HTW Chur

Institute for
Tourism and Leisure

Institute for Tourism and Leisure (ITF)

3rd Sino-Swiss Symposium

13th November 2018

Editor's Note

The Chinese Embassy and HTW Chur initially got in contact as far back as May 2017. As a follow-up to Chinese President Xi Jinping's visit to the World Economic Forum (WEF) in Davos in January 2017, the then-President of the Canton of Graubünden, Barbara Janom Steiner, and President of HTW Chur Jürg Kessler, were among the guests invited to the Ambassador's residence in Bern. Ms XI Ru, Councillor for Education and Culture, then asked HTW Chur whether it would like to organise the 3rd Sino-Swiss Symposium of Universities of Applied Sciences. The first symposium had taken place in autumn 2016 at the FHNW in Olten, while the second was held in autumn 2017 at HESSO in Fribourg. After internal consultation, HTW Chur accepted this request.

- **Goals**

The focus was on discussions between Swiss and Chinese universities of applied sciences. HTW Chur was able to establish a host of important contacts in China and the Chinese Embassy, and to create the basis for further collaboration and expansion of its network. In so doing, it demonstrated its competence in Asia, which is of great importance in the Canton of Graubünden, both in terms of commerce and tourism.

- **Participants**

On the Chinese side, a delegation of 43 participants (presidents of Chinese universities of applied sciences, members of ministries of education, etc.) took part. On the Swiss side, 45 participants came from the Canton of Graubünden (government councillors, members of the education commission, well-known figures from industry and business, colleagues from HTW Chur, etc.), as well as from abroad.

- **Content of the symposium**

In the morning, welcome addresses and keynote speeches by important representatives from the spheres of politics, business and education in China and Switzerland were on the agenda. In the afternoon, three breakout sessions were held to facilitate in-depth discussions about the topics of teaching at universities of applied sciences, practice-oriented research and university management.
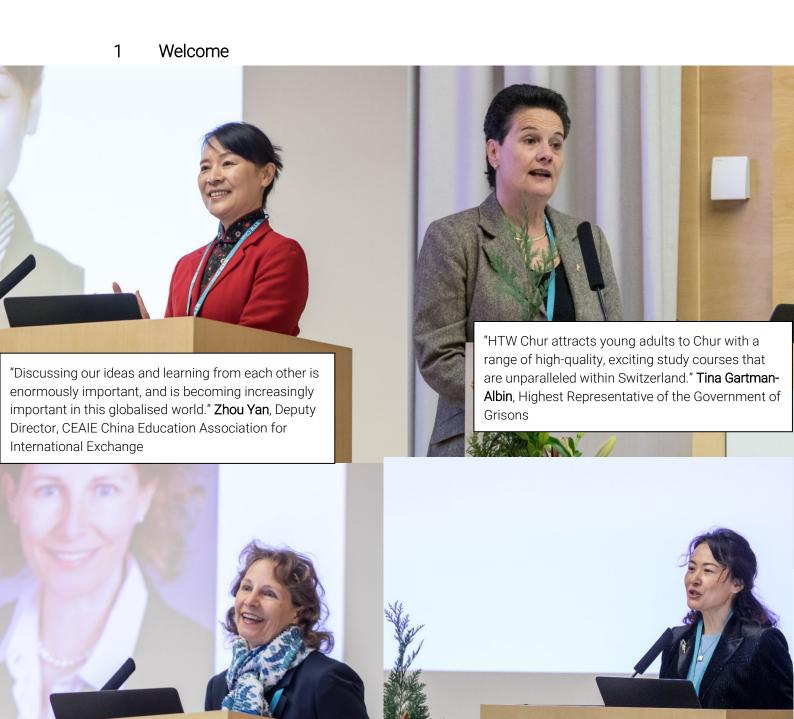

Prof. Jürg Kessler

President HTW Chur

Prof. Dr. Andreas Deuber

Head of Institute for Tourism and Leisure

Dr. Thuc Lan Tran

Program Director

HTW-SUES Cooperation

1   Welcome

"Discussing our ideas and learning from each other is enormously important, and is becoming increasingly important in this globalised world." **Zhou Yan**, Deputy Director, CEAIE China Education Association for International Exchange

"HTW Chur attracts young adults to Chur with a range of high-quality, exciting study courses that are unparalleled within Switzerland." **Tina Gartman-Albin**, Highest Representative of the Government of Grisons

"The striking mountains pose some challenges for our region, which we master with innovation, pioneering work and collaboration." **Brigitta M. Gadient**, HTW Chur President of the University Council

"Today, China and Switzerland are once again demonstrating their excellent ability to collaborate with one another." **Xi Ru**, Councillor for Education and Culture, Embassy of China in Berne, Switzerland

2   Keynotes

"The Practice of High-Level Application-Oriented Universities, and an Exploration of their Construction"

Prof. Dr. Cai Jingmin, President, Hefei University

Cai Jingmin told attendees about the importance of application-oriented institutions of higher education in China. In 1998, there were a total of 591 higher education institutes (HEI), and less than 20 years later, in 2017, there were as many as 1243 HEIs. They account for half of the total number of Chinese institutions and demonstrate how China has implemented its strategy of using higher education to strengthen its power as a nation.

