

DIFFERENT PATH – SAME GOAL

The Problem of Top-Level Promotion of Young Ski Racers and Dual Careers



Matura Paper

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1 Preface

In autumn 2021, as I was training on the Diavolezza Glacier for my first upcoming season as a FIS ski racer missing many school lessons already before winter, Sonja Nef, a former world champion, told me she admired me for doing all the racing besides the normal gymnasium without support. After all, she said, I was now a **professional** athlete. Right, and nobody in elite ski racing does it this way. And supposedly, it is the wrong way, says her husband, Swiss-Ski head coach youth Hans Flatscher. I therefore became interested in scientific studies investigating the problem of selection, the double burden on a young athlete facing a dual career and the importance of social resources.

When a path is not personally chosen and beyond that rocky, maybe fate wanted it that way and I have to be even more committed to reach my goals. After explaining my path in Chapter 2, I present the key issues and theses regarding school education and top-level sports in Chapter 3. In Chapter 4, the paper is generally directed at the double burden of school and top-level sports mainly from a sports science perspective and with the developments of politics, but then specifically investigates the coordination of **school education and ski racing**, because the latter calls for extreme structural adjustments from the school due to its dependence on favourable weather, snow and suitable ski slopes. In Chapter 5, I will present my own experiences in a regular public gymnasium unlike the situation at a Swiss Olympic Sport School, followed by interviews and a personal assessment. Finally, there is a summary of the most important findings and a conclusion.

In this paper, the terms top-level sports, elite sports and high-performance sports are used as synonyms. A Swiss Gymnasium or Kantonsschule is a secondary level II school with Matura degree.

2 Introduction: My way

Coming straight to the point, yes, I could have gone to the Sportgymnasium Davos, ideally situated next to the ski slopes. On 16 March 2019, my parents decided against it.

Review:

I have always loved sports as a challenge, a competition, a social event and for fun. I practiced Kungfu for years, went Western riding and was crew member of a competitive hip hop dance group. I am a AOWD diver, like playing tennis, hiking and going on expe-

ditions, but at the age of twelve, I **decided** to intensify ski racing as a competitive sport. Encouraged by a ski instructor in Appenzell, my parents sent me to the Skiclub Gossau, when I was 5 years old. I quickly became one of the best ski racers in Eastern Switzerland and also trained in the newly founded Ski Racing Club Suvretta St. Moritz during holidays.¹ As I was on the podium in most kids' races, I wanted to join the OSSV squad (Ostschweizer Skiverband) that worked together with the Talentschule St. Gallen (secondary level I).



Figure 1: First wins, Migros Grand Prix Final 3rd place, OSSV Squad 2017/18

I really enjoyed the committed teachers supporting ski racers who were mostly absent. But in the squad, I did not feel very comfortable. I was very skinny, not even in the pupal stage and not taken seriously. Furthermore, my long legs affected my coordination and stability. My two teammates were leaders in the 2005 competition, qualified for the national series and treated differently whereas I felt left behind. After two years in the squad,

¹ Blues Magazin Suvretta Sports St. Moritz. 14.04.2014. Suvretta Racing Club. Race-Schüler im Portrait.

my lack of self-confidence manifested itself blatantly in the mediocre race results. In 2019, I still wanted to go to the Sportgymnasium Davos (SSGD), but I also liked the idea of taking immersion classes, learning Spanish and taking a gap year abroad as an exchange student. On 16 March 2019 (I was 14), after another poor race, my parents decided to put an end to the suffering and sent me to the Kantonsschule am Burggraben St. Gallen thinking my ski career would slowly come to an end at 16 (junior races), like the headmaster of the "Kanti", Marc König, predicted. I was initially shocked and frustrated, but the pressure apparently dropped and I won the next races like in good old days. Nevertheless, the OSSV decided at the end of the season that I had to leave the squad since I no longer met the criteria of attending a sports school. On the other hand, the ski company HEAD asked me to join their HEAD Future Team who only supported the best athletes of a year. My former coach from the Skiclub Gossau, Clemens Caderas (born 1948), worked with me from then on. He took into account my long physique and legs and strengthened my self-confidence. He was a former school teacher and worked for Swiss-Ski, was Head of the NLZ East (Nationales Leistungszentrum Ost), trained World Cup racers (Daniel Mahrer) and had more than forty years of experience in coaching. A stroke of luck! Therefore, I performed very nicely at U 16 national series but sometimes pushed my luck too much and dropped out of races.



Figure 2: U 16 races as "Clubfahrer" without squad affiliation

My coach offered to train me for FIS races. I changed federations and have since been skiing for SAS, the Swiss Academic Ski Club,² whose members are students up to Swiss-Ski squads but their own training possibilities are modest. In my first professional FIS year (2021/22), I sometimes competed alone without my coach (who still trained the Skiclub Gossau), but I had some success, especially abroad in Italy. Due to the school load, I could not compete all 48 Swiss races because they usually take place at two days during the week. At the Swiss Championship in St. Moritz at the end of March, I had to stop the season because I crashed in the downhill race and hurt my knee (bone bruise). This season 2022/23, I have big plans to come back to the structures of Swiss-Ski, I work with a personal fitness trainer to gain more strength, I have changed my diet, and my coach has formed a FIS Team with another three female athletes. Finally, I am part of a committed team again. In January 2023, I was selected for the **XVI Winter European Olympic Youth Festival (EYOF 2023)** among four female athletes, the only one without NLZ or RV status.³ I would like to mention quite clearly that, for various reasons (cp. chap. 5.2), only with this adverse path I could reach my current technical level and strengthen my self-esteem.



Figure 3: FIS race podium, training in ski hall in Summer, my new FIS team

Performance records:

Junior level:

- 2013-20 Annual qualification for Migros Grand Prix Final: 3rd-9th place (05)
- 2016 1st place Internationaler Silvretta Schülercup
- 2019/20 1st place U 16 OSSV (Ostschweizer Skiverband)
- 2019/20 8th place U 16 IRO series (Interregio Ost)

² SAS, Ski Alpin Team, sas-ski.ch.

³ Swiss Olympic Team, Olympische Missionen, EYOF 2023.

- 2019/20 6th place national race series 2005
- 2020/21 12th place national race series 2005 (3x out of 6)

FIS level 2021/22: FIS Points ranking, year 2005 ladies SUI

- Giant Slalom 6th (778)
- Slalom 4th (686)
- Downhill 7th (325)
- Super G 13th (730)
- SL+DH (AC) 5th (338)

3 Key issues and theses

Balancing elite sports and school education is very challenging for young athletes and puts a lot of pressure on them. Therefore, this double load in adolescence is controversially discussed. A first key issue is the following question:

How do top athletes experience their daily stress with the double load of top-level sports and school education?

In order to maintain and develop the quality of training and competition in international elite sports, national solutions with regard to the compatibility of sporting and school careers are required. Therefore, a second key issue concerns the political conditions:

How has sports policy changed in the promotion of young talents?

With **full commitment of a professional sports career in ski racing**, school education is difficult to couple with the time expenditures of this sport. Sports-oriented schools want to solve this problem, also at secondary school level II. How many cutbacks do Swiss Olympic Sports schools make in school education when top-level sports takes up so much time and space? Based on my experience, I have established the following thesis:

- 1. The only pursuit of medals entails the risk of exploiting education for sport purposes.**

Attending the **Kantonsschule am Burggraben St. Gallen** with a broader range of subjects, school activities and field trips and with bilingual classes is fascinating. It is worth mentioning that in the Canton of St. Gallen, only 15.3% of young adults graduate with a gymnasial matura.⁴ This school is very committed to the educational goal of deepening social maturity⁵ and therefore, combining top-level sports with this kind of demanding

⁴ Cp. *Bundesamt für Statistik*, Sekundarstufe II: Maturitätsquote, bsf.admin.ch.

⁵ Cp. *Kantonsschule am Burggraben St. Gallen*, Porträt, ksb.g.ch.

school could be a huge challenge since it is unsatisfactory to cancel races and training for school reasons, and **hard to keep up with the competition**, nevertheless. Due to the low coordination of a normal secondary level II school, I formulate the following thesis:

- 2. The double load of school education and top-level sports is far more reduced with a structural coupling. These athletes cope far better because of support services in school, understanding teachers and coordination with the squad structures.**

4 Problem description

4.1 Area of tension

4.1.1 Identification and promotion of talents

In order to be successful in international elite sports, promoting young talents is a prerequisite. Because the development of young athletes is not always linear, a **broad and dynamic** definition of a “sports talent” is being discussed.⁶ A research at the Institute of Sports Science at the University of Bern in collaboration with Swiss-Ski concluded that when determining the talent characteristics, the relevance for athletic development (the potential), the biological age and the prognosis horizon have to be taken into account.⁷ Likewise important is the individuality of the athletes in their personal development as well as in their personal surroundings. Therefore, the promotion systems should be as permeable as possible and the measurement of individual talent characteristics needs to be of sufficient margin.⁸ The motivation for performance and several other psychological features play an important role to maintain the athletic engagement.⁹ Today, not the best, but the **most suitable** athletes should be selected.¹⁰ Swiss Olympic recommends

⁶ Cp. *Schafer*, 2011, 29-30; *Conzelmann & Marconi*, 2012, 13; *Swiss Olympic*, Manual Talentidentifikation und-selektion, 2016, 10.

⁷ Cp. *Conzelmann & Marconi*, 2012, 13, who talk about a medium to long term outlook.

⁸ Cp. *Conzelmann & Marconi*, 2012, 13.

