



**UNIVERSITY OF  
STIRLING**

**Sports Schools: An International  
Review**

**Report to the Scottish Institute of Sport  
Foundation**

Dr Sabine Radtke  
Prof. Fred Coalter

Department of Sports Studies  
University of Stirling  
STIRLING  
FK9 4LA

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# 1 SPORTS SCHOOL: POLICY AND PRACTICE

## 1.1 Introduction

The aim of this project, commissioned by the *Scottish Institute of Sport Foundation*, was to review available evidence on the policies and practices of *sports schools*. By this we mean mostly mainstream secondary schools which have a systematic and flexible approach to assisting young elite athletes to pursue their secondary education, while also training and competing at an elite level. There are three exceptions to this – the private Singapore Sports School (SSS), a Canadian school and Italian ski schools - which are specialised institutions with limited contact with regular schools.

Information was collected on sports schools in the following ten countries:

- Australia
- Belgium
- Canada
- Finland
- France
- Germany
- Italy
- Netherlands
- Singapore
- Sweden

Information was collected via secondary sources (published materials; conference papers; internet) and via telephone interviews with a range of informants (see Appendix A). Although we have tried to obtain as much information as possible, it must be recognised that we have been limited by the approach. We also sought to obtain information about New Zealand and England. However in each case, although there are attempts to accommodate young elite athletes and physical education is often a core subject, the main concern is an educational one, using sport to attempt to raise academic standards. Where there are attempts to support young elite athletes (e.g. the Youth Sport Trust's *Junior Athlete Education*) they tend to be more individualistic than the systemic approaches in our ten case study countries.

The purpose of this section is not to provide detailed descriptions and analyses of each country (detailed outlines are provided in the rest of the sections in the report). Rather, the purpose of this section is generic. It seeks to distil wide-ranging information from a variety of educational systems and types of sports schools into a policy-relevant analysis, by identifying the main features of such schools. However, because of variation even within one educational system, we also have had to use a range of illustrations from each country. For this reason, detailed prescriptive recommendations are not possible. However, we hope that this section illustrates the areas for consideration and possible approaches – as the report illustrates very clearly, the resulting model of sports schools reflects the educational and elite sports system in each country.

Given the wide variations in educational systems and school curricula it is not surprising that there is a substantial variation between (and even within) the countries. In some countries the sports schools are part of a national strategy/system, while others have several specialised schools that are permitted local flexibility to cater for elite athletes, but are not part of a national *system*. However, in all cases the schools cater for substantial numbers of elite sport pupils in systematic ways, rather than providing ad hoc arrangements for a limited number of pupil athletes. Within this variation we can identify a number of key issues

- The need to integrate young athletes within standard secondary schools for their own educational and social benefit.
- The need to include pupils of all abilities and educational levels.
- The need for flexibility of curriculum (achieved in a variety of ways).
- Possibility of permitting pupil athletes to extend the duration of their studies.
- A variety of educational support systems (e.g. pupil partners; summer schools; distance learning).
- The need to provide boarding facilities (especially where expertise is limited or sports require particular facilities).
- Close working relationships with sporting federations (e.g. selection of pupils; provision of elite coaching; assessment of progress).
- Reasonably close proximity to centres of excellence in core sports.

## **1.2 The schools**

We have divided this section into two broad parts. The first deals with educational aspects – how schools are funded, how pupils are selected, the nature of the curriculum and degree of flexibility and some measures of educational success. Although there is a degree of overlap, the second part deals with sporting issues including the mixture of sports, coaching arrangements, and sporting performance.

### **1.2.1 Numbers and Funding**

In most countries sports schools were founded in the early 1990s. In Sweden, where the debate started in the 1960s, sports schools were established in the early 1990s (along with a less systematic approach in Australia). Others are the result of more recent initiatives in Italy (2001) and Singapore (2004).

The number of sports schools in each country varies widely: from one in Canada (which deals with 22 sports) and Singapore (14 sports); ten each in Belgium and Italy (including ski colleges); 22 in Finland; 25 in the Netherlands; 36 in Australia; 38 in Germany and 61 in Sweden. Germany has the highest number of pupil athletes attending sport schools, with more than 11,000.

In certain countries (e.g. Australia) the development of a sports school is largely a matter for individual schools and is often pursued as part of a strategy to create a distinct identity. In others, such as Sweden and Germany, there are clear and formal criteria to be met to achieve the status of a sports school (see chapters 7 and 11). However, all are formally linked with the elite sports system and sports federations.

## ***Funding***

Sports schools tend to be government-funded state schools and, in the main, there are no school fees. The exceptions are the private school in Singapore and in the Netherlands pupils aged 16 and over have to pay annual tuition fees (although parents may apply for remission or exemption on a means-tested basis). However, fees are often charged for boarders, where this is necessary because of the nature of sports (e.g. skiing) or the location of schools; for athletes' extra support (e.g. guidance of a study/sport co-ordinator) and for participating in the sport programme (e.g. the Italian ski colleges, some Swedish sports schools). Some of the schools have private funding for scholarships (e.g. Canada, France, Singapore). There are also examples of private industry supplementing government funding (e.g. Sweden, Singapore and Germany).

In some countries (e.g. Sweden, Finland, Germany) sports schools receive additional government funding and the Belgian sports schools obtain additional funding from some sports federation (e.g. the Royal Belgian Football Association).

### **1.2.2 Degree of integration**

Clearly, as sporting success (and a subsequent professional career in sport) is not guaranteed, such schools must be judged on their ability to provide a good secondary education for the elite pupil athletes. Although there are a variety of small differences between each country, three broad approaches to combining study with training and competition can be identified

#### ***Wholly integrated***

These schools incorporate elite sport pupils into regular classes with other pupils (e.g. Australia, Belgium, Finland, Germany, Netherlands, Sweden). Within this context the elite athletes are provided with high levels of flexibility and support. Many educationalists argue that such integration is essential in terms of the social and emotional development of the young athletes. For example, in Germany and the Netherlands such mixed classes were viewed positively, providing motivation for other pupils and contributing to the school's dynamism (although we must emphasise that this is based on the opinion of respondents committed to this approach).

In mixed classes in Germany and the Netherlands, a pupil athlete can partner/cooperate with a non-athlete pupil, who agrees to keep him/her up-to-date with the content of missed classes. In France, mixed classes are regarded as good practice, integrating pupil athletes within the framework of a regular school as far as possible. However in Belgium, our respondent reported that such mixed classes can lead to resentment among other pupils, who may not accept that pupil athletes need to have such flexibility (e.g. missing classes; rearranging exams). Consequently, one might conclude that the success or otherwise of such an approach is "not proven".

#### ***Partly integrated***

In these schools the sports sections and sports classes are integrated in a regular secondary school, but with certain specialist sports classes for pupil athletes. This approach is adopted in Belgium, France, Germany and the Netherlands – where they have both this approach and the fully integrated one. The choice is usually pragmatic, depending on the decision of the school and the size of the school and the number of pupil athletes (to make such classes viable).

### ***Specialist provision***

These are sports schools which cater exclusively for pupil athletes, without being linked to a regular school. Examples of these are the specialist Italian ski schools (which because of the location of skiing are necessarily boarding schools), the one-off schools in Canada and Singapore and some German schools such as the Berlin/Seelenbinder school. All of these provide a range of core sports.

In each case these are multi-sports schools – the Singapore Sports School has eight core sports; despite a concentration on winter sports the Calgary school also has a range of sports. France illustrates a different model, with the centralised INSEP system (with just under 300 pupil athletes), 22 regional sporting centres and 400 regional training centres to which all pupil athletes are affiliated. The regional training centres provide accommodation and have arrangements with local schools, colleges and higher education institutions. In local secondary schools there are sport sections in which pupil athletes follow a normal, but flexible, timetable, or teachers from the local secondary schools provide on-site teaching at the training centres.

### **1.2.3 Flexible curricula**

In most countries the sports schools are state secondary schools and include pupils of all abilities and educational levels. Normally, pupil athletes must meet the standard academic requirements to achieve the relevant secondary school graduation diploma. However, there are substantial degrees of flexibility to enable the pupil athletes to train and compete in their sport. The time dedicated to training and related activities varies - approximately one third in Sweden; in France there are 24 hours of school lessons and about 20 hours of training per week; in Belgium the weekly 32 hour curriculum has 12 hours of sport. Further, the time dedicated to training varies between different sports. For example, swimming - a particularly time demanding sport – requires 22 hours of training at German sports schools, with 31 hours of school lessons.

Sports training takes place both in the morning and the afternoon, at either the school facilities (e.g. Singapore, France, Germany, Sweden, Australia, Belgium) and/or at local centres of excellence (e.g. Canada, Germany, Sweden, Netherlands, Belgium).

To compensate for this reduced classroom time, a number of approaches are adopted. In all schools extra tutorials are provided and in several countries (e.g. Canada, France, Germany, Italy and Singapore) distance learning materials, lap-tops and internet support are provided to enable schoolwork to continue during long absences for training or competition. The Canadian National Sport School offers year-round schooling provided by teachers on a separate summer contract.

Others adopt more structured solutions, which tend to reflect a broader flexibility within the education system. For example, in the Netherlands pupil athletes are allowed to focus on fewer subjects, reducing the required curriculum time. In Belgium, pupil athletes can extend their study by one year. In several countries (Australia, Belgium, Germany, Finland, Netherlands, Singapore, Sweden) pupil athletes are allowed to extend the duration of their studies by one year. Finland seems to have the most adaptable curriculum, largely because the national curriculum is decentralised and highly flexible. Within national guidelines, schools can draw up their own curriculum in which special emphasis may be given to certain subject areas. In this system pupils have responsibility for learning and decision-making, developing at their own pace, rather than within a year group. The school year is divided into five

seven week terms. Pupils construct their own timetables by selecting at least 40 per cent of their study programme, under guidance and fulfilling certain compulsory obligations. Further, although pupils usually spend three years in upper secondary school before taking the matriculation, this can be extended to four years. In Australia, pupils at the Canberra school associated with the Australian Institute of Sport have personally negotiated study programmes and study packages.

Another approach is to provide a modified school curriculum which contains additional sports-related subjects (Australia, Canada, Finland, Italy, Sweden and Singapore), or less frequently, include *sports training* as a school subject, with relevant credits (Sweden and Finland).

An additional approach is to have specialist teachers with experience of and commitment to the education of elite pupil athletes. In France, at INSEP, all teachers from local schools are selected on the recommendation of the schools' principals and on the basis of their experience and interest in working with elite athletes. In Singapore, teachers working at the SSS usually have a background in sports, or experience in teaching sportspeople. The view is that this enables them to be able to combine educational needs (strong in Singapore) with the unique needs of pupil athletes.

#### **1.2.4 Academic records**

Although it has been difficult to obtain accurate data about all schools, as one would expect results are mixed. Some respondents suggest that in some cases pupil athletes' completion rates and academic achievements are often above the national average (e.g. Australia, Canada, the Netherlands, Sweden). Despite the disrupted nature of their schooling, this may reflect the special attention that they receive (it could also reflect social class factors, about which we have no information). Others suggest that there is no difference between pupil athletes and non-athletes (e.g. Finland – probably the most egalitarian and flexible system). Only a French respondent stated that the pupil athletes' academic results are often below the national average.

#### **1.2.5 Drop-out rates**

In terms of drop-out (which usually means that the pupils go to a non-sports school), there are wide variations. For example, Germany, with over 11,000 pupil athletes has the highest drop-out rate of just over 40 per cent (this is a matter of public debate); Belgium's rate varies between nine and 23 per cent; Sweden ranges between five and 10 per cent; Finland, with the most flexible educational system, has about a three per cent drop-out; drop out seems to be negligible in Australia, France, Netherlands and Canada.

Swedish research on sports schools provides an interesting interpretation of "success". The research found that only about 30 per cent of the pupil population continue a sporting career after leaving secondary school, with only five per cent achieving a position in the world top 10. Despite this, the researchers suggest that attending a sports school is valuable because it assists pupils to learn to set goals and to develop achievement orientation.

## **1.3 Sporting issues**

### **1.3.1 Selection process**

In all countries, sports federations are centrally involved in the process of selection, with young people needing to achieve some form of *sporting excellence status* from their relevant sports federation to be considered for admission as a pupil athlete. In addition to this, the pupil's academic merit is also taken into account. The exception to this is in Singapore (the only private sports school), where the sports school organises annual selection trials and tests to assess the technical skills, fitness and potential for further development. In addition, written psychological tests are conducted to assess their mental strength and aptitude.

In Belgium, pupils undergo a *sports performance re-assessment* each year and if they fail they must leave the sports schools. By contrast, in Sweden, there is no yearly sports performance assessment by the school, club or sports federation, so that pupil athletes are rarely required to quit the school.

### **1.3.2 Number of sports**

There are substantial variations in the number of sports offered at sports schools, even within the same country. For example:

- One sport linked to a specific school (e.g. volleyball in Sweden).
- One sport linked to several schools (e.g. Finland, Sweden, Germany, Belgium, Italy).
- Sports schools covering only one sport (e.g. in Germany: the Freiburg sports school covers cross-country skiing; the Tauberbischofsheim, Bonn and Koblenz sports schools deal with fencing; the Italian ski schools).
- Sports schools covering a variety of (core) sports. This is the most widespread model (e.g. Australia, Singapore, Canada, Germany, Netherlands, Belgium, France, Italy).

### **1.3.3 Partnerships**

In addition to the flexibility of the curriculum (and associated support mechanisms), the other key element of sports schools is the widespread partnerships with sports federations. The federations are involved in the selection of pupil athletes (via the assignment of elite status) and are normally responsible for the selection (and employment) of the coaches (e.g. Belgium, Canada, Finland, France, Singapore).

Further, in several countries the sports schools, the coaches and the federations attach great importance to cooperation and communication with the pupils' home sports clubs (e.g. Belgium, Finland, Germany, Netherlands). In some countries, sports schools must be linked to the local Olympic Support Centre (Germany) or training centres (Netherlands) and focus on the same core sports as their local centres.

### **1.3.4 Coaching**

There are a variety of approaches, but the key is that most of the coaches are high quality and sports federation approved (or employed). In Belgium and Germany coaches working with pupil athletes must hold the highest coaching qualification. Also in many cases there is a high level of cooperation between the elite and club coaches. A few examples will illustrate the issues:

- *Germany*: The local Olympic Support Centre provides training via one of the regional elite coaches. It should be noted that the coach develops athletes' individual training programme *in cooperation with the club trainer*. Training sessions take place either at the school, at the clubs or at the Olympic Support Centre. Athletes train at least twice a day, three times per week (morning and afternoon).
- *Belgium*: The sports schools emphasise the importance of cooperation and communication with the pupils' home sports clubs. During the school week, the pupil athletes are coached by coaches employed by the sports federation, at the weekend they go home and attend club training and games. The home club coach and the federation's school coach meet regularly to discuss progress and adjust the training programme. The 12 hours per week sports training includes 10 hours in the pupils' respective sport and two hours of general PE (in morning and afternoon).
- *Singapore*: In this single, specialist, private school training programmes are run by the federations and coached by federation coaches. Training takes place at sports facilities, starting at 6 am, with an afternoon training session. Each year the SSS pupils go on several overseas trips for competitions and training camps.
- *Sweden*: Pupil athletes follow several training sessions per week provided by club coaches employed by the school and funded by the municipality. Local community and club facilities are frequently used, although the number of training sessions varies between schools. For example, *some* pupil athletes attend eight training sessions per week, on four days per week, training in the morning in school (8am to 9:30am) and in the afternoon at the clubs (after 4pm).
- *The Netherlands*: National sports federations and local clubs organise the training and choose the coaches, who are employed by the federations. Depending on the sport, the training takes place in the local clubs or at the province's Olympic training centre (including all the service delivery departments). The schools rarely provide appropriate training facilities.
- *Canada*: Coaching staff are approved by national or provincial sport organisations. No sport training is done at the school, with pupil-athletes working with elite level coaches elsewhere.
- *Finland*: Sports training is accepted as a school subject, taking place within school hours, with coaches allocating marks for training units on the same basis as other curriculum units. The training is provided by the school in cooperation with sports federations and local sports clubs, with the federations choosing the coaches. It occurs three to four times per week, usually in the morning from 8am to 10am.

In the case of the two highly centralised approaches - INSEP (France) and the Lake Ginninderra College linked to the AIS (Australia), training is provided by the institutes' elite coaches.

### **1.3.5 Assessment of sporting performance**

We could find little information about how the schools' sporting performance is assessed. However, in Germany schools are awarded elite sport school status on the basis of agreed criteria (e.g. number of elite athletes; academic and sporting achievements) for one Olympic cycle. After four years, they have to undergo an evaluation by the German Olympic Sports Federation in order to keep their elite status.

One presumes that the schools' record of sporting achievements will be a major element and it is clear that they have substantial records of achievement. Perhaps the German case is the most impressive, although given its scale (11,000 pupil athletes) this is not surprising. Between 2001 and 2004, current and former pupil athletes won a total of 683 medals at junior world and European championships, plus 327 medals at Olympic Games, world and European championships. Data indicate that in the games at Torino, Athens and Salt Lake City, 82 per cent of German medals were won by current or former pupil athletes. However, given the scale of the German system, it is perhaps better to assess the success of sports schools via illustrations from less comprehensive systems (see the data in the various country reports).

In the Netherlands, six current and former LOOT schools' pupils participated in the Olympic Games 2004, with three winning medals. In Finland, pupils or ex-pupils from Finland's largest sports school (Mäkelänrinne) have won 21 Olympic and world championship medals in eight years. In Canada one in six of the NSS pupils has represented Canada at a world level. In 2006, the school had over 20 current and former pupil athletes competing in the 2006 Winter Olympic Games in Torino. This represented over 10 per cent of the Canadian Team.

## **1.4 Conclusions**

### *Cautionary note*

It is best to start the conclusions with a cautionary note. Although the broad concept of sports schools has been embraced by a variety of countries, it is very difficult to assess the extent to which their sporting successes would have been achieved anyway – we have no way of assessing the *difference* made by sports schools, compared to another approaches. Nevertheless, it is clear that the various approaches to sports schools provide a reasonably successful solution to the problems of combining an acceptable degree of academic success; relatively low drop-out rates (an important indicator of success) and a degree of sporting success. Another success, emphasised by many of our respondents, was that in most cases the schools enable a degree of integration and interaction between elite athletes and other pupils, and this is regarded as necessary for the emotional and social development of young athletes (who might not achieve a career in sport). Perhaps a true test would be the opinions and experiences of the young athletes and we have no information about these.

### *The generic components*

There is a substantial variation between (and even within) the case study countries, reflecting their own histories, educational systems and approaches to the development of elite sport. This is reflected especially in two key aspects – the nature and degree of the flexibility available within the school curriculum and the close relationships

between sports schools and sporting federations. Of course, it is possible that the approach that we had to adopt for data collection might not have succeeded in exploring possible tensions in these relationships.

Also there is a wide variation in the extent to which such schools are part of a *system*, varying between the German approach and the relatively less systemic Australian and Canadian approaches. Also, there are substantial differences in the financial resources available to sports schools; the number of available scholarships; the level and quality of sports facilities provided by the schools (most used local elite centres regularly).

However, one conclusion might be that, even in the absence of a system, it is possible to establish relatively successful sports schools, provided that one can achieve the cooperation of the education authorities (probably the most difficult issue), teachers and sports federations. Another factor which needs to be considered is that sports schools clearly have a distinct culture, for both elite athletes and ordinary pupils (whose acceptance of the relatively privileged position of the elite athletes seems to be an important factor) and that this needs careful management.

Within this variation we can identify a number of key issues

- The need to cooperate with sports federations to decide on the relevant components of elite pupil status.
- The need to integrate young athletes within standard secondary schools for their own educational and social benefit (although this might not always be possible for sports with specific locational requirements, e.g. skiing)
- The need to include pupils of all abilities and educational levels.
- The need for flexibility of curriculum (achieved in a variety of ways).
- Possibility of permitting pupil athletes to extend the duration of their studies.
- A variety of flexible educational support systems (e.g. pupil partners; summer schools; distance learning).
- The need to provide boarding facilities. This is especially so where expertise is limited, sports require particular facilities, or to achieve some degree of critical mass in certain sports.
- Close working relationships with sporting federations (e.g. selection of pupils; provision of elite coaching; assessment of progress). It is worth noting that Belgian research indicates that initiatives to combine education and sports careers were generally developed by academic institutions, rather than by sports federations.
- Close liaison with the elite pupils' local team/sports club and coaches.
- Reasonably close proximity to centres of excellence in core sports. This enables access to quality facilities, coaches and services.

A final comment is that, despite the commitment to sports schools in many countries, the post-secondary school arrangements for combining sport with academic studies is more limited and this at a time when many of these athletes are beginning to mature.