The Specialist Committee for Application-Oriented Universities was founded in August 2017. Its main purpose is to strengthen collaboration among application-oriented institutions across the country and provide a platform for communication, discussions and sharing between these institutions.

Higher Education in Switzerland and Exchanges with China

Dr. Beatrice Ferrari, Head of Bilateral Relations, State Secretariat for Education, Research and Innovation (SBFI)

Beatrice Ferrari stresses that the Swiss education system is based on highly unspectacular elements, such as quality, autonomy, stability, reliability, and sustainability. Education is not a dead end and life-long learning and development are the key to success. Central aspects in Swiss higher education include the increasing mobility of talents, well-established research partnerships, a strong interest in professional education and applied research, and the development of new, innovative formats.

"University of Applied Sciences: Strategy – Structure – Culture"

Prof. Jürg Kessler, President, HTW Chur

The challenges facing Swiss universities of applied sciences are characterised by the pressure to be relevant and to economise. On the one hand, there are high expectations placed on study programmes and research by the outside world, and on the other, universities of applied sciences are forced to strive towards timely innovations in Bachelor's and Master's programmes and research, but above all, towards greater self-financing. They are the bridge between research-oriented universities and the research and development departments of companies. Universities of applied sciences are both research-focused and practice-oriented due to their applied research. In this way, they complete the academic world with a strong impact-orientated view on concrete solutions for the society.

"Sticking to Demand Orientation, Cultivating All-Round Engineering Technicians"

Prof. Dr. Zhang Hongtian. President, Heilongjiang Institute of Technology

Heilongjiang Institute of Technology was established in 1952. At present, the university has 13,000 undergraduates and 1,300 members of staff and is known as the cradle of Chinese engineers. The university collaborates very closely with external enterprises to build trade colleges and labs, such as an industrial robot innovation centre or an industry 4.0 intelligent manufacturing training lab. The goal is to improve the international level of speciality constructions and lay a foundation for the innovative fusion of production and teaching. Overall, the vision of the Heilongjiang Institute of Technology is to cultivate future-oriented modern engineers with virtuous morals and excellent professional skills, with an innovative approach, forward-looking skills and humanistic feelings and responsibilities.

3   Breakout Sessions

Breakout Session Group 1 "University of Applied Sciences Teaching"

Organiser	Prof. Martin Studer
Speakers	Roman Walker, Prof. Dr. Zhang Xinyuan, Ferdinand Gross, Prof. Dr. Thorsten Merkle, Prof. Dr. Yao Benxian
Translator	Song Yunlong
Minutes	Nadine Lee, Nina Regli

"Swiss Education" – Roman Walker, Klosterschule Disentis

Roman Walker (since 2016, rector at Gymnasium und Internat Kloster Disentis, which also takes Chinese students) reports on secondary education in Switzerland. He works in an "old" place: Switzerland is about 700 years old, but Disentis Monastery has been around for a grand total of 1400 years.

The Gymnasium und Internat Kloster Disentis has been working on the internationalisation of its student demography for some time now and is focusing its efforts primarily on the Chinese market. Some of the students are still taught by monks who live in the monastery. In a small federal state with many cantons, there are various matters that are not regulated centrally from Bern. Instead, the cantons have decision-making power and educational sovereignty. It is a political challenge to find a common educational denominator in Switzerland. It is also important to note that, in Switzerland, there are a wide variety of ways in which an academic degree can be obtained. Education was not a concern of the state from the outset because, for a long time, it had not existed in this form, and had instead been handled by the monasteries. Humanistic education, as it has been lived and cultivated at the Gymnasium Kloster Disentis since 1400, is the origin and basis of Western development.