⁹ Cp. *Conzelmann & Marconi*, 2012, 14.

¹⁰ Cp. *Schafer*, 2011, 30, 32-33: «[...] nicht die juvenile Anfangsleistung, sondern vielmehr die erwartete Endleistung [...]» *Conzelmann & Marconi*, 2012, 13; *Swiss Olympic*, Manual Talentidentifikation und -selektion, 2016, 14.

to base the talent identification and -selection on “PISTE: Prognostisch Integrative Systematische Trainer-Einschätzung”.¹¹ In conclusion, it can be said that in theory the holistic approach prevails nowadays, but is also more complex. How do you want to evaluate competitiveness, eagerness, commitment, resilience, persistence and discipline? And last, but not least, as the following figure shows, many actors may be involved before a talented young athlete reaches world class-level: Parents, coaches, teachers, sponsors, the state, Swiss Olympic...

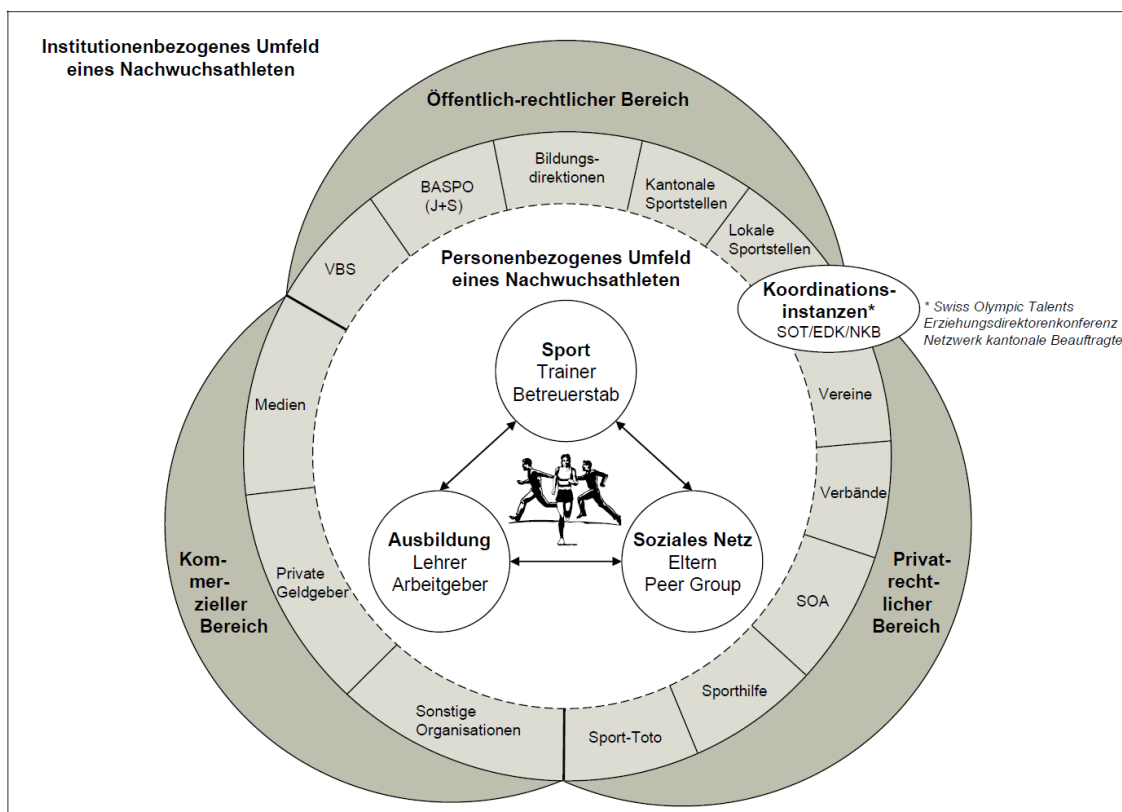


Figure 4: Structural image of Swiss youth sports promotion

4.1.2 Double load of school and top-level sports

The start of an elite sports career in Switzerland (compared to totalitarian societies) usually begins quite innocent. During primary school a child might be allowed to go ten minutes earlier from school (although some teachers do not like it) in order to train **ski** in the evening in Appenzell. In secondary school, there is a talent class where school is a little more coordinated with your sport so you could still get good grades to make it

¹¹ Swiss Olympic, Manual Talentidentifikation und -selection, 2016, 14.

through the entrance exam of your local gymnasium with matura diploma or find a decent apprenticeship. Most kids do not aspire an elite sports career after the age of 16, because they are not talented enough, school is more important to them (or their parents) or the double load puts them off. Clearly, U16 is playground even in elite national ski races whereas in FIS races, you compete against much older pro athletes, initially with a very high bib number on a bumpy slope. After a ridiculous race or a DNF (did not finish) you come home after hours of traveling and have to catch up with the missed school lessons, work for exams and overcome your frustration. Even without racing season, 20 hours spent on training per week are not uncommon for young athletes. **THIS is double load of school and sports**, not temporarily, but continuously.

To understand the conflict, let's go deeper into the **system theory** and look at the role expectations elite athletes have to face while still in school. In general, every person can become a student or a competitive athlete, provided he or she can only fulfill the expectations of the respective system. But elite sports and school have different social function systems and "operate in a completely self-referential way; they are self-contained in their actions and thus autonomous within their environment."¹² A beneficial action in one system has no importance in the other system. Within each system, all communications and actions refer to **binary codes**.¹³ In elite sports, the code "victory/defeat" is used.¹⁴ The actions of the players in elite sports are geared towards the goal of emerging as the winner of the competition.¹⁵ Explicitly expressed: "Der Zweite ist bereits der erste Verlierer."¹⁶ This puts athletes in a high cost situation, which means they must be fully committed to the top-level sport to even have a chance of winning.¹⁷ But precisely because they cannot maintain these high standards forever and are not always successful enough to generate an income, graduation from school becomes particularly important for the athletes' post-sport life. The binary code in the educational system is not so easy to

¹² *Borggreffe & Cachay*, 2012, 63. For a thorough overview of the system theory regarding school-age young athletes in elite sports, cp. *Teubert*, 2009, 29-54.

¹³ Cp. *Teubert*, 2009, 30.

¹⁴ Cp. in detail *Borggreffe & Cachay*, 2012, 63; *Teubert*, 2009, 33-34, 49-50; *Nolden*, 2011, 10; *Matthieu*, 2010, 10; *Stiller*, 2022, 2: «Das heißt, die individuelle (Best)Leistung kann zwar für das handelnde Subjekt einen Erfolg darstellen, bleibt aber ohne gleichzeitigen Sieg für das kollektivistische System des Spitzensports irrelevant.»

¹⁵ Cp. *Teubert*, 2009, 33.

¹⁶ *Teubert*, 2009, 34.

¹⁷ Cp. *Teubert*, 2009, 35.

define. Essentially, all requirements are placed on everyone equally and are fulfilled differently by everyone.¹⁸ Whether a school performance is considered successful, is therefore much more dependent on subjective standards.¹⁹ The system teaches students on one hand “socially adequate competences and skills (knowledge and values), on the other, to engage in selection, that is, to allocate career opportunities through reports and school-leaving qualifications.”²⁰ In the relevant literature, the binary code “better/worse” is widely used.²¹ Compared to the system of elite sports, the membership to the educational system is much more open, but there are parallels in time and social terms: School time is normally limited to a certain phase of life to preserve good future career opportunities. Likewise, the student should be present in the class room as often as possible.²²

The necessary full commitment in elite sports and the attendance and success in school put a **double load** on the person concerned because time becomes a scarce resource. “Weder im Spitzensport noch in der Schule ist ein «Teilzeitengagement» möglich.»²³ Given the fact that the invested time in school and training exceeds 50 hours per week²⁴ or more and the competition season demands even more commitment, the question arises how the young athletes experience the daily stress and cope with it. According to his **transactional stress theory**, Lazarus places the “**concept of coping**” instead of the term “stress” at the centre.²⁵ A person's capacity to cope and adjust to challenges and problems is a result of interplay of an individual and its environment. In the first assessment, the person classifies the situation as a threat, then the coping skills have to be evaluated. Usually, there are two approaches: a **problem-focused** (the individual handles the situation itself, for instance through solving of the problem itself, time management, shift in priorities, mobilisation of the social medias) and an **emotion-focused** strat-

¹⁸ Cp. Richartz, & Brettschneider, 1996, 246.

¹⁹ Cp. *Matthieu*, 2011, 10, 18.

²⁰ *Borggrefe & Cachay*, 2012, 63.

²¹ Cp. *Borggrefe & Cachay*, 2012, 63; *Teubert*, 2009, 36. Both discuss other codes like “teachable/not teachable”, “gebildet/ungebildet”, “fördernd/nicht fördernd und «vermittelbar/nicht vermittelbar» and refer to the relevant literature.

²² Cp. *Teubert*, 2009, 38.

²³ *Teubert*, 2009, 39.

²⁴ Cp. *Hoffmann, Sallen, Albert & Richartz*, 2010, 85; *Starke*, 2011, 24.

