USA: Vaughn College Aiming High with Lucas-Nülle

Students at Vaughn College have recently begun using Lucas-Nülle to prepare for their working lives as aeronautical and planning engineers. The renowned college integrates practical industry-based aspects into its course syllabuses. And the students are not the only ones to benefit from this.



Oliver Scheel of US Didactics and Marijan Naglic of Lucas-Nülle standing in front of Vaughn College



It doesn't get any more realistic: vocational training in automation technology using the IMS system

ucas-Nülle has had good contacts with Vaughn College in New York for several years now. When Sharon DeVivo, Vice President of Academic and Student Affairs at Vaughn College, saw the training systems for the first time, she was immediately convinced by their high quality and practical suitability: "It was clear to me straight away that our students would benefit greatly from the training systems, which combine industrial components with well-designed teaching methods." The students are now indeed using the new training systems after their introduction in autumn 2010. "This step forward for our college is the result of many years of intensive cooperation between both partners," explains DeVivo.

Since it was founded in 1932, the renowned Vaughn College has been one of the leading US colleges for the education and training of future traditional and industrial engineers. Courses covering every aspect of aeronautical engineering form a central part of the college's offering.

Oliver Scheel, the local partner representing Lucas-Nülle in the USA, and Sharon DeVivo first met several years ago at an event organised by the national accreditation body for engineering courses.

"The accreditation council determines the relatively strict criteria for engineering courses. Colleges and universities that want to award an accredited degree must fulfil these criteria and allow appropriate checks to be carried out. Lucas-Nülle training systems help us to comply with these criteria," explains Oliver Scheel.

Since that meeting, the relationship between Lucas-Nülle and Vaughn College has grown, and shortly afterwards they embarked on a joint project to set up an extensive self-learning laboratory on the New York campus.

Committed to practical training

Vaughn College places a major emphasis on practical orientation in all its courses. For example, all the lecturers who work there have at least three years' professional experience outside of academia and therefore know what is important in industry. Furthermore, it is a matter of course for the majority of students to complete internships with companies during their studies, giving them an opportunity to put their knowledge into practice. "The feedback we receive from the interns and the companies shows that our students are already proving themselves in practical situations, which is a very motivating experience for them, as well as being popular with the companies" says Sharon DeVivo. "Our training systems must therefore simulate real-life practice in a way that will give students the necessary skills and competence to enable them to put what they have learned into practice straight after graduating. Lucas-Nülle systems greatly facilitate this transfer and will make our courses even more industry-focused in the future."

Another decisive advantage of Lucas-Nülle training systems is the Blended Learning concept. It gives students a large degree of autonomy in structuring the learning process while at the same time safeguarding high, consistent and comparable standards through the course system and the material that is taught.

By successfully completing a course of study at Vaughn College, graduates are qualified as certified engineers who are entitled, for example, to carry out the kind of tests and inspections that are required by the authorities. In many cases, only certified specialists are allowed to take charge of projects. In order to be able to award this certification, Vaughn College has to comply with the strict demands of the accreditation council and adhere to certain standards, which in turn have to be able to be verified and documented at all times.

Self-learning to high standards

"The Lucas-Nülle course system, which also allows us to check the standard of learning electronically at all times, makes it easier for us to monitor compliance with the standards while at the same time giving the students the scope and freedom to determine how they want to work," explains DeVivo.

The idea for this kind of self-learning laboratory had been conceived back in 2005. But another four years passed before the State of New York made the funding available and gave the go-ahead with a public invitation to tender.

This made it all the more pleasing for everyone involved when Lucas-Nülle's bid was successful and the preparations could begin in October 2009. Gerald Schex, Lucas-Nülle's sales director for the region, drew up a precise plan for the future laboratory in collaboration with Oliver Scheel, Sharon DeVivo and the relevant professors.

"Consideration had to be given to the various user groups as the laboratory was supposed to provide the ideal framework both for basic courses aimed at first-year students and for advanced project work," reports Gerald Schex.

As well as being equipped with UniTrain-I courses in all the basic technical subjects, the new laboratory therefore also features a comprehensive IMS station for automation technology, which, for example, allows advanced students to work on their final projects.

A look around the laboratory

At the Open House Day in the autumn of 2010, the college unveiled its new laboratory to the public. "We are confident that all visitors will recognise that this superbly equipped laboratory is a reflection of the high quality of our course offerings," says DeVivo, adding that "the laboratory sends a clear signal to all our lecturers, students and business representatives that we provide teaching of a very high standard."

Other educational institutions and companies interested in Lucas-Nülle training systems are also able to tour the laboratory.

"The laboratory at Vaughn College shows what is possible with the systems. It is also very centrally located in New York City and easy to reach. We are therefore delighted to be able to invite customers and partners to this event," says Oliver Scheel.