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RANGER SCHOOL

BY ENRICO STEGER

CLIMB THE MOUNTAIN

ZIRKONZAHN INTERNATIONAL RANGER SCHOOL
3 MONTHS OF YOUR LIFE OR A LIFE IN 3 MONTHS?

EXPERIENCES THROUGH A RANGER'S EYES

DIE ZIRKONZAHN SCHULE BY ENRICO STEGER

FOR EVERY PURPOSE, THE RIGHT EDUCATIONAL PROGRAM

The Ranger School is part of a vast educational program, Die Zirkonzahn Schule – The Zirkonzahn School, conceived by Enrico Steger, MDT, pioneer of dental technology and founder of the worldwide, dental technical company Zirkonzahn (South Tyrol, Italy), run by Steger himself together with his son Julian Steger, MDT. The educational programs of the Zirkonzahn School include both schools and courses, and combine a sound dental technical teaching with a school of life and culture. Indeed, to aim at a successful career, excellent professional abilities are not the only milestone to reach: a person needs good educational bases and has to be able to team up, be creative, gain knowledge and achieve self-mastery. According to Enrico Steger, “learning means repeating”: excellent results only arise from an ongoing and self-motivated pursuit of improvements as well as from a constant exercise. The more knowledge and skills a person has, the more virtuous he will become. However, virtue requires more than mere adherence to a working method: it requires the willingness to cope with one’s personality and achievements, to train one’s perception, to develop a cultural understanding and to internalise work ethics and traditions proven over generations. All trainings that Zirkonzahn offers are for all walks of life: they aim at supporting both young and expert dental technicians in their personal and professional growth, by means of a diligent and complete education which focuses both on craftsmanship techniques and on digital technology.

All of the Zirkonzahn School’s facilities are located in the picturesque meadows of South Tyrol, embraced by the magnificent mountains of the Alps and all classes are held by expert dental technicians trained in-house. The five schools included in the program are created considering the specific target’s needs and last from five days to several months. The Military School, for instance, is conceived for the youngest dental technicians and apprentices and aims at deepening their understanding of modelling and working on CAD/CAM technology intensively. The Safari School is instead targeted to experienced dental technicians who seek to improve their knowledge about the world of CAD/CAM, whilst the Heldencampus is the school conceived for the real masters of dental technology, who possess a high level of virtue, technical knowledge and willpower. Together with the Ranger School, the Forest School is the newest program conceived by Enrico Steger. Its facilities are located in a farmhouse and the program combines manual working techniques with digital technologies, which makes the school particularly suited for the lovers of nature and craftsmanship. Finally, the Ranger School is addressed to six young dental technicians and dentists from all over the world who share the willingness to get new insights as well

as an intrinsic strive for knowledge and aims at preparing them for their professional future in a motivating and international ambiance in a period of several month.

Alongside the school trainings, the South Tyrolean firm offers a wide range of practical courses for every taste and level of expertise. Dental technicians interested in improving their skills in the use of the milling machines and the company’s software can subscribe to the CAD/CAM Milling courses, where they will also learn useful tips about workflow organisation and maintenance of the devices. For those who aim at improving their design skills in the software and learning more about material diversity and different digital approaches, CAD & Applications courses are instead the perfect solution. Dental technicians who are mostly interested in aesthetics and complementary techniques can finally find an answer to all their questions at the Applications courses. The courses are constantly updated and expanded according to the new innovations found by the research team of the Zirkonzahn’s dental laboratory. Every new solution is implemented into the training programs through intensive sessions, in which experts and participant can exchange ideas and learn together in a collegiate atmosphere.



The Zirkonzahn School, an educational program for every target that combines dental technical teaching to school of life and culture.



