting and Integrated Design Plan for construction of building in Bio Architecture (Pomezia)

Consulting and design for construction of Green Gym in Rome

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