## **2 AUSTRALIA**

### **2.1 Brief history**

In Australia, the educational system contributes to elite sport in terms of talent development within sports schools. In the early 1990s, 24 sports high schools were founded, although there is no strategy for these schools. Westfields High School (Fairfield West, Sydney) was designated as Australia's first sports high school in 1991. Westfields is a mixed school with pupil athletes and non-athlete pupils. The sports school was developed because of the high drop out rate from sport of both boys and girls by the age of 14.

Since its establishment, the Westfields model has been adopted in all Australian states and recognised by the Australian Government as a Project of National Significance. It has influenced similar provision in Malaysia and Singapore and a similar model has been established in Copenhagen.

Further, the Australian Athlete Career and Education (ACE) programme provides specific assistance to elite athletes in education, vocation and personal development.

### **2.2 Education system in Australia**

Education in Australia is regulated by the individual state governments. Pupils go to secondary school at age 12/13 (year 8), and are required to stay to year 10, receiving a junior high school certificate. Year 11 and 12 are optional but are required to be successfully completed to attain a high school diploma. The results of the last two years of high school are evaluated for entry to universities.

Lessons are held Monday to Friday, 8:45 am to 3 pm, with breaks for lunch and snacks. Extra Curricular activities such as soccer practice and dance classes are held after school hours, or Saturday mornings.

### **2.3 Sports schools**

There is no state or national structure or strategy for sports schools (although they have to deliver a core curriculum). In the school year 2006/2007, there were 36 sports schools and colleges in Australia. All sports schools (both government and private) have 'school based management' which allows them to operate autonomously in terms of the content of the curriculum. Such schools then use sport (or arts) to promote themselves.

#### ***Westfields Sports High School***

The Westfields Sports High School is situated on seven hectares and provides the following special facilities:

- Computer rooms
- Specialist subject rooms
- Library
- Ovals
- Throw cage
- Synthetic athletics track
- Strength and conditioning room

- Indoor sports stadium
- Sports medicine and physiotherapy centre
- Cricket nets
- Dance studio
- Purpose built gymnastics facility
- Tennis courts
- Off site softball/baseball diamond
- Rowing facilities at Chipping Norton Lakes / Sydney International Regatta Centre
- Three school buses

## **2.4 Pupil population and core sports**

### ***Westfields Sports High School***

The co-educational High School has 1,660 pupils, from years 7 to 12 and Westfields Sports is the largest school in the South Western Sydney School Region. The Westfields' sports are: athletics, baseball, basketball, cricket, dance, gymnastics, hockey, netball, rowing, rugby league, rugby, football, softball, swimming, tennis, touch football, volleyball, water polo.

### ***Lake Ginninderra College***

In 2005, the Lake Ginninderra College had about 40 Australian Institute of Sport (AIS) scholarship athletes enrolled. The sports in which they specialised included archery, water polo, basketball, gymnastics, football, rowing and volleyball. The College is linked closely to the Australian Institute of Sport.

### ***The Australian Institute of Sport (AIS)***

Pupil athletes who are AIS scholarship holders and come from outside Canberra live in the AIS Residence. School-age athletes are enrolled in local schools where AIS and school staff monitor and report on their academic progress. Athletes attend a Canberra High School for years 7-10 and Lake Ginninderra College for Years 11 and 12. Both schools are located close to AIS and a bus service is provided to and from each school to fit in with athlete requirements. At the AIS, a study hall programme runs from Monday to Thursday evenings during school terms. Specialist tutors provide tutoring in all curriculum areas and assistance with time-management and study skills. Attendance is compulsory for all school-aged athletes.

## **2.5 Funding**

Both Westfields and Lake Ginninderra College are government funded (no tuition fees).

## **2.6 Academic and sporting curricula**

### ***Canberra High School and Lake Ginninderra College***

Sports training is organised by the AIS at AIS facilities. Canberra's residential programme consists of archery, artistic gymnastics, basketball, boxing, netball, rowing, men's football, swimming, athletics (including athletes with disabilities), water polo and men's volleyball.

An alternative study programme to fit in with training and competition requirements is available at both Canberra High School and Lake Ginninderra College, assisting each athlete to fulfil the requirements of Year 10 and 12 Certificates.

Some general points about Lake Ginninderra College include:

- Each pupil's programme is personally managed; sporting demand is taken into account and curriculum and assessment are negotiated.
- Unit assessment plans and course outlines are given to each pupil athlete at the start of each unit.
- An AIS Liaison officer assists pupil athletes to develop their own study packages to ensure athletes meet ACT requirements.
- Pupil athletes who enrol in a unit enter a contract to attend all lessons and meet all assessment requirements.
- Failure to meet the assessment requirements will result in individual counselling. Where requirements are not met, teachers may not give an assessment in that unit and the student will risk failing.
- AIS athletes are encouraged to stay at school during non-timetabled lessons. As well as attending all scheduled classes, pupil athletes are expected to attend all support group sessions and college meetings. Support groups provide valuable information on such things as college happenings, careers events and applications to tertiary institutions.
- When a pupil will be absent from a class or school they are responsible for obtaining any work that they will miss.
- For residential athletes, ACE advisers inform the school of absences based on advice received from the Houseparent or Coach. ACE advisers monitor academic progress, receive parent-teacher reports and liaise regularly with teachers at the school.
- Parents of non-residential athletes are responsible for liaising with the school on the educational progress of their child, and also for advising the school of all absences that are not related to sporting commitments.
- A semester report is issued for each unit completed. A progress report may be requested at any time.

Most of the AIS pupil athletes complete their Years 11 and 12 in the normal two year period, but a number of them work to a three-year programme arranged to accommodate their training schedules and their travel to competitions outside the ACT.

### ***Westfields Sports High School***

Westfields offers a variety of courses for each of the pupil athletes and also the local pupils. The comprehensive lists include over 100 different courses with 10 advanced classes. The school's curriculum has been recognised with the Director General's Award for Outstanding Teaching and Learning Programmes (see Appendix 2A).

There are 105 teachers including a, Director of Sport. In addition, the school has 36 professional coaches, a doctor and two physiotherapists.

Recently, seven staff members were selected for national and state coaching positions. Five staff members have been awarded Australian Institute of Sport scholarships. Visiting overseas staff from Japan, Sweden, UK and USA have enhanced languages, visual arts, basketball, football and athletics programmes.

Westfields offer sport-specific training and competition programmes see (Appendix 2B).

## **2.7 Relationships with governmental and sporting organisations**

Lake Ginninderra College is linked with the AIS, the University of Canberra and the Canberra Institute of Technology.

### ***Westfields Sports High School***

Westfields has established links with the Australian Institute of Sport (AIS), with universities and major sporting associations giving pupil athletes access to skilled staff and excellent sporting facilities.

The relationship with the AIS is mutually beneficial, with Westfields teachers having the opportunity to work at the AIS as scholarship coaches and either return to the school with enhanced skills or continue working with the AIS.

## **2.8 Academic records**

There is no comparative national scale for all pupils. Only those wishing to go to university receive a nationally recognised ranking that permits university entrance.

### ***Westfields Sports High School***

Pupils at Westfields achieve the highest scores in the Higher School Certificate (HSC) with 150 pupils, in 2005, achieving scores of 70 and above. One hundred of those pupil athletes went further on to Tertiary Education (University). Ten pupils received distinguished achievers.

HSC results in 2006 were regarded as outstanding. There were 39 Band 6 results (top 10% in the state) and a top UAI (Universities Admission Index) of 97.85. In addition, 93 pupils were offered university places in 2007. Thirty-seven pupils received distinguished achievers awards. In terms of adding value to pupils' results from the School Certificate to the Higher School Certificate, Westfields is in the top 20 percent of all schools in the state. Approximately 30 to 40 per cent of Westfields Sports pupils go directly to university, while a very high number enrol in TAFE (technical and further education).

According to the Lake Ginninderra College principal, the college programme is very successful in terms of completion rates and achieving academic potential – pupil athletes and parents are satisfied with the education offered in this Year 11/12 only college.

### ***Lake Ginninderra College***

Lake Ginninderra College pupils regularly receive AIS Education Achievement Awards, for example:

- Ben Ient, Men's Water Polo, graduated from Lake Ginninderra College in 2004 with the highest University Admissions Index score by an AIS scholarship

holder. He received an academic excellence award in information technology systems. During his final year at school, he participated in the ACT Robocup Junior Competition and the University of NSW High Schools Programming Competition, in which he achieved a credit. Throughout his two years at the AIS, Ben has been working on developing his own web-design company.

- Matthew Engele (Soccer) completed his Year 12 at Lake Ginninderra College in 2001 with an excellent University Admissions Index across four subjects, gaining entry to Commerce at Macquarie University. This result was achieved despite significant absences from school while on Australian Under 17 national team duties, including Junior World Cup.

## **2.9 Sporting records**

Many former and current Lake Ginninderra College pupils represented Australia at the Athens Olympics.

### ***Westfields Sports High School***

Ten per cent of Westfields' school population has the opportunity to participate in sporting competitions overseas. Westfields has sent gymnasts to China, cricketers to Europe and girl soccer players to the USA. Currently, eight per cent of Australian professional soccer players in Europe come from Westfields. For example, recent sports achievements in athletics are as follows:

- National All Schools Knockout Champions - Senior Boys 2001, 2006
- National All Schools Knockout Champions - Junior Boys 2002, 2004
- National Schools Championships, 2006 - 16 medals
- National Championships, 2006 - 28 medals
- State Boys Champions - 1993 - 2006
- State Girls Champions – 1993 - 2001, 2003 - 06
- State Schools Champions - 1993 – 2004
- Six World Junior Representatives
- Four World Youth Representative
- Ten World School Games Representatives
- One 2000 Olympian
- Four 2006 Commonwealth Games participants – two bronze medals

## **2.10 Drop-out rates**

In the most recent years, the principal of Lake Ginninderra College is aware of about one student per AIS cohort that may not have obtained a year 12 certificate.

## **2.11 Post-Secondary Education**

The Elite Athlete Friendly University network (EAFU) has been established to identify and promote universities who have responded to the specific needs of elite student athletes by developing new, or promoting existing policies, and practices which assist elite student athletes to participate while pursuing and achieving academic courses.

AIS athletes studying at tertiary level can attend one of the following institutions: Australian National University, University of Canberra, Australian Catholic

University and Canberra Institute of Technology. Tertiary study may also be undertaken through a variety of distance education courses throughout Australia. The Elite Athlete Friendly University network and ACE assist elite athletes to arrange flexible study options in order to achieve their education aspirations, without jeopardising their sporting goals.

## **Appendix 2A: Westfields High Sports School Courses**

*Courses in year 7 to 10:* In addition to English, mathematics, science, geography and history, the school offers courses in accelerated maths, applied sport, commerce, computer studies, dance, design & technology, drama, food technology, Italian, Japanese, music, PDHPE (personal development, health and physical education), Spanish, sports science, technical drawing, textiles, and visual arts.

*Courses in year 11 to 12:* Westfields Sports offers courses in ancient and modern history, biology, business studies, chemistry, community & family studies, dance, design & technology, drama, economics, engineering science, English (standard, advanced, extension I & II), food technology, geography, general science, hospitality, information processes & technology, industrial technology (furniture & multi media), Italian, Japanese, legal studies, mathematics (standard, advanced, extension I & II), music, PDHPE, physics, photography, retain studies, Spanish, textiles & design, visual arts and an extensive range of vocational courses.

## Appendix 2B: Westfields training and competition programmes for athletics, swimming and rugby union/league

Sport (+ aim of the programme)	Courses offered	Course structure	Competition schedule
<p><b>Athletics</b></p> <p><i>Aim</i> The Westfields Sports athletics programme strives to provide a safe and healthy environment, the best available training facilities, coaching and support staff.</p>	<p><i>Year 7/8 Sport Enrichment</i> is an introduction to the programme.</p> <p><i>Year 9/10 Applied Sport Studies</i> is an elective subject chosen for study over two years as a component for the School Certificate.</p> <p><i>Year 11/12 Applied Sport Studies</i> is a continuation of the 9/10 programme.</p>	<p>Pupils in years 7/8 are given formal coaching for two periods a week and a strength and conditioning sessions for two periods per week as part of the school timetable. Pupils in 9/10 applied sports receive formal training for two periods per week two periods of theory including instruction in rules, training and coaching. Pupils in years 11/12 have one compulsory training session per week.</p>	<ul style="list-style-type: none"> <li>▪ Westfields Sports Carnival</li> <li>▪ Westfields Sports Cross Country</li> <li>▪ Sydney South West Carnival</li> <li>▪ Sydney South West Cross Country</li> <li>▪ NSW Schools Knockout</li> <li>▪ NSWCHSSA State Cross Country</li> <li>▪ NSWCHSSA State Carnival</li> <li>▪ NSW All Schools Carnival</li> <li>▪ Australian All Schools Carnival</li> <li>▪ Australian Schools Knockout</li> </ul>
<p><b>Swimming</b></p> <p><i>Aim</i> Westfields Sports provides a supportive environment for swimmers to combine their training commitments and competition schedules in partnership with their educational pursuits through its flexible timetable.</p>	<p>Westfields does not conduct a specific swimming programme for its swimmers. Swimmers are usually coached by a professional who prefer to be the sole coach. The School is able to give swimmers support by providing strength and conditioning training as well as the use of sport science facilities. In Year 9/10 Applied Sport swimmers are given the opportunity to have swimming as one of their electives for the School Certificate.</p>	<p>Pupils in year 7 have all mornings except Wednesday available for training purposes until 9.25 am. Year 8 pupils can utilise all mornings for training until 9.25 am. Year 9 applied sport pupils have Monday and Thursday afternoons time tabled, so may go home at 1.15 pm on these days. Year 10 applied sports pupils have Tuesday and Wednesday afternoons and Friday mornings timetabled for swimming, so may go home at 1.15 pm on these afternoons and may arrive at 9.26am on Fridays. Swimmers in years 11/12 finish school at 1.15 pm on all afternoons except Tuesday.</p>	<ul style="list-style-type: none"> <li>▪ Westfields Sports Carnival</li> <li>▪ Sydney South West Carnival</li> <li>▪ NSWCHSSA State Carnival</li> <li>▪ NSW All Schools Carnival</li> <li>▪ Australian All Schools Carnival</li> </ul>

<p><b>Rugby Union</b></p> <p><i>Aim</i> The aim of the course is to bring together talented pupil athletes in an environment which will promote the development of these pupil athletes in rugby union. It allows the boys to enhance their own performance and gives them an understanding of the laws, tactics and physical requirements within the game.</p>	<p><i>Year 7/8 Sport Enrichment</i> is an introduction to the programme.</p> <p><i>Year 9/10 Applied Sport Studies</i> is an elective subject chosen for study over two years as a component for the School Certificate.</p> <p><i>Year 11/12 Applied Sport Studies</i> is a continuation of the 9/10 programme</p>	<p>Pupils in year 7/8 train up to two sessions per week in the mornings.</p> <p>The year 9/10 programme and year 11/12 have two sessions per week and strength and conditioning is available at the coach's discretion. The courses contains the following modules:</p> <ul style="list-style-type: none"> <li>▪ Players and their role within the game, including positional skills and physical requirements</li> <li>▪ Coaching, including skill development, team strategies and tactics</li> <li>▪ Officiating – laws of the game and refereeing</li> <li>▪ Safety and basic first aid</li> </ul>	<ul style="list-style-type: none"> <li>▪ Waratah Shield – Open NSWCHSSA Knockout</li> <li>▪ Buchan Shield – U15 NSWCHSSA Knockout</li> <li>▪ Schoolboy 10's Championships – Open Division</li> <li>▪ The Kings School Invitational 10's Tournament</li> <li>▪ NSW Rugby Sports High Competition U13 / U14</li> <li>▪ West Sydney Regional Tournaments – All Ages</li> <li>▪ Sydney South West Area Carnival – Opens</li> </ul>
<p><b>Rugby League</b></p> <p><i>Aim</i> The aim of the talented rugby league programme at Westfields Sports is to provide a positive and enjoyable environment in which all participants are given the opportunity to advance their skill levels and consequent playing ability.</p>	<p><b>Year 7/8 Sport Enrichment</b> is an introduction to the program. Identification of strengths and weaknesses takes place so that basic skills and physical development can be targeted at the individual and the group. <b>Year 9/10 Applied Sport</b> is an elective subject accredited for the School Certificate. <b>Year 11/12 Applied Sport</b> is an extension of the 9/10 programme</p> <p>The Westfields Sports Rugby League programme offered the opportunity for two pupil athletes and one staff member to travel to France in 2003.</p> <p>The rugby league programme travelled to New Zealand in 2006.</p>	<p>All pupils will be offered at least two double period sessions per week. Pupils selected in the Open Squad will train on one extra afternoon per week. The timetable has been structured to allow years 9, 10, 11 and 12 rugby league pupils to work together as a combined group if necessary.</p>	<ul style="list-style-type: none"> <li>▪ Arrive Alive Cup - All Schools Open Knockout</li> <li>▪ Buckley Shield - NSWCHSSA U/14 Knockout</li> <li>▪ University Shield - NSWCHSSA Opens Knockout</li> <li>▪ Parramatta Knockout - U13, U14, U15, U16 and Open.</li> <li>▪ NSW All Schools Knockout</li> <li>▪ SSW U/15 Rugby League Championships</li> <li>▪ SSW Open Rugby League Championships</li> </ul>

## 3 BELGIUM

### 3.1 Brief history

Belgium is divided into three language communities (Flemish, French and German) and three regions (Flemish, Walloon and the region of Brussels). The introduction of cultural autonomy to the Flemish and Francophone communities brought an end to the National Institute for Physical Education and Sport (NILOS / INEPS) in 1969. Two autonomous institutions were established: the Flemish BLOSO (Administration for Sport and Outdoor Recreation) and the Francophone ADEPS (Administration of Physical Education and Sports). Consequently, the national coordination of sports policy has become more complex. Although a national umbrella organisation exists, the so-called ABCD (including ADEPS, Bloso, the Belgian Olympic and Interfederal Committee (BOIC) and the German speaking community), each community has its own education and sports policy.

In 1998 a law protecting athletes' rights, the *Topsportconvenant*, was initiated by the Ministry of Sport of the Flemish Community, in cooperation with the Ministry of Education, the three Belgian independent educational networks, the Belgian Olympic and Interfederal Committee (BOIC) and the sports administration body (Bloso) of the Flemish community. The *Topsportconvenant* offers pupils the possibility to combine their secondary education with elite level training within sports schools (in Flemish: *topsportscholen*). In the Flemish Community, there are eight secondary sports schools. Within the French-speaking community, a similar, but less elaborate initiative was developed which resulted in two sports schools (tennis and basketball).

### 3.2 Education in Belgium

Schooling is compulsory until the age of 18. Pupils complete primary school at the age of 12 and enter secondary education. Secondary education in Belgium consists of three cycles: first cycle (grade/year 1 and 2), second cycle (grade/year 3 and 4) and third cycle (grade/year 5 and 6). Whereas the first cycle provides a broad general academic programme with only a few options (e.g. Latin, additional mathematics, technology), different directions can be followed in the second and third cycle depending on pupils' skill level and interests.

The Belgian secondary school is divided into four general types:

- a) *General Secondary Education*, ASO level (*Algemeen Secundair Onderwijs*): It is a broad, general education, preparing for higher education. Pupils completing the ASO level are supposed to continue studying at university level.
- b) *Technical Secondary Education*, TSO level (*Technisch Secundair Onderwijs*): The TSO level is divided into two sub-levels: TTK and STK. Whereas the TTK courses focus more on technical aspects, the STK courses concentrate more on practical matters. Both include a general education into maths, languages, history, sciences and geography, but not to the extent of the ASO courses. Once pupils have completed the six-year secondary school, they either begin to work (mostly STK pupils) or continue to study at university level (mostly TTK pupils).

- c) *Vocational Secondary Education*, BSO level (*Beroepssecundair Onderwijs*): The BSO level is a practical and job-specific education including e.g. carpentry, car mechanics, jewelry. The BSO level is the only type of secondary education that does not qualify pupils to pursue higher education.
- d) *Art Secondary Education*, KSO level (*Kunstsecundair onderwijs*): These schools link general and broad secondary education development with active art practice, ranging from performance arts to display arts. Depending on the direction, several subjects might be purely theoretical allowing for higher education. Directions include dancing (ballet school), acting and several graphical and musical arts.

### **3.3 Sports Schools**

The eight secondary sports schools – all designed as boarding schools - in Flanders operate on the ASO (general) and TSO (technical) level. On the ASO level, pupils can choose between different branches such as sciences, modern languages, and mathematics. On the TSO level, pupils get the opportunity to specialise (e.g. commerce and accounting). The sports schools' curriculum is based on the national curriculum. Pupil athletes must meet the same academic requirements in order to achieve the secondary school graduation diploma as other pupils.

