



Success Stories

Developing Skills
for Employability with
German Partners

8 Case Studies from the Sector
of E-Learning Solutions and
Learning with Digital Media

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and Learning with Digital Media*

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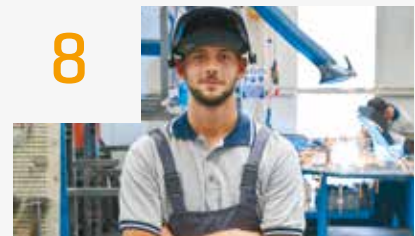
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Preface

Technology plays an increasing role in our everyday lifestyle – and also in educational and training contexts. More and more training providers develop comprehensive quality content and web-based solutions making use of innovative methods and emerging technologies. On-site learning is supplemented by blended learning and e-learning, providing students and trainees with easy-to-use, intuitive and interactive learning environments and scenarios. The practice-driven German dual system of vocational education and training can thus be enhanced, upgraded and equipped to meet the industrial challenges of the future.

With e-learning solutions learners are placed in an active role of discovering and exploring at their own pace. Most systems encourage collaboration with co-learners and instructors. Integrated adaptable query systems support continuous progress monitoring and status reporting. The tools usually have a customizable design and are expandable with new functions. They are easily accessible independent of time and place, available for all sorts of mobile devices and integrate skype and social media.

Moreover, the gamification of content in virtual and augmented reality facilitates a new way of learning through experience. Realistic simulations allow for adventures that would be impossible in reality. Flying through the universe or exploring the human body from the inside places the learners in uncharted territories, creating learning experiences of a new pedagogical dimension.

Germany's economic success is reinforced by its e-learning expertise. "Training – Made in Germany" offers the necessary know-how to meet the challenge in the field of vocational education and training. Germany has a long-standing tradition in this field and enjoys a high reputation for the demand-driven and practical orientation of its qualification programmes. The integration of professional, social and methodological competencies characterises the kind of knowledge German partners can provide.

The initiative iMOVE was established by the Federal Ministry of Education and Research in 2001, in order to promote international business relations of German training providers with international public and private organisations. iMOVE services include a multilingual database which contains information about German training providers, seminars, trainings and trade visits abroad.

This brochure presents eight success stories regarding e-learning solutions, realised in a joint effort by German and international partners. With its wide range of training programmes and its strong emphasis on employability, "Training – Made in Germany" has the potential to successfully contribute to the design process of training systems in many countries through transnational cooperation projects.



Ulrich Meinecke
Head of Division iMOVE at the BIBB







A fully automated learning factory prepares for work in an automated environment

www.festo-didactic.com

A training solution for Industry 4.0

Industry of the future will be characterised by an unprecedented flood of data and by a highly complex networking of plant and company areas. This means that it will be more important than ever for employees to be knowledgeable about the structure of digital and fully automated production technologies if the smooth operation of factories is to be ensured. Detailed knowledge of the set-up and programming of digital networks and competences in the inter-related fields of electronics, mechanics and IT will also be in demand. Festo Didactic's fully integrated learning factory now enables people to be systematically prepared for work in digitalised and complex industrial environments.

Festo Didactic is the world's leading supplier of technical educational institutions and of advisory and educational services for industry. The company forms part of the Festo Group, which operates in the field of factory and process automation and currently provides pneumatic and electronic propulsion technology to over 300,000 customers in 200 branches. Its continuing education subsidiary Festo Didactic has a turnover of around €154 million and is considered to be the market leader in the area of industrial training. In 2015 alone, Festo Didactic delivered training to 42,000 seminar participants in 60 countries. At the same time, hundreds of teachers received advanced training and obtained certification. Training solutions such as laboratory facilities, learning factories and e-learning products are offered in conjunction with technical, organisational and people-oriented training programmes aimed at schools, universities and companies.

Festo Didactic provides training solutions at three different levels. These range from basic packages to modules for individual industrial processes and also extend to encompass a completely integrated learning factory which involves learners at all stages. This is an overarching solution which enables participants to gain live experience of all aspects of an automated work environment specially prepared for training purposes.

The learning factory makes it clear how production processes which normally run invisibly in the background interact with one another. This allows learners to prepare to deal with plant programming and data management and also facilitates the

further development and testing of software solutions. Learning at real production facilities is dangerous and expensive by comparison.

The new learning factory is an open and flexible solution which enables various skills to be acquired and expanded. Employers themselves are able to determine which specific competences individual staff should obtain and can also decide which support and knowledge services they need to learn to use.