THE RANGER SCHOOL EDUCATIONAL TRAINING

A DENTAL TECHNICAL TRAINING AND A SCHOOL OF LIFE AND CULTURE

'When I was young, I was a talented dental technician and craftsman, but I learned that personal skills were not enough to become a good laboratory owner', says the creator of the Ranger School Enrico Steger, MDT, thinking back to his needs as a young dental technician. 'I also experienced that it is nothing but simple to receive a valuable support on this. Now that I have life and work experience, I would like to provide the new generations of young dental technicians with what I was not able to get in the past. This is how I came up with the idea of the Ranger School. I wanted a place where a deep understanding of teeth forms and technology innovations is combined with the tips and techniques to create a good image of oneself and to manage financial resources in the laboratory. Discipline is the keyword of the Ranger School and the only reason why I choose to give this school a military orientation. The success of an army

depended on discipline and loyalty. Through an efficient organisation, the warriors managed to bring warfare to perfection. When I was young, I did not even take part into the military service because I was not interested in it. For the Ranger School, I only wanted to discern the non-aggressive and unwarlike elements of the army and use them as core values. Discipline, diligence, loyalty, moderation, courage ... In life, if we want to be successful, we shall identify these elements as virtues and adhere to them'.

The great success of the first Ranger School, whose participants were all from Germany and included both master dental technicians as well as dental technicians who had just finished their schooling, set the path for the second edition of the program. The schedule and the general aim of the classes remained unchanged: the students could deepen their knowledge of dental technology and CAD/CAM

systems, put into practice the concepts learned and acquire useful notions of different subjects like business, English, philosophy, marketing, photography and writing. Strict discipline was combined with exciting activities, which gave the participants the opportunity to enjoy the beauty of the landscape and immerse in the culture of its inhabitants. The main differences between the two editions lay in the fact that the second Ranger School was opened also to dentists and its flagship was its international dimension. Not only did the participants have to cope with everyday challenges but also with cultural difference and language barriers, making English the only common communication channel. Every challenge helped the young participants bring their potentials as well as their limits to light. The union of everyone's strengths helped each participant to overcome his personal limits and get more mature and self-confident. The Ranger School offers a complete preparation for future masters, as well as a personal, inner education, which is meant to be life-lasting.

The International Ranger School really gathered young people from all over the world. Indeed, the six young participants came from the UK (Artur Doliniec), Mexico (Eduardo González de la Torre), Canada (Bodgan Opinca), Italy (Gabriele Tagliabue and Matteo Paolini) and Spain

(Sandro Natile) to attend this first international dental technical school. Last January, another international edition of the Ranger School started, gathering people from Spain, Finland, Mexico, Russia, Ukraine and Hungary. Eduardo González de la Torre embarked on the first International Ranger School and he was the first young dentist to take part in this experience. Based on his tales, this article aims at describing what being a Ranger means.



Engraved in iron, this emblem of the Ranger School is meant to be a constant reminder of the notions acquired during the school: iron will and discipline, digital knowledge but also manual and traditional skills are the elements that make a master out of a dental technician.



THE EXPERIENCE OF EDUARDO GONZALES DE LA TORRE IN THE ZIRKONZAHN RANGER SCHOOL

FROM MEXICO TO SOUTH TYROL, AMONG FEARS AND EXCITEMENT

I had just finished the dental school and I was looking for new learning experiences out of my comfort zone, when I heard of the Ranger School. I was very interested in this international program about dental technology for several reasons. First, I decided to enroll myself to this program because this school would help me understand the dental laboratory workflow, involving the latest novelties in CAD-CAM technology. I expected to learn as much as I could about dental technology, CAD/CAM systems and the manipulation of materials like zirconia and ceramics. This was very important to me in order to understand what a laboratory needs when preparing a case, and which expectations I can have from a laboratory. I was also very keen on understanding how to adapt my mindset to the lab work when working with a patient. My parents are dental technicians and have a great laboratory in Mexico, so I was also moved by the perspective of gaining knowledge about CAD/CAM technologies in order to be then able to help them in their laboratory and to start working part time as a technician. I believed this school would help me develop myself as a great restorative dentist.