With one exception (Antwerpen), all sports schools are integrated in regular secondary schools, i.e. on the ASO level, pupil athletes attend separate sports classes within the school. However on the TSO level, classes are mixed, with pupil athletes and non-athlete pupils. The coordinator of the Belgian elite sports schools at Bloso views the mixture of athletes and non-athletes as problematic because non-athlete pupils often do not understand (and do not agree) that pupil athletes have an exceptional position within the class (e.g. pupil athletes follow a reduced number of academic lessons and are allowed to be absent from school – see below).

### **3.4 Pupil population and core sports**

The pupil population of Belgian sports schools has almost tripled between 1998/99 (n: 201) and 2006/07 n: 590).

Initially, pupils entered sports schools at the age of 14/15 (in the third year of their secondary school education). Now the programme is open for second year pupils (aged 13). Younger (primary school) pupils who do gymnastics, tennis or swimming and achieved the status of 'promising athlete' with their sports federation also benefit from the system.

In the 2006/07 school year, 16 sports federations (athletics, badminton, basketball, cycling, football, golf, gymnastics, judo, handball, ski and snowboard, swimming, table tennis, taekwondo, tennis, triathlon, and volleyball) were involved in the sports schools programme. The largest pupil group are the football players with 159 (in 2006).

**Table 3.1: Sports schools in Flanders (2006/2007 school year)**

Name of the sports school	Sports
Leonardo Lyceum Topsport Wilrijk/Antwerpen	Badminton Basketball Judo Ski & Snowboard Tennis Football Swimming
Leonardo Lyceum Topsport Mortsel (near Antwerpen)	Badminton Basketball Judo Tennis Swimming
Koninklijk Atheneum Leuven	Table tennis Basketball Triathlon Football Volleyball
Koninklijk Atheneum Hasselt	Athletics Handball Golf Taekwondo
Koninklijk Atheneum Gent	Athletics Gymnastics Football Cycling
Koninklijk Technisch Atheneum Brugge	Football Swimming
Onze-Lieve-Vrouwecollege Vilvoorde	Volleyball
Sint-Jan Berchmanscollege Genk	Football

### 3.5 Selection process

To be eligible for admission to a sports school, pupil athletes must be awarded sporting excellence status by an independent selection board consisting of representatives of the respective sports federation, BOIC and Bloso (pupils must be nominated by their own sports federations). Admission requirements are different for each sporting discipline. Selection is based on objective criteria and expert technical and medical assessment. Since 1998, the selection criteria have become increasingly stricter.

There are three different stages of achieving the official status of an elite athlete (in Flemish: *topsportstatuut*) which is valid for one school year. Squad members are selected based on age, time standards, performances at national qualifying event and potential for future success:

- *Topsportstatuut A* / A-squad
- *Topsportstatuut B* / B-squad

- *Topsportbelofte* / “promising athlete” squad

For the school year 2006/2007, 645 pupils were acknowledged as elite athletes (in 1998/1999: 399). Ninety-one per cent of those athletes, who achieved the status of an elite athlete, attend a sports school.

Pupils must undergo a sports performance re-assessment every year. If they fail they have to leave the sports schools. However, the federations normally allow those pupils to finish their two year study cycle.

### 3.6 Funding

As an example, the costs for attending a sports school’s football section are as follows:

- *School fees*: There are no school fees in Flanders. Pupils’ parents pay the costs for the boarding school, books, extra tuition and transport.
- *Fees for football training*: The Royal Belgian Football Association (KBVB) provides coaches, sports infrastructure and medical/physiotherapeutic services and pays for every pupil athlete about € 1250 per school year. The pupil athlete does not pay fees for the football training.
- *Costs for sports clothes/equipment*: Once per year, pupil athletes get a Nike equipment package at 50 per cent of the shop price. Field players pay about € 210; goalkeepers pay about € 260.
- *Costs for training camps*: There are two training camps per school year (from Monday morning to Wednesday afternoon). Pupils are charged about € 110 per training camp.

### 3.7 Relationship between academic and sports curricula

Nearly half (49.7%) of pupil athletes live in the boarding school. The schools offer small class sizes, condensed study packages and extra tuitions/private lessons for pupils (due to the reduced number of academic lessons for pupil athletes and their frequent absence from school). In addition, pupil athletes are allowed to lengthen the duration of one study cycle from two to three years.

Pupils follow a 32-hour weekly curriculum, with 20 hours for academic lessons and 12 hours for sports training. Compared to the non-athlete pupils, who follow a 32-hour weekly academic curriculum (including PE), pupil athletes have reduced academic time to obtain the secondary school graduation diploma. For the pupil athletes’ parents, it is of great importance that their children get the opportunity to get the diploma to follow higher education despite the time-demanding sports training.

The 12 hours per week sports training includes 10 hours of training in the pupils’ respective sport and two hours of general PE; it takes place both in the morning and in the afternoon. Academic lessons only take place in the morning. For example, the Royal Belgian Football Association has the following time schedule for sports training:

- Eight hours of football lessons which include:
  - for the 14- to 16-year-olds: six hours of team training and two hours of individual technical training.

- for the 17/18-year-olds: four hours of team training and four hours of individual tactical training.
- Two hours of general PE.
- Two hours of football/training theory.

The sports schools attach great importance to cooperation and communication with the pupils' home sports clubs. Whereas during the week, the pupil athletes are coached at the sports school by coaches employed by the respective sports federation, at the weekend they go home and attend club training and games. The home club coach and the federation's school coach meet regularly to discuss the progress of the individual pupil and to adjust the training programme. The club coach also gets access to the results of school assessments of the pupil's sporting performance. The situation of the football players is different: Due to the high number of football clubs in Belgium, the football players attend the school's nearest football club training also during the week (twice/three times per week), instead of being coached at school.

Three times per school year (the beginning of October, February and June), there are examination periods to evaluate the academic and sporting development of the pupils. The findings about the level of sporting performance are used to enhance the individual sports training. The teachers and coaches discuss the strong and weak points of the pupil's performance with the pupil. The pupil sets objectives that need to be achieved until the next examination period. The main purpose of the examination is to provide specific and frequent feedback for pupils (what he/she is currently able to achieve, what he/she is currently not able to achieve, what he/she will be probably able to achieve in the future). The coaches are always informed about the pupils' academic achievement and progress. Generally, teachers and coaches achieve good cooperation. The results of all examinations are kept in a folder for each pupil to enable a tracking of the individual's development.

### **3.7.1 Flexible time schedule – Absence from school**

To enable participation in competitions and training camps abroad, pupils can be absent from school from 40 to 130 days. This law also extends to talented athletes who do not attend a sports school: those pupils can be absent for a maximum of 40 school days (depending on status, see Table 3.2 below).

**Table 3.2: Permitting pupil absence from school (half-days per year) depending on status**

<b>Status of pupils</b>	<b>Pupil absence from school A-squad (half-days per year)</b>	<b>Pupil absence from school B-squad (half-days per year)</b>
Sports school pupils aged 15 to 18 in study cycle 2-3 (the last four years in secondary school)	130	40
Pupil athletes not attending a sports school aged 14 to 18	40	40
Sports school pupils aged 13/14 in study cycle 1 (first two years in secondary school)	90	40
Pupil athletes not attending a sports school aged 12/13	40	40

Younger pupil athletes (with the status “promising athlete”) attending primary school are allowed to be absent from school for a maximum of 10 school days per year when participating in tournaments, training camps and championships organised by the respective sports federation (for primary pupils: gymnastics, tennis, swimming).

### **3.8 Relationships with governmental and sporting organisations**

As the Belgian sports schools were initiated through a partnership between the Ministry of Education and the Ministry of Sports, the content and balance of the education of the pupil athletes is determined and monitored by the Ministry of Education. However, the relevant sports federation determines the content of the sport-specific part of the educational programme for pupil athletes. The involvement of the Ministries ensures that the correct balance and attainment levels are met. The Flemish governing body Bloso gives financial support to the sports schools.

Overall, the sports federations’ responsibility is to provide coaches, sports infrastructure, transport and medical and physiotherapeutic services. The coaches employed by the sports federations sign a contract with the sports school and the Flemish Ministry of Education. According to the coordinator of the Belgian elite sports schools at Bloso, the influence of the sports federations can be regarded as strong because they employ the coaches and decide on the criteria for coaching qualifications. Coaches working in a sports school must hold the highest coaching qualification from the Flemish Academy for Training. The coordinator of the elite sports schools disagrees with the federations’ regulations, stating that: *“There are a lot of very talented coaches looking for a job, but they are not allowed to work within a sports school due to their lack of highest coaching qualification.”*

### **3.9 Academic records**

No data available.

### **3.10 Sporting records**

No data available.

### **3.11 Drop-out rates**

The drop-out rates for pupil athletes in sports schools have ranged between 9 and 23 per cent. There are different reasons for dropping out:

- Pupils leave the sports school because they do not pass the yearly sports performance assessment.
- Pupils cannot continue their sporting career due to injuries.
- Pupils decide to leave the sports school on their own initiative because of the limited variety of school subjects in sports schools. As mentioned above, on ASO level, pupil athletes can choose between sciences, modern languages and mathematics. However, if they prefer to choose e.g. Latin or advanced mathematics, they need to look for another school.

### **3.12 Post-Secondary Education**

According to Professor Paul Wylleman (Free University, Brussels) who carried out an evaluation study of Belgian sports schools, about 75 per cent of the pupil athletes follow higher education (college and/or university), with half of them attending university.

The sports schools do not provide a specific academic pathway from secondary school to university via school-university partnerships. However, there are co-operations between sports federations and universities. Student athletes, who are members of the national team and potential candidates for the Olympic Games, can be awarded a contract (worth 70 per cent of a full-time professional contract) which allows them to combine elite sport and studies in higher education. Elite athletes who do not follow higher education are given the possibility to be fully employed as an elite athlete by the sports agency of the Flemish or Walloon communities.

## 4 CANADA

### 4.1 Brief history

The National Sport School (NSS) is a public high school which includes grades 9 to 12. It was established in 1994 as a joint venture of the Calgary Board of Education (CBE) and the Calgary Olympic Development Association (CODA) as the first national sports school in Canada. [It was built on the legacy of the 1988 Winter Olympics in Calgary]. A CODA study had found that half of high performance athletes were either dropping out of high school to pursue sport, or leaving their sport to pursue academic study.

The school is operated in a partnership between the CBE and CODA. CODA's support for the school is intended to be part of the legacy of those games (along with the sports facilities). Coaching staff are sanctioned by national or provincial sport organisations.

The NSS is the only Canadian school that offers educational programming for elite athletes. There are other programmes that offer pupils the opportunity to do a sport as part of their school day, although these pupils tend not to be elite athletes.<sup>1</sup>

### 4.2 Pupil population and core sports

The NSS is located in the North West corner of Ernest Manning High School, although it has its own principal. Pupils in the school do not follow the regular semester/scheduling system of other pupils (in or out of Ernest Manning). In 2007 it had 138 developing and elite high-performance athletes in 22 different Olympic sports. The Principal expects enrolment to reach 150 pupils in 2008, which is the maximum the school can accommodate. However CODA is building a new school with a capacity of 200 at Canada Olympic Park (completed by 2009).<sup>2</sup>

**Table 4.1: Total pupil population by grade (2006/2007 school year)**

Grade	Female	Male	Total
09	10	6	16
10	17	27	44
11	21	25	46
12	14	18	32
<b>Total</b>	<b>62</b>	<b>76</b>	<b>138</b>

Due to Calgary's climate and history as a Winter Olympics host, most pupils are winter sports athletes, but this is not an absolute rule (see Table 4.2). The school is close to major sports facilities, many of which were built for the 1988 Winter Olympics.

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<sup>1</sup> An example of one of these programmes can be found at <http://schools.cbe.ab.ca/b823/> (date of access: 07/03/07)

<sup>2</sup> Spencer, D. (2007). Olympic sport and education a unique mix at National Sport School. *Canadian Press*, 24/01/07 (Electronic version). See <http://www.canada.com/topics/sports/story.html?id=92f491c8-4be9-46c3-96de-a80b384859af&k=39241&p=1> (date of access: 02/02/07)

Winter sports athletes often gain most from the flexible school schedule, as they must train during limited daylight hours during the winter. As the school is open year round, those taking extended winter breaks for training and competition, can make up for it during the summer (when most other Calgary schools are closed).

**Table 4.2: Pupil population in different sports**

<b>Sport</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
Alpine	16	17	34
Badminton	3	0	3
Biathlon	4	0	4
Cross Country Skiing	0	1	1
Diving	2	3	5
Fencing	1	0	1
Figure Skating	2	2	4
Freestyle Skating	5	2	7
Gymnastics	1	2	3
Hockey (female)	0	2	2
Kayaking	1	1	2
Luge	4	2	6
Nordic Combined	3	0	3
Skeleton	0	1	1
Ski Jumping	3	4	7
Snowboarding	8	3	11
Soccer	3	0	3
Speed Skating	9	6	15
Swimming	3	5	7
Syncro Swimming	0	8	8
Tennis	4	3	7
Tumbling	4	0	0
<b>Total</b>	<b>76</b>	<b>62</b>	<b>138</b>

### **4.3 Selection process**

An athlete who wants to attend the school applies to CODA, which gets approval from the athlete's provincial or national sport federation. All athletes are deemed to have substantial potential for success at the international level (or have already obtained it). A selection committee decides on each applicant's sporting potential and academic merit. In addition, the principal meets with a candidate's parents to ensure the athlete and the school will be compatible.

### **4.4 Funding**

Unlike the typical CBE school, substantial fees are charged (\$4,000 per year for the 2004/2005 school year), with CODA offering scholarships of \$2,000.

### **4.5 Teachers' contracts**

The teachers are on a standard continuous contract and work from late August to the end of June, unless they are hired for a summer course. The NSS also hires teachers on a separate summer contract if it is offering a course in the teachers' area of

expertise. Further, the school offers on-line courses over the summer months which are managed by teachers, who are hired on a per-course basis over the summer.

Materials are prepared for pupils to work on while training or travelling. Teachers also tutor pupils on an individual basis when the pupils return to school. The challenge arises in that the pupils are at different points in their course work.<sup>3</sup> In March 2005, the teachers at the NSS received an Innovative Practice Award from the Alberta Association for Supervision and Curriculum Development.

#### **4.6 Academic and Sports Curricula**

The school offers an academic programme leading to the Alberta High School Diploma and to graduation with the qualifications necessary to enter the post secondary institutions of their choice. The curriculum also contains sports-related subjects such as sport psychology (compulsory in Grade 10) and sports medicine (optional in Grade 10). Once pupil-athletes register at NSS they develop their own personal programme plans to use the blended learning environment to facilitate completion of high school by 19 years of age.

The main features of the NSS are:

- A grade nine to 12 programme of studies.
- Flexible timetable with courses which are modified to allow pupils to take advantage of year round schooling.
- Multiple entry points throughout the year, i.e. pupil-athletes do not necessarily have to join the NSS in early September as in traditional schooling. Instead, the NSS permits pupil-athlete intakes at other points in the school year.
- Four period day with fixed-time classes and morning and afternoon tutorials.
- An academic public high school setting.
- Mobile computing (telecommunications) for pupils.

On any day, there is no guarantee of the number of pupils who will be able to attend traditional classes. Half the pupils at the NSS may be absent because each sport has different training and competitive times during the school year. The NSS does not do any of the sport training at the school, with pupil-athletes working with elite level coaches outside the school.

Classes start at 8:30am and end at 2:30pm, but pupils come and go during class as they arrive from or depart to training sessions. In addition, pupils are allowed to eat and drink during class. For instance, the swimmers bring bags of food and litres of water into the classroom as they replenish their energy from their morning pool session and fuel up for another.<sup>4</sup>

Class sizes are small (Table 4.3), homework deadlines are negotiable and tutorial and online services are available for when the pupil athletes are otherwise occupied. With

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<sup>3</sup> See <http://www.nationalsportschool.ca/> (date of access: 23/01/07)

<sup>4</sup> Spencer, D. (2007). Olympic sport and education a unique mix at National Sport School. *Canadian Press*, 24/01/07 (Electronic version).

See <http://www.canada.com/topics/sports/story.html?id=92f491c8-4be9-46c3-96de-a80b384859af&k=39241&p=1> (date of access: 02/02/07)

laptops loaned by the school, the pupils e-mail assignments to their teachers and receive instruction from the school's online learning website.

**Table 4.3: Average class sizes for the 2006/2007 school year**

School year	Grade 9	Grades 10 to 12
2006 / 2007	15.7	13.7
2005 / 2006	16.0	15.9
2004 / 2005	13.0	16.7

Pupils can access their teachers outside the regularly scheduled class time by email and telephone (they have teachers' mobile numbers and can call them anytime). All pupils have access to instruction beyond the 25 hours per credit required by Alberta Education.<sup>5</sup> When the pupils are at the school, they have tutorials in the morning and the afternoon, where one-on-one instruction is available from teachers, either to catch up on work missed or get ahead (tutorials are scheduled twice a day for one hour each). Each of the 13 teachers is an adviser to pupils in a particular sport in addition to the subjects they teach. It is not uncommon for a pupil to approach a teacher and say: "I'm getting on a plane tomorrow and will be gone for five weeks. Can I get my materials?"

Face-to-face relationships between teachers and pupil-athletes are the cornerstone of the school's blended learning environment. These relationships are built through interactions in the learning environment when the pupil-athletes are able to attend classes. Supporting the learning that occurs within the school are methods of curriculum delivery the pupils access when away from the school. In the 2006/2007 school year, new methods to explore for the NSS teachers include the interactive programme 'Elluminate' as well as on-line synchronous and asynchronous discussions and debates. Pupils can access instruction outside of the classroom through the following delivery methods:

- D2L (an online learning environment called 'Desire to Learn').
- Distributed print distance package materials provided by their teachers.
- CDs containing entire units of study.

## **4.7 Sporting records**

Some of Canada's most successful athletes are products of the NSS. One in six of the NSS pupils represent Canada at some point on a world level. In 2006, the school had over 20 current and former pupil athletes who competed for Canada in the 2006 Winter Olympic Games in Torino. This represented over 10 per cent of the Canadian Team.<sup>6</sup>

### **4.7.1 Selection of international medal winners**

- Kyle Shewfelt: 2004 Olympic Gold Medallist, Gymnastics
- Jessica Sloan: 2000 Six-Time Paralympic Gold Medallist, Swimming
- Alanna Kraus: 2002 Olympic Bronze Medallist, Short Track Speed Skating
- Blythe Hartley: 2004 Olympic Bronze Medallist, Diving

<sup>5</sup> See <http://www.canadaolympicpark.ca/elite/school.asp> (date of access: 23/01/07)

<sup>6</sup> See <http://www.nationalsportschool.ca/> (date of access: 23/01/07)

- Deidra Dionne: 2002 Olympic Bronze Medallist, Freestyle Skiing Aerials
- Jennifer Botteril: 2002 Olympic Gold Medallist, Women's Hockey

The fact that the majority of the listed medal winners are females is a reflection of the recent comparative success of Canadian female athletes compared to their male counterparts.

#### **4.8 Academic records**

Although pupils are given greater flexibility in how they complete their work, they must still cover all the material in the course outline and in accordance with the Curriculum of Studies, Alberta Education. Most of the pupils are academically better-than-average pupils. The 2005-2006 Diploma Exam results showed an average mark of 65.76 per cent on the exams.

The school's completion rate is almost 100 per cent and the pupils achieve grades better than the provincial average. Historic completion rates at the NSS are among the highest provincially (School Development and Renewal Plan, 2006/2007).<sup>7</sup>

#### **4.9 Drop-out rates**

The school's completion rate is almost 100 per cent.

#### **4.10 Post-Secondary Education**

According to the NSS principal, 90 to 95 per cent of the pupils pursue post-secondary education (study at college and/or university). Some pupils enter college/university immediately after leaving school and continue with their sporting career at the university. Other pupils decide that their sport commitments will take priority over academic responsibilities for some time. At a later stage, they mostly chose to return to education.

The NSS does not provide a specific academic pathway from secondary school to university via school-university partnerships. However, the NSS principal stated that he is currently negotiating to establish school-university collaboration by offering courses for first-year university students at the NSS. That way, the first-year student-athletes could stay in the environment they are used to and would not be distracted and overburdened by struggling to cope with new routines.

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<sup>7</sup> National Sport School (2006). A culture of excellence: School Development and Renewal Plan, 2006/2007.

## **5 FINLAND**

### **5.1 Brief history**

At the end of the 1960s, plans were made in two Finnish upper secondary schools (Mäkelänrinne School and Kuortane School) to combine top-level sports and education. The two principals drafted a plan for a sports-oriented upper secondary school. The plan was proposed to the National Board of Education<sup>8</sup> in 1968, but it was rejected because officials did not want educational resources to be used to support competitive sports. However, the Ministry of Education gave schools the opportunity to hold extra physical education classes.