Festo has established an integrated learning factory at its own works in Scharnhausen. The learning factory forms part of a training concept and constitutes a permanent learning station for advanced trainees and skilled workers at the company. It is, however, also suitable for beginners and provides an overview of the opportunities offered by Industry 4.0. Within the scope of the learning factory, skilled workers and management staff are provided with short-cycle and practically related training by internal or external experts in so-called "one-point lessons". Learning contents cover the areas of mechatronics, logistics and process optimisation but also extend to include organisational and people-related training aspects such as interdisciplinary activity, learning skills and ability to embrace change.

Festo Didactic's fully integrated learning factory for Industry 4.0 is breaking new ground, and the company's training concept is attracting considerable international attention. Customers of the learning factory mainly come from countries which are seeking to expand their production sectors, such as the United Kingdom and the USA, or from regions wishing to stabilise production at a high level. The latter include South-East Asia and China.

The learning factory may be deployed in companies, at universities and at technical or vocational schools. Industrial clients are predominantly from the automobile sector. Audi, for example, procured equipment and services from Festo Didactic for use in its Learning Centre with a view to bringing staff at its Mexican works in Puebla up to speed for construction of the new Q5. Customers from the academic world include universities and colleges from everywhere between Denmark and China.

Distance learning leads to specialist welding engineer qualification

The International Association of Welding Technology (GSI) was established in 1999. It is a consortium of high-performing Welding Training and Research Institutes (SLVs) which together is able to offer over 80 years of experience in joining and test engineering. The aim of the GSI is to provide training and guidance in the welding sector and technology transfer both at home and abroad. It is active in over 50 countries. More than 300 of the 450 staff employed by the GSI are engineers and technicians.

The Association supports participants in its training and continuing education programmes in gaining career entry and pursuing professional development. Every year, the GSI conducts in excess of 20,000 training programmes and examinations in the field of welding. It also provides 1,500 courses for welding supervisory staff and 6,000 continuing education schemes for managers.

All teaching and training is carried out in compliance with standardised national technical stipulations and with the relevant standards and guidelines set out by the German Association for Welding and Related Processes (DVS), the EWF (European Federation for Welding, Joining and Cutting), and the IIW (International Institute for Welding). As long ago as 2007, the GSI received a "German Training Export Award" from the Federal Ministry of Education and iMOVE in recognition of the international demand for its innovative learning concepts.


The GSI SLV Baltikum OÜ is based in Tallinn in Estonia, where it works to promote welding training in the Baltic states, Russia and other Russian-speaking countries. The GSI Baltikum has joined forces with the e-learning department at the GSI in Germany to develop a course including integrated distance learning modules that leads to the qualification of "International Welding Engineer (IWE)". The "computer-based training" (CBT) on offer encompasses images, animations, texts and films at various digital levels. Learning success is monitored via an Internet forum, email and telephone contact, and the evaluation of homework.

Since August 2016, the GSI SLV Baltikum OÜ has been hosting relevant local pilot courses in conjunction with companies from the region. The programme leading to the qualification of International Welding Engineer is a postgraduate advanced training scheme which involves around 440 hours of teaching. 100 of these hours are completed within the scope of distance learning. Upon application, participants receive an access code that enables them to use online materials to acquire theoretical contents via a process of self-directed learning. At the same time, they are provided with the contact details of specialist lecturers who are then available for consultation if required. Demand for opportunities to expand professional competences via distance learning is very high in the Baltic states and Russia.

The programme is supplemented by 60 hours of conventional face-to-face teaching at the Tallinna Lasnamäe Mehaanikakool, a vocational school in Tallinn. Participants receive instruction from fully-trained welding lecturers on a weekly basis, and simulations are also used to aid learning. Learners spend the remaining part of their training in workshops.

Simulations bring a whole range of benefits. They enable trainees to concentrate entirely on the manual skill forming the object of practice by eliminating the sources of error which may exert an influence in the workshop environment. Learners can focus entirely on their own behaviour during the welding process, something which is crucial in terms of achieving a successful outcome.

The GSI Baltikum uses a simulation device manufactured by Soldamatic. This equipment has been specially designed to assist with gas-shielded welding, a technique which is particularly common. During the simulation, the machine uses a coaching system to support the practical exercises being undertaken. It provides corrections and produces a comprehensive evaluation of every weld joint completed. All tasks can be repeated an unlimited amount of times without consuming materials.



*International Association of Welding
Technology (GSI) in the Baltic*

On 28 February 2017, the first 21 participants from the Baltic states and Russia sat their examinations in Tallinn. Following the end of the pilot phase in September 2017, the entire learning package was presented at the “Welding and Cutting” Trade Fair complete with all its different course variations.

The programme is available in English, Turkish and Russian. As well as cooperating with companies with skilled worker requirements in the relevant area, the GSI SLV Baltikum OÜ is also seeking to work with universities in the Baltic states, Russia and other Russian-speaking countries in future.