"Deepen the Integration of Production and Education, Innovate the Model of Talent Training, Build an Industrial Big Data Institute" – Prof. Dr. Zhang Xinyuan, Beijing City University (English)

Zhang Xinyuan works at Beijing City University (BCU) and is responsible for international collaboration between the university and industry. BCU, founded in 1984, is a state-recognised private university where a tenth of Beijing's students study. In 2007, it awarded its first internationally recognised Bachelor's degree and, since then, many more Bachelor's and Master's degrees have been added. BCU offers customised training, co-research and shared resources with 500 collaborative units, including the state and various companies. Collaboration with the government, for example, is of paramount importance. The promotion of collaboration with schools and enterprises focuses on training programmes and other collaborative forms of education. For this

practical approach, it is crucial to set up special research institutes to perform practical research. However, besides the practical approach, there are still many more improvements to make, such as cross-border education, development expenses and sustainability.

Innovation is in the spotlight at BCU, as can be seen in the construction of an institute for big data, where an innovative management mechanism is taught. An innovative teaching module runs through the entire design chain. Courses can be found on platforms offering an audio-visual education. The university focuses on equipping students with a three-dimensional tutorial team to foster interpersonal competence and provide them with input from different perspectives. Furthermore, designing realisation concepts and looking at operations in engineering enterprises represent a substantial part of the activities. As the construction of the institute of big data was a success, regional service centres have started to be constructed.

"Experience of Collaboration with Chinese Students" – Ferdinand Gross, Winner of the Young Swiss Leadership Award

Ferdinand Gross studied International Management at the University of Applied Science in St. Gallen. As part of his studies, he took part in a "Young Swiss Leadership Competition", where his project led him to work with Shanghai University.

Mr. Gross and his team focused on an international consulting project, looking at how a Swiss healthcare company could develop its business in the Chinese market. For the Swiss team members, this project involved 10 days of field work in China. In exchange, the Chinese team members also came to Switzerland for 10 days. In between these meetings, the communication between the team members from China and Switzerland consisted of video chats, emails or messages on the platform "WeChat". Ferdinand Gross explained that it was like leading a virtual team. The main focus of their teamwork consisted of analysing the processes of Chinese hospitals, their product portfolio and promotions in China.

When Mr. Gross elaborated on the biggest problems they encountered when communicating with his Chinese team members, he put initiative at the top of the list.

His expectation was that everyone would be pro-active, contributing the best they could to succeed in the project. Furthermore, he says that the Chinese team members saw him, as the team leader, as someone who was on a higher level in the hierarchy. There were some difficulties in communication, such as direct and indirect language, or the Swiss way of communicating being highly offensive to the Chinese team members.

Recommendations for better intercultural integration would be to train students in dealing with unstructured tasks. That could mean vaguely formulating a task and letting students work out how

to go about it with their own solutions and ideas. Additionally, in Ferdinand Gross' eyes, there should be an emphasis on the quality of papers, citations and scientific language. Also, he sees an opportunity in promoting initiative in international environments: competence should be heavier weighted than hierarchy. Furthermore, he suggests that university classes should focus more on teaching about cultural differences. Ferdinand Gross and his team won the "WTT Swiss Young Leader Award" for this project, competing against 30 other teams.

"The Challenges of Integrating Chinese Students into the Swiss Higher Education System" – Prof. Dr. Thorsten Merkle, HTW Chur

Thorsten Merkle is the Director of Studies in Tourism at HTW Chur. He had more than four years of experience in teaching students (most of whom came from China) at a private Swiss Hospitality University before joining the HTW. He has regular teaching assignments in Shanghai as part of the Joint Programme between HTW Chur and Shanghai University of Engineering Science (SUES).

He talked about how culture helps us to interpret things, which in turn helps us to make sense of them to ourselves. Culture is a tool that we use to interpret and perceive things. He uses Hofstede's model to examine the values on the six dimensions: Power Distance, Individualism, Masculinity, Uncertainty/Avoidance, Long Term Orientation and Indulgence.

Mr. Merkle concentrates on two of these values, Power Distance and Individualism, in order to compare Switzerland and China. Power Distance is about hierarchies and privilege viewed by those who have power, and obviously there is a visible difference between the two countries. Individualism focuses on "me" or the collective, where context and harmony are very important. He concludes with a few learnings based on this theory, first talking about Power Distance. Chinese students are less willing to ask questions and directly approach lecturers and they are less likely to participate in class discussions. According to him, one solution for overcoming this difference is using quizzes to offer anonymity to the students. He has also had good experiences with faculty rooted in both cultures. Mr. Merkle tries to encourage students to understand that it is "ok" not to know everything: not even the professor knows everything.