At the beginning of the 1970s, the National Board of Education and the Ministry of Education began an experiment with the secondary education curriculum to organise an upper secondary school system without a rigid school year, a semester structure and a school grade system (see below). Previously, Finland operated a system in which pupils had to pass a grade at the end of each year of education (assessed by a variety of tests and continuous assessment) and failure meant repeating the year. A non-graded system meant that grades were abolished, although pupil's progress is continuously monitored and evaluated. The system offered pupils greater freedom to plan their individual study programmes and schedules. Pupils determine the total length of their secondary school studies, as well as their daily schedules.

The experiment was particularly beneficial for pupil athletes providing more time to complete their studies and having sufficient time to train. The plan to combine top-level sports and secondary education in Mäkelänrinne School was approved as part of the broader curriculum experiment. Experiences from Mäkelänrinne School led to the establishing of other sports-oriented upper secondary schools, with the support of sports federations. In 2007, the system of supporting athletes' education in Finland consists of 12 upper secondary general sports schools and 10 upper secondary vocational sports schools.

### **5.2 Education system in Finland**

The Finnish education system is comparatively egalitarian, with no tuition fees. The first nine years of education (primary and secondary) are compulsory, and the pupils go to their local school. After graduation from comprehensive school, there is a choice between upper secondary school and vocational school. The second level education is not compulsory, but 54 per cent continue their studies at upper secondary schools. Upper secondary school, unlike vocational school, concludes with a nationally graded matriculation examination qualifying the pupil for all higher level studies. Vocational schools do not prepare for higher education.

Overall, upper secondary education is a highly decentralised system with local level responsibility for teaching arrangements, course content and the selection of teaching material.

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<sup>8</sup> The Finnish National Board of Education (FNBE) is the national agency in charge of development of education in Finland. It is working under the auspices of the Ministry of Education. FNBE is responsible for the development of pre-primary education and basic education, general upper secondary education, vocational education and training, formal adult education and training, liberal adult education (incl. folk high schools, study centres, summer universities) and extracurricular basic education in arts.

### 5.2.1 The non-graded school system

The non-graded system provides pupils with a curriculum which gives them greater responsibility for learning and decision making, learning at their own pace, rather than within a year group. The school year, consisting of about 190 school days, is divided into five 7 week terms. Pupils make up their own timetables (under guidance and fulfilling certain compulsory obligations) by selecting at least 40 per cent of their study programme. Pupils must complete compulsory studies (at least 75 courses) to get the equivalent of A-levels - the matriculation. There is no restriction on a maximum number of courses a pupil may take. Pupils usually spend three years in upper secondary school, before taking the matriculation, although this can also be two or four years. Within the national guidelines, schools can draw up their own curriculum in which special emphasis may be given to certain subject areas. Generally the core subjects are very broad, including languages, sciences, mathematics, humanities, psychology, religion and philosophy.

Classes consist of pupils who have chosen the same module, independent of their year. At the end of each period, there is an examination week when pupils may have exams in up to seven subjects. Re-assessments are arranged five times a year for those who fail courses. A pupil is entitled to one re-assessment and if this is failed the course must be repeated.

### 5.3 Pupil population and core sports

In the school year 1998/1999, there were 1,595 pupils in 50 different sports attending the sports-oriented upper secondary schools. Three sports - athletics, ice hockey and football - accounted for 45 per cent of the pupil athletes. Three of the 12 sports-oriented upper secondary schools accounted for 49 per cent of the pupil athletes. Table 5.1 shows the number of sports-oriented upper secondary schools and the number of pupils being active in the six most popular sports.

**Table 5.1: School year 1998/1999: Numbers of schools and their pupils taking the most popular sports (from: Thomson & Fairweather, 2000)**

Sports	Number of schools offering the sport	Number of pupils taking the sport
Athletics	11	279
Ice hockey	10	226
Football	9	222
Skiing	9	140
Swimming	8	81
Basketball	6	121

### 5.4 Selection process

Entry to an upper secondary sports school is very competitive, with admission based on a combination of academic and sporting ability. Eligibility is based on grades (10 points out of 20), sporting merit (7/20) and an entrance exam/interview (3/20). The points for sporting merit are given by the national sports federations.

## **5.5 Funding**

### **5.5.1 The government's contribution**

Talented young sports people are positively encouraged to move to sports-oriented upper secondary schools, with the Ministry of Education providing a substantial per capita subsidy to augment school resources. Additional finance comes from local authorities.

In the school year 1998/1999, sports-oriented upper secondary schools received 22,000 Finnish marks per pupil athlete instead of the normal 17,000 marks per non-athlete pupil. At £555 per head/per annum the government's contribution to sports-oriented secondary schools amounts to nearly £900,000 per annum (allocated to payments for coaching, sports sciences and hiring of facilities).

### **5.5.2 The parents' contribution**

In local authorities with a sports school there is no additional cost for residents. However, if talented young people move to a sports school outwith their area they pay for residence and meals. For example, in the case of Sotkamo Sports School, pupil athletes board in the Vuokatti Sports Institute a few kilometres from the school. The rent for a room in a dormitory is about £120 a month. Breakfast and dinner cost about £50 a week.

## **5.6 Academic and sporting curricula**

The sports-oriented upper secondary sports schools maintain high academic entry standards and pupils must succeed both in sport and academic work. Sports training is accepted as a school subject and it takes place within school hours. Twenty credits can be obtained by attending training provided by the school (75 is the minimum for graduating and attending the matriculation examination). In vocational education pupil athletes can get up to 25 credits out of the required 120. Sports coaches allocate marks for training units on the same basis as other curriculum units.

The training is provided by the school – in cooperation with sports federations and local sports clubs – three to four times per week, usually in the morning from 8am to 10am. In Table 5.2, the pupil-teacher-coach ratios are shown.

**Table 5.2: School year 1998/199: Number of pupils, staff and coaches at eight sports-oriented upper secondary schools (from: Thomson & Fairweather, 2000)**

School	Number of pupils	Funded sports pupils	Local resident pupils	Number of staff	Full-time coaches	Part-time coaches
Aurajoki	294	203	120	25	2	7
Kastelli	396	80	55	22	1	6
Kuninkaanhaka	358	125	No data available	38	0	8
Kuortane	207	74	9	23	0	8
Makelanrinne	635	438	No data available	45	1	17
Ounasvaara	305	76	21	25	0	4
Salpausselka	387	93	No data available	47	0	8
Sotkamo	368	116	26	24	1	14

### **5.7 Relationships with sporting organisations**

The schools are coordinated by a commission chaired by the Finnish National Olympic Committee and the sports school system is part of Finnish elite sport training system. According to the Athletes' Study and Career Counsellor of the Finnish Olympic Committee, the sports schools and sports federations work in cooperation but the intensity varies. The schools organise training in cooperation with both national sports federations and local sports clubs and the sports federations choose the coaches to be employed by the school.

### **5.8 Academic records**

The Finnish Olympic Committee has collected information on the sports-oriented upper secondary schools since 2003. Every year about 450 pupil athletes finish the matriculation examination and, on average, there is no difference in the academic records of pupil athletes compared to the achievement of non-athlete pupils. However, there is some difference in the length of studies: pupil athletes prolong their studies from three years to four more often than non-athlete pupils.

### **5.9 Sporting records**

Pupils or ex-pupils from Mäkelänrinne School have won 21 Olympic and world championship medals in eight years. Whereas Mäkelänrinne had success in over 18 sports, the smaller schools have concentrated on a few sports, mainly Nordic winter sports.

### **5.10 Drop-out rates**

In some sports-oriented upper secondary schools, the drop-out rates are lower among pupil athletes than among non-athlete pupils. Yearly, there are less than 50 drop-outs out of around 1,700 pupil athletes. The Finnish Olympic Committee found that most of athletes who drop out continue their education in some other upper secondary school (often closer to the place where they live) or in upper secondary vocational school.

## **5.11 Post-Secondary Education**

Several Finnish universities and polytechnics have started programmes to cater for the needs of athletes. For example the Oulu Polytechnic, which is a member of the Oulu Region Academy of Sport, arranges a training-oriented, ten-study-week unit from student athletes who are members of the academy. The University of Oulu, supports the athletes with study counselling, helps with planning studies and arranges flexible studying during the camp- and competing seasons.

In addition, there are highly specialised academies tailored for both the educational and sporting needs of student athletes (e.g. OSUA Sport Academy). The Sports Academies aim to develop and improve the planning, implementation and monitoring of the athletes' daily training. They support the athletes both in educating themselves alongside their sports career and in their transition to working life during, or after, their sports careers.

### **Appendix 5A: Example of good practice: Mäkelänrinne Upper Secondary School**

#### **Brief history**

In 1994, the Ministry of Education officially granted Mäkelänrinne Upper Secondary School special status based on a curriculum with emphasis on sports. The majority of Mäkelänrinne pupils come from the Helsinki area. The school owns high quality sporting facilities: an Olympic-size swimming pool, two gyms and a sports hall.

#### **Pupil population**

Pupil athletes and non-athlete pupils are taught together (besides the sports programme), and in 2002, 69 per cent of the pupil population were pupil athletes (480 pupil athletes out of a total of 697).

#### **Core sports**

Special elite training is offered in a number of sports, such as football, basketball, ice-hockey, squash, badminton, athletics, orienteering, gymnastics, rhythmic gymnastics, swimming, sailing, dance sport, floorball, handball and synchronised skating.

#### **Selection process**

Two-thirds of first year pupils are admitted on the basis of combined academic and athletic merits. The selection of pupils applying to special training programmes is partly based on recommendations made by sports federations, with those admitted being the top of their age group. Each year the number of applicants exceeds the number of places available.

#### **Academic and sporting curricula**

Sports courses may constitute one-third of the total number of upper secondary school courses, although the pupil athletes must meet the same academic requirements in the matriculation examination as non-athlete pupils. The school's curriculum is based on the national curriculum, with optional, applied and integrated courses in various

subjects. One example of the wide choice is the extensive language programme, which offers advanced courses in English, Swedish, German, French and Russian. Instruction is also given in elementary and intermediate Latin, Spanish and Italian. The majority of the pupils choose advanced courses in mathematics.

Training theory is a 2nd-year compulsory course for all pupil athletes to help them to understand the basics of training and applying it to their own sport and training. In addition, the theory helps the pupil athletes to understand and independently pursue their training programmes and deepen their commitment to training. The pupil athletes produce a written analysis of their own sport and their own qualities and draft a development plan in accordance with the personal goals they have set.

The pupils can complete the upper secondary school studies in two to four years, and it is possible to take time off if needed.

The school day is 8.20 am to 3.05 pm, with training sessions for the athletes held from 8 am to 10 am on Tuesdays, Wednesdays and Fridays. At the beginning of each school year the pupil athletes receive the teaching programme and timetable for the whole year. This enables them to take into account their own individual needs and interests in planning their own schedules on a long-term basis. In this, they are assisted by group advisors and special guidance counsellors.

#### **Academic records**

The relationship between the course grades and the matriculation examination results is good, and academically Mäkelänrinne is above the national average.

#### **Sporting records**

Seven of Finland's athletes in the 2004 Olympic Games had attended Mäkelänrinne School. Mäkelänrinne has maintained a Hall of Fame record of achievement since 1991. The sporting records for 2006 are summarised in Table 5.3.

**Table 5.3: Mäkelärinne sporting records for 2006**

2006	Swimming 50m Freestyle	Bronze	European Championships
2006	Swimming 100m Individual Medley	Gold	European Championships
2006	Swimming 4x50 m Medley	Silver	European Championships
2006	Floorball	Silver	Junior World Championships
2006	Field archery	Silver	European Championships
2006	Powerlifting	Gold	Junior World Championships
2006	Diving 3m	Bronze	European Championships
2006	Diving 1m	Gold	European Championships
2006	Sailing 29er	Gold	World Championships
2006	Athletics, discus	Bronze	School World Championships
2006	Shukokai karate	Silver	Junior World Championships
2006	Shukokai karate	Gold	Junior World Championships
2006	Wushu kungfu	Silver	Junior European Championships
2006	Break dance crew	Silver	European Championships
2006	Street dance formation	Bronze	European Championships
2006	Ice hockey	Bronze	World Championships
2006	Swimming 100m Individual Medley	Silver	World Championships
2006	Synchronized skating	Gold	World Championships
2006	Synchronized skating	Bronze	World Championships
2006	Synchronized skating	Gold	Junior World Championships
2006	Synchronized skating	Silver	Junior World Championships
2006	Ice hockey	Silver	Olympic Games

## 6 FRANCE

### 6.1 Brief history

France is characterised by a highly centralised high performance sport system which can be viewed as a result of the failure of the French national team at the 1960 Olympic Games in Rome. Before 1960 there was a low level of intervention by the State in high performance sport. However, de Gaulle regarded the failure of the French team as in contradiction with the “greatness of France”. Consequently, the French government decided to intervene and to direct the high performance system. For example, the sports federations were funded and civil servants specialising in sport were inserted in each sports federation. In 1975, France established its first sports legislation by creating the title ‘high performance sportsperson’ (*sportif de haut niveau / SHN*) and establishing a new funding system to support elite athletes. Today, there are about 6,000 elite athletes recognised as SHN athletes. SHN athletes need to be registered on the official list of elite athletes (*la liste des sportifs de haut niveau*) established by the Ministry of Youth, Sport and Associations (*Ministère de la Jeunesse, des Sports et de la Vie associative*).

The legal framework for the organisation and promotion of physical and sports activities is set by Act no. 84-610 of July 16, 1984, amended by Act no. 2000-627 of July 6, 2000, whose Article 1 reads as follows:

*“Physical and sports activities are an important element of education, culture, integration, and social life. They also contribute to fitness. Their promotion and development are in the public interest. The State, local governments and their groupings, membership organisations, sports federations, enterprises, and their social institutions take part in promoting and developing physical and sports activities. The State and sports associations and federations foster the growth of high-level sports, with the help of local governments and their groupings and of interested enterprises. The State is responsible for the teaching of physical and sports education, placed under the authority of the Education Minister. The State is in charge of, or supervises, in liaison with all interested parties, the organisation of training programmes for careers in physical and sports activities and the issuance of corresponding diplomas. The approved sports federations participate in the implementation of public-service missions relating to the development and democratisation of physical and sports activities.”*

France has five state-run national sports institutes:

- The National Institute of Sport and Physical Education (INSEP)
- The National School of Ski and Mountaineering (ENSA)
- The National School of Sailing (ENV)
- The National Equestrian School (ENE)
- The National School of Cross-Country Skiing and Ski Jumping (ENSF)

INSEP (*Institut National des Sports et de l'Education Physique*) is a government body supervised by the Ministry of Sport and was founded in 1945. Its aim is to help sportspeople of international level to balance intensive training with academic studies. INSEP can house up to 1,000 sportspeople selected by their respective sports

federations. INSEP has a 34 hectare campus located in the Bois de Vincennes, which is administratively part of the XIIth *arrondissement* of Paris.

In addition, there are 22 regional sporting centres (CREPS, Regional Centres for Education and Sport). One of the major aims of the national scheme is to enable elite athletes to complete a dual sporting and educational career.

A network of just over 400 regional training centres for education and sport (*Pôles*) was created in 1995. *Pôles Espoir (Points of Hope)* have been set up across France in all Olympic sports to assist in the training and follow up of elite athletes. Talented young sportspersons are registered with the *Pôles Espoir* on the recommendation of the national technical directors in their sport. *Pôles France* are centres for sportspersons in the French national team. These training centres are INSEP at national level, CREPS at regional level and other territorial centres (the Velodrome in Hyères, the Nautical Centre in La Rochelle) or Federal Centres (the national football centre in Clairefontaine and national rugby centre in Marcoussis).

**Table 6.1: Number of elite athletes (SHN status) affiliated to training centres (*pôles*) in 2001, excluding football, rugby and disability sport**

	Total number of SHN athletes	Percentage of SHN athletes affiliated to the <i>pôles</i> system for at least one year
Total	5,543	57
<b>38 per cent (n=2,080) of those in the following sports:</b>		
Athletics	406	47
Skiing	276	67
Gymnastics	261	74
Speed and figure skating	257	51
Cycling	256	39
Swimming	233	52
Sailing	207	77
Judo	184	84

At the *pôles*, 50 per cent of elite athletes are under the age of 22. Fifty-five per cent are pupils and students, 50 per cent of them are pupil athletes under *baccalauréat* level (*baccalauréat* is the national examination that most French pupils take at the end of secondary school).

## 6.2 Education system in France

France has a strong, centralised, tradition and has built and consolidated its identity through a school system tasked with educating future citizens; consequently, the education system is largely the responsibility of the State. Central government retains powers regarding the defining and implementing of education policy and national

curricula. The French educational system is divided into three different stages: primary education (*enseignement primaire*), secondary education (*enseignement secondaire*) and tertiary or college education (*enseignement supérieur*). School attendance is compulsory from ages 6 to 16. Primary and secondary education is predominantly public (private schools also exist, in particular a strong nationwide network of primary and secondary Catholic education, while tertiary education has both public and private elements).

Secondary schooling is divided into two stages, or *cycles*. From 11 to 15 years, almost all children attend a *collège*, taking them from grade 6 to grade 3. After grade 3, they move onto a general, technical or vocational *lycée*. The *lycée* is the second, and last, stage of secondary education. At the end of the final year of schooling, most pupils take the *baccalauréat*. *Lycées* are divided as:

- The *lycée général*, leading to general baccalaureate,
- The *lycée technologique*, leading to the technological baccalaureate, and
- The *lycée professionnel*, leading directly to the professional baccalaureate. General and technological education streams are imparted at ‘standard’ *lycées*, while professional streams are imparted at separate professional *lycées*.

The *lycée général* is the usual stepping stone to university degrees. The *seconde* (grade 2) is a link-year during which pupils make their final choice of *série* (academic stream) for the final two years. During the *seconde*, pupils (aged 15/16) mostly take the same courses, despite having different intellectual and academic skills and interests. Therefore, that schooling year usually is deemed easier than both the *première* (grade 1: pupils aged 16/17) and the *terminale* (final year: pupils aged 17/18).

After the *seconde*, most French pupils chose a general stream. The *baccalauréat* examination is different for all three *séries*, and subjects are weighted according to the student’s academic stream. A majority of pupils who sit the *baccalauréat général* choose the *bac S*. It has typically been seen as most prestigious and offer a greater range of post-graduation opportunities (see Appendix 6.1).

The *lycée technologique* includes eight streams, called *séries technologiques* (see Appendix 6.2). The *lycée professionnel* leads to several professional vocational diplomas in all fields of study.

### **6.3 Sports schools**

296 of those pupil athletes are taught at INSEP. Other pupil athletes are affiliated to training centres (*pôles*) all over France. INSEP and other *pôles* provide accommodation facilities and have arrangements with local schools, colleges and higher education institutions. Either there are sport sections in secondary schools in which the pupil athletes follow a normal school schedule with special time arrangements, or teachers from the local secondary schools come to the training centres to provide on-site teaching. The pupils’ weekly timetable is adapted so that they are able to balance both sport and education.

## 6.4 Pupil population and core sports

In Table 6.2, the age structure of elite athletes is shown. In France, there are 960 young athletes aged below 18 years, of whom 940 (98 per cent) attend secondary school.

**Table 6.2: Elite athletes: age and situation (pupil, student, working), excluding football, rugby and disability sport**

Age	Number of pupils / students	Number of athletes working / being employed	Total number of SHN athletes
Under the age of 18	940	20	960
Between the age of 18 and under 20	971	110	1,081
Between the age of 20 and under 23	740	400	1,140
Between the age of 23 and under 28	340	951	1,291
Aged 28 and above	30	1,041	1,071
<b>Total</b>	<b>3,031</b>	<b>2,512</b>	<b>5,543</b>

Among the 850 INSEP athletes who currently live and train at the national institute, there are 296 young athletes under the age of 18 who follow secondary school education (school year 2005/06). The following sports federations are involved in the INSEP programme: athletics, badminton, basketball, boxing, canoe, kayak, weightlifting, horse riding, gymnastics, cycling, ice hockey, judo, karate, wrestling, swimming, squash, taekwondo, tennis, table tennis and rhythmic gymnastics.

The other 644 pupil athletes below 18 years of age (listed in Table 6.3) belong to other *pôles* throughout France.

## 6.5 Selection process

Elite athletes are awarded sporting excellence/SHN status by the respective sports federation. For pupil athletes, admission criteria for the *pôles* relate to both sporting and educational results.

## 6.6 Funding

The costs for attending INSEP are as follows:

- *Training and living at boarding school*: about €600 per school year.
- *School education*: about €100 per school year.

