

Case Study: Relaunching a technical education in Bologna

In the Metropolitan Strategic Plan, a priority project was "the relaunch of technical education", which aimed to qualify technical schools and more generally to enhance connections between doing and thinking, and the ability to master even creatively technical processes - as a fundamental competence of citizenship.

The project fits into the broader "Manufacturing Renaissance" strategy, which aims to give new vigour, to the Bolognese tradition in mechanics, mechatronics and automation (whilst also considering ICT innovation).

The project is coordinated by the Metropolitan City and conducted jointly by a public-private partnership consisting of: Association of Autonomous Schools of Bologna; Aster; Bologna Chamber of Commerce; CNA Bologna; Municipality of Bologna; ITS Maker Foundation; Emilia-Romagna Region; Regional and Local Education Public Department; Unindustria Bologna; schools involved in the project.

The project started with 9 Institutes (mechanics, electronics, ICT, chemistry, graphics, logistics, fashion), in very different in geographic location, size, kind of students, study courses, degree of innovation, relations systems. These Institutes formed a network and made an analysis of their educational service, identifying 4 principal areas of intervention: incoming guidance in connection with lower secondary schools, and welcome programs in early grades; partnership with companies; curricular, methodological and organizational innovation; and network activities between institutes. Through joint working the 9 Institutes have defined many improvements, including;

- 'Open days' in technical institutes for lower secondary school teachers;
- Promotion of technical culture in the three years of lower secondary school, with interventions and workshops conducted by upper secondary students;
- Production of facsimiles of conventions and standard procedures for the stabilization of multi-year partnerships with companies;
- Dissemination of repertoires of possible integrated activities for alternating school-work, and technical assistance for their implementation;
- Implementation of digital platforms for cooperative learning between institutes and companies;
- Realization of seminars in companies for educators (school principals, teachers, trainers, counsellors);
- Experimental curriculum integrations aimed at additional diplomas in technical subjects;
- Activation of a "Technoragazze desk" in each Institute, managed by female teachers of technical subjects and addressed to female students or young girls interested in enrolling in technical schools.

Starting from spring 2015, the project was extended to the institutes covering accounting, finance, marketing, business information systems, international relations and tourism and, from September 2015, to food, agroindustry, buildings, environment, territory courses.