The second reason why I was interested in participating in this program was the international nature of the school. I found very appealing the fact of sharing the space with people from other cultures and making some new friends from all around the world. I knew that cultural difference would bring in communication problems. However, English is my second language, I do not have many opportunities to practice it in my daily life in Mexico, and I knew that forcing myself to speak English for three consecutive months would certainly help me to master this language. This experience would also give me the chance to get to know different cultures that I had never get the change to discover, which is good for a future job in an international community.

Of course, along with excitement, I was feeling nervous about this experience. The idea of sharing a little space all day long with five different persons I had never met before and speaking different languages made me a little worried. Sometimes, even though I thought I had the basics of what I was going to do in the school, I also feared that my technical abilities were not so good because I had not practiced them a lot before. However, I always tried to stay positive thinking that my main purpose was to learn as much as I could.

'I believed this school would help me develop myself as a great restorative dentist'

Ranger 008 – Eduardo Gonzalez de la Torre. He left Mexico to attend the first edition of Zirkonzahn's International Ranger School, in South Tyrol, Italy. He shared this unique experience with 5 young dental technicians coming from Canada, the UK, Spain and Italy.



A SCHOOL OF LIFE AND OF SELF-DISCOVERY, BREAKING DOWN BARRIERS

The day at Ranger School starts at 6 a.m.. We just had 15 minutes to put aside all laziness and get prepared for our morning sports session. Usually, we went out for a run or a bike ride, but sometimes we also played football between us and against the participants of the Military School. After one hour of sports, a nutritious breakfast awaited us usually with eggs, cereals or yogurt. Then, we were ready to start our morning class! In the morning, we usually had two lessons, with a 15-minute pause in between to relax or prepare for the upcoming class: everything we learned was interesting and important for our future as laboratory owners.

We usually finished our classes with our minds full of notions ... Luckily, at 12 p.m. it was lunch time! At the base, we followed a vegetarian diet. This was part of the Ranger School philosophy, which aims at forging people able to adapt themselves at diverse, even tougher, situations in order to become more versatile and grow up. We had to prepare our lunch jointly with a daily budget of 6 euros per person, which helped us understand how to manage our money: to stay in our budget, we planned each meal beforehand. These rules made us aware of how discipline and simplicity are important in one's life: we were able to adapt ourselves to such different life habits and to cook with such limitations! As weeks went by, we even got used to preparing nice, complete vegetarian meals that fulfill all our needs for the day, which means you really do not need much to have a great pleasing meal.

After lunch, we dedicated some time to cleaning: after each thing you do, it is better to tidy up immediately, in order to have everything ready for use for the next time. Sometimes, if we were fast, we could rest for a bit, otherwise we had to get prepared for the second session, which started at 02.00 p.m.. As in the morning, the afternoon classes were structured in two parts. When also the last class was finished, it happened sometimes that we needed to go on working on our own for another 15 minutes, then it was time for dinner preparation. We had time until 8 p.m. to prepare our meal, enjoy it, clean and finish our work of the day. Usually, after that time we could dedicate time to ourselves. We used to work a bit more and do wax-ups or communicate with our families but some evenings we also took part in other thrilling and unconventional activities. At 10.00 p.m., we had to check out and get ready for bed in order to refill our energy reserves for another exciting yet demanding day at the Ranger School.



However, this was only one side of our life as Rangers. This was the school-life part of this challenging experience. During weekends, we dedicated our time to team building through stirring cultural and sometimes unusual activities. On Saturdays, we were given the opportunity to discover the charming area around us, the Valle Aurina, as well as the people who inhabit these places and their traditions. We organised long bike rides, attended to traditional events occurring in the area and took part in other interesting activities. Sundays were completely free and usually we went eating out together and we enjoyed once again the valley. In some occasions, we also took the chance to finish our homework for the upcoming week – yes, sometimes our instructors gave us homework: once, for example, we had to read a book called “Sophie’s World” or we had to go out and take some specific pictures for our photography classes. Anyway, if our behavior was good and we kept everything tidy at the base, one time per month we could have a completely free weekend that we could spend to go back home or visit other places not far from here. And this is what we did: we took the chance to travel!