Depending on the pupil athletes' sporting results, most sports federations and/or clubs offer full and part scholarships. Consequently, parents are unlikely to pay the full costs.

## 6.7 Academic and sporting curricula

At INSEP and other *pôles*, the compulsory secondary schooling is organised locally. At INSEP, pupils follow a 44-hour weekly curriculum, with 24 hours for academic lessons and 20 hours for sports training. Both the sports training and most of the academic lessons take place at INSEP that provides 20 classrooms, a research and documentation centre and four IT rooms.

The Institute cooperates with four local upper secondary schools (*lycées*) in the region of Val-de-Marne:

- *Lycée Marcelin Berthelot* (148 pupil athletes)
- *Lycée Hector Berlioz* (48 pupil athletes)
- *Lycée Louis Armand* (75 pupil athletes)
- *Lycée Professionnel Jean Moulin* (24 pupil athletes)

296 pupil athletes (school year 2005/06) may choose between the above described general streams (S/ES or L), technological streams and professional streams (in total, INSEP offers nine different *baccalauréat* options). Classes take place at INSEP from 8am to 11am in the morning and from 2:15pm to 4:15pm (Monday to Thursday) and are taught by teachers from local schools. In total, there are 68 secondary school teachers cooperating with INSEP, i.e. they work at both a regular secondary school and INSEP. The teachers are selected on the recommendation of the schools' principals and on the basis of their interest to work with elite athletes. The INSEP study coordinator emphasised the importance of the teachers' positive attitude:

*“The teachers need to be aware of the challenge of working with elite athletes who must combine educational and sporting demands.”*

The class sizes are small. On average, there are 13 pupils per class. On Fridays, the pupil athletes use the INSEP bus service to attend classroom lessons at the respective schools (within sports classes, there are no mixed classes). There are two reasons for giving lessons outside of INSEP once per week:

- For subjects such as biology, chemistry and physics, pupils use the laboratory facilities in the schools.
- According to the INSEP study coordinator, pupil athletes are supposed to keep affiliated to the “normal school life” and to get the opportunity to exchange ideas with non-athlete pupils. Hence, INSEP and the schools organise common leisure activities (e.g. theatre visits for pupil athletes and non-athlete pupils).

At INSEP, there is both a study coordinator helping with study-related issues and a sport coordinator. In addition, there are teaching assistants responsible for homework supervision and extra tuition.

The adapted timetable consists of the following elements:

- About 24 academic lessons per week.
- Four hours of homework on Wednesday afternoon.
- Additional academic lessons in the first week of school holidays for final-year pupils.

- Maximum class sizes of 18 pupils.
- Extra tuitions in the case of absence from school due to training and competition.
- Homework supervision from 8:30pm to 10pm twice per week (compulsory attendance).
- For final-year pupils: organisation of oral “try-out” examinations twice per week (in major subjects).
- Distance learning courses in selected subjects such as languages in cooperation with the CNED (*centre national d’enseignement à distance* / national institute for distance learning).

## 6.8 Relationships with sporting organisations

The Ministry of Sport announces the names of the SHN athletes who are allowed to train at INSEP and other *poles*, according to the recommendation of the sports federations.

The state-run INSEP and other *pôles* are closely linked to the sports federations that normally choose the coaches working at INSEP. Sports federations offer scholarships to pupil athletes attending INSEP. However, the extent of scholarship funding varies and is dependant upon the policy of the specific federation.

## 6.9 Academic records

In Table 6.3, the academic records of INSEP pupil athletes (school year 2005/06) are shown. According to the INSEP study coordinator, the obtained study results are “*satisfying*”, even though below the national average (pupil athletes must balance academic and sporting demands with a total workload of about 44 hours per week). To pass the *baccalauréat* examinations, pupil athletes must meet the same requirements as other non-athlete pupils, although they are given the opportunity to complete the examinations not in spring term, but in September (pupil athletes’ only privilege compared to non-athlete pupils).

**Table 6.3: Admission to the different *baccalauréat* steams**

	Number of candidates	Passed
<i>Baccalauréat général</i>	46	42 (91.3 %)
• ES (economics and social sciences) + L (literature)	(13)	12 (92.3 %)
• S (natural sciences)	(23)	21 (91.3 %)
<i>Baccalauréat technologique</i>	10	9 (90 %)
<i>Baccalauréat professionnel</i>	15	11 (73.3 %)

## 6.10 Sporting records

Ten INSEP pupil athletes competed for France in the 2004 Olympic Games in Athens.

## **6.11 Drop-out rates**

According to the INSEP study coordinator, it is only in exceptional cases that pupil athletes are not able to balance sporting and academic demands and leave INSEP. To prevent these cases, each sports federation has a designated contact person giving advice about balancing educational and sporting demands. In the school year 2006/07, there was one pupil athlete, (aged 16) who decided to stop high-level training at INSEP due to decreasing academic success. He moved back to his hometown and continued club training.

## **6.12 Post-secondary education and employment**

INSEP also provides education at the post-compulsory and FE/HE education levels. About 50 per cent of former pupil athletes stay at INSEP to pursue post-secondary education. INSEP offers different options to pursue college-level or university-level sports-related studies (e.g. diploma in coaching, sports and PE studies, sports administration, sports management).

Flexibility in respect of student athletes is encouraged within the university system. Provisions concerning the admission of elite athletes to Institutions of HE are outlined in Circular No 1455 of 6th October 1987. This circular invites university deans, school directors and regional directors of education to undertake all necessary efforts to accommodate elite athletes who wish to combine both sports career and academic studies. As the management of universities is decentralised, some university deans may make special arrangements for elite athletes, such as extending the duration of courses, allowing reduced attendance and postponing exams. For example, each year the Ministry of Health awards exemption to 20 elite athletes from entrance exams to the first year of courses at Institutes for Physiotherapy and Chiropractic.

The Ministry of Sport allows elite athletes to participate in a recruitment competition, reserved exclusively for elite athletes, to work as Category A civil servants. These athletes must undergo 18 months of preparation for competitions. This takes place at INSEP and is administered by the sports federations. Once they have been accepted to work in the civil service, athletes who still train professionally can benefit from flexible work schedules in order to maintain training and competition commitments.

Within the context of the modernisation of the army, the Ministry of Defence allocates 80 positions to the Ministry of Sport, which are distributed among the army, marines, air force and the military police. Ten positions are also provided in civil personnel.

The Ministry of the Interior, Domestic Security and Local Government allocates 60 full-time positions within the national police to elite athletes. The Ministry of the Economy, Finance and Budgetary Affairs allocates 30 positions within the Customs Service to elite athletes. Twenty-nine of these 30 places are reserved specifically for members of the French Ski Federation.

In 2003, the Ministry of Youth, National Education and Research employed 75 athletes as temporary secondary school teachers in sports academies specialising in their sports. Of these, six were able to work part-time and 11 worked with the Union for School Sports (UNSS). The Ministry of Sport provides 23 positions as sports teachers at INSEP. Regional and local authorities, especially those that deal with sport, are an attractive source of employment for elite athletes. There are currently 70

athletes working in local and regional authorities where their schedules are adapted to suit their sports activities.

### Appendix 6A: Descriptions of the general streams for the *baccalauréat* examination

Streams	<b>S</b> <i>scientifique</i> (various natural sciences)	<b>ES</b> <i>économique et sociale</i> (economics and social sciences)	<b>L</b> <i>littéraire</i> (literature)
<b>Description</b>	The sciences stream requires advanced mathematics (regarded as most important), physics, and chemistry.	The <i>série ES</i> is balanced between literary and scientific courses; pupils must take an economics and social sciences exams.	The <i>série L</i> focuses on French language, history / geography and foreign languages; also including a literature section. Pupils must take examinations in up to three modern languages, but also have the option of presenting examinations for either Latin or ancient Greek or for both.

### Appendix 6B: The eight streams of the *lycée technologique*:

- *Sciences et technologies de la gestion* (Management Sciences and Technologies, *STG*).
- *Sciences et technologies industrielles* (Industrial Science and Technologies, *STI*).
- *Sciences et technologies de laboratoire* (Laboratory Science and Technologies, *STL*).
- *Sciences médico-sociales* (Health and Social Sciences, *SMS*).
- *Sciences et technologies du produit agroalimentaire* (Food Science and Technologies, *STPA*).
- *Sciences et technologies de l'agronomie et de l'environnement* (Agronomy and Environment Science and Technologies, *STAE*).
- *Techniques de la musique et de la danse* (Music and Dance Techniques, *TMD*)
- *Hôtellerie* (hotel business).

## 7 GERMANY

### 7.1 Brief history

#### *Sports Schools in the former German Democratic Republic (GDR)*

The high performance sport system of the former German Democratic Republic (GDR) was based on a well organised search and support for talented athletes. The *Sport Schools for Children and Youth* were established in 1952 and extended into organised places to train Olympic winners. Eighty per cent of the Olympic participants of the GDR came from these 25 sports schools (with more than 10,000 pupil athletes) and won the main part of the 572 Olympic medals won by the GDR.

After German reunification the legitimacy of this form of elite provision was undermined when it became known that the majority of these athletes were involved – consciously and unconsciously – in a secret doping system. It was also revealed that there was a frequent disregard of ethical standards.

In 1990, the German authorities started an initiative to establish secondary schools specialised in sports and adapting the positive aspects of the GDR system. Before 1990, sports schools played only a minor role in West Germany.

### 7.2 Education system in Germany

In the Federal Republic of Germany responsibility for the education system lies at the federal structure of the state. The diversity of the German school system is due to the country's federal structure, and the sovereignty of its 16 *Länder* (federal states) in matters of culture and education is a core element of it, although they share some responsibility for education with the federal government. The *Länder* establish specific legal regulations in a variety of laws governing general education and vocational schools.

Compulsory and free schooling begins at the age of six and usually lasts nine years (10 years in Berlin, Brandenburg, Bremen and North Rhine-Westphalia). The first stage of the German public school system is the *Grundschule* (primary school - first to fourth grade or, in Berlin and Brandenburg, first to sixth grade). After *Grundschule* (at the age of ten or 12), there are basically four options for public secondary schooling:

- *Hauptschule* (the least academic) until grade nine or, in Berlin and North Rhine-Westphalia until tenth grade.
- *Realschule* until grade ten.
- *Gymnasium* (secondary school) until grade 12 or 13 (with *Abitur* as school leaving examination, qualifying for admission to university).
- *Gesamtschule* (comprehensive school) with all the options of the three “tracks” above.

A *Gesamtschule* largely corresponds to an American high school. Pupils who graduate from *Hauptschule* or *Realschule* continue their schooling at a vocational school until they have full job qualifications. This type of German school, the *Berufsschule*, is generally an upper-secondary public vocational school, controlled by the German federal government. It is part of Germany's dual education system. Pupils who graduate from a vocational school and pupils who graduate with good GPA from a *Realschule* can continue their schooling at another type of German public

secondary school, the *Fachoberschule*, a vocational high school. The school leaving exam of this type of school, the *Fachhochschulreife*, enables the graduate to study at a Fachhochschule (polytechnic), and in Hesse also at a university within the state. The *Abitur* from a *Gesamtschule* or *Gymnasium* enables the graduate to start studying at a polytechnic or at a university in all federal states of Germany.

### 7.3 Sports schools

To give 10- to 19-year old talented young athletes the opportunity to develop their sporting career alongside their school academic career there are several links between schools and institutions/organisations of high performance sports. The sports schools operate on all educational levels (*Gymnasium*, *Gesamtschule*, *Realschule*, *Hauptschule*), even though the sports schools' aim is to enable most pupils graduate with the certificate of *Abitur* (prerequisite for admission to university).

There are different types of partnerships between high performance sport and educational institutions including:

- Schools specialising in sport (*Sportbetonte Schulen*).
- Partner schools of high performance sport (*Partnerschulen des Leistungssports*).
- Elite sports schools (*Eliteschulen des Sports*) - the most elaborate school type in terms of combining sport and education.

The first two school types (*schools specialising in sport* and *partner schools of high performance sport*) are pre-stages to the status of an elite sport school (generally, it is a long-term process to achieve elite status). A total of 38 elite sport schools offer the opportunity to pursue a career in international competitive sport, combined with normal school studies. They are on a full or half-boarding basis with currently around 11,000 talented athletes (school year 2006/07).

The integrated system consists of so-called *Olympic Support Centres* (*Olympiastützpunkte/ OSP*) and the elite sports schools (see Appendix 7A). The German Olympic Sports Federation (*Deutscher Olympischer Sportbund/DOSB* – the umbrella organisation of German sport) operates 20 Olympic support centres which prepare athletes in specific core sports. These centres are funded by the 16 German federal states (*Länder*) and local communities. The centres employ 31 career advisors who assist athletes in combining high level sport with education (or profession). All *elite sports schools* are attached to an Olympic Support Centre where athletes are able to access a wide range of services.

The German Olympic Sports Federation has a list of criteria which have to be fulfilled in order to get the elite sport school status:

- Elite sports schools need to be linked with the local Olympic Support Centre and focus on the same core sports.
- The local Olympic Support Centre must be able to provide qualified coaches (with highest coach certificate: A-level coaching diploma) and sports facilities.
- The school should be close to the training facilities (maximum school-to-training facility time: 20 min).
- In the region, there should be a high number of young athletes who can train together (members of the national youth squad).

- The school must be designed as a boarding school.
- There should be a sport-co-ordinator employed by the school.
- The school must provide adaptations to the timetable of pupil athletes.

Schools get the elite sport school status for one Olympic cycle. After four years, they undergo an evaluation by the German Olympic Sports Federation in order to keep their elite status (criteria include: number of pupil athletes, academic records, sporting records). Selected schools are identified as examples of best practice.

Every two years, the German Olympic Sports Federation organises a conference on elite sports schools to facilitate national information exchange and networking among the schools, federations, Olympic Support Centres, clubs and universities.

## 7.4 Pupil population and core sports

There are 38 elite sports schools covering all Olympic sports. Each school focuses on the core sports offered by the respective local Olympic Support Centre. In the school year 2004/05, 11,271 pupil athletes attended elite sports schools. Thirty-one per cent of all German youth squad members attend an elite sports school. The largest sports are shown in Table 7.1.

**Table 7.1: The largest sports at elite sports schools (2004/05)**

<b>Sport</b>	<b>Number of pupil athletes (squad members) at the elite sports schools</b>
Athletics	727
Swimming	525
Football	510
Handball	315
Judo	309
Canoe	249
Ski	240
Rowing	232
Cycling	203
Wrestling	196
Speed skating	192
Basketball	186
Boxing	170
Fencing	170
Gymnastics	165
Volleyball	162
High diving	117

## 7.5 Selection process

To be eligible for admission to an elite sports school, pupil athletes must be awarded sporting excellence status by the respective sports federation. Potential candidates need to be members of the national youth squad (DC/C-squad). The sports classes primarily consist of pupil athletes who are active in one of the core sports. The remaining places are awarded to talented applicants (squad members) in other sports (e.g. football as a non-Olympic sport). However, eligibility is also based on academic

merit and it is the responsibility of the 16 German *Länder* to determine the academic standards.

Over the last decade the entrance age for elite sports schools has changed. At the end of the 1990s, two-thirds of pupil athletes were admitted before the age of 12 (normally fifth-grade and seventh-grade pupils; the mean age was 11.2). One third of pupil athletes were aged 13 to 15. Ten years later, the majority of pupil athletes are older when they start to attend an elite sports school (aged 13 to 15). Nine per cent of pupil athletes are admitted at the age of 16. Looking at the pupils' sporting records, it is striking that the majority of the 2004 Olympic medal winners were between 13 and 15 years old when they started to attend an elite sports school (the mean age was 13.9). The average duration of sports school attendance is four years for Olympic medal winners and six years for other Olympic Games participants.

## **7.6 Funding**

Because responsibility for education is determined at state level, schools are financed by the *Länder*, the elite sports schools can claim a higher amount of financial support. In addition, there is one main sponsor for the German elite sports school system: the German Savings Bank Association<sup>9</sup> (*Deutscher Sparkassen- und Giroverband/DSGV*). DSGV's contribution to elite sports schools amounts to nearly € 400,000 per annum, which is distributed to the schools by the German Olympic Sports federation. The specific amount of money differs from school to school depending, for example, on school size and number of pupil athletes.

## **7.7 Academic and sporting curricula**

In terms of study plans/timetables adapted to the athlete's school and sport demands, no general statements can be made because of the federal structure of Germany. For example, whereas in some *Länder* elite sports schools offer the possibility of a two-year programme of upper secondary education in three years, it is not accepted in other states.

The main features of elite sports schools are:

- A grade 5 to 12 programme of studies.
- Athletes get the opportunity to train at least twice a day three times per week (training in the morning and afternoon).
- Guidance of a study / sport co-ordinator who meets the pupil athlete regularly to help him/her manage and balance both school and sport demands (e.g. by writing the pupil's individual study plan according to training and competition times, organising extra tuitions, exam date shifting).
- Flexible timetable to allow pupils to be absent due to training and competition.
- Extra tuition / homework support.
- Possibility of delay for tests and internal examinations.

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<sup>9</sup> The Deutscher Sparkassen- und Giroverband (German Savings Bank Association, DSGV) is the umbrella organisation of the Sparkassen-Finanzgruppe and its 477 savings banks, 11 Landesbanken, 11 Landesbausparkassen, 13 public insurance companies and many more financial service providers.

- In some *Länder*: possibility of doing the two-year programme of upper secondary education in three years.
- In some *Länder*: decrease in the amount of school lessons.

Depending on the specific elite sports school, classes are mixed with pupil athletes and non-athlete pupils, or there are sports classes consisting only of pupil athletes. In mixed classes, some schools have established a one-to-one sponsorship system: each pupil athlete cooperates with a non-athlete pupil as a partner who keeps him/her informed on the content of missed classes.

Training sessions take place at the school, at the clubs or at the Olympic Support Centre.

As an example, Table 7.2 shows the weekly timetable of a swimmer aged 14 (eighth grade).

Another example is of young gymnasts who attend an elite sports school and practice in the morning and in the afternoon. Transportation is offered by the school to take them to the training facilities and back to school and lunch is offered by the school. Everyday after lunch, two or three teachers offer extra tuitions and homework support to catch up on missed subject matters. Normally, there is an intensive pupil-teacher relationship built up over time. If necessary (particularly in the pre-Olympic year), pupil athletes can apply to be taught privately in selected subjects, if they feel that they cannot catch up in class.

## **7.8 Relationships with governmental and sporting organisations**

Elite sports schools cooperate with clubs/national sports federations/Olympic support centre. The training is normally given by a regional coach, employed by the sports federation, who develops the athlete's individual training programme in cooperation with the club trainer.

There is a permanent working group on elite sports schools consisting of representatives of the German Olympic Sports Federation, the German Sports Aid Foundation<sup>10</sup>, the Culture and Sports Ministries of the *Länder*, the Olympic Support Centres and business representatives.

The German Olympic Sports Federation (owner of the brand "*Eliteschule des Sports*") determines the quality criteria for elite sports schools and conducts the evaluation process every four years.

## **7.9 Academic records**

No detailed data available.

Research has shown that top-level athletes attending elite sports school report significantly higher general sense of self and good peer and parent relations and academic achievement scores. Results of qualitative interviews showed the important role of a positive feedback on academic achievement in developing a positive self-concept, even for adolescents with outstanding sporting success. The findings suggest that involvement in elite sport may influence the development of young people's self-

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<sup>10</sup> The German Sports Aid Foundation (in German: *Stiftung Deutsche Sporthilfe*) is devoted to helping talented athletes outside the pro sector.

**Table 7.2: Weekly timetable of a swimmer attending an elite sports school (excl. competitions at the weekend)**

<b>Time</b>	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>	<b>Saturday</b>	<b>Sunday</b>	
6 am to 7 am	Getting up	Leisure time at home + going back to school in the evening						
7 am to 8 am	Training	Training	Training	Training	Training	Training		
8 am to 9 am			School (incl. lunch)					
9 am to 10 am	School (incl. lunch)	Going home + leisure time						
10 am to 11 am								
11am to 12 am								
12 am to 1 pm								
1 am to 2 pm								
2 pm to 3 pm								Training
3 pm to 4 pm								Leisure time
4 pm to 5 pm	Training	Training	Training					
5 pm to 6 pm		Leisure time						
6 pm to 7 pm	Leisure time		Leisure time	Leisure time	Leisure time			
7 pm to 8 pm								
8 pm to 9 pm								
9 pm to 10 pm								

perceptions in a positive way and that a positive academic self-concept may serve as a personal resource in the process of coping with stress.

### **7.10 Sporting records**

Some of Germany's most successful athletes are products of the elite sports schools. Between 2001 and 2004, current and former pupil athletes have won a total of 683 medals at junior world and European championships and a total of 327 medals at Olympic Games, world and European championships.