Comprehensive training offer for the microfinance sector

The Frankfurt School of Finance and Management is a research-led business school, covering all aspects of business, management, banking and finance. The business school offers degree courses, education and training programmes, and research and consultancy projects and is therefore a source of advice and inspiration for companies and other organisations, for individuals embarking on new careers and also more experienced professionals and executives. The "International Advisory Services" (IAS) unit has been running international consultancy and training projects since the 1990s.

efiport AG was formed in 2000 and is a subsidiary of the Frankfurt School. It is one of the most innovative providers of technology supported education and training solutions in Germany. The courses offered are used by companies operating at an international level, by medium-sized enterprises and also training providers and universities. The provision includes strategies, systems and service solutions for on-line tests; web-based training and blended learning; knowledge platforms and social media as well as integrated qualification management.

"LinkEd E-learning" is a new area of business formed in IAS in 2010 which today is well-established as the "Frankfurt School Development Finance e-Campus" (FSDF e-Campus). The learning platform for this was created by efiport. The background to this development was the unprecedented boom in the microfinance sector during the first decade of the new century which brought with it with numerous interested parties from developing and newly industrialised countries without opportunities for accessing face-to-face training.

In order to make the training experience accessible to more people than ever before, online certificate courses were developed in the areas of microfinance, risk management, SME finance, climate & renewable energy finance and microinsurance. These are 6 month part-time courses which in general require approximately 150 hours of learning. They culminate in a final written

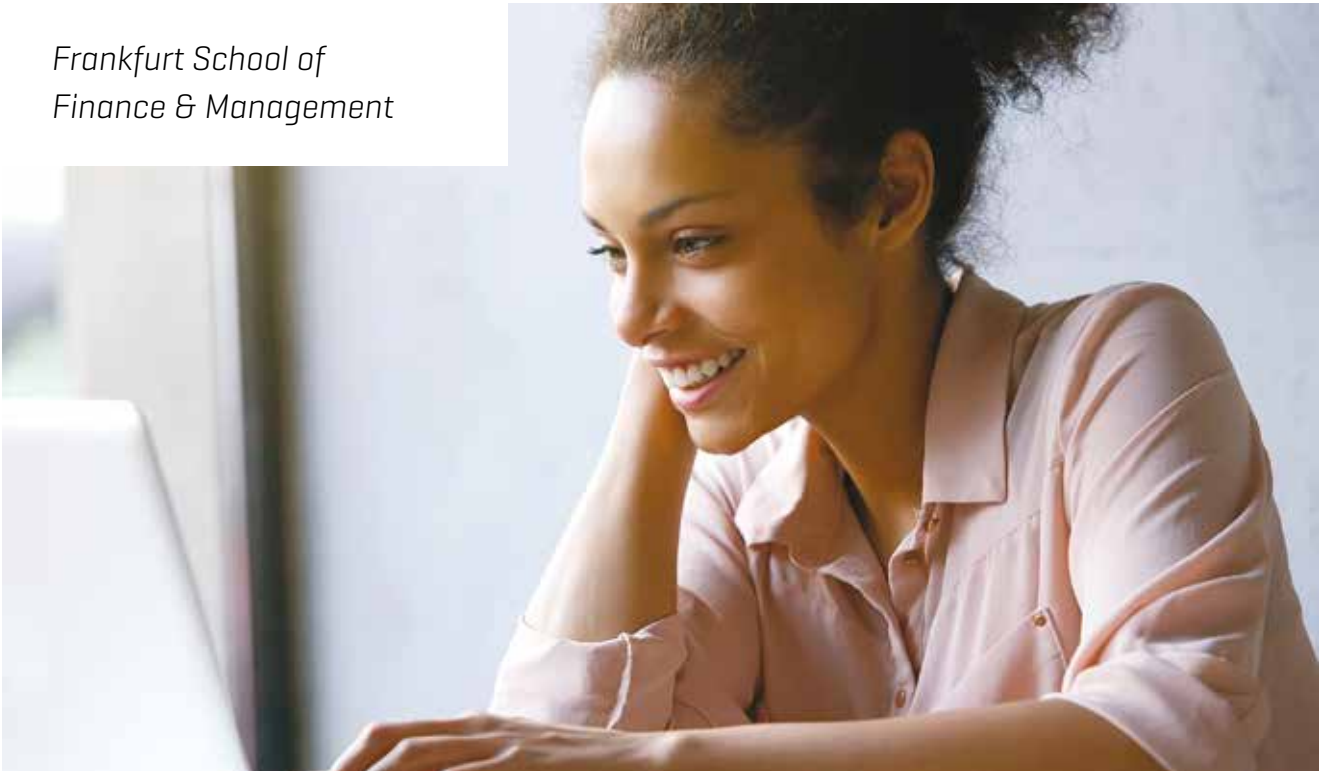
examination which must be attended in person and which can be taken at one of the 70 examination partners worldwide.