²⁵ Cp. *Lazarus*, 1981, 198-232.

egy (the individual changes the reference to the situation, for instance, through denial, distraction, acceptance of responsibility, relaxation training).²⁶

Several studies have investigated the double load with its various aspects.²⁷ Clearly, different people have different personal resources to withstand stress,²⁸ but it emerges from interviews with elite sports athletes that there is a connection between the perception of stress and time expenditures.²⁹ Only where elite sports and school structures could be coupled, talented young athletes did not perceive school as such a burden. Efforts seem sensible and meaningful if they serve important personal goals.³⁰ The existence of a defined sports goal confirmed by successful sporting achievements has an effect on a positive sports self-image.³¹ The high investment in time and material leads to a performance sport identity of the top athlete,³² so the sporting load is part of his or her self-image: this is what the athlete wants. The volume of training does not correlate with the time related stress, but reducing travel and organisation times through institutional cooperation between sports and educational institution can be helpful, not because time is saved, but specific stress induced segments of time can be reduced.³³ So many researchers see their studies as empirical evidence for the importance of structural coupling of sports and school for young athletes.³⁴

²⁶ Cp. *Matthieu*, 2010, 7-8.

²⁷ For an overview of the current research status in Germany, cp. *Teubert*, 2009, 14-23. Particularly noteworthy is *Richartz & Brettschneider*, 1996, with the following questions: 1. What is the extent of the double burden? 2. How do young people cope with the double burden and 3. Does the double burden prevent a pedagogically desirable development?

²⁸ Cp. in detail *Richartz & Brettschneider*, 1996, 188-275.

²⁹ Cp. *Richartz & Brettschneider*, 1996, 71-73.

³⁰ Cp. *Hoffmann, Sallen, Albert & Richartz*, 2010, 88.

³¹ Cp. *Matthieu*, 2010, 54. According to the interviewed athletes, triumphs at school can be attributed only to diligence, but sporting success to personal skills that have more influence to the self-image, cp. 55. Cp. also *Hoffmann, Sallen, Albert & Richartz*, 2010, 90: Training is "sinnvoll investierte Zeit".

³² Cp. *Starke*, 2011, 9.

³³ Cp. *Hoffmann, Sallen, Albert & Richartz*, 2010, 90.

³⁴ Cp. *Hoffmann, Sallen, Albert & Richartz*, 2010, 91; *Matthieu*, 2010, 65; *Nolden*, 2011, 8; *Borggreffe & Cachay*, 2012, 76; *Stauffer*, 2001, 8, who attended the newly opened Sportmittelschule Engelberg.

4.1.3 The war of roses: functionalisation of the school for the benefit of top-level sports

“Weltmeister werden und die Schule schaffen” - the title of the famous book of *Richartz & Brettschneider* shows the expected one-sided interpretation of the school: “manage” the school in order to preserve professional career opportunities in post-sporting life.³⁵ In system theory, the coupling of two systems means the linkage of two autonomous systems which follow their own internal logics.³⁶ Coupling the school with top-level sports bears the danger of instrumentalising education for the benefit of achieving sporting excellence. The other side of the school mission, education (for maturity) and development (of the whole personality) seems to play a marginal role at best in this view of talent development.³⁷ The radiant power of medals won exerts a dazzling fascination on various institutions. There are several researchers that recognize the danger of narrowing the school profile to a medal-fixated funding institution.³⁸ They claim that the success of an elite sports school cannot be measured by the number of “produced” medals, “sondern an den für die Institution Schule vorgesehenen qualitativen Gütekriterien wie Art und Inhalt des schulischen Abschlusses.”³⁹

The institutions involved must therefore have a common objective and avoid a lack of coordination and conflict of interest. The better this succeeds, the more resources are left for the top-level sport training and fewer athletes drop out of their sports career. Every school is subject to state control and has to comply with curricula. Using the school for their own purposes is a difficult task for sports organisation. **Coupling these structures** - not only maintaining a close cooperation with the school - is fundamental, but above all, the **commitment** of such a partnership as well.⁴⁰

³⁵ Cp. *Prohl & Stiller*, 2011, 7.

³⁶ Cp. *Borggreffe & Cachay*, 2012, 60.

³⁷ Cp. *Prohl & Stiller*, 2011, 7.

³⁸ Cp. *Prohl & Stiller*, 2011, 8-9.

³⁹ *Prohl & Stiller*, 2011, 9. Cp. also *Stiller*, 2022, who wants to broaden the goals of elite sports. His idea of maturity and responsibility is more developed if the focus is less on medal success and more on the achievement of a reflexive examination of the athletes’s own sporting aspirations (der “mündige Athlet”).

⁴⁰ Cp. *Teubert*, 2009, 12-13.

What are the margins in school? Where are **possible structural adjustments in school** to meet the needs of top-level sports? ⁴¹ Athletes need enough time per week to train. As far as ski training is concerned, half of a day is easily spent away from school if the slope is not nearby the school. Training sessions and competitions lasting several days need to be accepted by the school. The enormous amount of missed regular classes and exams requires an adjustment in study- and examination dates. Missed lessons can be made up promptly through e-learning, missed exams through exam-weeks after the competition season. To create space for training, the school education is usually extended by one year and weekly plans are specifically tailored to the students. Needless to say, the teaching staff has to show great understanding of the stresses and strains on athlete students. In schools that promote sports in specific sport classes or Olympic sport schools, teachers support the students outside of class hours through tutoring, coaching or consultation hours.⁴² Many athlete students claim that the social support of teachers has a decisive influence on student satisfaction. This significantly reduces the perceived double burden.⁴³

According to *Teubert*, the following barriers to implementing elite sport programs in schools are twofold: Teachers in school do “not know” about the difficulties regarding the combination of elite sport and school. They think training sessions abroad are extra holidays (“look who’s here again?”), they look at a tired face in the morning not knowing the athlete just competed at a national championship (“had a long night?”), they have no imagination what top-level sports means (a full-time job) because for them, sport is recreation. These barriers could be easily overcome by providing comprehensive information to the teachers regarding the double burden.⁴⁴ The opposition of establishing and implementing elite sports programs is more complex: “Not wanting”- barriers reflect the fear of disregarding the principle of equal treatment of all students. The emphasis of success (there’s only one winner, the rest loses) meets with a normative rejection from teachers. The health risks, the “wear and tear” of the children fuel prejudices. Last but not least, many teachers are biased towards elite sports because it is seen as having

⁴¹ Cp. *Teubert*, 2009, 65-100. For an overview regarding school adjustments, *Borggreffe & Cachay*, 2012, 65, with two examples.

⁴² Cp. for different structural and temporal organisations, the “Schulangebot” of Sportmittelschule.ch in Engelberg and Sportgymnasium.ch in Davos.

⁴³ Cp. *Starke*, 2011, 13; *Richartz & Brettschneider*, 1996, 172-176; *Nolden*, 2011, 52.

⁴⁴ Cp. *Teubert*, 2009, 93-94.

little educational value. There are headmasters who say: Sports, my goodness! Then, we only have the stupid ones at school. Fear of giving up service by the book reflects the rejection of new structures. Teachers do not want to write re-examinations or give support lessons because additional effort is not rewarded.⁴⁵

Of course, the **organisations of elite sports** must also take an interest in the school's concerns. Trainers should not pressure athletes when their level of performance at school is critical. Important dates should be communicated early to guarantee an efficient coordination of sports-related and school matters.⁴⁶ But trainers are a very important key function in every respect: the roles of trainer (professional competence), coach (social competence) and manager (strategic competence).⁴⁷ Especially in winter sports, where the climatic conditions cannot be easily predicted, the trainers are obliged to communicate changes in plans as quickly as possible.

The war of roses caused by the rejection and conflict situations between the organisations of elite sports and schools is at the expense of the athletes. In the absence of a coordination structure, they have to organize themselves and bear the whole double burden. Therefore, a particularly important link between school and top-level sports is a **sports coordinator**.⁴⁸

4.1.4 Developments in German speaking countries coordinating education and top-level sports

In **Austria**, the school autonomy allows each school to set a focus on movement and sport in the sense of profile building. Therefore, there are many schools with a sporting focus beginning of 5th grade. The Austrian school system provides for a special form in higher education regarding ski sports. Through a special cooperation with the Austrian Ski Association, the admission to the performance squads as well as the traveling to training courses and competitions are optimally coordinated.⁴⁹ Given the importance of winning medals in ski sports, Austria has one of the most successful sports schools in

⁴⁵ Cp. *Teubert*, 2009, 94-98.

⁴⁶ Cp. *Teubert*, 2009, 100-101.

⁴⁷ Cp. *Schafer*, 2011, 47, 257.

⁴⁸ Cp. *Nolden*, 2011, 221-222. For the implementation in Switzerland see chap. 4.2.2.

⁴⁹ Cp. *Schulsportinfo.at*, Schulsport: Ueberblick – Sportliche Schwerpunktschulen.

the world: The “Schigymnasium Stams” was launched in 1967 by the Tyrolian Ski Association. You can’t help but take a look at the “wall of fame” next to the entrance. The life at the boarding school in a small village is limited to sports.⁵⁰ The school is structured according to the power level principle: weaker students get the chance to catch up on subjects without having to repeat an entire grade, gifted students can skip a grade.⁵¹ Noteworthy is therefore also the exhibited panel of successful ex-students outside sports in business.

In the wake of the merger of the sports system of the GRD (East Germany) and FRG (West Germany), a fierce battle broke out in **Germany** over the question of the future status of competitive sports. “Geld gibt’s in Deutschland nur im Austausch gegen die härteste Währung: Medaillen.”⁵² Meanwhile, there are 43 «Eliteschulen des Sports (EdS)» in which 11’500 talents are being promoted. They have a boarding school and are tied to an Olympic base.⁵³ These schools are subject of controversial debates in scientific specialised publications and national medias, especially regarding the quality of education and the efficiency of creating successful athletes.⁵⁴ *Güllich*, who worked for the DOSB (Deutscher Olympischer Sportbund) for 13 years and has been researching the topic of junior competitive sports for years, claims that the EdS are not associated with increased success in elite sports, but with lower educational attainment and career prospects.⁵⁵ Because snow and mountains are scarce in Germany, there is only one boarding school (Eds) for ski alpine in Oberstdorf since 2007.

