## A PERMANENT TRAINING FOR THE ITALIAN SURVEYOR AND A NEW PATH TOWARDS AN EFFECTIVE SCHOOL SYSTEM FOR THE YOUTH

### Fausto SAVOLDI, Italy.

Key words: Curricula, Education, Real Estate Development, Professional Training, Profession, category, Reform, Official Registry, Youth.

### SUMMARY

Without a new kind of professional training, the 110.000 Italian Surveyors still active nowadays in our country (most of them trained in the Sixties and the Seventies) will run the risk of seeing their range of activity reduced, unless an adjournment in their competences. New building technologies, new surveying and valuating techniques (these are the main tasks of the profession) do not match anymore the standard school education. Even the daily professional practice can not reduce anymore the gap between theoretical education and the existence of modern digital procedures, new technical instruments and new rules laid down both by the State and by the Market.

Through its official representatives (a National Board and regional ones), the whole Category, well aware of these problems, set up different autonomous initiatives:

- 1) For all the professionals registered on the Official Registry, we made it mandatory a permanent training (educational courses with specific credits that, according to the age, every surveyor must obtain);
- 2) We operated in order to reform the School System, especially the status of all the former "Technical Institutes". Today, after the substantial reform passed by the Government in 2010, they are called "Technological Institutes", and are devoted to "Building, Environment and Territory". In such a way, our Category is trying to contribute with its experience and its renewed permanent training to the "know-how" of the youth in our field (building, topography and valuation).

I'd like to mention all the needs that modified, in the last fifteen years, the three main sectors of our profession:

- to restrain energy waste;
- to protect the landscape and the environment;
- to improve a sustainable mobility (which implies collecting and processing data: a task deeply connected with our competences in topography and digital cartography):
- to have a deep knowledge of the real-estate market. This later competence constitutes
  a fundamental asset in order to value a property according to standard procedures, and
  along with the international rules stated after the global economic crisis in 2009
  (crisis whose end is not yet well assured!);

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3) We encouraged all the surveyors registered in the Official Registry (from the age of 30 to the age of 50) to continue their studies, in order to obtain a three-year degree in engineering or architecture:

That's the reason why our Category is now called "Geometri e Geometri Laureati". We are proud to stress that our training is no more a five-year process, but a full technological education of 8 years after the standard Mandatory School;

4) Moreover, we welcomed the provisions taken by the reform in 2010: a reform that will allow the creation of a new educational path, alternative to the three-year degree (the so called "Istituto Tecnico Superiore", after 5 years of "Technological Institute"). The new training path (2 years) is meant to create technicians high-specialised in specific technological disciplines related to the surveyors' activity. The new training process will entirely substitutes the two-year apprenticeship that is today required in order to be able to take the National Exam and to be registered in the Official Registry. The "apprentice-surveyor", wrongly considered as an independent professional, comes back to the role of a student. Nevertheless, he gains a training practice that involves working for private companies, professionals and public institutions.

In the meanwhile, we are strengthening the knowledge and the competences that will allow them either an autonomous or a salaried activity.

Even if we try to promote individual competence, the Category is still "multi-disciplinarian": That's a way to say that we can face the challenge of a Global Market more and more demanding, paying attention to the quality of the "performance" and respecting all the bounds imposed by official laws and by technological innovations.

Individual specialisation and our Category's multi-tasking role gave way to associated offices that are able to help a client in all his needs. They can present themselves as leading models in the wider Market of the Developing Countries.

In Italy, such a model constituted the trainer of all the processes of rebuilding after the II World War and of the development that our Country achieved in the last decades.

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The technological revolution that took place in the last twenty years in Italy widened the gap between school education and the real operational skills required by every professional Surveyor. Although with a great delay, a substantial reform promoted by the Italian Government in 2010 was meant to fill this gap. This reform states how our "Technical Institutes" have to be changed into "Technological Institutes".