The learning activities are tailored for an international, multi-lingual target group with particular needs and requirements. These take into account slow and intermittent internet connections, and in some circumstances minimal experience with web-based continuing education and training as well as comparably limited funding. The provision of continuing education and training can also be adapted to individual timetables. A responsive design makes it easier to use for mobile end devices.

With technical requirements having to be kept to a minimum, the package of activities had to include course materials which were as attractive and as motivating as possible. The solution was not to use complex formats such as web-based training and webinars. In place of these, notes with a motivating and varied design were prepared. In addition, online tests and case studies; simple yet appealing multimedia formats such as power point lectures and short video tutorials, and discussion forums were also created.

The learning units have a modular structure. An online test consisting of 15 single and multiple-choice questions follows each module. To pass the test, at least 50 percent of the questions must be answered correctly. A maximum of three points are available for each question. The test can be taken three times. Once passed successfully, the next module is unlocked automatically.

Today, the nine different courses are offered in English via the FSDF e-Campus platform, two are offered in French, one in Chinese and one in Spanish. Since September 2016, the Frankfurt School's first academic programme is offered entirely online on the e-Campus. This "Online Master of Leadership in Development Finance [MA]" is based on the current certificate courses which can also be credited.



The number of participants using the platform is rising continually with almost 1,500 international students from more than 100 countries in 2016 alone. Around one third of these come from sub-Saharan Africa and one third from Europe. Most are

employees of financial institutions. Many others work for international organisations and donors of development aid such as the World Bank, UN organisations, administrative bodies and consulting companies.

*IBB Institut für Berufliche Bildung AG,
Institute for Vocational Training (IBB AG)*



The virtual classroom as an export hit

The IBB Institut für Berufliche Bildung AG was founded in 1985. It now operates across 250 locations and is one of Germany's largest continuing education providers. The IBB offers its participants tailored training solutions. These range from traditional face-to-face training to live teaching in virtual classrooms and extend to include blended learning concepts. The institute also runs a virtual online academy (VIONA), in which, regardless of where they are located, participants from Germany and other European countries meet on a daily basis to learn and work together under the guidance of specially trained lecturers.

As one of the major German providers of virtual learning scenarios, the IBB has now expanded its provision across borders. Since May 2017, it has been cooperating with the Vienna-based company Aspire Education GmbH. Its platform *aspidoo.com* is the first large-scale learning platform in Austria to offer learners a broad range of high quality online continuing vocational training programmes. IBB courses are now also available in Austria via the VIONA platform, which the company set up ten years ago. This has been made accessible to more than 200 partner locations in Germany thus far.

The cooperation agreement will see *aspidoo.com* advising and supporting customers both online and in person, as well as offering a pleasant learning environment in the regional training centres. Customers will receive access to selected VIONA courses at each of *aspidoo's* ten training locations, independent of the number of participants.

A virtual classroom is able to accommodate all students and lecturers together with a whiteboard and a range of learning materials. Nevertheless, it only exists on an avatar picture of each participant. Participants have contact with their learning group and are able to speak online through a microphone, ask questions and present work results — just like in a normal face-to-face seminar. The lecturer guides the processes, leads discussions, organises small group work in “adjoining rooms”, initiates brainstorming sessions, records work outcomes and distributes documents. Additional supporting learning materials are made available on a separate learning platform.

The scope of a teaching programme is based on the typical length of a course conducted on a face-to-face basis.

One highlight of the virtual classrooms is so-called “application sharing” technology. This enables all seminar participants to operate any IT application in front of the others regardless of whether such a programme is installed on their own PC or not. This method makes it easier to process results together. VIONA makes use of the *vitero* platform, which has been developed by educational specialists and psychologists on the basis of research results by the Fraunhofer Institute, and features a highly intuitive user interface.

Just like in a conventional face-to-face teaching programme, the presenter, the co-presenter and the participants all sit around a virtual table. Depending on the equipment within the room, this may serve as a whiteboard, a pin board, a language laboratory or a presentation surface for software. The trainer uses the application sharing technology for purposes such as the demonstration and presentation of software applications or to enable these programmes to be used by the learners. All of this allows the participants and trainer to interact online via a highly varied didactic mix and using various forms of learning. Such an approach produces a positive effect for user acceptance and in terms of successful learning.

Energy and the environment, graphic and media design, nursing and healthcare, personal development and languages are just a few of the numerous topics addressed by the learning provision available via VIONA. The duration of courses ranges from compact one-week introductory programmes to two-week retraining schemes. Selected IBB courses have been specially adapted for the Austrian market. 16 modules from the areas of graphic and media design, digital competence and IT were the first to be chosen in this regard. Courses were adjusted in such a way so as to meet the specifications and requirements of the Austrian Labour Market Service [AMS]. During the two-week modules, learners are also afforded the opportunity to apply what they have learned within the scope of project work. Special coaching units or consultation sessions enable them to clarify any questions relating to their own individual projects with the trainer directly.



