Talent identification
by Esa Peitola

1 Introduction

Over the years, as competition in athletics at all levels has intensified and the overall quality of performance improved, the early identification of sporting talent in young people has become increasingly important.

Talent identification can be defined as '...that process by which children are encouraged to participate in the sports at which they are most likely to succeed, based on results of testing selected parameters. These parameters are designed to predict performance capacity, taking into account the child's current level of fitness and maturity'.

As talent identification is often confused with talent development, it is necessary to keep the above definition clearly in mind. Talent identification is the first step in the progression from beginner to successful international athlete; talent development follows this as the next important phase in the achievement of sporting success. Figure 1 illustrates the various steps comprising the long-term development of elite athletes.

It can be argued that the best form of talent identification is competition: talent will become evident as a result of competitive performance. However, this does not take into account the effects of biological age on performance, nor does it provide any opportunity to predict a youngster's potential for success in other sports. Popular events in athletics will attract the majority of children, leaving neglected those which are less familiar. Moreover, potentially gifted track and field athletes who participate in team sports may never realize their talent.

Early selection enables young athletes to develop their talent, so that by the time they reach international competition they have already attained high levels of performance.
Individuals can be guided towards events in which they will get maximum return for their efforts, and away from the frustrations caused by a lack of success. Athletics provides a good variety of events (speed-, power-, strength-, skill- and endurance-based), and an early determination of an athlete's areas of strength helps to identify the disciplines which will best suit him. Moreover, it provides the opportunity to use each country's limited resources for sport in a way which will get the best possible return from its sporting talent.

2 Existing talent identification programmes

The most sophisticated talent identification programmes in athletics existed in former eastern bloc countries, especially in the GDR and the Soviet Union. The selection methods which they used were far from foolproof, but their systematic approach to talent identification, involving a close co-ordination with schools and their physical education programmes, was superior to that of other countries.

The talent identification programmes which they used were system-related models. State bodies actively searched for talent in an organized, systematic way through testing and competitive procedures. In contrast, the western world has relied traditionally on person-related models which provide structures to nurture a talent should one emerge. These person-related models are based on the idea of 'Sport For All', normally discovering talent as a direct result of competition performance.

The United States in particular offers a good example of this kind of approach to talent identification. It has great strength and depth in the sprints and hurdles events, so that competition selection in these disciplines works well. However, in less popular disciplines competition selection tends to yield inferior results.

2.1 Talent identification in the former Soviet Union

Talent identification in the former Soviet Union consisted of three stages. Between stages, selected children were trained either by a specially qualified PE teacher or by a qualified coach, so that the process of identification was linked closely with that of development. Controlled training between stages also gave valuable information about a youngster's sensitivity to training. Figure 2 illustrates the talent selection procedure in the former Soviet Union.

2.2 Talent identification in the former GDR

The process of talent selection in the GDR consisted of two stages. The first step was a general one: anthropometric data were collected and assessments made from performances achieved in PE classes as
The graph shows a three-stage scheme to identify potential talent over a period of four to five years.

Figure 2: Talent selection in the former USSR

regards running speed, jumping strength, endurance and arm strength. This kind of assessment formed part of the general PE curriculum for children of nine and ten years.

The second step was more sport specific. It included a six-month test training period which yielded a wide range of information, from attitudes towards training to the size of training loads undertaken. Young athletes were allocated to event groups according to biological age, number of training sessions per week, and test results. Anthropometric factors were taken into account for events which were believed to require a minimum body height.

2.3 Other examples of talent identification systems

China has a nation-wide talent identification system which is linked very closely to its schools programmes. As in the former GDR and Soviet Union, talent development is the responsibility of professional coaches.

In certain areas of Germany (for example in Dortmund and Wattenscheid), talent identification programmes have been established; however, there is no nation-wide approach. In many countries talent development systems are organized by athletic federations (for example in Finland and in Sweden), but again there are no standardized, country-wide talent selection procedures.