As for the dimension of Individualism, he likes to encourage "mixing and mingling", and the integration of foreign students. There may be difficulties with students from more collective backgrounds. Generally speaking, this behaviour is not exclusive to students. For example, at a "drinks evening" in a business context, observations prove that people with similar cultural backgrounds like to stick together. Examples of how to bridge the gap include randomly allocating students for group tasks. This may be difficult, but it also forces students to leave their comfort zone. Another possible strategy is to offer a buddy programme for Chinese students. But as a final thought, Thorsten Merkle concludes that, whilst we concentrate a lot on differences, we also need to be aware of similarities.

**"Research on the Current Situation and Characteristics of Chinese College Students' Interests" –
Prof. Dr. Yao Benxian, Hefei Normal University**

Yao Benxian is Vice President of Hefei Normal University and holds a doctorate in psychology. His field of study is motivational research, which he summarises in one sentence: "No matter what you do, it is important that you do it out of self-interest."

Yao Benxian reports on his latest study, which looks at the interests of Chinese students. To this end, he interviewed students from five universities. One question he asked looks at what the students read and how often they use the Internet. Chinese students have many different interests, and the Internet is an important tool both in their private lives and for their university work. However, one conclusion of his study is that Internet use often takes place without a specific goal and is not used to draw conclusions from what has been learned. Students have broad interests and are not limited to a single topic, which can also be seen in their choice of subjects at school. Above all, a great interest in "entertainment" was noted. Mr Yao is not surprised by this; it is highly typical for young people in China.

The results of this research can be used by university chairs to adapt their degree programmes to their target audiences. Ferdinand Gross, the previous speaker, was a great inspiration for Yao Benxian because it is important to try to understand and get to know your opposite number. This can also be applied to the results of research, by trying to accept and pick up on the interests of students. Mr Yao would very much like to work with institutions in Switzerland to find out the interests of Swiss students. He hopes to find suitable solutions to overcome cultural differences.

Breakout Session Group 2 "Applied Research"

Organiser	Prof. Dr. Bruno Studer
Speakers	Prof. Dr. Tobias Leutenegger, Prof. Dr. Albert Weichselbraun, Prof. Dr. Peter Moser und Christopher Jacobson, Prof. Dr. Peng Xiaolin, Prof. Dr. Song Jianbo
Translator	Jiang Yufang
Minutes	Jasmin Hadorn, Domenica Herzog

Bruno Studer welcomes all those present on behalf of the HTW and briefly explains the course of the afternoon. A total of five case studies will be presented, including three research projects and two Chinese universities.

"Underwater Photography with a Camera" – Prof. Dr. Tobias Leutenegger, HTW Chur

Tobias Leutenegger presents the project "Underwater photography with a camera". This is a 3D underwater camera that can measure distances using rays of light. The project was financed by the regional foundation "Technik" and therefore needs to have a benefit for the economy. This project is the first to integrate 3D images into rehabilitation.

The camera emits infrared rays that are invisible to the human eye, which are then reflected and return to the camera. Distance can be measured on the basis of the light speed measured, and finally, a three-dimensional image can be generated. The pixels on the image are 20 x 20 micrometres. The camera's function is to observe a person on an underwater wheel and measure their movements.

Mr. Leutenegger explains the different stages of the project and the difficulties that he faced. In the first experiment, the camera was placed outside the aquarium, which housed an electromechanical fish. The camera worked perfectly in the air, but the water greatly dimmed the light. For this reason, the camera had a range of only a few centimetres. Furthermore, the speed of the light and the colour of the water posed major challenges. The chip in the camera and its sensitivity depend on the water colour, which has to be optimised. LEDs were also needed to light the aquarium, since the fish can otherwise only be recognised from a very short distance. Reflections in the aquarium are shown as red dots, which is far from desirable, but other colours do not work well with the chip.

According to Mr. Leutenegger, there are many possible solutions. Among other things, different colours can be used to make the fish visible from greater distances. In addition, chemicals that prevent the formation of algae had to be added to the water to absorb all the light. However, the chemicals can have an influence on transmission within the water.

Audience questions

Are there other areas of application, apart from observing the Aquabike for therapeutic purposes?

Leutenegger: The underwater camera can provide images of the geometry of riverbeds. Our colleagues from Holland are very interested in this because of the many dikes there. It would be a disaster if they broke.

What are its applications outside the water?

Leutenegger: The camera can be used in self-propelled vehicles, in 3D cameras for smartphones and for face recognition.

Are the movements simply observed as they are, or is it also possible to observe specific movements, such as bone movements?

Leutenegger: The camera can be used to collect additional information and measure performance and force using the pedal and handlebars.

What will happen next with the project?

Leutenegger: Further measurements will be made under water, so the results can be verified. We will be the first to analyse 3D data and integrate it into rehabilitation.