⁵⁰ Cp. *Stauffer*, 2001, 9-12 to history, funding, organisation, admission criteria and student life.

⁵¹ Cp. *Schwienbacher*, 2021, Werkstätte für Weltmeister, tirol.at.

⁵² *Prohl & Stiller*, 2011, 1.

⁵³ Cp. *Der Deutsche Olympische Sportbund*, Eliteschulen, *dosb.de*.

⁵⁴ Cp. in favour of the development of the individual athlete: *Prohl & Stiller*, 2011. Cp. *Hummel & Brand*, 2010, as an advocating response of the discrediting of the elite sports academies. Cp., *Nolden*, 2011, 67: “[...] unter Federführung der Schule [...]»

⁵⁵ Cp. *Güllich*, 2016/2017, 197. Moreover, he claims that with early specialisation of talents the risk of long-term overstrain and injuries rises. He states that in “Youth academies”, 29 % of the athletes and in national youth squads, 44 % are exchanged every year. Cp. *Güllich*, 2021, 16.

4.2 Importance of ski racing in Switzerland and its solutions of coordinating education and top-level ski racing

4.2.1 National expectations and political guidelines promoting young talents

In the past, physical training served the purpose of making enough young men fit for military service. Within a century, popular sentiment and politics changed completely, not least due to external shocks.⁵⁶ The Swiss National Rifle Association (1824), the Swiss Gymnastics Federation (originally “eidgenössisch”, 1832) and the Swiss-Ski Association (1904) were established quite early but had no focus on elite sports. The demonstration of sporting power in National Socialist Germany at the 1936 Olympic Games was impressive. Nevertheless, top-level sports misused for state propaganda purposes led to an initial change in Swiss policy: strengthening the autonomy of sports federations.⁵⁷

In stolid Switzerland, first and foremost, poor top-level sport performance at international events and the creation of major events have driven the promotion of competitive sports. The disaster at the Winter Olympics in Innsbruck 1964 (no medals!) led to the founding of the National Committee for Elite Sports (NKES) in 1966 and finally to a **Federal Law on the Promotion of Sport and Gymnastics** in 1972.⁵⁸ With the lifting of the amateur status in 1981, organised professional sports progressed further, but it was above all the media that ensured the spread and marketing of sports creating a national identity in an increasingly globalized world.⁵⁹ However, the prevailing opinion was that the state should only directly devote itself to popular not professional sports. A key moment was the very poor turnout at the Olympic Summer and Winter Games in 1992. There was a big gap between top-level sports and the promotion of young talents. Now, top-level sports has finally become a state affair of top priority, especially through the dedicated actions of the Swiss Federal Council Minister Adolf Ogi⁶⁰ and big sports event like the UEFA EURO 2008 in Switzerland.⁶¹ Successful athletes became nationally known personalities and

⁵⁶ Cp. *Weber & Sager*, 2015, 249.

⁵⁷ Cp. *Weber & Sager*, 2015, 252-253, for instance, through the founding of the Sport-Toto-Gesellschaft in 1938.

⁵⁸ Cp. in detail *Weber*, 2013, 21-34.

⁵⁹ Cp. *Weber & Sager*, 2015, 253-254.

⁶⁰ Cp. *Weber*, 2013, 49, 82.

⁶¹ Cp. *Weber*, 2013, 77, 85.

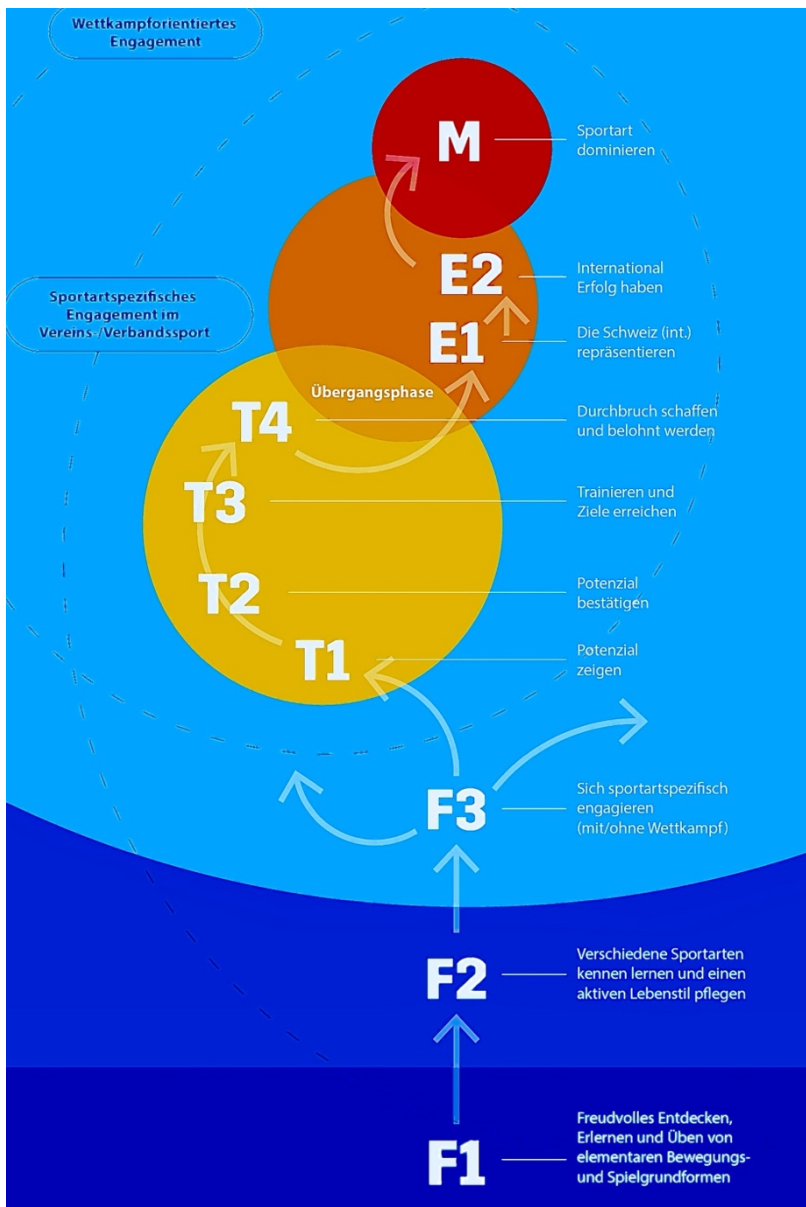


Figure 5: Swiss Olympic: Stages and areas of "FTEM SCHWEIZ" in an overview

role models for the youth thanks to media presence. Many sports personalities like Roger Federer (2003, tennis), Peter Sauber (2005, car racing), Köbi Kuhn (2006, soccer), Jörg Abderhalden (2007, Swiss wrestling), Didier Cuche (2011, ski alpine) Dario Cologna (2012, cross country skiing) and Stanislas Wawrinka (2013, tennis) were voted "Swiss of the Year" and became not only important ambassadors of the country abroad but also served as the embodiment of a shared Swiss identity.⁶²

In a sports policy concept in 2000, the Federal Council committed

itself for the first time to promoting competitive sports, as of 2006, elite sports became one of four strategic fields of actions of BASPO (Bundesamt für Sport)⁶³ in cooperation with Swiss Olympic and by 2011, elite sports has been included as a separate norm in the Sports Promotion Act (SpoFöG). The following paragraph should be emphasized:

⁶² Cp. Weber & Sager, 2015, 255. Remember two-times winner "Alinghi" of the America's Cup, a Swiss Yacht of Ernesto Bertarelli. Team "Alinghi" was awarded as Swiss Team of the Year in 2003 and 2007 and everybody wore the skipper cap as a "national" symbol.

⁶³ Cp. Weber & Sager, 2015, 254.

Der Bund [...] «kann Angebote fördern, die es ermöglichen, Sport und Ausbildung zu vereinbaren.»⁶⁴ There is an increased coordination between the Confederation and Swiss Olympic within the framework of the 2016 Competitive Sports Concept.⁶⁵ Therefore, Swiss Olympic developed the general concept of “**FTEM Schweiz**” together with BASPO. The abbreviation FTEM stands for the four areas “**Foundation**”, **Talent**”, “**Elite**” and “**Mastery**” and thus represents the **ideal** course of an athletic career up to the top of the world.⁶⁶

This chosen path fuels the population’s expectations (waste of money for slackers in case of failure) and the policymakers share responsibility for ensuring that competitive sport is more than just the pursuit of medals. At the Winter Games in Peking in 2022, Swiss Olympics targeted 15 medals, an ambitious goal, only successfully reached by the alpine skiers who brought home 9 medals (5 golden). The other six medals came from other divisions of **Swiss-Ski**. This major event demonstrates the importance of Swiss-Ski racing.⁶⁷ Switzerland celebrates its ski stars. In 72 years, 32 alpine skiers won the “Athlete-of-the-Year-Award” (Switzerland).⁶⁸ Therefore, Swiss-Ski is one of the most important and most successful sports associations of Switzerland and promotes elite sport specifically. According to their website, Swiss-Ski’s aim is to guide the talents through the development stages as well as possible with **flexible and individual solutions**.⁶⁹ With regard to the promotion of young talent, the coordination office “Swiss Olympic Talents” is particularly important, together with the BASPO. They award labels to sport-friendly educational institutions, assign Swiss Olympic Talent Cards, coordinate support concepts of sports associations, give Sport Scholarships, provide special instruments like PISTE, promote J+S and the campaign “cool and clean”.⁷⁰ The Sports federations like Swiss-Ski are responsible for the implementation of the **Swiss Olympic Talent**

⁶⁴ *BG über die Förderung von Sport und Bewegung* vom 17. Juni 2011, 4. Kapitel: Leistungssport, Art. 16: Massnahmen, Abs. 3 (SpoFöG, 2011).