Network platform for education and training services in the area of production management and technology

www.iao.fraunhofer.de www.dragon-training.de

DRAGON – a system of continuing education and training for developing competency in China

Four German organisations have joined forces under the name of DRAGON to jointly establish a system of continuing education and training for production management and technology in China on a prototype basis. The competency development offerings are guided by specific work practice. The partners involved – under the overall leadership of the Fraunhofer IAO (Institute of Labor Economics and Organisation) – are the Institute for Production Technology at the Karlsruhe Institute of Technology (KIT), the Competence Center Automation Düsseldorf (CCAD) and Winkler Bildungszentrum GmbH. Four further application partners in China and the technology partner vitero GmbH are also involved. The Federal Ministry of Education and Research (BMBF) is sponsoring the project which will run until the end of 2017.

The content in China is available in a variety of formats. The formats extend from open online courses – for example in pneumatics, hydraulics, industrial robots or controllable electric drives – to virtual classrooms for virtual teams through to both free and fee-based online courses or blended learning sequences.

Moodle software provides online “course rooms” in which working materials and learning activities are stored. The DRAGON moodle learning management system contains courses which present production techniques and production management methods in a clearly accessible manner. Free courses are available covering basic knowledge as well as more complex courses to develop specific competencies for modern production. The length of courses varies. At the end of longer courses there is a test with a digital certificate.

Learners can use the education and training services either locally in classroom-based events or via an internet platform. This use is fully flexible and can be tailored to the needs of the individual learner. The local offering with real people in real classrooms includes both learning visits as well as parts of courses run in businesses. In production facilities and companies, participants are able to discuss and experience procedures and quality assurance methods at first hand. A virtual team from vitero is used for the

internet-based projects and to coordinate the joint project. A particular strength of the system is its excellent use of typical team processes and accepted team working methods.

DRAGON Remote Laboratories are physically real production facilities which can be operated over the internet. It is possible to check, via video camera, whether what has been programmed has actually been carried out by the remotely controlled components. You therefore not only see a simulation, but also the hardware at work.

The DRAGON system not only offers its users certified qualifications at various levels for different sections of content. It is also intended to serve as a marketing and networking platform for other providers of education and training services in this subject area.

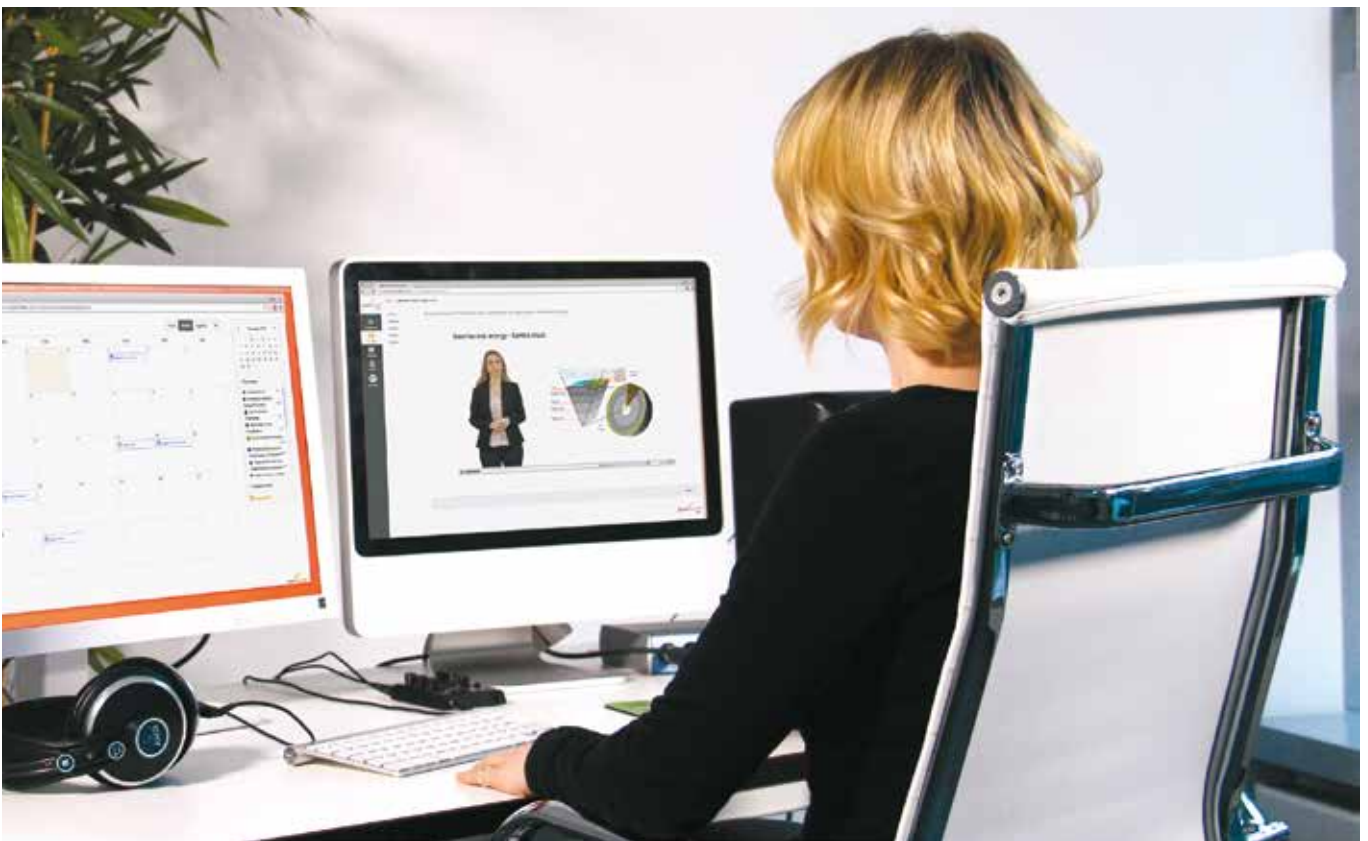
Companies in the sector were interviewed beforehand in order to identify suitable customers. It was therefore possible to identify various marketing channels for which a range of German organisations in China contribute contacts. The targeted end customers are Chinese production businesses and German-Chinese joint ventures with less than one hundred employees, as well as their suppliers.