"IMAGINE" – Prof. Dr. Albert Weichselbraun, HTW Chur

Albert Weichselbraun presents the research project IMAGINE. The project is financed by Innosuisse and aims to make image data easier to find. Keystone is the largest supplier of visual content in Switzerland, where the relevant information is filtered directly from text.

There are three main problems:

> 1. Keystone has its own photographers who deliver between 300 and 500 images per day, which are manually annotated by employees. In addition, there are about 20,000 pictures which are supplied by third-party agencies.

> 2. Keyword spamming: i.e. the wrong terms are assigned to an image, referring to elements that are not visible in the image, for example.

> 3. Limited vocabulary of the employees performing the annotations. Artificial intelligence does not have the background knowledge of a human being, and consequently, there is a need for open data resources like Wikidata.

To overcome these problems, images are to be automatically annotated and classified. The aim is to replace the manual process with methods of artificial intelligence using a computer process. At lower costs, this should lead to higher quality, an improved semantic search and greater customer

satisfaction. Besides clustering (the automatic formation of image collections), the main goal is the integration of IMAGINE into the Keystone portal.

Audience questions

Can IMAGINE also be used for videos?

Weichselbraun: *Yes, subtitles contribute a great deal.*

How did the partnership between Keystone and the HTW come about?

Weichselbraun: *Keystone had already worked with an Austrian press agency and was very satisfied with it. 50% of the project belonged to Keystone, which is also the case now in the collaboration with the HTW.*

What was your experience with Innosuisse?

Weichselbraun: *Support from Innosuisse means that the subsidies are optimised. Business partners only pay 50% of the costs if everything is absolutely secure.*

Is it possible to keyword texts when there is an excess of data, as with Keystone?

Weichselbraun: *Yes, it is possible. It remains possible to abstract from clusters. This method is already used in biomedicine. Procedures are extracted and the relevant information is entered into a database, which means that less reading is required.*

What is the error rate?

Weichselbraun: *There is no information on this yet: the projects are not yet finished, and both are still running.*

"Online Booking Tool for Group Travel" – Christopher Jacobson, HTW Chur

Christopher Jacobson introduces the project "online booking tool for group travel", which deals with customers' needs. It explores when a trip is planned, when more information is sought and when it is ultimately booked. The aim is to create an online tool that will simplify the booking of group trips and bring more guests to Graubünden. It is a joint project for various destinations, which will be supported by Innosuisse. The project started in 2015 and was completed in spring 2018. Now a follow-up project is dealing with the marketability of the project. The big difference when compared to existing platforms such as booking.com is that it is not possible to book trips for more than 50 people using these platforms.

The target groups are Swiss associations and companies that want to undertake activities in Graubünden. The focus is on the activities, and accommodation is only booked during the second stage. The online tool combines business and technological knowledge, has refined filters and enables all intermediate steps to be saved.

During development, secondary data analysis and feasibility studies were first carried out. The vision was divided into the elements of accommodation and activity. Prototypes were developed in three-week cycles, which were improved and implemented every three weeks. A product increment was delivered after each cycle for testing. The implementation required collaboration with the IT department. Each cycle consisted of three phases: development, reflection and improvement. Software tests were performed on an ongoing basis. This tool provides a good basis for further developing other specific topics.

Audience questions

How is this platform used?

Jacobson: The platform has been online since July. Currently, we have 20 users daily, although the platform is not actively promoted. With active advertising, we can expect 250 users every day. It is important that the destinations offer enough bookable experiences.

How can this be sold in China?

Jacobson: The target audience for this project is not China, but Swiss clubs and companies. However, the tool is to be further developed.

How will the money for projects be distributed; how will lecturers be supported?

Jacobson: Every professor is obliged to do a certain amount of research every year. The research is to be carried out in a qualitatively beneficial way, which is measured. Every other year, there are external reviews that look at the positioning and success of institutes. These reviews focus on whether the objectives have been achieved. In this project, the main donor is Innosuisse, but the project managers are responsible for the use of the financial resources.

"Integration of University and City" – Prof. Dr. Peng Xiaolin, Chengdu University

Chengdu University (UC), founded in 1978, has 22,000 Bachelor's students, 1,000 Master's students and 600 international students, says Peng Xiaolin. They are taught by 160 full-time professors and 300 part-time professors. Today, in addition to an affiliated hospital, the campus also offers a church.