⁶⁵ *Leistungssportkonzept Bund* vom 26. Oktober 2016. Cp. in particular chap. 6.1.3. Leistungssport und Bildung.

⁶⁶ Cp. *Swiss Olympic*. FTEM Schweiz, Rahmenkonzept zur Sport- und Athlet*innenentwicklung in der Schweiz, Version 2022, 6.

⁶⁷ At the Winter Games from 1988 to 2018, Alpine skiing is the clear leader with 37% of the medals. Cp. in detail *BASPO, Leistungssport Schweiz – Momentaufnahme SPLISS-CH 2019*, 3. Sportnation Schweiz – ein Ueberblick, 15.

⁶⁸ *Sports-awards.ch*, Hall of Fame.

⁶⁹ Cp. *Swiss-Ski*, Sport- und Athletenentwicklung.

⁷⁰ Cp. *Schafer*, 2011, 10-11.

Cards. These cards show municipalities, cantons, schools and other partners which athletes are included in support programs of associations and are to be specifically supported. The Cards “National” and “Regional” are a recognition of the eligibility for a successful elite career of a talented athlete who is a member of a national or regional junior squad.⁷¹ In 2022, there are 1109 ski alpine talents (local, regional, national, bronze, silver and gold), 141 National Talent Cards holders nationwide and 16 in Kanton St. Gallen. From the level “National” upward, Swiss-Ski awards the card through national rankings that are based on evaluation of three factors: competitive performance in the national series, national sports test and technique grades.⁷² At lower levels, regional associations are granted a certain degree of freedom of action in the area of processes and detailed criteria. They usually only consider their own squads.

With the beginning FIS age of 16 years, many athletes stop skiing competitively because they have not been selected into a higher squad, they have started an apprenticeship or have gone to a normal gymnasium, they have been badly injured or have lost their motivation. In season 2021/22, there were 38 licensed female athletes with year of birth 2005. Of these, 6 did not race (because of injury or other reasons). At the end of the season, 7 licenses were already inactive. Thus, 18% of the licensed FIS female athletes of 2005 have already stopped, of 2004 24% (13/54), of 2003 41% (16/39), of 2002 56% (27/48) and of 2001 61% (24/39).⁷³ So what support concept does Swiss-Ski have in mind for up-and-coming athletes?

4.2.2 Structural coupling in the educational program

Swiss Olympic is committed to the targeted and sustainable development of coordinated training programs within the framework of optimal support for young competitive and elite athletes and awards the quality labels “Swiss Olympic Sport School” (4), “Swiss Olympic Partner School” (57) and “Leistungssportfreundlicher Lehrbetrieb” (402) and runs the Program “Spitzensport und Studium”.⁷⁴ For this purpose, it uses the independent educa-

⁷¹ Cp. *Swiss Olympic*, Talent National, Regional und Lokal.

⁷² Cp. *Swiss-Ski*, Kriterien und Verfahren für die Zuteilung von Swiss Olympic Talents Cards, 2015, 3.

⁷³ Sadly enough, that the biggest talents of 2005, 2003 and 2001 have already quit because of severe back pain or performance pressure.

⁷⁴ *Swiss Olympic*, Ausbildung.

tion platform **EDUWO**. At the age of 13, an ambitious ski racer prefers to go to a Swiss Olympic Partner School because the intensity of training and races rises. Therefore, belonging to the regional squad is prerequisite and the regional association gives the athlete the necessary legitimacy, the Regional Olympic Talent Card. At the age of 15/16, the athletes going professional usually choose a secondary II labeled partner or sport school because there are not many apprenticeships whose training companies are sports friendly.⁷⁵ Young ski racers usually aim for the admission into one of the **three Swiss Olympic Sport Schools suitable for winter sports**: Sportgymnasium Davos, Sportmittelschule Engelberg and Kollegium Spiritus Sanctus Brig, all ideally located close to the ski slopes and offering boarding school structure. All Swiss Olympic Partner and Sport schools and “Leistungssportfreundliche Lehrbetriebe” have in common that a **coordinator** supports the athletes in their time management and guarantees a systematic cooperation between the educational institution, the sports partners and the athletes. Swiss Olympic emphasises that regarding the coordination of school and top-level sport, the focus is on **individual** solutions that are to be tailored as much as possible to the individual talent and its development phase.⁷⁶ The development potential is better exploited if these transitions are tackled proactively, early and **together** with the partners from the personal environment, namely the parents, schools, associations/clubs and the athletes.

“Hierbei ist es wichtig zu erkennen, dass Übergänge immer Stolpersteine in einer Karriere darstellen können. Dementsprechend erfordern sie umsichtiges Vorgehen.”⁷⁷

In the **Canton of St. Gallen**, there are various talent schools at secondary level I suitable for young ski racers: Gams, Nesslau, Quarten and Stadt St. Gallen are used to the “heavy task” of teaching those mostly absent students.⁷⁸ At secondary II level, only the

⁷⁵ Young ski athletes not aiming for a gymnasial Matura can go to school to get a federal certificate of Proficiency in Business administration e -profile (EFZ) (Davos, Engelberg, 4 years) or a Professional Baccalaureate in Business and Services (BM_WDW) (Brig, 5 years). But these secondary II schools for winter sports only commercial schools apart from the Gymnasium. For manual professions, only a pure vocational apprenticeship is eligible.

⁷⁶ Cp. *Swiss Olympic*, Koordination Schule/Lehre und Leistungssport, Sek I und II, inkl. Berufsschule, 1.

⁷⁷ *Swiss Olympic*. FTEM Schweiz, Rahmenkonzept zur Sport- und Athlet*innenentwicklung in der Schweiz, Version 2022, 17.

⁷⁸ Cp. *Kanton St. Gallen*, Talentschulen Kanton St. Gallen. Regarding the requirements for attending a talent school: *Verordnung über den Volksschulunterricht* vom 11.06.1996, Art. 11 bis.

United School of Sports as a Swiss Olympic Partner School in St. Gallen gives ambitious ski racers the opportunity to complete a school-oriented apprenticeship (business administration, E- or B-Profile) or a vocational baccalaureate in business and services (BM1).⁷⁹ Gymnasiums in the Canton of St. Gallen do not work together with the OSSV (Ostschweizer Skiverband) or Swiss-Ski. With the accession of the Canton of St. Gallen to the intercantonal agreement for schools with specific-structured offers for gifted pupils (sGS 211.83, HBV), sports talents can go to a secondary level II school more suitable to their abilities. Young ski racers in Eastern Switzerland therefore usually attend the **Sportsgymnasium in Davos**. As a rule, a National Talent Card – in exceptional cases also a Regional Talent Card - is required for a special support of young sports talents in upper secondary level-schools.⁸⁰ The flexibility of **normal** schools at this level includes the dispensation of lessons and the making up of examinations, but no educational support is provided.⁸¹

(VVU, Stand 01.08.2022) and in detail *Kanton St. Gallen*, Konzept Hochbegabtenförderung im Kanton St. Gallen vom 23.11.2011 (Stand 15.02.2018), Chap. 5.

⁷⁹ Cp. *United School of Sports*, Ausbildungsmodell.

⁸⁰ *Kanton St. Gallen*, Konzept Hochbegabtenförderung im Kanton St. Gallen vom 23.11.2011 (Stand 15.02.2018), Chap. 4.3.

⁸¹ Cp. *Kanton St. Gallen*, Konzept Hochbegabtenförderung im Kanton St. Gallen vom 23.11.2011 (Stand 15.02.2018), Kapitel 4.3.1; cp. *Kantonsschule am Burggraben St. Gallen*, Begabungsförderung: Sport, ksbg.ch. Only the Gymnasium of Wattwil offers the extension of the duration of the school by one year.