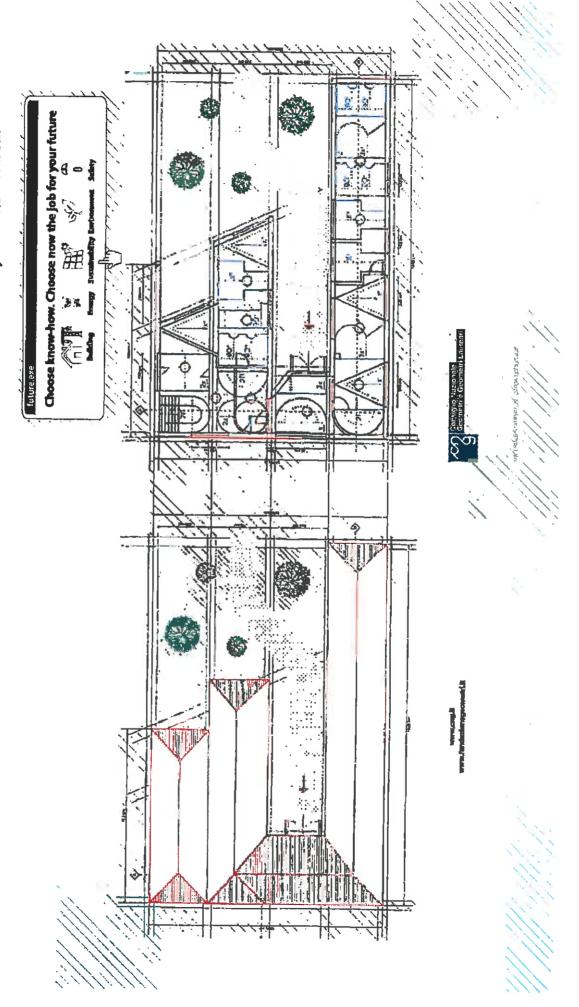
The following slide will show you how the Italian school system is structured.

### THE ITALIAN SCHOOL SYSTEM **Nursery School** MANDATORY SCHOOL 3-6 years old **Primary School** 6-11 years old Secondary School 3 12-15 years old SECONDARY SCHOOL Technical Classical Music-Art Scientific Institutes Studies **Studies** Studies (5 years) (5 years) (5 years) Post-Seccondary - University University **ITS** Professional training 2 years 2 years Professional TS 01F - Young Surveying Professionals and Students Activity 4/13 Fausto Savoldi A permanent Training for the Italian Surveyor and a New Path towards an Effective School System for the Youth

FIG Working Week 2011 Bridging the Gap between Cultures Marrakech, Morocco, 18-22 May 2011 Our Category is now trying to help all the students attending the last mandatory year of schooling (that's to say: the second year in a Secondary School) in order to:
Guide young students to a choice that could improve their potentials. We are publishing booklets that illustrate all the characteristics and the opportunities offered by "a firm choice": to attend a Technological Institute specialised into "Building, Environment and Territory

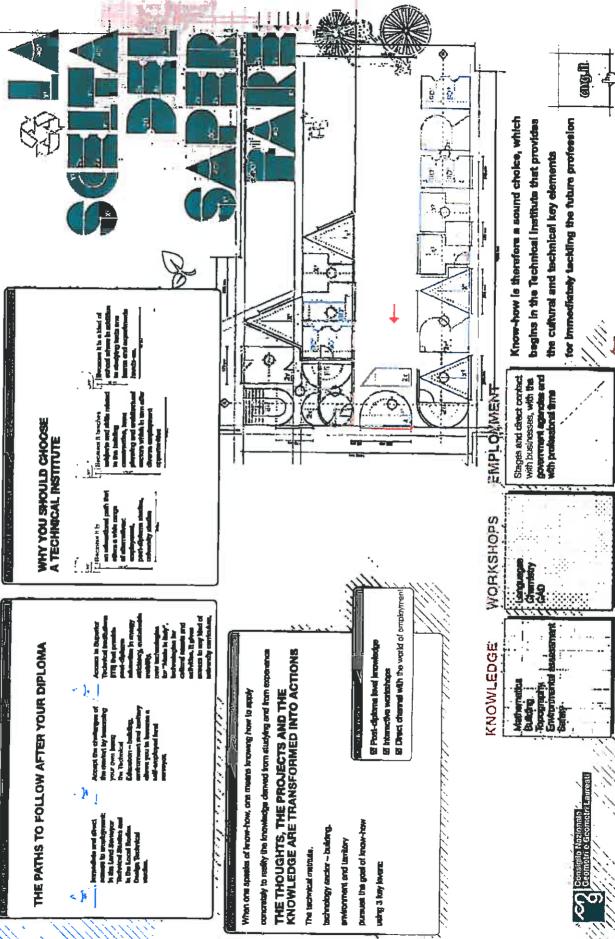
## A SOUND CHOICE

The Technical Institute, technology sector: building, environment and territory the choice of Know-How, A sound choice!



Persuade parents and teachers that a Technological Institute is as qualified as a "Liceo". The former matches the urgent needs of our Country. We do need more than 150.000 technicians for the industrial sector, for the Public Administration and as self-employed professionals.