UC conducts application-oriented research and has many different institutes, such as biomedicine, digital animation, vehicle design and economic development. The university works closely with the city and aims to develop Chengdu into one of China's main cities. The university supports the economic development of Chengdu and the "One Belt, One Road" initiative launched by the state government. For this reason, there is close collaboration between the government, the research institutes and local businesses. Each research institute has its own direct channels of collaboration with government offices. For example, 70% of the university's alumni work in Chengdu. In relation to the "One Belt, One Road" initiative, new courses and language majors are offered to train professionals in engineering, economics, management and law for the countries in question.

After this background, Peng Xiaolin introduces a research team. Among other things, antibiotics are being developed at UC, which is why a warehouse for new antibiotics has been built. Research in this area is actively carried out in collaboration with Chinese pharmaceutical companies. Another focus of its research is food processing. Research is being carried out into how to improve nutrition and whether barley or oats can be used to combat obesity and help deprived areas. In this field, researchers in South Korea, Israel, New Zealand, USA and Thailand are working together.

"Thoughts on the Implementation of a 'Distinct School' in Guizhou" – Prof. Dr. Song Jianbo, Guizhou Institute of Technology

Song Jianbo of the Guizhou Institute of Technology (GIT) introduces his university. Due to an acute shortage of skilled workers in southwestern China, an application to the Ministry of Education for the expansion and further development of GIT was approved in 2011. The establishment of Guizhou Polytechnic College in November 2013 was recognised as an effective measure for strengthening the university environment in Guizhou. The aim was to optimise higher education institutions and scientific development in southwest China.

This new institute is very practically oriented. A total of 29 majors are offered in the departments of aircraft construction, new energy sources and equipment and electrical engineering. GIT also participates in the new educational reform by the Alliance for Innovation and Entrepreneurship of Universities in the ASEAN region (Association of Southeast Asian Nations), which came into force in January 2017. The focus is on the development and use of big data. The Institute for Data Science is the first large data science institute in China to be established in collaboration with Alibaba. A total of 10,000 students are being trained in three majors. The courses focus on network engineering, data science, big data technology, intelligent science and technology. The institute is a training base for

innovative, talented individuals in the field of data science. In the curriculum, care is taken to ensure that the work is heavily application-oriented through case studies, large big data exercise projects and examples from the engineering sciences. It is ensured that lecturers are experts from industry or within the university environment.

Song Jianbo underlines the success of the GIT in recruiting foreign students from countries along the route of the "One Belt, One Road" initiative. Since April 2016, a total of 117 students from Pakistan, Tajikistan, Mongolia and Laos have started their studies at GIT.

Breakout Session Group 3 "University Management"

Organiser	Prof. Jürg Kessler
Speakers	Prof. Jürg Kessler, Arno Arpagaus, Prof. Hu Ning, Dr. Tran Thuc Lan, Prof. Dr. Wang Baicheng
Translator	Hong Lei
Minutes	Selina Steiner, Lisa Dermont

Jürg Kessler, President of HTW Chur, welcomes all the participants to the breakout session on "University Management". First, Arno Arpagaus, Administrative Director and member of the HTW Executive Board, will talk about employee development in relation to personnel development. Mr. Kessler will then personally lead the workshop on the subject of service offerings. The HTW is used to illustrate particularly important partnerships in a talk by Prof. Hu Ning and Dr Thuc Lan Tran. Finally, Professor Dr. Wang Baicheng will give a presentation on the management of the Heilongjiang Institute of Technology.

"Human Resources Development" – Arno Arpagaus, HTW Chur

Arno Arpagaus greets all present with a "Ni hao". He also welcomes everyone from his side, especially, of course, the delegation from China. Personnel development is key at HTW Chur. Capable and motivated employees are the essential success factor for HTW Chur, and they can only be attracted and maintained if there is the chance of professional success. The personnel development measures are aimed at qualifying employees and preparing them for additional challenges. They support the achievement of the university's goals and serve to strengthen the company in the market. The personnel measures for scientists are divided into four function levels.

A professorship is an appointment and a title, but it is not a function, such as personnel management, as is customary in the university environment. The aim is to enable scientific staff to pursue further advanced training and qualifications in their own field. Mid-level staff are divided into three areas. Research Assistants I (WiMa I) perform administrative and operational functions in all areas. In most cases, they are Bachelor's graduates of a university of applied sciences who are employed for a limited period of three years. This is followed by Research Assistants II (WiMa II): they work on projects, manage sub-projects in research and services and participate in simple teaching. As a rule, they are university graduates who are employed for a limited period of three years immediately after graduating with a Bachelor's degree. Normally, a Research Assistant II leaves HTW Chur after the expiration of their contract, and enters the world of industry. On the other hand, it is also possible to convert a fixed-term employment contract into an open-ended one and become a Research

Assistant III. For this, the individual must have successfully worked as a WiMa II, have experience in project management and hold a Master's degree. Research Assistants III take over the overall management of important and complex projects in the four areas of teaching, services, further education and research. They have a Master's degree, as a minimum, and are usually newly recruited, i.e. their employment is not automatically a transfer from the second to the third category. Research Assistants III are employed on a permanent basis (they have permanent employment contracts). With further training in university didactics, WiMa III have the opportunity to develop further and become lecturers.