Current and former pupil athletes represented 58 per cent of the German team in Torino, 29 per cent in Athens, 38 per cent in Salt Lake City and 30 per cent in Sydney. That means that 82 per cent of all German medals were won by current or former pupil athletes (each second current/former pupil athlete participating in those Olympic Games won a medal).

### **7.11 Drop-out rates**

Between 1998 and 2001, a longitudinal investigation of drop-out of pupil athletes at the *Potsdam* elite sports school was undertaken. Eighteen out of 41 pupil athletes (44 per cent) dropped out over this period. The high drop-out rate seems to be caused particularly by difficulties in coping with the social environment. Pupils often leave the sports school because they do not manage to cope with stress (due to school and sport demands) and to learn from failure in sport. Consequently, they feel frustrated and get confronted with motivational problems. In this context, the authors emphasised the need for psychological support services at elite sports schools.

However, it needs to be pointed out that the survey results are not representative at the national level. More detailed data is not available.

### **7.12 Post-Secondary Education**

After the Sydney Olympic Games, it was recognised that approximately 30 per cent of the German Olympic squad were university students and that increased support was required for these athletes. The Federal State of North Rhine Westphalia drew up a so-called Top Sport Declaration and the ADH (German University Association) introduced the nationwide initiative *Partner University Top Sport*. In total, there are 48 universities that signed the top sport declaration. Partner University Top Sport co-operates with local Olympic Support Centres and sports federations. For example, the German Sports University in Cologne offers flexibility to all elite athletes. Approximately 850 student athletes studying at the German Sport University are on the Top Sport scheme, which helps them to combine sport and education and produce good academic results. Flexibility is offered for:

- Enrolment for courses and seminars.
- Examination schedules.
- Attendance at compulsory seminars/lectures.

The German Olympic Sports Federation's website offers information to athletes 'in transition' (moving from the elite sports schools to university). This information is designed to help the athlete choose the most appropriate university in terms of access to training facilities, coaching, support services and academic courses.

**Appendix 7A: Locations of elite sports schools (in cooperation with the *Länder* and the regional Olympic sport centres)**

<i>Länder</i> (federal states)	Regional Olympic support centres	School locations (cities) and core sports	Number of core sports
Baden-Württemberg	Freiburg/Schwarzwald	<i>Furtwangen</i> : cross-country skiing, ski jumping, nordic combination	3
		<i>Freiburg</i> : cross-country skiing	1
Baden-Württemberg	Rhein-Neckar	<i>Heidelberg</i> : boxing, weightlifting, swimming, volleyball (female)	4
Baden-Württemberg	Stuttgart	<i>Stuttgart</i> : athletics, cycling, rhythmic gymnastics, trampolining, gymnastics	5
Baden-Württemberg	Tauberbischofsheim	<i>Tauberbischofsheim</i> : fencing,	1
Bayern	Bayern	<i>Berchtesgaden</i> : luge, alpine skiing, nordic combination	3
		<i>München</i> : speed skating, figure skating, judo, athletics,	4
Berlin	Berlin	<i>Berlin/Coubertin school</i> : basketball, speed skating, figure skating, canoe, athletics, pentathlon, swimming, volleyball, high diving, water polo	10
		<i>Berlin/Flatow school</i> : canoe, athletics, rowing, sailing	4
		<i>Berlin/Seelenbinder school</i> : beach volleyball, archery, speed skating, figure skating, judo, athletics, pentathlon, cycling, swimming, gymnastics (male), volleyball, water polo	12
		<i>Berlin/Poelchau school</i> : field hockey, pentathlon, rowing, water polo	4
Brandenburg	Cottbus-Frankfurt/Oder	<i>Cottbus</i> : boxing, cycling, gymnastics (male)	3
	Potsdam	<i>Frankfurt/Oder</i> : boxing, weight lifting, judo, cycling, wrestling, shooting	6
		<i>Potsdam</i> : football, canoe, athletics, rowing, swimming, triathlon	6
Hamburg	Hamburg/Schleswig-Holstein	<i>Hamburg</i> : basketball, swimming, table tennis, volleyball (male)	4
Hessen	Frankfurt am Main	<i>Frankfurt am Main</i> : field hockey, athletics, swimming, table tennis, volleyball (male)	5

Mecklenburg-Vorpommern	Mecklenburg-Vorpommern	<i>Neubrandenburg</i> : canoe, triathlon, athletics	3
		<i>Rostock</i> : rowing, high diving	2
		<i>Schwerin</i> : boxing, volleyball (female)	2
Niedersachsen	Niedersachsen	<i>Hannover</i> : judo, athletics, swimming, table tennis, gymnastics, water polo	6
Nordrhein-Westfalen	Köln-Bonn-Leverkusen Rhein-Ruhr Westfalen	<i>Bonn</i> : fencing	1
		<i>Leverkusen</i> : basketball (male), athletics,	2
		<i>Essen</i> : canoe, rowing, swimming	3
		<i>Bochum-Wattenscheid</i> : athletics, rhythmic gymnastics, water polo (female)	3
Rheinland-Pfalz	Rheinland-Pfalz/Saarland	<i>Kaiserslautern</i> : badminton, cycling	2
		<i>Koblenz</i> : fencing	1
Saarland	Rheinland-Pfalz/Saarland	<i>Saarbrücken</i> : no specific core sports	0
Sachsen	Chemnitz/Dresden Leipzig	<i>Altenberg</i> : biathlon, luge,	2
		<i>Chemnitz</i> : basketball, biathlon, figure skating, athletics, gymnastics	5
		<i>Dresden</i> : speed skating, rowing, volleyball (female), high diving	4
		<i>Klingenthal</i> : cross country skiing, ski jumping, nordic combination	3
		<i>Oberwiesenthal</i> : cross country skiing, ski jumping, nordic combination	3
		<i>Leipzig</i> : handball, judo, canoe, rowing, swimming, gymnastics, high diving	7
Sachsen-Anhalt	Magdeburg/Halle	<i>Halle</i> : boxing, athletics, rhythmic gymnastics, rowing, swimming, gymnastics, high diving	7
		<i>Magdeburg</i> : handball, canoe, athletics, rowing, swimming	5
Thüringen	Thüringen	<i>Erfurt</i> : speed skating, athletics, cycling	3
		<i>Jena</i> : athletics, wrestling	2
		<i>Oberhof</i> : biathlon, luge, cross country skiing, ski jumping, nordic combination	5

## **8 ITALY**

### **8.1 Brief history**

Compared to other European countries, sports schools in Italy have been established more recently. Although ski colleges have been open to winter sports athletes since the beginning of the 1990s, the first two sports-oriented secondary schools for pupil athletes in different sports were established in Genoa and Pisa in 2001. The Genoa sports school is known for its special expertise in the fields of natural sciences.

Currently, there are two secondary sports schools and eight ski colleges in Northern Italy, enabling pupils who are involved in high-level sports to combine education and sports career.

### **8.2 Education system in Italy**

The Italian educational system is controlled centrally by the national government. The Ministry of Education maintains schools at every level and closely regulates private schools. The Ministry prepares school curricula and holds competitive examinations for the appointment of teachers in all government schools.

Education is free and compulsory from 6 to 14 years of age. When a child has completed his/her primary education at the age of 11, he/she attends the lower middle school (*scuola media inferiore*) for the next three years. On completion of middle school, pupils who wish to continue their education may choose between two five-year programme options: (i) the academic schools and (ii) the technical institutes. The academic schools specialise in the classics (*ginnasio, liceo classico*), sciences (*liceo scientifico*) or fine arts and architecture (*liceo artistico*). Completion of an academic school programme qualifies pupils for general university admission. The Technical Institutes offer programmes in agriculture, commerce, surveying, naval science and industry. Their programmes qualify pupils for admission to the appropriate university.

### **8.3 Core sports**

Most pupil athletes are winter sports athletes and team-sport players. The Genoa sports school focuses on volleyball and basketball (according to the country's success in those sports). The Pisa sports school specialises in volleyball, handball, basketball, football, baseball/softball, rugby, athletics, gymnastics, swimming, tennis and fencing.

### **8.4 Selection process**

In order to attend secondary sports school pupils must be awarded sporting excellence status by the respective sports federations.

### **8.5 Funding**

At Genoa and Pisa sports schools, one school year costs about €2,600 for each student.

In the case of *Ski College Veneto di Falcade*, substantial fees are charged for attending the boarding school (€1,572 per school year) as well as for participating in the sport programme (about €2,000 per school year for alpine skiers and snowboard athletes; about €650 for cross-country skiers). The fees cover the costs for daily training, transport, training camps and medical services (incl. physiological tests). The

fees do not cover the costs for hotel accommodation (during competition), ski pass and skiing equipment.

## **8.6 Academic and sporting curricula**

The schools enable the athlete to have a more flexible timetable (e.g. reduced number of school lessons; attending school in the morning, training in the afternoon). They offer study plans that favour the athletes' sporting commitments, tutoring services (especially during revision periods, or when athletes spend a long period of time away from school) and distance learning. Winter sports athletes may be absent up to 80 school days per school year.

When training and/or competing abroad, pupil athletes get e-learning packages via e-mail. The e-learning/distance learning programme can be entered by parents and coaches (via passwords) to check the pupil athlete's academic progress and achievement. Chat-rooms have been established for pupils and teachers to communicate regularly.

The sports schools and ski colleges provide a modified school curriculum that contains additional sports-related subjects (viewed as being beneficial for elite athletes) such as anatomy, pharmacology, physics, biomechanics, physiology, sport ethics, organisation and administration of sports events, social psychology and group dynamics. English and computer sciences are compulsory subjects. The Pisa sports school provides seminars in sports management and modules involving work placements in sport-related institutions.

The overall number of school lessons varies by grade (first year: 26 hours per week; second year: 27 hours per week; last three years: 30 hours per week).

## **8.7 Relationships with the Ministry of Education and sporting organisations**

The ski colleges are operated in a partnership between different organisations: Ministry of Education, University and Research (*Ministero dell'Istruzione, Università e Ricerca* / MIUR); the Winter Sport Federation (*Federazione Italiana Sport Invernali* / FIS), the National Olympic Committee (*Comitato Olimpico Nazionale Italiano* / CONI) and the National Union of Mountain Municipalities, Communities and Authorities (*Unione Nazionale Comuni Comunità Enti Montani* / UNCEM).

## **8.8 Academic records**

No data available.

## **8.9 Sporting records**

No data available.

## **8.10 Drop-out rates**

No data available.

## **8.11 Post-Secondary Education**

Some of the schools are linked to higher education institutions such as universities. There is provision for the promotion of athletes who study at institutes of sports sciences. Other athletes who study at universities are supported through the university sports centres, which receive public grants. There is, however, a degree of flexibility given to athletes studying at university, in the form of timetabling and exam dates.

## 9 THE NETHERLANDS

### 9.1 Brief history

In 1991, the LOOT school foundation (*Landelijk Overleg Onderwijs en Topsport*; or *National Coordination of Education and Elite Sports*) was established as a joint venture of the Netherlands Olympic Committee\**Netherlands Sports Federation* (NOC\*NSF), the Ministry of Education, Culture and Science and the Ministry of Health, Welfare and Sport. The purpose of the LOOT foundation was to offer pupils the possibility to combine secondary education with elite level training within sports schools and to maximise the pupil athletes' sporting and academic potential. In the school year 2006/07, there were 25 secondary schools which have received the LOOT status through the LOOT foundation. LOOT schools are not designed as boarding schools.

For the support of elite athletes, NOC\*NSF has established an Olympic network (*Olympische Netwerken*) consisting of Olympic training centres in almost all of the 12 Dutch provinces: (only Drenthe, Friesland and Zeeland do not have one). The LOOT schools cooperate closely with the training centre in their province.

### 9.2 Education in the Netherlands

Compulsory education in the Netherlands consists of eight years of primary education (aged four to 12) and four to six years of secondary education. At the age of 12, primary pupils do the final primary school test (*Cito test*), consisting of 290 multiple choice questions testing the pupils' Dutch and comprehension skills, mathematics, world orientation (geography, biology and history) and study skills. A choice about the type of secondary education to be followed has to be made in the final year of primary school. Parents, teachers and children make this decision together, with the results of the Cito test weighing significantly in the choice.

The three options for secondary education are (in order of ascending academic attainment):

- *Pre-vocational secondary education* (VMBO; *Vorbereidend Middelbaar Beroepsonderwijs*) is usually an introduction to upper secondary vocational education (MBO). It takes four years to complete and pupils (aged 12 to 16) must choose one of four sectors: engineering and technology, economics, agriculture, and care and welfare.
- *Senior general secondary education* (HAVO; *Hoger Algemeen Voortgezet Onderwijs*) lasts five years (for pupils aged 12 to 17). A HAVO diploma provides access to the HBO-level (polytechnic level) of tertiary education.
- *Pre-university education* (VWO; *Vorbereidend Wetenschappelijk Onderwijs*) takes six years to complete and prepares pupils (aged 12 to 18) to enter university education (equivalent to A level). There are two types of the VWO programme: *atheneum* and *gymnasium*. The two branches differ in the compulsory language programme. Whereas the *gymnasium* includes Latin and Greek in the curriculum, the *atheneum* focuses on modern languages. For prestige and career reasons parents often wish to get their children into the *gymnasium*.

All secondary schools must teach a compulsory core curriculum of subjects including Dutch and other languages (including English), sciences and biology, mathematics, geography, history, physical education and the arts for three years before allowing pupils to take their study paths. Both HAVO and VWO pupils can choose from four so-called education profiles: science and technology, science and healthcare, economics and society, and culture and society. All three school types (VMBO, HAVO and VWO) finish with a final national examination (in Dutch: *eindexamen*).

With a MBO, HAVO or VWO diploma, pupils can enroll in HBO (*Hoger Beroeps Onderwijs*, literally “higher professional education”). It is oriented towards higher learning and professional training (polytechnic level). With a VWO diploma, pupils can enroll in WO (*Wetenschappelijk Onderwijs*, literally “scientific education”). WO is only taught at a university. It is oriented towards higher learning in the arts or sciences.

### 9.3 Sports schools

LOOT schools are secondary schools for pupils of all abilities from VMBO, HAVO and VWO. Pupil athletes attending LOOT schools can choose between the three educational streams according to his/her intellectual ability.

As an example, pupils’ distribution by educational level at the LOOT school *Trevianum* (in the city of Sittard / province of Limburg) is as follows:

**Table 9.1: Pupils’ distribution by educational level at *Trevianum* school (2005/6)**

Grade	Total number of pupil athletes	Number of pupils - HAVO level	Number of pupils - Atheneum level	Number of pupils - Gymnasium level
1	12			
2	12	7	4	1
3	16	8	6	2
4	41	19	14	8
5	27	16	5	6
6	6		2	4
<b>Total</b>	<b>114</b>	<b>50</b>	<b>31</b>	<b>21</b>

Current education legislation does not place any restrictions on educational arrangements between pupil athletes and educational institutions. Therefore, it depends on specific schools to what extent they make adaptations to their regulations and educational programmes. Overall, a large number of schools are willing to adapt to make it possible for pupil athletes to combine sport and education. The quality of the educational programme is monitored by the LOOT foundation.

### 9.4 Pupil population and core sports

In the school year 2006/07, the LOOT schools accommodated approximately 2,500 pupil athletes in 68 sports. LOOT secondary schools also offer regular education for non-athlete pupils. The pupil athletes form only a small part of the school’s total pupil population, although about 10 per cent of LOOT schools have specialist elite sports classes (depending on the number of pupil athletes per age-group). However, the LOOT foundation’s national co-ordinator stated that experts regard mixed classes

(pupil athletes and non-athletes) as good practice: it is “*essential that pupil athletes are integrated within the framework of the regular school as far as possible*”. He emphasised that for the pupil athletes’ social development, it is important that they are not only surrounded by sports people, but also by “*normal*” people. “*Otherwise, they may loose contact with the real world.*” The experience has proved that pupil athletes are academically more successful in mixed classes because their non-athlete classmates may help them to pick up missed classes and deal with homework. Contrary to the Belgian experience, non-athlete pupils do not disagree with the policy of mixed classes. According to the LOOT foundation’s national co-ordinator, non-athlete pupils do not show signs of envy and jealousy because of the athletes’ concessions (see below).

LOOT sports are: e.g. acrobatics, aerobics, American football, athletics, badminton, ballet, baseball, basketball, billiards, boxing, bowling, callisthenics, canoeing, canoe polo, carting, climbing, cricket, cycling, figure-skating, football, golf, gymnastics, handball, hockey, horse riding, ice-hockey, judo, kaatsen (Dutch game), karate, motocross, netball, mountain biking, platform diving, rowing, rugby, sailing, short track, inline speed-skating, skiing, ski jump, speed skating, softball, squash, synchronised swimming, swimming, taekwondo, table tennis, tennis, trampolining, trial, triathlon, twirling, volleyball, wu shu, wakeboarding, water polo, windsurfing and wrestling. The largest group are the football players, followed by the tennis, basketball and judo.

As an example, pupils’ distribution by sport at the LOOT school *Trevianum* is as follows:

**Table 9.2: Pupils’ distribution by sport at Trevianum school (school year 2005/06)**

<b>Sport</b>	<b>Number of pupil athletes</b>
Athletics	9
Badminton	3
Rhythmic gymnastics	2
Handball	1
Softball	1
Ice-hockey	2
Judo	10
Karate	2
Motocross	1
Horse riding	2
Speed skating	1
Skiing	2
Taekwondo	3
Table tennis	1
Tennis	8
Gymnastics	7
Football	23
Cycling	1
Swimming	21
<b>Total</b>	<b>114</b>

## 9.5 Selection process

To be eligible for admission to a LOOT school, pupil athletes must be awarded sporting excellence status by their sports federation. Admission requirements are different for each sporting discipline. Pupil athletes are selected based on time standards, performances at national qualifying events and their potential for future success. The potential candidate must spend at least 15 hours per week in training and competition. There are different stages of achieving the official status of an elite athlete:

- (1) A-squad (NOC\*NSF-status)
- (2) B-squad (NOC\*NSF-status)
- (3) *HP-sporters* / “promising athlete” squad (NOC\*NSF-status)
- (4) A-squad (sports federation’s status)
- (5) B-squad (sports federation’s status)
- (6) Member of a sponsored talent team<sup>11</sup>

Overall, eligibility is based on both sporting and academic merit. To apply for a LOOT school place, the potential candidate needs to follow these steps:

- a. Interested pupils who are squad members get information on LOOT schools through their NOC\*NSF career advisor.
- b. The candidate signs up for a LOOT school.
- c. A selection committee, consisting of people from NOC\*NSF, the respective sports federation and the LOOT school, decide on each applicant’s eligibility in cooperation with the pupil’s parents.

## 9.6 Funding

Each LOOT school is responsible for its own budget (see Table 9.3).

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<sup>11</sup> For example, the *Rabo Talent Team*, sponsored by the Dutch Rabobank, is assembled annually and consists of the most talented young riders of the Netherlands up to 25 years old. Members of the Talent Team gets 2,000 € per year which they can spend on the improvement of their riding career.

**Table 9.3: Trevianum's budget plan (2006/07)**

Income (in €)		Expenditures (in €)	
Contribution NOC*NSF	4,500.00	Labour costs	35,000.00
Contribution local authority <i>Sittard-Geleen</i>	2,200.00	Support for pupils	11,000.00
Parents' contribution	11,000.00	Contribution LOOT project DaCapo <sup>12</sup>	1,600.00
Contribution <i>Trevianum</i>	35,000.00	Contribution LOOT foundation	2,500.00
Interest	1,000.00	LOOT activities (e.g. get-together for pupil athletes, their parents, teacher coaches)	1,500.00
		Public relations	1,000.00
		Sundry expenses	1,000.00
		<b>Credit balance</b>	<b>100.00</b>
<b>Total</b>	<b>53,700.00</b>	<b>Total</b>	<b>53,700.00</b>

The expenses are paid by the school itself, local authorities, NOC\*NSF and by the pupil athletes' parents. At *Trevianum*, pupil athletes' parents pay additional school fees (€100 per school year) for the athletes' extra support (e.g. guidance of a study / sport co-ordinator). Other schools collect fees between €50 and €200 per school year. The pupil athletes' travel expenses are normally paid by the parents. Only major sports clubs (e.g. football clubs) are able to pay for the players' travel costs.

The NOC\*NSF has €80,000 per year divided by the number of LOOT schools. According to the LOOT foundation's national co-ordinator, the NOC\*NSF's contribution is important for the LOOT schools to know that the work they are doing is being appreciated by the Netherlands Olympic Committee.

## 9.7 Relationships with sporting organisations

The LOOT schools' relationships with sporting organisations vary. In many cases, national sports federations work closely with LOOT schools (e.g. baseball/softball, gymnastics, tennis, judo, basketball, football). In other cases, sports federations are still trying to establish closer relationships with the LOOT schools (swimming, volleyball, speed-skating). A few sports federations do not collaborate with LOOT schools, but support individual elite athletes. In addition, most LOOT schools work closely with local sports clubs.