I can say that this experience made me understand that discipline and order are very important values to perform any activity in an effective manner. During these months, I could undertake a kind of journey of self-discovery, getting to know my limits, my strengths and unknown potentials. I replaced bad habits with new, good ones, such as exercising every day, eating healthier and being tidier at work. I also increased my self-confidence, realising that I actually know

more than I think but at the same time I got aware that there are plenty of things that I still have to learn. Of course, I am starting now this profession, and I still have to grow more. This school made me understand that cultural barriers do not exist as long as people share the same values and purposes: if common values are stronger than the ones specific to a culture, cultural difference does not count. Living with five unknown people was at first quite difficult. You have to be very patient, but over time, and thanks to the group activities we took part in, you get accustomed to the group dimension. You get to know the other people well and accept their customs. After all, it could not be otherwise, living together 24 hours per day...! All joking aside, at a certain point you start realising that you all share the same purpose and that you can learn a lot from an international experience. Not everyone has the chance to live cultural difference, discovering other food habits and languages. Moreover, we practiced English a lot and we could learn a bit of the languages of the other participants too. Our team of Rangers was composed of people from Italy, Spain, Poland, Canada and Mexico (myself). I brought with me, for example, a Mexican spice that everyone could discover and appreciate, we learned to cook pasta in the real Italian manner and we could taste some traditional dishes from South Tyrol. Everyone had something to teach or show to the others related to his culture. In the end, we came as strangers and, just in the first month, we became good friends. We get to be a great team, and we could only grow from this experience.



Cultural difference can build up barriers, but if common values are stronger than the ones specific to a culture, cultural difference is not important. During weekends, the participants dedicated their time to team building, taking part in events in the valley or organising trips.



At the Ranger School, the participants can learn how to create, from the beginning to the final step, all types of restorations through CAD/CAM systems, like inlays, onlays, crowns and bridges. Ranger 008 - Eduardo González de la Torre took this picture representing one of his jobs for his photography class.

A COMPLETE JOURNEY IN DENTAL TECHNOLOGY AND CAD/CAM

At the Ranger School I first learned how to deal with Zirkonzahn's materials and CAD/CAM system workflow. For example, I was taught how to layer composite to create a gingiva, which indirectly reinforced and gave me knowledge about soft tissue anatomy, the manipulation of composites and PMMA. I got the chance to learn how to create, from the beginning to the final step, all types of restorations through CAD/CAM systems, like inlays, onlays, crowns and bridges. I acquired important notions on how to work with anatomic reductions to layer ceramics and on how to layer ceramics over zirconia in crowns and structures like a Prettau® Bridge, Zirkonzahn's aesthetic full-zirconia restoration. All this gave me a better understanding of the behavior of ceramics and colours. Furthermore, I mastered how to create a Toronto Bridge on a zirconia bar with friction copings in Tecno Med resin, as well as prosthesis in Multistratum® Flexible with the gingiva part layered with composite. During our lessons, we were also taught how to take great pictures of our restorations and create a presentation out of them, with the aim of showing what we learned step by step and presenting our jobs to somebody else in a clean and professional manner.

Of course, at the Ranger School we also manufactured cases. Every week I was feeling more and more confident with what I was doing and when the time for the final job arrived, I felt prepared to manufacture it almost by myself. Carrying out these jobs has made me aware of how a perfect digital workflow should be and that it is possible to work efficiently in a user-friendly yet simple manner. At the school, we worked with Zirkonzahn's devices such as the PlaneSystem®, the Face Hunter 3D facial scanner and CAD/CAM systems, which are completely integrated with each other to create a smooth workflow combining both digital and manual working steps. We used the PlaneSystem® to determine the person's occlusal plane, while the Face Hunter helped us to take multiple photo-realistic 3D scans of the person's face, in order to create a rehabilitation based on the patient's physiognomy. Thanks to the Face Hunter, our final restorations were very accurate since the work was not based just on one measurement, as we were used to, but on the complete digital facial structure of the patient.