Not all the lecturers who teach at the HTW have a doctorate. However, it is possible to acquire a doctorate during your time as a lecturer at the HTW. In the case of professorships, the HTW strives towards a blended approach. In order to ensure the appropriate expertise within the HTW, professors who have pursued an academic career are employed, while individuals from industry who have changed to an academic career are also sought to ensure that there is a sufficient amount of practical focus. Arno Arpagaus explains that professors at the HTW are not only from academia; they are also well-known figures with a strong practical orientation. It is also important that HTW Chur attaches great importance to all its members in their respective functions.

Arno Arpagaus emphasises that the HTW offers highly attractive personnel development opportunities. If an individual's level of employment is at least 70%, one day is available within the workload for work on their dissertation or research. In the case of a Master's degree or dissertation, employees are supported for three years, and in the case of a Bachelor's degree, up to four years. The HTW thus has an attractive model that allows employees to enter the world of work while continuing to develop themselves.

Conclusion

Jürg Kessler emphasises once again that the blend of academic and practice-oriented professors is particularly important. This mixture of professors can be found in all three areas. On the one hand, this blend consists of research-orientated colleagues who have pursued their careers at one university and, on the other hand, of a group who have a university education but have gained professional experience and success over a longer period of time, before switching back to an academic career.

Finally, all professors must meet expectations in the fields of research, education and practice. The HTW has 260 permanent employees and about 300 part-time lecturers. Joint research projects with companies are important for innovation. This also ensures that HTW employees continue to maintain their links to practical applications.

"University Management" – Prof. Jürg Kessler, HTW Chur

In his talk, Mr. Kessler concentrates on the degree courses. The HTW, and the Canton of Graubünden, is facing a major challenge in that, demographically, there are fewer and fewer young people in the area. According to Mr. Kessler, this means that the HTW, as a university, cannot only promote innovation in research and teaching, but must also guide and lead the university itself. If the HTW still had the same educational opportunities as in 2008, the number of students would be about the same as it was then. However, the development of a new and innovative range of courses, some of which are unparalleled within Switzerland, has increased the number of students to 1700.

Jürg Kessler puts things into perspective, explaining that this figure is naturally very small in comparison with the student numbers at Chinese universities, but very good for a university in the Swiss mountains, especially since it is difficult to increase the number of students. In the talks this morning, it has already been explained that the Canton of Graubünden is the largest canton in terms of area, but one of the smallest in terms of population, with around just 28 inhabitants per square kilometre. The geography of Graubünden means that some students from the region need as long to get to Chur as they do to travel from Chur to Geneva: a total of more than 3.5 hours. For this reason, the HTW has a national focus, with over 80% of HTW students coming from outside the Canton of Graubünden.

Mr. Kessler shows the schematic process of how new courses are developed. At the beginning, in terms of input, there are the legal requirements and in-depth analyses of the needs of industry. Since the uniqueness of the study programmes is particularly important, several variants of study concepts that do not yet exist in Switzerland are drawn up on the basis of these analyses. Mr. Kessler explains that the HTW's approach is practice-oriented and innovative. Companies' needs are consciously addressed. The input phase is followed by the actual development process. The appropriate study concept is selected from several variants. In this process, particular attention is paid to ensuring that external experts from industry have their say, along with lecturers, students and the administration.

The output of the whole process is a recognised course of study. The degrees can be awarded by the HTW as an officially recognised university. The resources must be made available, both financially and in terms of personnel, and because we have a high level of competition between universities in Switzerland, a new degree programme requires a good number of applicants. According to Jürg Kessler, this is nothing new. The important thing is that this process must be conducted and managed with great precision. A new degree programme should always be unique: the HTW always wants to be the first to offer the best programmes.

Finally Mr. Kessler concludes that being a university in this remote area of Switzerland is both a privilege and a destiny: We need to take on the role of a pioneer and be more innovative than our competitors.