The topics of production management and technology are prepared with close relevance to practice and delivered in a practical manner. All competency development offerings take into account the specific requirements of Chinese customers. There is greatest demand, in particular, for competency in quality assurance, fault identification and independent problem solving.

Following the supported phase, the project partners, together with additional partners, are planning to continue running the system on a profitable basis. The aim is also to develop knowledge via the project to provide an insight as to how education and training services might be developed to a level of maturity and quality for the Chinese target market.

Fraunhofer IAO (Institute of Labour Economics and Organisation)







Interactive courses at the Malta College of Arts, Science and Technology (MCAST)

www.sgm-berlin.com

E-learning solution for Maltese citizens

The Malta College of Arts, Science and Technology (MCAST) is dedicated to provide universally accessible vocational and professional education and training for its more than 10,000 full time and part-time students. As a public institution, it aims at supporting the process of individual, self-paced, life-long learning especially for working professionals. Participants of MCAST programmes can expand their capabilities in a great variety of fields and by upskilling and re-training improve their career perspectives.

The German training provider SGM Educational Solutions has developed a huge repository of interactive vocational and academic e-learning courses for the MCAST in 15 disciplines, including Engineering (Electrical, Mechanical, ICT), Health Care, Business and Management, Art and Design, Green Energy, Tourism, and Agriculture. In order for the courses to be delivered through blended learning, SGM has set up an intelligent learning management system (LMS) which is cloud-based. It provides learners with an easy-to-use, intuitive and interactive learning environment.

SGM is an expert company for comprehensive educational and training content and for solutions which make use of innovative methods and emerging technologies for new learning scenarios. SGM also provides assessment and consulting for the establishment or the re-organization of educational institutions or training processes. The development of curricula and syllabi is realized according to educational standards such as national or international qualifications frameworks. SGM came in second in the FOCUS/Statista analysis of the fastest growing companies in 2017 and finished 12th for Deloitte's Technology Fast 50 Award 2016 in Germany.

For the MCAST, SGM created 241 e-learning modules with 97 international lecturers involved. More than 100,000 digital media items were produced and integrated into more than 15,000

e-learning units. Thus, content for more than 5,800 learning hours was created. The e-learning online system is in operation since 1 December 2016.

The platform-independent LMS provides learners with an easy-to-use, intuitive and interactive learning environment including all necessary apps to meet modern online learning requirements. It is compatible with all common terminal devices and desktop systems, facilitating easy communication between lecturers and learners as well as active learning success tracking. The main features of the LMS also include editors for content creation and intelligent content linking. The LMS solutions can be integrated into various learning contexts ranging from basic education to vocational training, academic education and industrial training.

Additionally, an innovative web-based system for the "electronic accreditation of prior experiential learning" was developed and implemented to assess and classify existing levels of knowledge and skills, including those which had been acquired non-formally and informally. The (partially) automated system facilitates the formal recognition of informal qualifications. Based on the compilation of competencies and the subsequent assessment by an expert, an e-learning portfolio (individualized learning path) for each applicant can be created. The use of electronic tools enhances process handling, control and documentation and allows for worldwide accessibility.