4.2.3 Ski: NLZ (National Performance Centre)

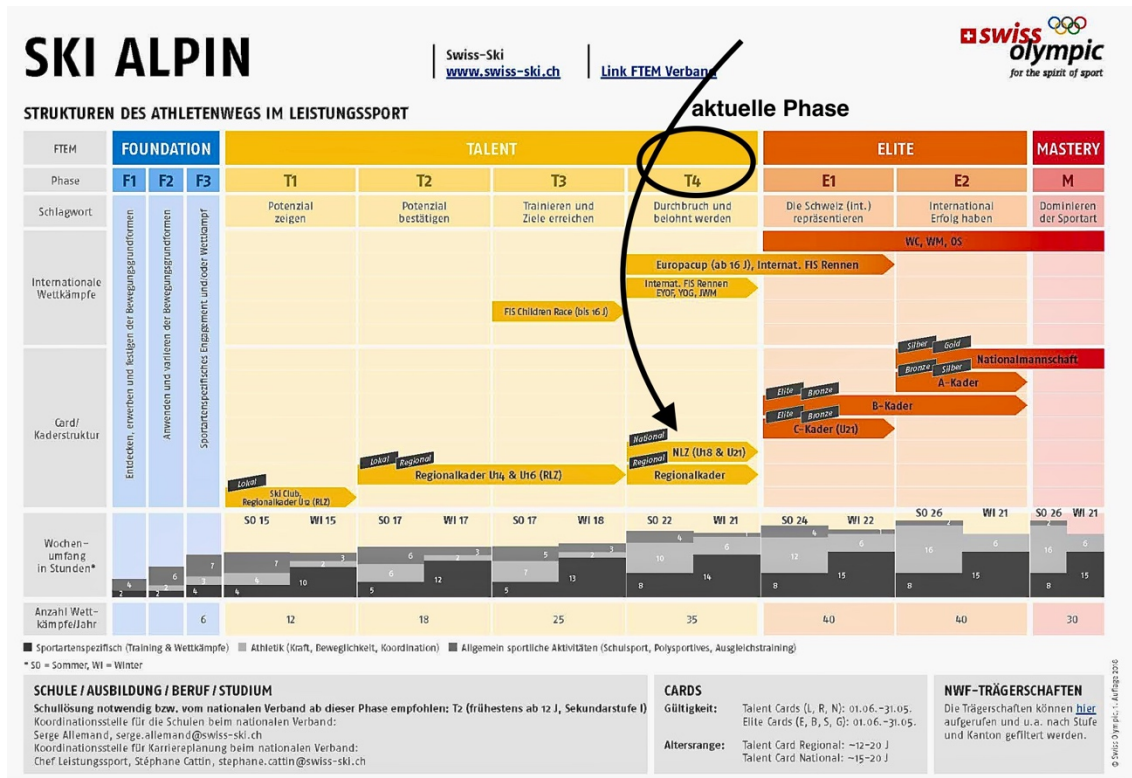


Figure 6: Swiss Olympic. Ski Alpin: Strukturen des Athletenwegs im Leistungssport

According to figure 6, sports talents in Phase four (T4) should keep up with the national elite and assert themselves against the competition. After joining a regional squad (RLZ), the next step to achieve at the age of 16-18 is getting into one of the **three National Performance Centres (NLZ)** “Centre” (Engelberg), “West” (Brig) and “East” (Davos) whose aim is to bring together the best athletes from the respective interregion. On the long way to the top, the NLZs form the level between the regional associations (e.g. OSSV, BSV, BOSV) and the Swiss-Ski C squad.⁸² Since 2010, the goal has been and remains the symbiosis between professional training facilities and optimal school conditions. It is therefore a **requirement** that the top-level athlete attends one of the three Swiss Olympic Sport Schools in Davos, Brig and Engelberg because “der Sport steht im Mittelpunkt.”⁸³ Only a few athletes do an apprenticeship outside the sports schools, not

⁸² Cp. *Swiss-Ski*, Ski Alpin: Leistungszentren. The regional performance centres (RLZ) are responsible for the youth level U16 (e.g. RLZ OSSV St. Gallen, Appenzell).

⁸³ Cp. *Swiss-Ski*, 2012, Kriterienkatalog für Leistungszentren Alpin Swiss-Ski, 3. Dierk Beisel, former Swiss-Ski -Leistungssport-Chef, emphasises a «*zwingende Partnerschaft des Sports mit einer Swiss Olympic School oder einer Schule mit sportartenspezifischer Ausrichtung.*» *Beisel*, 2012, 4.

least because of the travelling time to ski and fitness trainings. In 2022, 9 female athlete (year 2002-06) were selected to the NLZ Ost, 15 (year 2003-2006) to the NLZ Mitte and 3 (year 2003-04) to the NLZ West. The last NLZ regularly opens up to more athletes who have not met the criteria because their head, Laurent Donato, is not willing to comply with the selection criteria at all costs.⁸⁴ This flexibility allows 10 more female athletes in 2022 to share the squad's better structures.

Due to the various challenges in the junior area of Swiss-Ski, there was a need for action. In spring 2021, a new youth strategy was approved: The Swiss-Ski C squad is to be expanded and the national performance centres (NLZ) are to be supported - and at regional association level, the focus is on expanding the junior squads and strengthening the U16 level.⁸⁵ The promotion of young talents at Swiss-Ski is also on good financial footing. Swiss Olympic supports the NLZs with 150'000 Swiss francs for covering the operation costs.⁸⁶ In 2021, thanks to the Passion Snowsports Foundation, almost 1.3 million Swiss francs helped supporting young athletes directly or carrying out youth projects like speed camps.⁸⁷

According to Swiss-Ski, the squad structure was based on a pyramid principle until now, that is: the further up, the fewer athletes were in the squad. In reality, however, the structure was more like a form with several bottlenecks (especially in the C squad) where too many athletes were held up. There was no permeability but hard cuts between the levels. So, Swiss-Ski wants to remedy this thorn in the flesh by introducing a pillar structure. The athletes are to be divided into the three core disciplines earlier: Speed, Giant Slalom and Slalom. Swiss-Ski itself says that this will enable the athletes to switch up and down the discipline pillars according to their needs, just like in a lift. In future, athletes will be selected according to their abilities and less according to age. This means, for example, that they can stay at the same level for a longer period of time. The main goal of Swiss-Ski is to meet the needs of the athletes.⁸⁸ BUT to be selected into a national squad (NLZ

⁸⁴ Cp. *Taugwalder*, 30.12.2020, Prägende Stufe auf dem Weg nach ganz oben, Walliser Bote, spiritus.ch. Cp. for the less stringent criteria *Allemand*, 16.01.2021, 16.

⁸⁵ Cp. *Swiss-Ski*, 18.01.2022, «Wir wollen die Ski-Familie enger zusammenbringen.» Swiss-Ski Alpine director Walter Reusser and head of the youth program Hans Flatscher were in charge.

⁸⁶ *BASPO*, Leistungssport Schweiz – Momentaufnahme SPLISS-CH 2019, 8. Sportanlagen und Trainingszentren, 46.

⁸⁷ *Swiss-Ski*, Annual Report 2021-22, Wertvolle Unterstützung für den Nachwuchs.

⁸⁸ *Swiss-Ski*, Annual Report 2021-22, Wertvolle Unterstützung für den Nachwuchs.

or C-squad), a **candidate U 18** has to race **all** disciplines (1 Downhill, 2 Super-G, 3 Giant Slalom, 3 Slalom) to get enough points in the BRACK.CH Swiss Cup.⁸⁹ Moreover, a young ski racer competes at about 50 races a year to get his or her FIS points down for a better bib number (start).

Swiss-Ski Alpine Director W. Reusser argues that every young ski racer should be offered the framework conditions for a successful professional career:

«Beim Übertritt vom Kinderrennsport zum Erwachsenenrennsport hören noch immer viel zu viele auf. Sie denken: «Ich schaffe es nicht, ich bin zu weit weg!» Aber kann man dies mit 16 wirklich wissen? Es ist wert, mindestens bis 18 dranzubleiben – auch aus gesellschaftlicher Sicht. Es gibt viele Wandel in dieser Zeit. Die Schule, die Lehre, die Freundin, der Ausgang – ein emotionales Auf und Ab. Beim Sport erhält man eine Beständigkeit, er generiert eine innere Ruhe. Die jungen Athleten, aber auch ihre Eltern, sollen dabei wissen: Sie dürfen auch mal stolpern, wir lassen sie deswegen nicht fallen.»⁹⁰

With the transition to secondary level II (Kantonsschule) at age 15, my lack of self-confidence, the pressure of competition and the importance of education to me were guiding me to another path. But the love for ski racing stayed, nevertheless, and with this new path, everything changed...

5 Comparison: Life of a ski racer with and without coordination of school and top-level sport

5.1 Life in the Sportgymnasium Davos (SSGD) and the NLZ

As shown at the end of chap. 4.1.2., the structural coupling of sports and school reduces the stress induced segments of time. In ski racing, short distances to slopes are essential, the combination with a boarding school is ideal. Established in 1997 and soon accredited as “Swiss Olympic Sport School” and “Nationales Leistungszentrum”, the SSGD provides housing, school and training under one roof. It is a foundation, therefore a pri-

⁸⁹ *Swiss-Ski*, Selektionsrichtlinien 2023/24: C-squad: Top 2 U 18 Swiss Cup; NLZ: Stärkeliste 1-8/year or Swiss Cup 3rd-10th place. Cp. also *Swiss-Ski*, Brack.ch Swiss Cup 2022/23.

⁹⁰ *Germann*, 27.03.2022, Swiss-Ski geht spezielle Wege, um an der Spitze zu bleiben, blick.ch.

vate school and complies with federal and cantonal provisions on secondary school level II. It offers a Matura degree with focus on economics. The SSGD is a small independent school that has set itself **the sole goal** of enabling young people who participate in competitive sport to **receive an education despite the heavy burden of sport**.⁹¹ To be admitted, the entrance exam of the home canton, the Graubünden exam or a “house” exam must be passed. Because of the sporting focus of the school, an athlete with sporting excellence may be even admitted if a “house” test is passed after one year of provisional acceptance (two attempts). Further admission requirements are a sports test, a recommendation of the regional squad and the possession of a Regional or National Talent Card.