"University Collaboration" – Prof. Hu Ning, Shanghai University of Engineering Sciences

Hu Ning is pleased to present the collaboration between the HTW and SUES, along with other SUES collaboration projects. SUES is recognised as one of the best engineering universities in China and pursues an international strategy. It works closely with industry and companies, thereby creating synergies. International collaboration plays an important role in the strategic development of the university. Every year, more than 2000 SUES students continue their studies abroad, there are more than 1000 foreign students on campus, and SUES has more than 100 partner universities worldwide. The motivation behind foreign collaboration is that high quality international teaching resources improve the quality of the training of specialists in China. In addition, the university needs to adapt as the city of Shanghai becomes internationalised, meaning that it must acquire international communication skills. Finally, channels are to be created to allow students to study at home and abroad.

In 2013, the SUES and the HTW entered into a partnership. Thanks to the mediation of the Swiss Industry Association, this partnership was agreed in the presence of the Swiss Consulate General. One year later, in 2014, the collaborative course "International Business (Tourism and Business Management)" was approved by the Chinese Ministry of Education. Another year on, in 2015, the first class of students began their education. This class was the first to successfully graduate from the course in 2018. SUES alumni are very popular with companies because they speak English well.

Within the collaboration to date, a stronger relationship between SUES and HTW Chur has been established and friendships have been fostered. In the future we would very much like to expand the collaboration and also work together with external partners.

"University Collaboration" – Dr. Thuc Lan Tran, HTW Chur

After a strategic introduction to the collaboration between the HTW and SUES, Ms Tran presents the content of the collaboration, on the basis of the contract signed in 2013. The Institute for Tourism and Leisure (ITF) at HTW Chur is in charge of this collaboration, which the HTW wants to use to expand its skills in China and utilize this to support the economy and tourism in Graubünden.

The ITF sends its teachers to China to teach a total of 15 modules (based on the tourism curriculum at the HTW) in English. The teaching is highly interactive and is characterised by group work and excursions. The goal is that, after three years, the best students in Chur will complete the last year of the Bachelor's degree in Tourism. 2018 is a special year because a good deal has happened within the collaboration. In March 2018, the first year of study completed the course and the HTW awarded its certificates, which are recognised by the government of Graubünden.

Another milestone is the strategy meeting, which takes place twice a year. This was broadcast via Skype for the first time in May. In July, a faculty exchange took place. Four lecturers from the partner university came to Switzerland to participate in the HTW's Summer School in St. Moritz. It was

important for the lecturers from Shanghai to understand how teaching takes place in Switzerland. Participation in the Summer School showed the Chinese lecturers how interactive Swiss teaching is. At the strategic level, the HTW is represented by Prof. Jürg Kessler, Prof. Dr. Andreas Deuber and Prof. Dr. Thorsten Merkle. Ms Tran is active at the operational level and the HTW lecturers are active at the teaching level.

"Exploration and Improvement of the Modern University System with Chinese Characteristics" – Prof. Dr. Wang Baicheng, Heilongjiang Institute of Technology

Wang Baicheng greets all present. He gives a short talk on the management of the Heilongjiang Institute of Technology (HIT). The management structure is divided into an academic and a management/supervisory area, which are separate from each other and additionally divided on a university and a college level. The quality assurance of the university is of central importance for personnel development and the high quality of the research projects. The five central points are the assessment of the institution, self-assessment, professional accreditation, international assessment and control of the current data.

Mr. Wang stresses that external collaboration is very important, for example, the collaboration between the HIT and the ZTE Corporation (a large telecommunications supplier based in Shenzhen), which also includes jointly supported institutes and laboratories. This shows that HIT works closely with industry to collaboratively develop technological innovations. Collaborations of this nature have three levels: first, the coordination of important parts such as political stakeholders, industrial companies and financial partners. The second point involves internal management such as students, lecturers and other supporting groups. On the third level, there is the university's culture, where the university's motto, traditional culture and engineering culture are important. Every year, the HIT receives optimisation proposals from its alumni, which are important for the further development of the collaboration.

Summary by Jürg Kessler

Mr. Kessler summarises the last talk in relation to the three areas of practical focus, innovation and research orientation. With regard to practical focus, collaboration with China is a very important intercultural experience that can be put into practice. Managing does not achieve much here: you have to experience it. Experiences, along with the steering of internationalisation, innovative study programmes and research, are mutually strengthened. For the HTW as an applied university, in particular, it means that diverse problems lead to interdisciplinary solutions, which in turn lead to partnerships and mutual strengthening. These solutions, as is now the case with SUES, take the form of innovative solutions for the benefit of students and business.

Joint research is important for applied research universities because it allows them to bring complementary knowledge together to form a whole. Last but not least, the personal experiences of both students and teachers are of great importance for practical orientation. An important basis was also presented: quality assurance systems and internal collaboration are central to academic freedom, and the people involved on both sides are central to keeping a partnership alive.

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