The jobs realised gave us the chance to learn how to combine virtual and manual working steps by means of the JawPositioner, which provides an exact physical reproduction of the digital data. We milled the previously obtained digital data in the JawPositioner in order to integrate the digital information into the conventional workflow and adjust manually the prototype rehabilitation. Following the proposed workflow, we obtained a functional, precise and totally customised rehabilitation in a fast still highly accurate way.

During the cases realisation we also mastered the company's software, composed of several useful modules which help you in the organisation of your work. In the Archive software, for example, we gathered and stored all the information about the case given by the dentist and the patient, so that every dental technician working on the case could find all the data at any time. In the Scan module, we imported and matched all the data obtained by the scans, the PlaneSystem® and



Eduardo González de la Torre's restorations manufactured during the Ranger School. All cases have been created using technologies and aesthetic materials provided by Zirkonzahn.

the Face Hunter in order to have a complete panorama of the patient's situation and we then established the correct working position through a digital articulation of the virtual models. The software module where we created the final restoration based on the complete digital patient's face was instead the Modeller module.

Our work made me realise how a digital approach to a case creation can bring significant advantages also in terms of

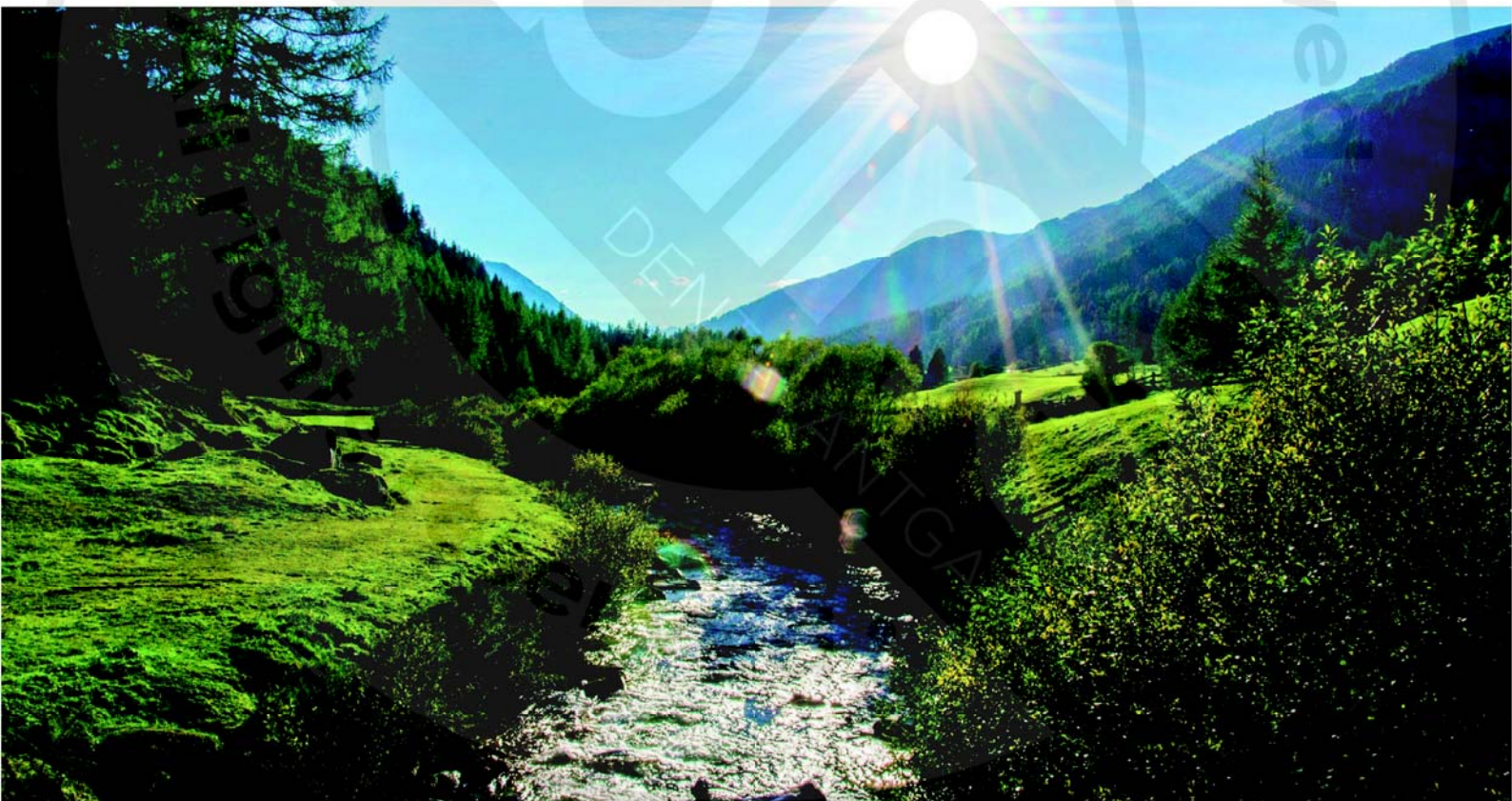
communication between the restorative team, the dentist and the patient. The communication between dentist and dental technician is faster and the patient's appointments with the dentist are considerably reduced. Thanks to the facial scans and the collection of the patient's data, the dental technician is able to work on the case at any time without the patient being there, who can visualise the options for his prosthesis directly at the second appointment.