# THE CHOICE OF KNOW-HOW



With the reform of 2010, during the first 4 years of a Technological School the focus has been placed on the fundamentals: Math, Italian Literature, Foreign Languages. From the 5<sup>th</sup> year we start with programs more addressed to the professional activity and the post-secondary education (University: Engineering or Architecture) or Post – Secondary Technological School (MA in the professional qualifications that are more demanded by the industrial sector

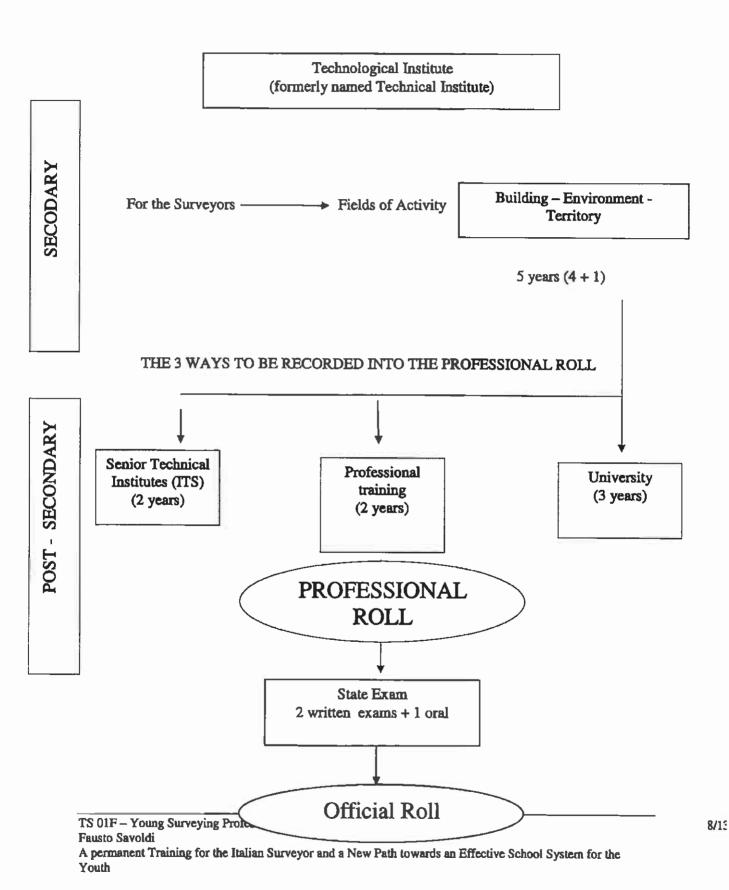


FIG Working Week 2011 Bridging the Gap between Cultures Marrakech, Morocco, 18-22 May 2011 Here you can see the educational path that a student of a Technological Institute "Building, Environment and Territory" has to follow in order to be registered in the Professional Roll.

Three are the ways to the registration into the Roll, and all of them lead to the State Exam that qualifies a professional to the practice of his activity (both as self-employed or as employee).

We added to the former two-years of practical training that used to grant the recording into the Roll:

- Three years at the University (Engineering or Architecture) and the subsequent degree.
- Two years at the "Senior Technological School" in order to become specialised in one of the four disciplines that are crucial both for our Country and for our professional activity:
  - 1 Power efficiency
  - 2 Sustainable mobility
  - 3 New technologies of the "made-in-Italy" House System
  - 4 New techniques applied to the cultural preservation and promotion.

BUT what is really new in this reform is:

- ALL the Professional Categories are actively participating in the whole Secondary School Education process: we are all contributing to the creation of "Laboratries" and "Scientific Committees" in every Technical Institute.

The Scientific Committees, formed in every School by teachers, parents and professionals, should establish the fields of teaching and the practical experiences (stages) required for the professional activity in every specific territory. Every School can choose to use part of the "free" teaching hours for these purposes that are exceeding the standard education programs.

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As for the Post – Secondary Education, we are ALL involved in its management, and, for this purpose, we are creating specific Foundations with the partnership of the Industrial Sector, the Public Administration and the "High schools in To these Foundations (all conceived Technology" (ITS).

To these Foundations (all conceived as partnerships) founds are granted by the Local Public Administration, by Companies operating in the sector, by Technical Institutes and by Educational Organisations. Among the companies active in the field, we can mention even our Professionals and the Professional Category itself. These Foundations have two crucial tasks: to manage a two-years training financed by the State and by the Regions: to organise practical stages in Companies and Public Organisations that are active in the Educational Sector.