Whereas the schools are only responsible for the academic programme and its adaptations for pupil athletes, national sports federations and local sports clubs organise the training and choose the coaches (to be employed by the sports federations). Depending on the sports, the training takes place either in the local sports clubs or at the province's Olympic training centre. The schools do not provide

<sup>12</sup> Trevianum has started cooperation with *DaCapo vocational college* to enable also VMBO pupils to combine sports and education.

training facilities. According to the LOOT foundation's national co-ordinator, the local sports clubs play a major role in the Dutch talent identification system.

## 9.8 Academic and Sports Curricula

LOOT schools offer individual study plans/timetables with adaptations according to the athlete's school and sport demands. Study plans, developed in cooperation between the athlete, parents and the school's study / sport co-ordinator, include the following concessions/levels of flexibility:

- Guidance of a study / sport co-ordinator who meets the pupil athlete regularly to help him/her manage and balance both school and sport demands (e.g. by writing the pupil's individual study plan according to training and competition times, organising extra tuitions, exam date shifting).
- Flexible timetable to allow pupils to be absent for training and competition.
- Exemption from specific courses: Normally, pupils need to choose ten subjects for the final national examination (*eindexamen*). Pupil athletes are allowed to focus on a reduced number of subjects (six, seven or eight subjects depending on the chosen educational level: MBO, HAVO or VWO diploma).
- Delay or decrease the amount of homework.
- Extra tuitions/private lessons to compensate for the pupil athletes' frequent absence from school.
- Private study rooms.
- Possibility of delay for tests and internal examinations.
- Possibility of doing the final examination year over a two-year period (only for world class pupil athletes).
- Use of the province's Olympic training centre's facilities including all the service delivery departments such as sports medicine, physical therapies, strength and conditioning, biomechanics and performance analysis, performance psychology, sports nutritional counselling, personal development services.

The extent to which each pupil athlete benefits from these concessions depends on individual needs. The LOOT schools' purpose is to create the best conditions for pupil athletes to achieve good academic outcomes.

## 9.9 Academic records

Even though LOOT pupils are allowed to follow all three types of secondary education, only a few pupil athletes choose the VMBO level (pre-vocational secondary education). Most choose the HAVO or VWO level. According to the LOOT foundation's national co-ordinator, the fact that pupil athletes mostly enrol in HAVO and VWO proves that pupil athletes show high educational abilities.

As an example, the 2005/06 school year results of *Trevianum* are as follows (Table 9.4 and 9.5):

**Table 9.4: School year 2005/06 results at *Trevianum* school (besides final exam candidates)**

	<b>Number of pupil athletes</b>	<b>Percentage</b>
Promoted to the next grade	80	87
Needed to repeat the grade	9	10
Left the LOOT school	3	3
<b>Total</b>	92	100

**Table 9.5: Final school exam results at *Trevianum* school (school year 2005/06)**

	<b>Number of pupil athletes</b>	<b>Number of pupils who graduated from secondary school</b>	<b>Percentage</b>	<b>Failed</b>
Eindexamen HAVO	16	14	88	2
Eindexamen VWOAtheneum	2	2	100	0
Eindexamen VWO Gymnasium (incl. Latin and Greek)	4	4	100	0
<b>Total</b>	22	20	91	2

## 9.10 Sporting records

Some of the important sporting records are summarised in Table 9.6.

**Table 9.6: Sporting records of current and former LOOT school pupil athletes**

Name	Sports	Success
Rens Blom	Athletics	Gold medallist, WC 2005
Sydmill Harris	Basketball	NBA USA
Marlies van Baalen	Horse riding	4th, Olympic Games 2004
Françoise Harteveld	Judo	Gold medallist, EC 1998
Karel Klaver	Hockey	Silver medallist, Olympic Games 2004
Nicky Pastorelli	Kart racing	Test driver Formula One
Sven Kramer	Speed skating	Silver medallist, Olympic Games 2004
Ireen Wüst	Speed skating	Gold medallist, Olympic Games 2004
Martin Verkerk	Tennis	Finalist Roland Garros 2003
Verona van der Leur	Gymnastics	Silver medallist, WC 2002
Suzanne Harmes	Gymnastics	Bronze medallist, WC 2005
Jeffrey Wammes	Gymnastics	Bronze medallist, EC 2005
Kalle Coster	Sailing	6th rank, Olympic Games 2004
Inge de Bruijn	Swimming	Four-time gold medallist, Olympic Game 2004
Inge Dekker	Swimming	Gold medallist, WC 2006
Thijs van Valkengoed	Swimming	Bronze medallist, EC 2003

LOOT school provided 11 football players in the U21 squad that won in the 2006 European Championships. Further, two of these players participated in the 2006 World Cup in Germany.

## 9.11 Drop-out rates

The drop-out rate of LOOT pupil athletes is less than one per cent per school year.

## 9.12 Post-Secondary Education

There is no equivalent organisation to the LOOT foundation at university level. Consequently, the drop-out rate of student athletes at university level is higher than the pupil athletes' drop-out rate. According to LOOT foundation's national coordinator, student athletes generally struggle more than pupil athletes to combine education and sport. Student athletes have more responsibility in life and need to organise their daily time schedule, including demands of education and sports, on their own.

A small number of institutions of higher education have special elite sport classes, such as the Johan Cruyff College. The Johan Cruyff College is an intermediate vocational education for management and communication for potential elite athletes only. It offers the possibility to adapt the timetable to the training schedule. It also enables elite athletes to follow e-learning programmes during foreign training camps.

## 10 SINGAPORE

### 10.1 Brief history

The Singapore Sports School (SSS) was officially declared opened in 2004 with a pioneer batch of 141 pupil athletes. The idea of establishing a specialised school for young sportspeople was mooted by the Committee on Sporting Singapore (CoSS) in 2000. The CoSS had noted that Singapore's demanding academic environment places enormous pressure on young aspiring athletes, leading most of them to eventually abandon their sporting aspirations for their studies. It was also observed by the Committee that resources given over to elite sports development in mainstream schools are often limited, as these schools' focus tends to be directed towards providing quality academic education.

The government adopted the CoSS recommendation and the hardware was subsequently put in place - a S\$75 million complex in Woodlands featuring academic, sports training and boarding facilities that took 13 months to complete. The Sports School comes under the auspices of the Ministry of Community Development, Youth and Sports (MCYS).

The SSS is the only school in Singapore to have its own sports science academy offering services such as exercise physiology, sports biomechanics, sports psychology, sports physiotherapy, strength and conditioning, nutrition and medical/nursing support to pupil athletes. The sports science academy has two objectives:

- To provide sports-specific assessment, testing, profiling etc that will add value and help in fine-tuning the training programmes of the various academies and thus contribute to the enhancement of performance.
- To provide an educational service by teaching pupil athletes various aspects of sports science such as nutrition strategies, injury management etc., so that they will be empowered to be responsible and be able to put the knowledge and skills learnt into practice. Seminars, workshops, etc., are also conducted for coaches and parents.

### 10.2 Education system in Singapore

Education in Singapore is managed by the Ministry of Education (MOE) which directs education policy. The Ministry controls the development and administration of public schools which receive government funding, but it also has an advisory and supervisory role for private schools. For both private and public schools, there are variations in the extent of autonomy in their curriculum, scope of government aid and funding, tuition burden on the pupils and admission policy.

Primary education is a four-year *foundation stage* (Primary 1 to 4) and a two-year *orientation stage* (Primary 5 to 6). Primary education is free, though there is a fee of up to SGD13 monthly per student that goes to the school to help cover miscellaneous costs. At the end of Primary 6, the national Primary School Leaving Examination (PSLE) is held. The examination determines whether the pupil is ready to leave primary school by passing; however the primary purpose of the examination is to eventually allocate places in secondary schools to pupils based on their performance in the examination.

Based on results of the PSLE, pupils are placed in different secondary education tracks or streams: “Special”, “Express”, “Normal (Academic)”, or “Normal (Technical)”. Both *Special* and *Express* are four-year courses leading up to a Singapore-Cambridge General Certificate of Education O-Level exam. The difference between *Special* and *Express* is that the pupils’ native languages - English and the mother tongue - are taught at a higher level as *higher mother tongue*, and are thus more difficult. *Normal* is a four-year course leading up to a Normal-level (N-level) exam, with the possibility of a fifth year followed by an O-level. Normal is split into *Normal (Academic)* and *Normal (Technical)*. In *Normal (Technical)* pupils take subjects more technical in nature, such as Design and Technology, while in *Normal (Academic)* pupils are prepared to take the O-level exam and normally take subjects such as principles of accounting. In 2004, the Ministry of Education announced that selected pupils in the Normal course would have an opportunity to sit for the O-level exam directly without first taking the N-level exam.

With the exception of schools offering the integrated programme which leads to either an International Baccalaureate Diploma or to an A-level exam, most pupils are streamed into a wide range of course combinations at the end of their second year. The total number of subjects they have to sit at O-level ranges between six to ten subjects with English, mother tongue or higher mother tongue language, mathematics, one science and one humanities elective being compulsory. The subject taken varies, and several new subjects such as computing and theatre studies and drama are being introduced in tandem with the Ministry of Education’s revised curriculum.

### **10.3 Pupil population and core sports**

The SSS offers the following core sports:

- Badminton (about 31 pupil athletes in 2006/07)
- Bowling (about 33 pupil athletes)
- Football (about 136 pupil athletes)
- Netball (about 29 pupil athletes)
- Sailing (about 16 pupil athletes)
- Swimming (about 22 pupil athletes)
- Table tennis (about 25 pupil athletes)
- Athletics (about 74 pupil athletes)

In addition, there were pupil athletes in the following minor sports:

- Golf (ten pupil athletes)
- Wakeboarding (one pupil athlete)
- Gymnastics (one pupil athlete)
- Triathlon (five pupil athletes)
- *Silat* = martial art stemming in the majority from Malay & Indonesia heritage (12 pupil athletes)
- Shooting (one pupil athlete)

The SSS also admits talented individual pupil athletes from other sports on a case-by-case basis. In total, there were about 395 pupil athletes attending the SSS in the school year 2006/07 (male: 57 per cent; female: 43 per cent). Foreign pupils can take up to 20 per cent of the places in the SSS. Those admitted must satisfy the same criteria of high sporting potential as a local pupil. But Singaporeans will be given priority. No

Singaporean pupil with high sporting potential will be deprived of a place at the SSS. In 2007, there were three foreign pupils from Indonesia, China and the UK attending the SSS.

## **10.4 Selection process**

Every year, the SSS admits between 100 and 150 pupil athletes aged between 12 and 15 after they have attended its annual selection trials which consist of a series of tests to assess their technical skills, fitness and potential for further development of their talent. In addition, written psychological tests are conducted to assess their mental strength and aptitude. Finally, they are interviewed by the school's senior management before being considered for admittance. Older pupils are considered on a case-by-case basis. On average, there are about 1,200 young athletes per year signing up for the Singapore Sports School's selection trials.

Following the selection trials, pupil athletes must obtain PSLE examination results that enable them to qualify for the school's express stream programme (see above). Pupils who qualify for the normal (academic) stream will be considered for a place in the school on a case-by-case basis.

Pupils who wish to study in the Singapore Sports School can seek a formal school transfer from their posted secondary school to the Singapore Sports School. This will also facilitate their re-admission to the mainstream secondary school system should they decide subsequently to leave the Singapore Sports School.

## **10.5 Funding**

### **10.5.1 School fees**

Singapore citizens who are accepted by the SSS need to pay S\$6,000 a year in school fees. The fees cover the cost of food and accommodation at the school as well as the education and sports training pupils receive.

According to sporting results, partial scholarships from the SSS and its corporate sponsors are an offer to top-performing Singapore pupil athletes while financial assistance schemes are available to help needy Singapore pupils to afford the fees.

Selected permanent residents and foreigners need to pay the full school fees without any subsidy at a cost of S\$25,000 a year. This includes the cost of food, accommodation, education and sports training.

### **10.5.2 Sponsoring**

The SSS has the support of sponsors such as Singapore Pools, Ericsson, Yonex, Pointer, Manulife, British Chamber of Commerce, Singapore Airlines, Umbro, New Balance and Police Sports Association. Selected SSS pupils receive scholarships and study awards from the sponsors.

For example in 2005, the Police Sports Association has awarded three study awards, worth a total of S\$36,000 to promising pupil athletes who come from financially needy backgrounds. These awards, worth S\$3,000 per year per pupil, help these pupils pay their school fees. Manulife Financial, a worldwide sponsor of the Olympics, offered four scholarships worth S\$12,000 each to SSS pupils. In addition, the British Chamber of Commerce and Standard Chartered Bank have jointly announced the *Dream 2012 sports bursary* for SSS pupil athletes preparing for the

2012 London Olympics. The bursary will rise about S\$20,000 each year until 2012 to help the most talented athletes compete in the 2012 Olympics.

## **10.6 Academic and sporting curricula**

The SSS provides a flexible academic setting that enables elite pupil athletes to balance their academic pursuits with their high-level, intensive sports training. In order to enable the pupil athletes to meet the rigorous local and overseas training and competition requirements, the SSS has implemented a modular system of education where the academic calendar is organised in blocks of five weeks per module. This system ensures that pupils who miss parts of the module as a result of their participation in sports will not:

- Be disadvantaged when they return to the classroom as the modules taught are not directly dependent on each other.
- Experience gaps in their learning as the system makes provisions for pupils to make up lessons that they have missed.

The SSS pupils go on several overseas trips for competitions and training camps each year. The Sports School believes that early exposure to high levels of competition will help these pupils in their development into elite athletes. The modular system also allows teachers to constantly evaluate the lessons and modify them where necessary to ensure quality learning for pupils.

Online learning resources and lesson compact discs are provided for pupils to access when they are training or competing overseas, thus enabling them to keep up with their academic work while away. Pupils are given two hours of supervised study time every night for them to revise their weaker subjects and topics. In addition, there are development and enrichment programmes for pupils to acquire entrepreneurship, leadership and public speaking skills, and appreciation of the arts, music and life sciences. Pupils are taught weekly lessons on sports science so that they can apply its principles in training and competition.

Apart from overseas training and competition, pupils are expected to stay in the boarding school from Sunday nights to Friday evenings during the school semester. The 7ha boarding school has classrooms catering to classes of 20 to 25 pupils, libraries, science and music labs, specialised home rooms<sup>13</sup> and three residential blocks for pupils and staff. Its sporting facilities include two all-weather Olympic-sized swimming pools, a 700 seater indoor multi-sports auditorium, a ten-court badminton training centre, a table tennis centre which can accommodate up to 32 tables, an 8 lane 400m synthetic rubber running track, a synthetic football field, a two-storeyed gym and strength and conditioning centre.

The SSS provides the flexible academic programme for pupil athletes while the respective national sports federations look after the pupils' training.

The SSS follows the same academic syllabus as the local mainstream schools. The academic programme is firmly based on the educational objectives set out by the Ministry of Education and prepares pupils to sit for the GCE 'O' Level examinations

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<sup>13</sup> *Home rooms* means that SSS pupils are not confined to a specific classroom for lessons. Instead, they move around to home rooms that are 'owned' by subject teachers. Such an arrangement allows teachers to transform their classrooms into learning centres that are rich in materials and apparatuses that make learning a 'living' experience.

in either four or five years. Pupils can take up to nine subjects in the upper secondary levels, depending on their sports schedule and academic achievement.

The day starts at 6am when the pupils prepare for their first training session. Breakfast follows and the academic lessons take place in specialised classrooms (*home rooms*), followed by lunch, enrichment programmes, a nap, a second training session, dinner and supervised study. Lights out is at 10.30 pm.

There is a staff-pupil ratio of about 1:10. The SSS staff is a combination of academic as well as coaching professionals. The teachers usually have a background in sports or experience in teaching sportspeople. As such, they are able to provide an education that considers the unique position of pupil athletes trying to balance studies and sports. Staff development is a priority for the school. Teachers are provided opportunities, both locally and overseas, to acquire pedagogical and content skills. Teaching processes are constantly reviewed and refined so as to cater to the differentiated abilities of the pupils. Class sizes are of maximum 25 pupils. Each of its eight core sports academy is headed by a General Manager (GM) and a Head Coach. Its Academy General Managers are derived from former teachers who are also sportsmen.

### **10.7 Relationships with sporting organisations**

The SSS is operating under the auspices of the Ministry of Community Development (MCDS) and is closely linked to the national sports federation. The SSS training programmes are run by the respective federations.

### **10.8 Academic records**

No data available (according to the SSS Marketing Communication Manager, due to the fact that the sports school has been open for only three years there are no details available yet).

### **10.9 Sporting records**

For example, the SSS achieved the following sporting records for the year of 2005:

- At the Asian optimist sailing championships in Thailand, one pupil captured both the boy's and overall titles.
- One girl became the Sports School's second Asian champion for 2005 when she won the under-15 singles title at the Asian junior table tennis championships in India.
- Two swimmers struck gold at the fourth Asian age-group swimming championships, taking home the 100m and 200m Butterfly titles, and the 50m breaststroke title, respectively.
- At the international children's games in England, an annual mini-Olympics featuring over 1,500 athletes from 70 cities under the age of 15, SSS swimmers and paddlers won two gold, six silver and two bronze medals, tripling the one gold and two bronze medals they won at the same competition a year before in the United States.
- Six SSS pupil athletes represented Singapore at the 23rd Southeast Asian (SEA) Games in Manila. Competing in swimming, bowling and sailing, they

fulfilled the school's promise of delivering athletes to represent Singapore at the SEA Games, two years ahead of time. All six athletes returned with medals, winning two gold, seven silver, and one bronze medals, contributing to Team Singapore's 42 gold medal haul.

### **10.10 Drop-out rates**

Pupils, who find that they are unable to cope with the programme for valid reasons, are permitted to opt out at any point, and return to a mainstream school. More detailed information about drop-out rates is not available.

### **10.11 Delivery to universities**

Delivering post-secondary education programmes, the SSS Education Services Centre (ESC) is a one-stop on-campus facility that aims to provide quality consultation services to both parents and pupils. In general, the ESC seeks to assist parents of SSS pupils to determine appropriate educational pathways for their children, identifying career directions and making the best of their educational programme. The ESC is also furnished with a library of resources to help pupil athletes obtain specific information about partner-universities/institutions. The Centre also provides administrative support in the form of registration and matriculation for specific post-secondary education programmes.

The Singapore Sports School's post-secondary education programmes seek to provide their pupil athletes with a seamless academic pathway from secondary school to university. This "through-train" route eliminates the need for pupil athletes to take the GCE 'O' and 'A' levels in order to pursue a university degree. By skipping the 'O' or/and 'A' levels, pupil athletes will no longer have their sporting progress derailed by their preparations for these examinations.

In forging strategic alliances with various tertiary institutions, Singapore Sports School has developed a fairly extensive network of collaborations both locally and beyond. The SSS has established partnerships with tertiary institutions in New Zealand, Australia and United Kingdom. The group of education partners comprises the following institutions:

- Republic Polytechnic, Singapore
- Nanyang Technological University, Singapore
- EASB Institute of Management, Singapore
- AUT (Auckland University of Technology) University, New Zealand
- University of Wales Institute, Cardiff (UWIC), United Kingdom

Building upon this well-established "through-train" platform, the SSS has progressed to forge other collaborations with universities in Australia such as Monash University, Edith Cowan University (ECU) and University of Western Australia (UWA) as well as Brunel University in the United Kingdom.

## **10.12 Post-secondary “through-train” platform**

### ***Pathway 1:***

Singapore Sports School >> Republic Polytechnic Diploma >> Nanyang Technological University Degree

Singapore Sports School pupils can qualify for and pursue a three-year diploma course at Republic Polytechnic without having to sit for their ‘O’ levels. Upon graduation from Republic Polytechnic, the SSS-RP graduates can pursue a university degree at Nanyang Technological University via the University’s Discretionary Admission Scheme.

### ***Pathway 2:***

Singapore Sports School >> Auckland University of Technology (AUT) Diploma >> Auckland University of Technology (AUT) Degree

In collaboration with AUT University, EASB Institute of Management is offering the two-year diploma in sports management and exercise science. SSS athletes are eligible to apply for this diploma after their graduation year of study at Sports School. Graduates from this diploma can progress to pursue a university degree with AUT University in New Zealand. The SSS is also forging other network alliances with universities in Australia, United Kingdom and United States of America for progression opportunities after the AUT diploma.

## 11 SWEDEN

### 11.1 Brief history

The history of the *national sports upper secondary school* can be traced back to a number of parliamentary bills on youth sport passed in 1965. These led to a government commission of enquiry, which in 1969 presented the first proposal for a combination of elite sport (i.e. at national/international level) and education. The commission members emphasised the need to find solutions to suit Swedish society, stating that the format of elite sport boarding schools in the German Democratic Republic, Poland and the Soviet Union were not appropriate.