LOOKING BACK AT MY FIRST EXPECTATIONS IN THE ZIRKONZAHN RANGER SCHOOL

Looking back at this unique experience, I can say that my expectations have been more than fulfilled on any point of view. I learned more than I thought I could manage, I mastered how to use efficiently CAD/CAM technologies, how a dental laboratory works and I picked up new notions of useful and different subjects. Being in a completely new place with five strangers, with a language barrier and with no idea of what I was going to do was quite a difficult situation to cope with in the beginning. However, over the weeks communication turned out to be great, I got the chance to travel, discover the place I was living in, and I came back

to Mexico with new friends from all over the world, and with the word "friends" I also mean our instructors, with whom we managed to make friends too.

Finally, and most importantly, this experience in South Tyrol helped me unveil unknown capabilities and aspects of my personality, which made me more self-confident and independent. I will be able to put into practice what I learned and I know this experience will be the starting point to grow more. In a few words, after this experience I can say I feel more ready to face life than I was before.



The inspiring surroundings of the Zirkonzahn's Ranger School, located in the Valle Aurina, South Tyrol. The strict schedule of the Ranger School is combined with exciting activities that give the participants the opportunity to enjoy the beauty of the landscape and immerse in the culture of its inhabitants. This picture was taken by Ranger 008 – Eduardo González de la Torre during for the course of photography that he attended during the Ranger School.

Find us on 

The adventures of the Rangers are posted every week on Zirkonzahn Worldwide's Facebook page. Would you like to be an international Ranger? Stay tuned, and enroll in the next mission at the Rangers' base!



RANGER SCHOOL

'The ranger is a guardian and protector. Resoluteness, alertness, willing to defend values, absolute humbleness before nature and unflagging contribution to his goal. These are the principles of the Ranger School. With an iron will, we are consistently passing on all our knowledge to our disciples within six months. Thus the disciple will become a virtuoso master himself and subsequently teach the disciples who follow. We teach the essential of both art and dental technology; we devote, for instance, 100 minutes per day to modelling, we work on very challenging cases, photography and aesthetics. Our disciples will have to do homework and face challenges which will bring them to their limits. Living and learning together in perfect unity will help them overcome these obstacles. To understand the bigger picture, it is indispensable to convey the values of culture. To reach this objective, the written word is studied and tested, the elocution celebrated and body, mind and character developed. The Ranger School offers knowledge from which the disciples can profit throughout their whole life and their sense of connection between each other will never fade.'

Luigi Steyer

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DIE ZIRKONZAHN SCHULE

The Zirkonzahn School