According to its quality mission statement **regarding sports**, SSGD uses the FTEM Switzerland as an orientation basis for their sports promotion.⁹² It offers ideal training conditions with steady training slopes at Jakobshorn, Bolgen, Rinerhorn and occasionally Parsenn with in-school trainers. Furthermore, athletes train with their regional or national squads. In preseason 22/23, **NLZ** athletes trained in Livigno, Stelvio, Saas Fee and Peer (ski hall in Belgium). In October, all reservations were cancelled in Diavolezza, the only glacier in Eastern Switzerland, and Swiss-Ski and NLZ athletes had priority. In Winter, they train everywhere, at Davos or on race slopes prior to races and have priority with the best lines. In SSGD, athletes train 4x a week on snow during season with the school trainers, sometimes at weekends with their squad. During Summer holidays, there are special athletic and ski camps organised by the NLZ. Transport and lodging for training and races are organized by the NLZ, whereas the athletes are only responsible for their absences in school. The SSGD has a big sports hall with various training possibilities. A specially designed weekly schedule enables regular athletic training at suitable times of the day, during early season usually five times a week. The school provides a wide range of sports physiotherapy services with prevention and rehabilitation training and consulting as well as mental training.

School time in this gymnasium has been extended by one year to allow more time for training (five years). **School** lessons are adapted to the sport-specific dates. There are two timetables for spring/summer and autumn/winter with individual weekly schedules. According to its quality mission statement **regarding school**, didactic planning will be

⁹¹ Cp. SSGD, Ueber uns, sportgymnasium.ch.

⁹² Cp. SSGD, Sport, Q-Leitbild: der Code of Coaching der SSGD, sportgymnasium.ch.

published on moodle, an internet learning platform, two weeks in advance. During race season, there are not any specific exam-free weeks but special make-up weeks for exams. While staying at race destinations, the school allows the athletes to write the exams under the supervision of the coaches on site. The teachers offer help for **individual support** of the athletes. This is what makes the big difference according to teachers and SSGD students. They get to know each other outside the classroom and due to the small size of the school, they can build up a personal relationship with the students. The teachers' commitment to help the students in any way is not only encouraged but also required by the SSGD in order to reduce the double burden on the athletes.⁹³ Poor performance at school is addressed at an early stage; basically, almost no one has to leave school because of bad school management. Students have the possibilities to improve grades by additional projects and vocabulary exams. Drop outs are mostly athletes with health issues or motivation problems.

To be honest, this all sounds like paradise for a junior athlete. Nevertheless, according to my research, not a few athletes see boarding school as a necessary sacrifice for their skiing career, because, of course, ordinary family life suffers as a result. Moreover, competitive tensions between ski racers and a pecking order between athletes of various sports (ski alpine, freestyle, cross-country) have sometimes been perceived, so even friendships formed through sport can be put to the test by competitiveness and envy. Since there is no direct battle at ski competition between peers but against time, socially compatible athletes give each other assistance and motivation in stressful times and are an important social resource. Therefore, peers in a sports school are called "colleagues" or "kind of friends" at least temporarily.⁹⁴

⁹³ Cp. SSGD, Schule, Unterrichtskonzept und Q-Leitbild, sportgymnasium.ch.

⁹⁴ Cp. also interviews in Sportmittelschule Engelberg: *Matthieu*, 2010, 48.

5.2 Life in the Kanti Burggraben and training in a small team (SAS/Skiclub Gossau)

After finishing ski races U16 and having decided to start being committed to professional ski racing, the life of a young athlete changes completely in every aspect. My first year in FIS races (21/22) coincided with my third year in the **Kantonsschule** St. Gallen. I was 41 days away from school for races, had 40 training sessions during school time (half-day or full-day), apart from 27 additional training days during holidays, not to mention the long travel to the ski slopes. This school year, I have even more school absences and do not attend school in winter very often.



Figure 7: Heavy loads

Instead of the 27 lessons in SSGD, I had 37 lessons and came home late to catch up on missed school material, do homework, physical training and prepare for exams. Needless to say, the timetable and the many exams in winter are not at all compatible with the racing season.

My National Talent Card allows me to leave school anytime. The formal handling of absences depends on the respective vice headmaster and his affinity for sports. I have no help whatsoever and depend on the teachers' digitalised notes and written or oral information of schoolmates who are quite reluctant and only willing to help after repeated requests. I sometimes have to write exams without all needed but not given documents or information. To compensate for my knowledge gaps, I sometimes go directly to the



Figure 8: Ski tuning

teacher and ask for short explanations (when changing classrooms). But if a teacher gives me the impression, the absences are my own fault and causes him or her additional effort due to the re-examination, I avoid any further negative developments. General subject assistance with older students is impossible in terms of time.

My **social resources** regarding ski racing are **my coach and my teammates**.

Last year on my own - without any real peers in training - was intense and good for concentration but also promoted loneliness. My three new team members are an important mental support to me. One girl is in a sports school, one completes a sports friendly apprenticeship, one does the Fachmittelschule (FMS), but does not attend regularly training. My coach for 11 years always gives training sessions with constructive feedback that is conducive to development and very professional. Moreover, he motivates me tremendously and mentions the good things first. Unlike other trainers, he uses timing and video analysis each time to describe the progress or the faults. Because of his training success he has some envious among the regional and national associations, and I myself changed the association to escape resentment and obstruction. Due to the small size of the team the coach can postpone trainings or schedule additional trainings. During Winter season, he is up on the mountain every day to give training to whoever has requested his service. Ski club junior members pay a small yearly fee to the club, we older racers compensate for his expenses, so there is a lot of heart and soul in the coach's commitment.

My **school friends** do not know me as a ski racer and therefore, perceive me differently, just as a normal human being. I use these special moments of leisure or school events (Spanish week in Valencia) to recharge my batteries. Basically, I use every minute to have a good training and only skip it if attending school events is compulsory.

Without the support of my **parents**, none of this would be possible. Their commitment is the icing on the cake (travel, financial, on the slope, school, organisation) and gives me stability and trust.

This year, I put a lot of effort in **physical training** regarding strength and power endurance with the help of a personal trainer, independently in a gym, and with a fitness instructor, who used to ski race (team training), so I have gained a lot of muscle mass. To handle my sensitive side in race competitions, I work with sport hypnosis, **mental training** and the ACT approach (Acceptance and Commitment Therapy).

5.3 Interview with Daniel Yule (18 May 2022)

Daniel Yule (1993) is a member of the National Swiss-Ski Squad and the only Swiss slalom specialist who has won five World cup slaloms. He has completed a degree in economics on the side. The interview was held in English (written) since he is originally British.

1. *Were you in a squad (Kader) or NLZ during your time in the gymnasium?*

During my time at the gymnasium, I was mostly in the NLZ West team. As I went to the gymnasium as soon as possible, I was still in Ski Valais during my first year there before moving up to the FIS category. During my final year I was selected to the Swiss-Ski C team.

2. *You attended the gymnasium in Saint-Maurice, so not a sports school. Why did you decide not to go to the sports school Collegium Brig?*

I decided to not attend the sports Collegium in Brig because my education was the priority at the time. I specialised in physics and applied mathematics. Also going to Brig would have meant I would have had to spend an extra year in school. Additionally, the cost of going to Brig was also a factor as it would have been much more expensive. Finally, I didn't want to be totally immersed in a world where skiing was on the menu for breakfast, lunch and supper.

3. *Did you receive special school support to cope with the school subject matter you have missed? How did you get your school documents? Was it easy for you to get dispensed from class?*

I didn't receive special support but thankfully that was mostly down to the fact that I didn't need it.

I was lucky to have a classmate who would scan the documents if needed or lend me her notes to make a copy of them once I got back to school. I wouldn't have been able to complete my Matura without her.

It was usually very easy for me to get time off from school. The policy was that as long that my grades were good, I could miss as much class as I wanted.

4. *Has your schooling been extended to 5 years? How many lessons per week did you have? Have you missed the same amount of school classes as the student athletes?*

In the Valais, the gymnasium is a five-year program anyway so my schooling was in no way extended. It would have been extended if I had attended the sports Collegium in Brig.

I would follow the normal number lessons per week which was 32 or 33 but I was allowed to miss full days of school to attend ski training.

It's difficult to say if I missed more or less school than other student athletes, but during my last year at the gymnasium I was absent from school about 50% of the time.

5. *Did you benefit in life from a normal high school or was it just a stressful matter?*

I believe that I greatly benefited in life from a normal high school experience as it gave me some perspective on how lucky I was and am to be able to pursue my passion. There obviously were some stressful times but these also helped me learn how to manage my time and take on some responsibility.

5.4 Interview with Clemens Caderas (ski coach) (18 November 2022)

Clemens Caderas (1948) was head coach of the Graubünden Ski Association for 9 years, head coach of NLZ East, Coach of Interregio East, trainer of race teams and private trainer of various Swiss and foreign athletes. In 2020, he was awarded as Coach of the Year as a lifetime achievement by the Graubünden federation for Sport.

1. *What does a young ski racer need to succeed?*

The athlete needs to enjoy the sport, must be independent from twelve years on, and be willing to learn and do without certain things (teenage life). Talent, good athletics, and great physical stability are advantageous, but also the perceptible increase in those prerequisites from year to year, in the end. A supportive environment (family, relatives, coaches), the material support from ski companies, and an education that is benevolent towards athletes are important resources.

2. *What are the advantages and disadvantages of ski racing outside the association structures?*

Working with small groups a coach is able to perceive an athlete better, to provide more targeted support and to respond to everyone. But due to the smaller support staff the coach cannot be present at the start and finish line and the athletes need to help prepare the slope and carry the heavy ski gates.