That's why, after so many years, for the first time our Category has been called to take an important role in the educational process of the future generations of Professionals. Heavy task! Our great responsibility is increased by the urgent need of a constant updating of the technical knowledge required from the Professionals already registered in the Official Roll. 100.000 Italian Surveyors (30.000 topographers, 50.000 building planners, 20.000 valuators and experts), whose education dates back to the Sixties or the Nineties, would run the risk of a significant reduction in their professional activity without an updating of their competences. New technologies in building, surveying and valuating (the three most important activities in our profession) do not match anymore what our schools taught them. Moreover, our daily practice cannot fill our educational gaps, especially those concerning electronic procedures, new technical instruments, and the new rules stated by law and by the market.

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Youth

Through its National Board and the 110 County Boards, our Category is well aware of these problems and needs. For such a reason, we promoted different kinds of initiatives.

- 1) A permanent education has been made mandatory for all the Professionals that are registered in the Official Roll. All of us have to participate to training courses that give us "professional credits". These credits have to be acquired every year, according to the age of the Professional and in order to maintain the registration in the Roll and be operational.
- 2) We started to give a practical contribution inside the Secondary School System, sending our Professionals as teachers especially in the Technical Institutes ("Building. Environment and Territory"). In such a way, we want to participate with our experience (enhanced by our permanent education) in teaching to the youth a "knowhow" in building, surveying and valuating.
- 3) We encouraged those people already registered in our Official Roll and whose age ranks from 30 to 50 years old to resume their training in order to obtain a Three-years Degree in Engineering or Architecture. Nowadays, our Category is called "Surveyors and Graduated Surveyors": it's a way to

show the change from a 5-years education into a technological training of 8 years after the mandatory school.

- 4) We chose to subscribe the 2010 Reform providing for a new educational path that represents an alternative to the three-years University course named "Senior Technical Institutes (ITS)" that starts after the 5 years of Technological Institute. This new path (two years) is meant for high-qualified technicians, specialised in specific fields related to the surveyor's traditional activity). This new educational process will gradually take the place of the two-years practical training that is now mandatory in order to be registered in the Official Roll. The "Apprentice Surveyor", mistakenly considered as a self-employed professional, become a "student" again! Nevertheless he will be formed through a real professional practice within established Companies, Professionals or Public Offices.
- 5) We encourage young Professionals to create partnerships that might offer different specialisations (topographers, builders, valuators), in order to give to the client the full range of services. Even other Categories have been involved in the creation of these cabinets: engineers, geologists, forest agronomists.

Why are we doing all this? Because technological innovations have deeply changed our way to operate, and have given way to new fields of activity...

A few years ago we weren't talking about power saving; nowadays such an item is crucial in every building project: we have to consider it in the choice of the plan, the materials, the cost valuation.. In Italy, every building will have its "power-consumption certificate", mandatory in order to establish the building characteristics, the kind of systems installed and to suggest a possible price if sold. Such a reform compelled our Professionals to attend specific updating courses that might be different in the various Regions.

As for the implantations, our knowledge has improved to the point that we can compete with the Category of the Industrial Experts, traditionally the most competent in this field and close to the production sector.

The idea of power-saving is strictly linked with the concept of environmental preservation.

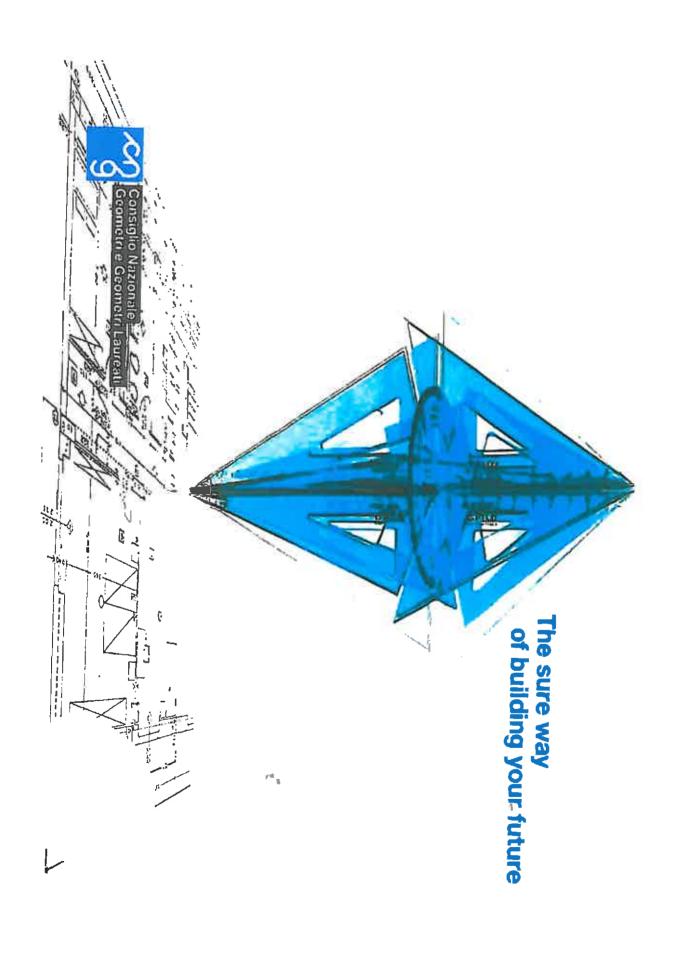
A Professional more sensitive towards this subject means a more responsible and careful way to build and a deepest knowledge of the Territory.

