



Education and Training in Surveying Sector of Turkey: Current Challenges and Future Perspectives

M. Tevfik Ozludemir¹, Erol Kocurk², Rahmi Nurhan Celik¹



¹Istanbul Technical University



²Kocaeli University

TS 2G - Future Education Models and Curricula,
Commission: 2
Tuesday, 13 April, Bayside 202, SCEC

1

Outlines

- Milestones in the history of Turkey
- Education and Training in Surveying Sector of Turkey
 - Technician education in secondary education
 - Technician education in vocational high schools of universities
 - Geomatics Engineering education in universities
 - Professional training activities in surveying sector
- Education and Training in Surveying Sector of Turkey
- Conclusions

TS 2G - Future Education Models and Curricula,
Commission: 2
Tuesday, 13 April, Bayside 202, SCEC

2

Milestones in the history of Turkey

- Republic of Turkey was founded in 1923.
- Turkey signed agreements with International Monetary Fund and became a member of NATO in 1950's.
- September 12th military coup took place following the January 24th economic policies declared in 1980.

TS 2G - Future Education Models and Curricula,
Commission: 2
Tuesday, 13 April, Bayside 202, SCEC

3

Education and Training in Surveying Sector of Turkey

- Surveying programs in Technical High Schools
- Surveying programs in Vocational High Schools of the Universities
- Geomatics Engineering Departments of the Universities
- Master and Doctorate programs of the Universities
- Post-education Training and Orientation Courses of the Public Institutions
- Training programs of surveying sector
- Certification programs

TS 2G - Future Education Models and Curricula,
Commission: 2
Tuesday, 13 April, Bayside 202, SCEC

4

Technician education in secondary education

Technician education is given in 43 “Surveying and Cadastre” departments in technical high schools, industrial vocational high schools and multi-program high schools which are connected with Ministry of Public Education. Besides, there is also one surveying-cadastre technician program in Vocational and Technical Education Centre. Period of study in these schools is 4 years after compulsory primary education. Students who graduate from all these schools enter into Surveying, Surveying and Cadastre, Mine Surveying programs of Vocational High Schools of universities without examination in case they demand.

TS 2G - Future Education Models and Curricula,
Commission: 2
Tuesday, 13 April, Bayside 202, SCEC

5

Technician education in vocational high schools of universities

- Totally 3518 students started education in 72 Surveying-Cadastre Technician program in 2009-2010 education period in Turkey. In addition, Property and Property Management programs was 41 in 2009-2010 education term with 1249 students attended.
- “Vocational High Schools Program Development Project” that is started to be applied in all vocational high schools in 2002-2003 education period is an important attempt for uniformity. However the project was put into practice without making adequate preparation.

TS 2G - Future Education Models and Curricula,
Commission: 2
Tuesday, 13 April, Bayside 202, SCEC

6

Technician education in vocational high schools of universities

- Vocational and technical education is not done in a proper way. In most of Vocational High Schools it is seen that the quality of infrastructure is not as good as it should be.
- Most of vocational high schools opened in recent years do not have adequate teaching staff. Also important part of current instructors did not have pedagogy education.
- Establishing job trainings of vocational high schools to a legal ground have not been realized yet though various attempts. School-industry cooperation was not able to be brought into demanded level though certain conducted attempts.
- The knowledge of students in main classes such as mathematics, Turkish and sciences are quite low.

TS 2G - Future Education Models and Curricula,
Commission: 2
Tuesday, 13 April, Bayside 202, SCEC

7

- General Directorate of Turkish Employment Organization (İŞKUR) describes Surveying-Cadastre Technician trained in high schools as “the person who draws a piece of land on a scaled paper by using special marks and by taking its geographical position, zoning status, settlement and public works status into consideration under supervision of geomatics engineer or technician”.
- Surveying-Cadastre Technician trained in vocational high schools of universities is defined as “the person who prepares infrastructure of projects such as cadastral mapping, dam construction, road surveying, watering, power line installations in urban and rural areas under the supervision of geomatics engineers.”

TS 2G - Future Education Models and Curricula,
Commission: 2
Tuesday, 13 April, Bayside 202, SCEC

8

Geomatics Engineering education in universities

- In Turkey a great number of engineering departments opened recently by ignoring requirements of the country and surveying sector, and quotas of geomatics engineering departments were significantly increased. For example, in 2004 approximately 650 students were studying in 8 programs while this number increased to 1175 in 11 programs in 2009. It is a fact that newly opened departments have problems both for inadequate lecturers and infrastructure.
- Quality, national and international accreditation concepts gained importance recently in geomatics engineering education. Important steps were taken in relation to this subject for determination of national accreditation principles and criteria, and measurement of education qualities of current departments.

TS 2G - Future Education Models and Curricula,
Commission: 2
Tuesday, 13 April, Bayside 202, SCEC

9

Professional training activities in surveying sector

- Many public institutions in Turkey apply their own professional training programs. However starting from 1990's such programs were limited because of financial reasons.
- Universities play an important role in professional training. But the lack of continuous and systematic relations between universities and public institutions makes the organisation of such training activities difficult.
- These problems are also valid for private sector institutions. Private sector also needs to renew itself parallel to the developments in informatics, technology and other processes.

TS 2G - Future Education Models and Curricula,
Commission: 2
Tuesday, 13 April, Bayside 202, SCEC

10

Conclusions

- The main problems in surveying sector of Turkey are the lack of coordination of surveying issues and insufficient cooperation between surveying institutions. In addition there is no long-term strategic planning considering the requirements of the country. These problems directly affect the education processes. Necessary measures should be taken at national level.
- There should be close relations between universities and other vocational high schools. Universities should also give support to the public and private institutions to organise proper training programs.
- Education issue is still one of the most important tasks in surveying sector. By collectively working, like in many other issues, surveyors of Turkey are capable of overcoming such problems.

TS 2G - Future Education Models and Curricula,
Commission: 2
Tuesday, 13 April, Bayside 202, SCEC

11

Thank you for your attention...

TS 2G - Future Education Models and Curricula,
Commission: 2
Tuesday, 13 April, Bayside 202, SCEC

12