SGM and the MCAST plan to expand their partnership in the future. SGM has already placed 40 MCAST students in internships at European businesses in Germany. A project for European vocational students who wish to acquire competences in Malta, preparing them for the German labour market, is well under way.

On the way to becoming a “learning organisation”

Steelcase is one of the world’s leading manufacturers of office furniture. The company was founded in 1912 in Grand Rapids, Michigan, USA, where its Head Office is still located today. Steelcase has around 10,000 employees and more than 650 specialist retailers worldwide. It has been listed on the New York Stock Exchange since 1998 and generated a turnover of \$3.1 billion in 2016.

With the objective of continuing to develop as a “learning organisation” and of establishing a system of self-directed learning for ongoing staff training, Steelcase began to search for a suitable e-learning provider. The aim was to set up a blended learning model for product and sales training, i.e. a combination of e-learning and traditional face-to-face teaching. The company presented a wide range of stipulations. It wished to have efficient training and self-learning media for sales and retail staff which could be processed using standard computers, notebooks and tablets and which were also suitable for reference purposes whilst at work. In order to facilitate international use, the aim was that learning should be able to take place in different languages and that contents should also be capable of adaptation and expansion to cover particular cultural characteristics.

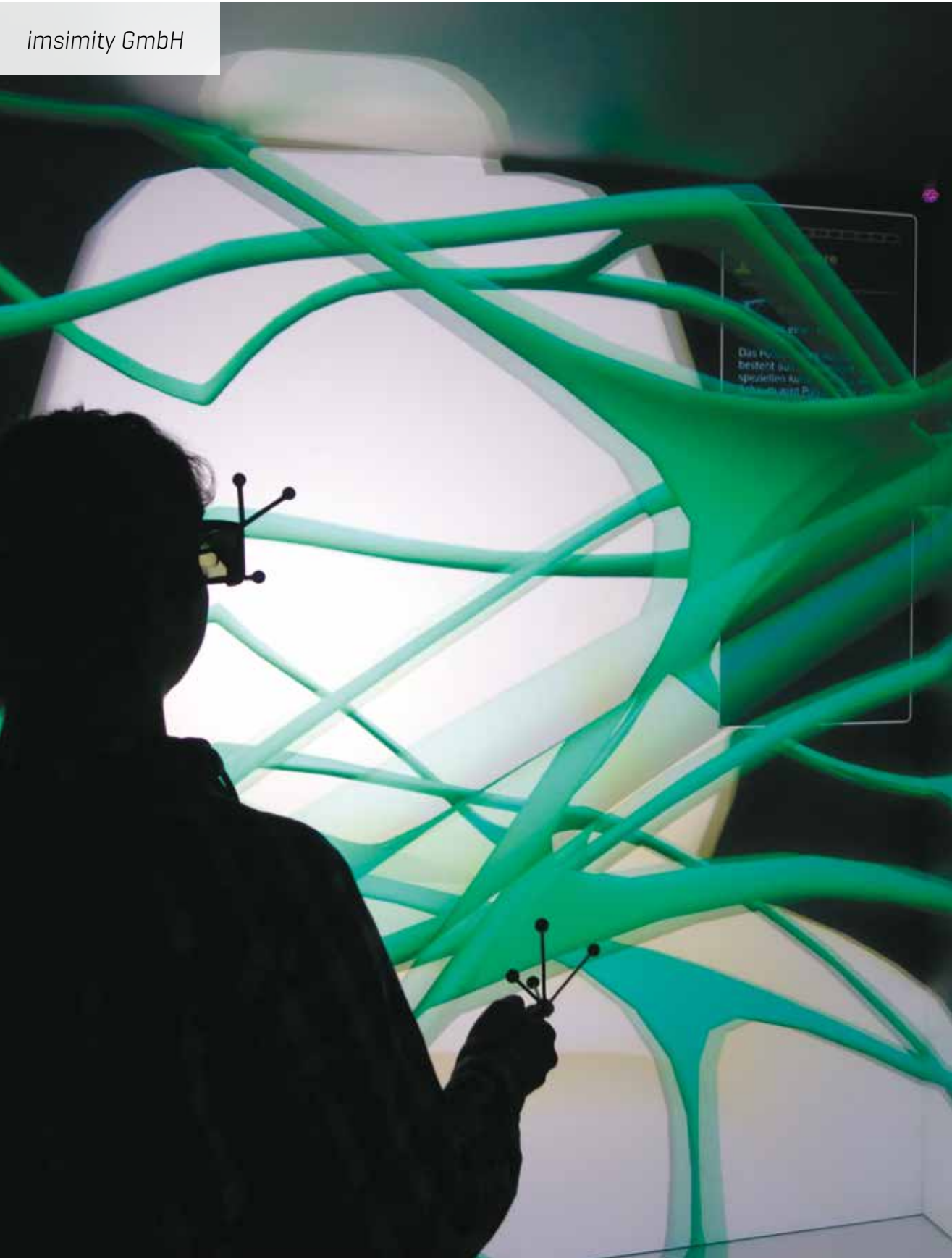
In 2015, Steelcase found the partner it was looking for at a major e-learning fair— the German inside Group, which specialises in company training. inside has been successfully implementing tailored training and continuing education concepts for companies all over the world for more than 20 years. As a full-service provider, the company employs around 70 experts from various specialist areas (including information technology, methodology, didactics and film) who deliver precisely customised solutions from a single source.