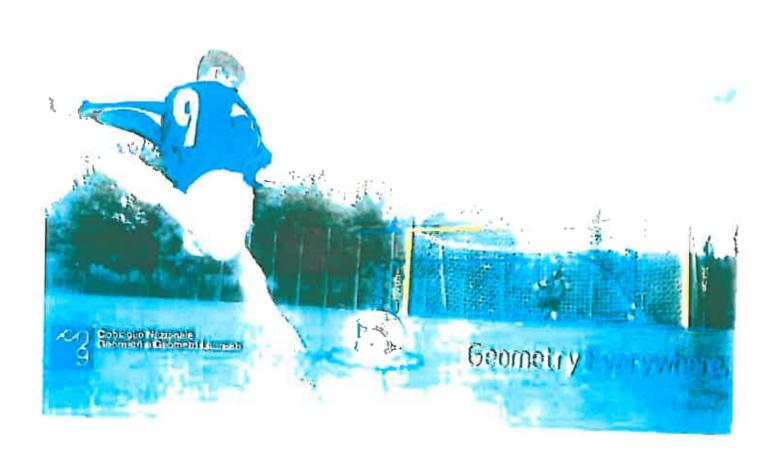
Even a topographic map does not anymore constitute a mere survey and a graphical representation. It becomes a collection of data about rights on properties, characteristics of the soil and dangers related to them, landscape and cultural values attached to every single parcel. Topography is not a mere collection of measurements and their graphic representations anymore: it becomes a way to record the whole of our knowledge of a specific territory: its cadastral status, its nature and dangerousness, its economic potential.

As it is, topography is a discipline deeply linked with the problem of a "sustainable mobility" that so much characterises our world both in the working sector and in the communications.

To prevent power-waste, to protect the environment, and to make it easy to communicate and to exchange news among people represents a new way to "live" our homes and our territory. New horizons are opened in the relationship among the people and between citizens and Authorities. That's the new kind of living, thinking and working that the Italian Surveyors want for their youth. That's the way to assure to them a future and stand as an example of a self-recreated profession for all our Colleagues around the World.

I'm sure: this is THE way to create a future for our youth!





### **BIOGRAPHICAL NOTES**

Born on 16 February 1945 in Brescia, where he lives and works as a free-lance surveyor.

July 1965: graduates and obtains a diploma as Surveyor at the Istituto Nicolò Tartaglia in Brescia.

1966: Lieutenant in the Infantry Corps of the Italian Army.

November 1966: participates in the emergency campaign during the flood of the city of Florence, coordinating the operations of his unit for saving the artistic heritage of the historic city centre.

1967: enrols in the Registers of Surveyors of the Province of Brescia and begins to work as a free-lance professional.

From 1969 to 1978: is elected member of the Provincial Governing Council of the Board of Surveyors in Brescia and is appointed Secretary from 1975 to 1978.

From 1978 to 1983: is elected member of the National Board of Surveyors.

From 1985 to 1997: elected for the first time as Delegate to the Italian Social Security Fund for Surveyors, representing the Lombardy region.

From 1989 to 2008: officiated as the President of the Provincial Board of Surveyors for the Province of Brescia – a professional order with 3,000 professional members enrolled.

April 1997 to 2008: is elected President of the Italian Social Security Fund for Surveyors, an organization with 95,000 enrolled members that issues 24,000 pensions, with movable goods and real estate property amounting to €1,400,000,000.

2005: is nominated by the Mayor of Brescia as Member of the Board of Directors of the Brescia Mobilità SpA, a company with capital of the Brescia Municipality and the ASM of Brescia for the construction of the urban subway network.

2007 to present: Member of the Board of Directors of F2i, a fund for the creation of infrastructures which stands third in the world for its capitalization.

2008 to present: is elected President of the Consiglio Nazionale Geometri e Geometri Laureati

2008 to present: FIG Commissions 1 and 2 Italian Delegate

2008 to present: Member of the Council of European Geodetic Surveyors

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