

Training labs for students at the Poznań University of Technology

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Changes to the vocational training system have recently become a permanent fixture in Polish education. Vocational training, which is part of this system, has failed to provide a comprehensive response to the needs of students and employers alike. On the one hand, during such training, students at vocational schools are given the opportunity to familiarise themselves with the working conditions in a given company or institution. On the other, though, their only activity is usually to perform the simplest tasks or merely to act as passive observers. Employers can hardly be blamed for this situation, as they are justified in putting the pursuit of financial gain before education, which can only be regarded as a praiseworthy, yet minute, part of their business activities. There is no fault on the students' part, either, as they are often not ready to be given responsible jobs, involving, for instance, the operation of advanced machinery, since they are usually not given the opportunity to use them at school. The question is what vocational training scheme has the greatest potential to fulfil the expectations of both stakeholders. An attempt at arriving at a new scheme is the training lab, which has been developed by the Management Engineering Faculty at the

adjusting education to the needs of the labour market have spawned the Technical Knowledge Accelerator® concept, which has become the foundation for projects on the labour market and education. The idea of the training lab has been in the making for several years, evolving from the concept of mobile labs designed to deliver knowledge on leading scientific achievements in remote locations far from large municipalities, to university-based state-of-the-art laboratories, available not only to students¹.

As a result, currently PUT has 10 lab rooms with the latest equipment, which is also found in modern companies. The labs are used by vocational-school students from the region of Wielkopolska. By September 2015, they are to welcome as many as 6300 of them. The idea behind this type of vocational training is generally to provide future employees with the opportunity to have hands-on interaction with the latest advancements in the field of technology, which either already are, or soon will be, commonplace in business set-ups. For instance, the labs allow inexperienced interns to program industrial robots, which is a risk a company cannot normally take. In the labs, students are given a chance to work with high-end equipment and to take advantage of all its functions. The facilities provide access to machines such as optical-fibre welders, 3D printers, industrial robots, RFID gateways, and different types of professional software, to name but a few. Special educational programmes have been developed for the labs to focus on independent and creative student experience, and the courses are taught by experienced professionals with practical business expertise. Therefore, the know-how they share is not only on how to use the machinery but also on professional



The IT Lab. The optical-fibre welder.

conduct and the requirements imposed by employers.

Students are introduced to the hardware and software necessary in the professions such as economist, IT specialist, machinery engineer, logistician, sales specialist and marketing organisation technician. Their presence in the training labs has met with enthusiastic comments, which is reflected in survey results and evaluations carried out among both students and teachers. Soon, the labs are to be opened to employers, who will be invited to see and assess them during Open Days. Further development of the vocational training cannot be programmed without the relevant input from all stakeholders, and the views of employers on this matter are crucial in this respect.

The results of current studies and analyses will constitute the basis for the continued development and enhancement of the vocational training, and will contribute to the expansion of knowledge resources in companies. The labs have already proven to constitute a very interesting alternative to the traditional vocational-training scheme. They provide students with access to sophisticated tools outside their school, which facilitates experience gains, while also offering employers an opportunity to recruit employees with superior experience.

More information on the training labs is available on www.zawodowcy.org.



The Logistics Lab. An RFID reader.

Poznań University of Technology (PUT) in cooperation with the Local Government of the Wielkopolskie Province. Researchers at the University have studied knowledge management in companies for a number of years now.

The cooperation with the Central Ostrobothnia University of Applied Sciences in Finland and the search for effective methods for

¹ Szafranski M., Grupka K., Goliński M.: Program akceleracji wiedzy technicznej i matematyczno-przyrodniczej w Polsce [The programme of acceleration knowledge of technology, mathematics and natural science in Poland]. Wydawnictwo Politechniki Poznańskiej, Poznań 2008

² Szafranski M., Goliński M.: Interactive laboratory of technical knowledge acceleration in the program of acceleration of knowledge of technology, mathematics and natural science in Poland. Publishing House of Poznań University of Technology. Poznań 2010.