For Steelcase, inside created virtual classrooms, in which knowledge is made available in a target group specific way and divided into the areas of basic principles, product-related knowledge and sales training. Staff use the virtual classrooms to access different self-learning media such as interactive cards, which are used to impart basic and factual knowledge in a clear and compact way via small learning units. Short and concise texts are used in conjunction with graphics, photographs, animations and videos to provide an entertaining and varied learning experience. As well as being used within the scope of the blended learning training approach, these interactive learning cards are also suitable for learning at the workplace. Staff are able to use a range of filters to select specific topics in a targeted way or choose certain learning cards to work with.

A scenario-based form of training has also been put in place. This simulates the structure of a customer conversation in an authentic and practical manner and enables staff to practise such a discussion. Employees initially develop competences by applying what they have learned within the secure framework of the learning situation. They then receive direct feedback on the course of the conversation and a recommendation of the areas in which they could improve in future meetings. Learning outcomes are also monitored to ensure that staff have understood the learning contents. This particular learning solution features a responsive design and is compatible with the use of tablets as mobile end devices.

inside Business Group





Learning in the third dimension for the gamer generation

imsimity GmbH provides solutions for the visualisation of complex learning content and processes in the areas of mathematics, natural sciences and technology, and also in the areas of art and sport. These solutions are targeted at customers from all sectors and areas of business. The company uses mixed reality technologies, including virtual reality [VR] and augmented reality [AR], which makes a wide range of phenomena easier to grasp and understand.

Virtual reality [VR] is a digital learning world generated with the aid of computer technology and is at the heart of the teaching and learning methods of the cyber classroom. What is special about this method is the fullest possible immersion of the user in a stereo 3D visualized reality. As many of the users' senses as possible are exposed to a wide range of stimuli via its interfaces. Depth perception means that users feel fully integrated and part of the VR learning world in the cyber classroom.

Interactive use heightens the feeling of full integration. Users are able to move intuitively in the virtual reality, and can explore and change objects. Virtual reality makes it possible to experience events in three dimensions—in reality this is unachievable as events might occur too quickly or be entirely invisible, for example air flows and magnetic fields.

Within augmented reality, additional information can be provided, processes can be analysed, and situations can be experienced interactively via the ingenious "augmentation" of reality. This increases understanding and contributes to a more permanent transfer of knowledge.

By superimposing real objects with digital data, AR applications provide effective opportunities, particularly in service training, for teaching the procedures required in commissioning or repair. For example, information can be positioned in an entirely new way, precisely where it is required—in the user's field of vision. Virtual objects are embedded in real time in a recorded video image in such a way that they are correctly positioned in

terms of space and perspective, and augment the actual image. This can be displayed a number of ways including via data glasses [wearables], smartphones or tablets.

The 3D/VR learning software from imsimity is available for a range of target groups in different editions, including general schools and vocational schools, universities, and development departments in companies. imsimity provides mixed reality learning platforms for both German customers and international consumers.

Together with the German Fire Protection Association [GFPA] GmbH, imsimity has used the cyber classroom to develop a fire protection information course in virtual reality for the Kuwait Fire Academy. This course, developed entirely in Arabic, simulates how people respond to a fire in enclosed spaces, such as apartments and schools, and makes it possible to provide virtual firefighting training using different fire extinguishing methods. In a further development stage, and taking this course as the basis, the CyberLearnIT fire platform is currently being created. This is an education and training platform for professional and voluntary fire service personnel in the Arab region. It also provides training for fire service personnel in specific work activities, for example fire truck operators. The integration of 360 degree videos and 3D models, which allow simulations to be conducted, saves on the costs the procurement and maintenance of exhibits and experimental technology and enables extinguishing experiments to be safely conducted.

imsimity was created as a spin-off from the High Performance Computing Center of the University of Stuttgart and has been working in the fields of virtual and augmented reality for more than 15 years. For 12 years, imsimity has been hosting the "Virtual Fires Congress" at the company's present location in St Georgen in the Black Forest. This has now become the largest specialist convention on the themes of virtual reality simulation and serious gaming in the field of security and safety.



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