3. *Should the athlete's biography be taken into account in the selection process in order to assess potential?*

In the evaluation, they consider the athlete's biological age. If there is potential, they should allow private groups to give the athletes more time to develop. Ultimately, an athlete must then show strong commitment.

4. *What is most important to you in the relationship with the athlete?*

I appreciate honesty, trust and open communication. In a small team, social skills are important, we achieve goals together. An athlete must always have achievable goals in mind and be ready to accept defeats which make him stronger. Finally, the coach needs to be there in good and bad times and get the best out of every athlete.

5.5 Personal perception of the circumstances

Do I regret that I did not go the proper way of a targeted, structured planned sports career according to Swiss-Ski's FTEM? As one should never look back, I try to give my impressions to the dual career developments. In order to be successful in elite ski racing sports, **there has to be a structural coordination of school and top-level sports** nowadays due to the increasing professionalisation of the sport. A young athlete competing in FIS races (from 16 years onwards) must subordinate everything to this goal. Although Swiss Olympic emphasises the focus on individual solutions, every ambitious young athlete attends a sports school with extension of school years and other structural couplings (see chap. 4.2.2.) or does a sports-friendly apprenticeship and is thus **able to reduce time related stress**.

Successful sports graduates are the main goal of the Sportsgymnasium in Davos. The requirements for admission to the gymnasium are clearly reduced and feasible for lower-performing athlete students (like Sek-B students), but they too must pass a federal Matura and cannot fail a year. Parents whose two similar intelligent children have graduated from the KSBG and from the SSGD clearly state that the content requirements are lower in the sports school, but the education regarding time management is very highly valued. Many good students are underchallenged at school. The difference for lower-performing students is - besides the adjustment of the timetable - the **supervision of the students**, and therefore, the school avoids screening out hopeful ski talents. A sports boarding school is a very close-knit system requiring a lot of adaptation on the part of

the athletes who lose a bit of their individuality and also serve the school's and the squad's record of achievement.

Staying in a normal gymnasium **without** structural coupling is possible during U 16 competition and later during FIS competition if an athlete has no special interest in being selected for a higher squad (NLZ or Swiss-Ski). Although the selection process is a holistic approach in theory, only results count and therefore, in the first two FIS years, good training in **all** disciplines is an irreplaceable precondition, and the athlete's potential and educational circumstances are not really taken into account. There is a "Stärkeliste" with athletes who compete all required races (also speed) and sports tests and who, therefore, get further national support. In an NLZ, an athlete is able to train all disciplines, has priority to slopes and foreign races and an optimal infrastructure. This is how the gap widens, and many athletes drop out early. An injury or a longer sickness can end a career when training outside the squad structures because naturally, Swiss-Ski only cares about athletes inside their system. Daniel Yule, although attending a normal gymnasium, was allowed to train with the NLZ West, which wants to promote as many young athletes as possible. He was able to manage school because he is very intelligent, had fewer school hours per week and had a **good social resource in school**. These are certainly favourable circumstances.

As I feel low empathy from teachers, good grades do not generate better self-esteem but loosen the noose around my neck and let me train with more peace of mind. There are many teachers who do not know about the double burden of my situation but unfortunately, also a few who make me feel like a nuisance or give destructive comments ("I wonder how you will do in the exam"). Due to the many absences, a careful error analysis of exams is rarely possible. But I am a tumbler toy and have developed many **personal resources** like time management and positive self-esteem to reduce the perception of daily stress. I constantly try to adapt my coping mechanisms to the circumstances and perceive sports trainings as restorative for my mind. I never wanted to change the school because I like immersion lessons and Spanish. Nevertheless, it is hard, when races have been cancelled the same day, a ski binding has opened up during a race due to a rough slope or simply when the races have ended unfavourable to say the least, and I have missed so many school lessons in vain. On one hand, I have to **sacrifice a bit my educational success for sport**. On the other hand, I also need resilience when you are the **exotic in the ski circus** (outside the squad structures) and have the same abilities as other athletes. To be part of the selection process this season the binary code of top-

level sports is decisive and I have to change my priorities and subordinate and survive school. That is of course unsatisfactory, but cannot be changed.

In January 2023, after a rough start to the season, Swiss Olympic chose me to be part of the Swiss Olympic Youth team for the European Youth Olympic Festival (EYOF) in Friuli Venezia Giulia due to a potential assessment. The participation can be described as one of the highlights at the junior level according to the framework concept FTEM. That gives me hope of still succeeding in the sporting arena while surviving in school.

6 Conclusion

6.1 Results

How do top athletes experience their daily stress with the double load of top-level sports and school education?

In principle, many empirical studies have shown that the effect of high-performance sporting activities **does not have a negative influence** on time related stress. But healthy psychosocial development of young top-level athletes can only take place when the **different systems of school and sports are synergistically coordinated**, especially in ski racing where training is so time-consuming (structural resource). Otherwise, a feeling of being overwhelmed can occur.

How has sports policy changed in the promotion of young talents?

Sports Policy in general and in particular Swiss sports policy changed fundamentally in the last century and elite sports became politically important. One new concept of BASPO and Swiss Olympic is the instrument of **FTEM** that provides recommendations for assessment criteria in talent selection and focuses not only on current performance, but also on performance development, psyche, resilience, anthropomorphic conditions, the athlete's environment and biography. The development process of a talent is individual, but in reality, the actual **selection process** in associations like Swiss-Ski promotes adaption and conformity and rigid structures are not really overcome. However, once selected into the structures of Swiss-Ski, a young athlete has more opportunities for development.

These 1: The only pursuit of medals entails the risk of exploiting education for sport purposes.

The danger exists. The federation (BASPO) and Swiss Olympic developed concepts to support young athletes in their **dual career**. Swiss-Ski implemented a young talent strategy with symbiosis between professional training opportunities and optimal school conditions. Due to its **structural possibilities**, the private foundation SSGD, one of three suitable Swiss Olympic schools, is in a position to alleviate the double burden of the demands of school and sport. However, the **primacy of top-level sports** applies, and the school has to compromise on the level of education due to its special recruitment regarding school barriers, but nevertheless, it can provide an education that is fair to all students by means of individual support measures, e-learning and school time extension. Finally, very high-performing students are still able to complete a subsequent university degree.

These 2: The double load of education and top-level sports is far more reduced with a structural coupling. These athletes cope far better because of support services in school, understanding teachers and coordination with the squad structures.

This is true. Gymnasium education cannot be done without quality impacts on top-level sports, especially in ski racing because the lack of coordination not only weighs too much on the time related stress but also closes the door for a selection. An NLZ would not take the extra effort to integrate an athlete who cannot keep to their training and race schedules. The promotion of young talents in ski racing only targets athletes who fit into their ideal system between 14 and 18 years. Therefore, to be a candidate for a Swiss-Ski squad **school must be subordinated to top-level sport** at the latest in the last year of matura (U18) which is very unfortunate. Otherwise, the gap between NLZ/Swiss-Ski standard and other elite level ski teams and their different training structures becomes too wide.

In addition to the structural feature of coordination, the nature of **social resources** (parents,⁹⁵ friends, trainers,⁹⁶ but also teachers⁹⁷) is a very important protective factor for shielding negative effects of double burden of school and sports. The **quality of care** is

⁹⁵ Cp. *BASPO*, Leistungssport Schweiz- Momentaufnahme SPLISS-CH 2019, 5. Talentidentifikation und Talentförderung, 28: positive influence: parents: 90%.

⁹⁶ Cp. *BASPO*, Leistungssport Schweiz- Momentaufnahme SPLISS-CH 2019, 5. Talentidentifikation und Talentförderung, 28: positive influence: personal coach: 73%; national squad trainer: 60%; junior coach: 57 %; cp. *Starke*, 2011, 17.

⁹⁷ Cp. *Starke*, 2011, 13.

the key to good performance and the prevention of drop-outs.⁹⁸ Unfortunately, there are coaches and officials who are too busy with representing the reputation of the squad and promoting their own profiling, and make the younger athletes feel like merchandise and seemingly heteronomous. Likewise, the acceptance of the school management and teachers towards competitive elite sport is essential for the athlete's esteem. A junior athlete needs people who not only reveal his or her deficits, but from whom he or she also experiences appreciation and open communication. Last, but not least, **personal resources** are a crucial factor. To handle the double load of a dual career and to meet all expectations increased ability to withstand stress is indispensable.

6.2 Reflection

Despite my immense double load, I have put a lot of effort into the research because the topic accompanies me in life as a young top-level athlete. I never thought that the literature research would be so rich and I have gained many new insights.

I would like to thank especially the following people who contributed to the success of the work: Clemens Caderas (coach) Daniel Yule (Swiss Ski racer), Petra Eberle (Head Coach of NLZ East), Elyssa Kuster (NLZ ski racer) and Sabrina Anderes.



Figure 9: In the ski basement

⁹⁸ Cp. Phase T3: *Swiss Olympic*. FTEM Schweiz, Rahmenkonzept zur Sport- und Athlet*innenentwicklung in der Schweiz, Version 2022, 19.

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Declaration of Originality

„I confirm with my signature that this paper is entirely my own work and that any assistance given by others was restricted to advice and proof-reading. All sources employed in preparation of the paper and all quotations used are clearly cited and due acknowledgment is given for all help provided by others. I am aware of the definition of plagiarism in the Matura paper guidelines and that submission of work which has been plagiarised is a serious breach of the Matura regulations (Art. 1quarter of the Maturitätsprüfungsreglements des Gymnasiums).

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