3 The organization of a talent identification programme

The best way to ensure that a talent identification programme reaches the maximum possible number of children is to establish a close co-operation with schools. The first stage of the process could take place between the ages of 10 and 12, using basic field tests which are easy to administer. These tests would be carried out in schools and administered by the teachers. If selection is made at an early age, maturity differences play only a minor role. Those who seem to be talented are encouraged to participate in general training in schools and clubs.

The second phase of the selection procedure could take place between the ages of 13 and 16. Again, the tests should be carried out in schools and should be easy to administer. Those who are selected at this stage are
invited to undergo more sophisticated tests, administered by specialists in the area centres or in the state centres, and consisting of field tests and/or laboratory tests depending on the facilities available. The test batteries should include background information, training history, competition results, anthropometric measurements, and psychological as well as physiological tests.

Those who are finally selected should be allocated to elite junior programmes on an event-group basis. Those who show good results in the second-stage tests but are not finally selected should be encouraged to participate in club training programmes. There should always be the possibility of entering the selection process as a result of good competition performance. All the tested youths should be encouraged to participate in recreational sports.

In developing countries it is very important to promote the youth competition structure. Tests in these countries should be adapted to take into account the local conditions, but should be standardized across the whole country.

4 The Australian approach to talent identification

Some of the more effective talent identification programmes, such as the systematic models of the former GDR and Soviet Union discussed above, seem to have passed into history. Due to the substantial costs and high degree of organization required, they are unlikely to be implemented in the western world.

In Australia, no form of talent identification programme exists specifically for athletics. However, the implementation of successful talent selection projects in rowing and gymnastics has encouraged the introduction of new programmes to other major sports in the country.

4.1 The responsibilities of a Talent Identification Consultant

My work as a Talent Identification Consultant for the Australian Sports Commission consists of planning and establishing talent identification programmes in selected sports. Our models will be systematic models with
respect to individuals and their preferences. All children, whatever their talent, will continue to be encouraged to take part in a range of sporting activities. In conceiving these programmes Australia has taken a remarkable step towards improving its levels of athletic performance.

My specific responsibilities to the Australian Sports Commission are as follows:

- To develop a programme that identifies sporting talent in selected areas at the Australian Institute of Sport (at the moment athletics and swimming).
- In consultation with a small advisory committee, to provide advice for coaching staff that will assist them in establishing appropriate directions for talent identification in selected sports.
- To initiate and undertake applied research on a multi-disciplinary basis in the area of talent identification.
- To collect, analyse, interpret and evaluate results, and present information and findings in the area of talent identification to sport science and sport medicine staff, coaches and a wider sporting community.

4.2 Other experiences in the area of talent identification

While working for the Finnish Amateur Athletic Federation I was responsible for promoting a talent development system for the sprints and hurdles. During that time I worked closely with Jyväskylä University and we undertook extensive research into talent identification. These research projects included one five-year follow-up period and one three-year follow-up period of talented youths. We had some plans to promote Finland-wide talent identification programmes for sprints and hurdles, but they were not implemented.

My time spent in Qatar as a national team coach included some basic and practical talent identification work. Our search for talent was based on observation in the streets, playing fields, army and schools. Anybody looking and sounding suitable was asked to participate in practical training for a period of some weeks, and during that time it was possible to evaluate quite accurately their talent potential. This kind of observation system was possible because nearly all the Qatari people live in the capital Doha.

5 Conclusion: talent identification in the future

In the future, extensive international cooperation is necessary if talent identification programmes for athletics are to be improved. A good level of co-operation can help to create international data banks so that available information can be widely used. It can also help to create norms for various tests.

In addition, more research is needed in order to collect a greater range of data on the development of fitness, ability parameters and human growth and development. This kind of information should be collected in both developed and developing countries.

More extensive research can generate a greater number of valid tests and improve the validity of existing ones; for example, the role of psychological and sociological factors in the prediction of sporting success is still unclear.
REFERENCES