The national ethos was that young athletes should have the opportunity to study and train *close to home*. The working group also noted that neither the US high school nor intercollegiate sports could take root, because competitive sports and education have been two separate fields in Sweden.

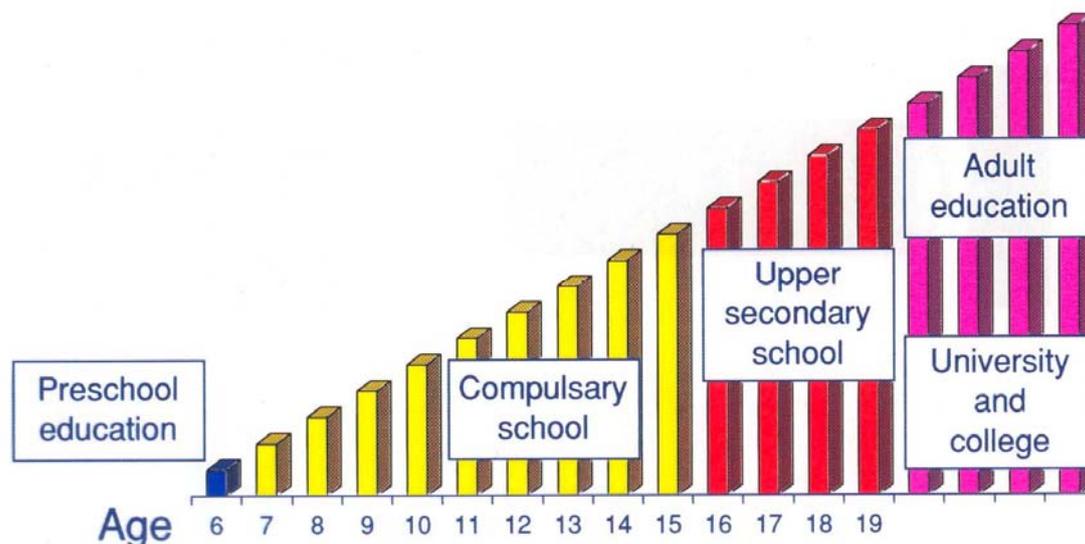
The authorities thought that athletes should be part of the ordinary secondary school and its curriculum. In addition, schools would arrange opportunities for the athletes to train under the supervision of a professional coach, with the costs of hiring a coach by the local municipality. The primary responsibility for the launch of the experiment was given to the Swedish Sports Confederation (*Riksidrottsförbundet/RF*). The school legislation of the time stated that students were obliged to attend the nearest secondary school, but the law was amended so that any athlete could apply to schools involved in the experiment.

A trial operation initiated in 1972 by the Swedish Sports Confederation and with two municipalities was taken over in 1977 by the National Board of Education, allowing changes to be made to the syllabus. The new subject of *specialist sport* was introduced in 1982 the combination of elite sport and education was established on a permanent basis.

### 11.2 Education system in Sweden

Education in Sweden is state-funded and compulsory for all between the ages of seven and sixteen. Compulsory school includes nine years of basic school until the age of 16 (in Swedish: *Grundskola*). At the end of their ninth year in school (age 16) pupils sit national examinations in Swedish, English and Mathematics. *Gymnasieskola* (literally “gymnasium school”) is the three-year upper secondary school in which pupils can either prepare for higher education or receive a vocational education.

**Figure 11.1 The Swedish school system**



Most (98 per cent) Swedish pupils continue their studies into upper secondary education and anyone up to the age of 20 can enroll for free upper secondary education. The upper secondary school is divided into different so-called “national programmes”, i.e. different types of choices which lead to different kinds of education.

There are 17 three-year national study programmes, which provide a broad general education and eligibility to study at the university or post-secondary level. The two most common programmes are “social sciences” (*samhällskunskap*) and “natural sciences” (in Swedish: *naturvetenskap*). Every programme comprises 2,500 upper secondary credits. All national programmes include the eight core subjects: English, arts, physical education and health, mathematics, general sciences, social studies, Swedish and religion. Thirteen of the 17 programmes contain at least 15 weeks in a workplace. In four of these - the arts, natural sciences, social sciences and technology - workplace training is not compulsory, though even these programmes offer the possibility of conducting parts of the programme at a workplace.

Upper secondary school concludes with a nationally graded examination (*Slutbetyg Från Gymnasieskola*) qualifying the pupil for all higher level studies.

### 11.3 Sports schools

Opportunities to develop a sports career within the school system exist at upper secondary level for 16- to 19-year olds (grade 10 to 12). In the school year 2006/07, there are 61 sports schools that recruit pupil athletes from all over the country. Depending on the size of the school, they cover one sport or more. One purpose of those sports schools (*idrottsgymnasium*), which are designed as boarding schools, is to offer pupil athletes better training opportunities than they get in their home towns. Sports schools are always part of a regular secondary school (*gymnasium*) which means that pupil athletes are taught in the same class with non-athlete pupils, follow the standard curriculum, but have opportunities for training during the day. Pupil athletes can, to some extent, adjust their school programme to suit training and competition.

Communities that are interested in establishing a new sports school must meet the following criteria:

1. There must be a sporting tradition in the community with good conditions for training, strong local clubs and experienced coaches.
2. The relevant political committees and administrative bodies must regard the programme as positive and be willing to support it financially.
3. The community must lie within the Swedish centre for the respective sports, to ensure that the sports school is close to competitions and is a suitable location for pupil athletes' gatherings.
4. There must be a large range of national programmes (see above) available at secondary schools in the locality, so that pupil athletes' wishes can be met.
5. The community and the school should have a tradition of looking after pupils from elsewhere in the form of boarding facilities for pupils, or families willing to take care of them.

*Sandagymnasiet* upper secondary school (grade 10 to 12) in Jönköping/Huskvarna is the largest sports school within Sweden. It was founded in 1961 (sports section founded in 1975) and currently provides education for about 1000 pupils (of whom 250 are pupil athletes in 10 sports) taught by about 150 staff. Although most pupils come from the local area, there are about 30 pupil athletes from other parts of Sweden. For first-year pupils *Sandagymnasiet* offers accommodation in a former hotel (20 beds). Second- and third-year pupils are supposed to rent apartments in town. There is an agreement between sports schools and local housing companies to reserve accommodation for pupil athletes.

#### 11.4 Pupil population and core sports

In the school year 2006/07, there are 61 sports secondary schools covering 32 sports with a total of 1,323 pupil athletes. The schools with the largest numbers of pupils are those dedicated to skiing, athletics, orienteering, ice hockey, basketball, football, bandy and volleyball (see Table 11.1).

**Table 11.1: School year 2005/06: Numbers of sports schools and their pupils taking the most popular sports**

Sports	Number of schools offering the sport	Total number of pupils taking the sport
Skiing	7	192
Athletics	7	172
Football	4	120
Ice hockey	2	60
Bandy	2	60
Basketball	2	60
Orienteering	2	42
Volleyball	1	62

For example, the *Sandagymnasiet* athletic centre (*Sanda Idrotts Centrum*) gives pupils the opportunity to combine academic studies with training in basketball, ice hockey, handball, golf, soccer, skiing, badminton, swimming, floorball and orienteering.

Football (75 pupils), ice hockey (40 pupils) and basketball (30 pupils) are the largest sports at *Sandagymnasiet*.

### 11.5 Selection process

In order to attend a secondary sports school pupils must be awarded sporting excellence status by the respective sports federation and must have successfully passed grade 9 (with national examinations in Swedish, English and mathematics). The guidelines for the balance between levels of grades and sporting performance are not specified, and left to individual schools. The coordinator of the sports schools at the Swedish Sports Confederation emphasised that entry requirements and admission to an upper secondary sports school are based on a combination of academic and sporting ability - “*Pupil athletes must be good at both.*”.

### 11.6 Funding

The 61 sports schools collectively receive additional government funds from the government (a total of €4,000,000 per school year) and the municipality (a total of €6,000,000 per school year). Funding from the municipality covers the salaries for teachers and coaches as well as the pupil athletes’ transport. Private industry supplements government funding. Each sports school receives a specific amount of money depending on the number of pupil athletes and the kind of sports. On average, schools get €3,000 per school year for an individual sport athlete and €1,800 for a team sport player. In return, the sports schools must demonstrate that they have invested in quality training and that pupil athletes are performing satisfactorily in academic work and sport.

There are no school fees in Sweden. However in some schools, pupil athletes’ parents need to pay extra costs for sports training and transport. This ranges between €500 and €1,500 per school, depending on the specific sport and the club’s contribution. For example at *Sandagymnasiet*, doing athletics is more expensive than playing ice hockey because of the relatively small contribution of the athletics club.

### 11.7 Academic and sporting curricula

Pupil athletes follow one of the national programmes together with the non-pupil athletes. This implies that the pupil athletes belong to many different classes and courses. However, the pupil athletes additionally follow several training sessions per week. The number of weekly training sessions varies from school to school. In Table 11.2, the time schedule for ice hockey training is shown for pupil athletes in different grades at *Ishockeygymnasiet / Wenströmska gymnasiet* (spring term 2007).

**Table 11.2: Time schedule for ice hockey training at *Wenströmska gymnasiet***

<b>Grade 1</b>	Mondays: 8am to 9.30am Thursdays: 3.15pm to 4.30pm
<b>Grade 2</b>	Tuesdays: 2.45pm to 4pm Thursdays: 8 am to 9.30 am
<b>Grade 3</b>	Mondays: 2.45pm to 4pm Tuesdays: 8am to 9.30am

At *Sandagymnasiet*, pupil athletes attend eight training sessions per week: on four days per week, there is training in the morning (8 to 9:30am) and in the afternoon after 4pm. The morning sessions take place at the school (using the school's or the community's sports facilities) and are taught by club coaches. In the afternoon, training is organised by Jönköping's sports clubs. Most community and club facilities are within walking distance from school, with only the golf players needing to take the bus to reach the golf course.

Approximately one third of the time spent at the sports school is dedicated to training and related activities, with scheduled time allocation varying between sports. For ski sports, more time is devoted during winter months. Therefore, each pupil has a personal mentor with whom the studies are planned and conducted on an individual basis. Together with mentor and teachers, pupil athletes work out a personal study scheme, with adaptations according to the individual athlete's school and sport demands.

Sports training is accepted as a school subject and 700 credits can be obtained by attending training. In 2007, the new Swedish government focused more on academic than sporting achievement and has discussed the possibility of decreasing the number of credits that can be achieved through sports training to 400 or 500.

Sports lessons for pupil athletes consist of both a practical part (70 to 80% of the sports lessons, with focus on technique and tactics training, individual and team training) and a theoretical part (20 to 30% of the sports lessons with focus on e.g. sport and exercise psychology, coaching science, anatomy, sport ethics, fair-play, doping). The coordinator of the sports schools at the Swedish Sports Confederation (RF) stated that the RF is currently planning a school evaluation to check the school programmes' balance between practical sports training and sports-related theoretical lessons. The evaluation is regarded as necessary because there are some schools that tend to offer only practical sports training without guaranteeing theoretical lessons.

When pupil athletes have finished their sports courses, they receive a mark in their chosen sport, where consideration is given to all parts of the courses.

Sports schools offer extra tuitions/private lessons for pupil athletes (due to their frequent absence from school) and the possibility of doing the three-year programme of upper secondary education in four years. However, according to the principal of *Sandagymnasiet*, only five per cent of the pupil athlete population exercise this option.

## **11.8 Relationships with governmental and sporting organisations**

The sports schools are supported jointly between the Swedish School Board and the Swedish Sport Confederation and the local communities/municipalities.

## **11.9 Academic records**

On the upper secondary school level, pupil athletes are considerably over-represented on the *academic* programmes, compared with the national average, with an equivalent under-representation on the *vocationally*-oriented courses.

According to the principal of *Sandagymnasiet*, the pupil athletes' study results are above the national average. However this refers mostly to individual sport athletes. The principal's experience is that team sport athletes are generally less focused on their academic achievement. In addition, research has shown that the pupil athletes'

grades considerably vary from sport to sport depending on the respective sport's roots (middle-class or working-class sport). Female pupil athletes show significantly better results than their male counterparts.

### **11.10 Sporting records**

Research has shown that one third of former upper secondary sports school pupils take part in competitions at international level. However 53 per cent state results/positions at a level lower than Swedish national championship level; 33 per cent cite results from Swedish national championships and 14 per cent cite results from international competitions. Eighteen per cent have won medals at Swedish championships, two per cent at European championships and five per cent have achieved a position in the top 10 at world championships/the Olympic games.

In the case of *Sandagymnasiet*, 30 per cent of pupil athletes continue their sports career after leaving school. Further, 30 per cent decide to begin a coaching career instead of a sports career. The others (40 per cent) drop out of the sports system. The *Sandagymnasiet* principal does not complain about the drop-out rate but emphasises the purpose of his school to enable young athletes aged 16 to 19 to find out about their chances to succeed in elite sports. Even if some pupils realise at the age of 19/20 that they are not good enough to succeed at top level, the principal argued that it is worth the effort to attend a sports school because pupils learn to set goals and to develop achievement orientation. He argues that former pupil athletes are generally very attractive for companies due to their ability to set goals.

From the point of view of researchers who conducted the 2000 survey, continued investment in national sports upper secondary schools for the major team sports is not justified. However, continued investment in national sports upper secondary schools is justified in the following cases:

- Where taking part in the sport is affected by special climatic conditions or access to special conditions, either geographically or with respect to facilities – e.g. downhill skiing, sailing, golf.
- Where the number of young athletes active in the sport is so limited that a person risks being the only one in the club.
- For sports in which access to qualified coaches is limited.

By contrast, both the coordinator of the sports schools at the Swedish Sports Confederation and the *Sandagymnasiet* principal stressed that one major aim of sports schools is to teach goal setting. For both of them, the schools' approach is successful and needs to be continued if the pupils' ability to set and achieve goals results in a successful career, either in sport or in their occupation.

### **11.11 Drop-out rates**

The drop-out rates for pupil athletes in elite sport sections have ranged between five and 10 per cent (however, pupils normally continue their education in the upper secondary school without taking part in the sports-focused programme). There are two main reasons for dropping out:

- Pupils cannot continue their sporting career due to injuries.

- Pupils leave the sports school on their own initiative because they realise that they are not good enough to compete at the top level. Unlike Belgium, there is no yearly sports performance assessment by the school, club or sports federation, so that pupil athletes are not forced to quit the school.

### **11.12 Post-Secondary Education**

Fifty per cent of pupil athletes attend university. However, the coordinator of the sports schools at the Swedish Sports Confederation said that one major problem is the lack of widely offered support at Swedish universities and it is difficult for student athletes to combine sport and education on the higher education level. From the Swedish experts' perspective, pupil athletes experience a "free fall" after leaving the upper secondary sports school because there are only limited educational and sport career opportunities in a way which allows a continued combination of elite sport and work/study/starting a family. Many athletes find it difficult to handle the transition from the upper secondary sports school, with its ordered world and access to trainers, friends, board and lodgings, to running their own lives, with the need to earn a living and gain further education, resulting in them rejecting sport.

Due to the fact that athletes are generally study-minded and focused on their academic achievement, a high number of pupils leave sport to pursue academic study. The average age for ending an elite sporting career was 21.2 for those who left the sports upper secondary school in 1993.

Swedish experts stated that it is possible that in the future more athletes will try to continue their studies in other countries, which offer better opportunities for combining elite sport and advanced education.

## Appendix A: Contacts for information

Country	Person/Position/Institution
<b>Australia</b>	Mr Roger Davies, Principal of the Westfields Sports High School
	Ms Jenny Sommer, Principal of the Wirreanda High School
	Ms Leah Kennewell, Principal of the Ascot Park Primary School
	Mr Joseph K Allan, Principal of the Hills Sports High School
	Prof Helmut Digel, University of Tuebingen, Germany
	Mr Greg Blood, Client Services, National Sport Information Centre, Australian Sports Commission
	New South Wales Department of Education
	Queensland Education Department
	Australian Capital Territory Department of Education
	South Australian Department of Education and Children Services
	Western Australian Department of Education
	Mrs Rowena C Allsop, Communications Division, Department of Education, Victoria
	Mr Steve Kalend, Executive Officer, School Sport Australia
	Mr John Waser, National Manager of the National Coach and Athlete Career and Education (NCACE) Programme, Australian Institute of Sport,
	Mr Lance Regnier, Manager of Sports Unit, Department of Education, Victoria
	Mr Michael Battenally, Principal of Lake Ginninderra College (LGC)
Mr Martin Watson, Vice principal of Lake Ginninderra College (LGC),	
Mrs Kim Nichols, Vice principal of Lake Ginninderra College (LGC)	
<b>Belgium</b>	Prof. Paul Wylleman, Vrije Universiteit Brussel
	Mr Johan Roeykens, Coordinator of the elite sport schools at Bloso
<b>Canada</b>	Mr Cameron Hodgson, Principal of the National Sport School Calgary, Alberta
<b>England</b>	Mrs Chelsea Warr, UK Sport's Talent Identification Performance Consultant
	Prof. Chris Earle, Director Sports Development Centre Loughborough University
	Prof. Ian P. Henry, Professor of Leisure Policy and Management and Director of the Institute of Sport and Leisure Policy, Loughborough University
	Mr Richard Parker, UK Sport's Performance Lifestyle Manager
	Mr David Priestley, Performance Lifestyle Adviser, Derby, Yorkshire
	Mr Jerry Bingham Head of Strategy, Ethics and Research, UK Sport
	Mr Mike Collins, Institute of Sport and Leisure Policy, Loughborough University
	Mr Nick Rowe Head of Research and Strategy, Sport England, Research Unit
	Mrs Alison Oliver, Implementation Director, Youth Sport Trust
	Mr S. Grainger, Loughborough University
Mrs Sarah Champion, Youth Sport Trust	

	Mr Ben Tan, Youth Sport Trust
<b>Finland</b>	Mrs Tuuli Merikoski-Silius, Study and Career Counsellor, Finnish NOC
	Mr Jari Kanerva, Director, Communications, The Finnish Society for Research in Sport and Physical Education
	Mrs Paevi Markkanen, Project coordinator (The European Athlete as a Student Project)
	Mr Risto Keskitalo, Chairman of the Oulu Region Academy of Sport, Head Coach
	Mr Seppo Pitkanen, Principal of the Makelanrinne Senior High school
	Mr Rauno Junttila, Principal of the Kastelli Upper School
<b>France</b>	Mr Patrick Mignon, Institut National du Sport et de l'Education Physique (INSEP)
	Mr Denis Musso, INSEP
	Mr Christophe Dubove, INSEP
	Mr Pierre Thomas, INSEP
<b>Germany</b>	Mr Arne Gullich, Deutscher Olympischer Sportbund (DOSB)
	Prof. Dr. Anne-Marie Elbe, University of Copenhagen, Denmark
	Prof. Dr. Helmut Digel, University of Tuebingen
<b>Italy</b>	Mrs Monica Barra, University of Tuebingen, Germany
	Prof. Dr. Helmut Digel, University of Tuebingen, Germany
	Dr. Corrado Beccarini, Scuola dello Sport, CONI, Rome
<b>Netherlands</b>	Mr Marjan Olyslager, detalenten academie
	Prof Maarten van Bottenburg, <a href="#">Utrecht University</a>
	Mr Bas Rijnen, W.J.H. Mulier Instituut
	Mr R.J. Heerema, Loot Foundation
<b>New Zealand</b>	Dr Clive Pope Senior Lecturer, Department of Sport & Leisure Studies, University of Waikato
	Mr Peter Sharp, Executive Director, New Zealand Secondary Schools Sports Council
	Cromwell College / Golf Academy
	Freyberg High School / Sports Academy
<b>Sweden</b>	Dr Rolf Carlson, College of Physical Education and Sports Science, University of Stockholm
	Mrs Maja Uebel, Swedish Sports Federation (RF)
	Mr Mikael Santoft, Swedish Sports Federation (RF)
	Mr Hakan Danielsson, Swedish Sports Federation (RF)
	Mr Mattias Claesson, Swedish Sports Federation (RF)
	Mr Stefan Kristoffersen, Principal of the Tingsholmsgymnasiet
	Mr Goran B. Lundberg, Principal of the Ishockeygymnasiet
	Mr Rudbeckianska, Principal of the Fotbollsgymnasium
	Mr Otis, Principal of the Malmö Basketgymnasium
	Mr Magnus Flink, Principal of the Sandagymnasiet
<b>Singapore</b>	Mrs Veronica Lee, Marketing Communications Manager, Singapore Sports School

## **Appendix B: Secondary sources**

### **Australia**

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