

# Talent Identification and Development in Sport

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# My Professional Connections



# Are Future Elite Athletes Born or Made?

Those who will eventually become elite performers are likely to have gifts that express among the top 10% of their age peers.

**(Gagne, 2010)**

Other than body size, everything that you need to become an elite performer can be developed through 10+ years of deliberate practice.

**(Ericsson et al., 1993)**

# The Best Answer We Have is...BOTH

“Deliberate practice explains a sizeable amount of the variance in expertise, but leaves an even larger amount unexplained.”

(Hambrick et al., 2016)

“Talent is an expression of systematically developed skills resulting from an interaction of both nature and nurture.”

(Gulbin et al., 2013)

## Featured Study #1 (Gulbin et al., 2010)

This study examined the developmental histories of **673** Australian high-performance athletes representing a total of **34** different sports.

These athletes were either already-elite or pre-elite athletes connected to the Australian Institute of Sport (AIS), or their State Institutes and Academies of Sport (SIS/SAS).

## Key Findings from (Gulbin et al., 2010)

It is noteworthy that **63%** of these athletes believed or were told that they had gifts or natural abilities, and that this was a key motivator in their early development.

It is also noteworthy that the great majority of these athletes saw themselves as competitive (**79%**), coachable (**78%**), and persistent/determined (**78%**).

## Featured Study #2 (Güllich & Emrich, 2014)

This study examined the developmental histories of **1,558** German high-performance athletes representing a total of **47** different Olympic sports.

Specifically, it compared those athletes who competed regularly at the International level with those whose involvement terminated at the National level.

## Key Findings from (Güllich & Emrich, 2014)

The International athletes in this study were found to have specialized in their main sport significantly later than those who were National level competitors (**age-14.4 vs. age-12.1**).

The International athletes were also more likely to have had extensive other sport training (**66% vs. 51%**) and competition (**53% vs. 39%**) than their National level counterparts.

# Two Key LTAD Stages

## Train to Train (ages 12-15)

Athletes should narrow their involvement to two main sports, and should commit to corresponding training on a seasonal basis.

## Train to Compete (ages 15-18)

Athletes should specialize in a single sport during this stage, and should commit to year-round sport-specific, physical, and mental training.

## Two Key Working Definitions

**Talent Identification** is the ongoing process of identifying athletes with the potential to advance to the elite level of sport (i.e., national team/ professional sport).

**Talent Development** is the ongoing process of helping athletes to develop the full range of skills that will be required to compete at the elite level of sport.

# How Are These Processes Connected?

1. Initial Demonstration of High Performance Potential
2. Verification of Potential through Extended Involvement
3. Enhanced Training and Competitive Success
4. Breakthrough Leading to an Elite-Level Opportunity

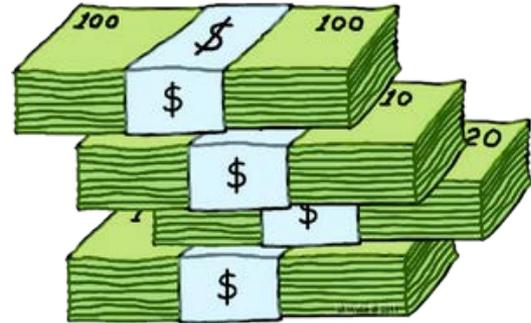
(Gulbin et al., 2013)

# Talent Identification is about 'Making Bets'

You Can Make Smaller Bets?



Or, You Can Make Bigger Bets?



## Make 'Smaller Bets' at Train to Train

There is ample evidence that age-group results do not represent a reliable predictor for later success in senior elite sports.

**(Güllich & Emrich, 2014)**

There is also ample evidence that varying rates of maturation make the prediction of eventual adult performance very challenging.

**(Till et al., 2011; Rees et al., 2016)**

# How to Win More 'Train to Train' Bets

Focus on the rate and ease of learning of sport-specific skills, not what your athletes have already been taught to do.

**(Tranckle & Cushion, 2006)**

Look for athletes who played multiple sports when they were younger, since this may have enhanced their ability to learn.

**(Güllich, 2018)**

# Multi-Sport Involvement Promotes Future Learning

**“Multi-year coach-led practice and competitions, but not peer-led play, in other sports facilitated later efficacy in sport-specific practice, and perceptual-motor skill refinement in particular.”**

**(Güllich, 2018)**

# Make 'Bigger Bets' at Train to Compete

At this stage you can begin to compare your athletes' progress to established training and competition milestones within your sport.

(Hayman et al., 2011)

Athletes develop at different rates, so be okay with some of them moving in and out of your programming over time.

(Rees et al., 2016)

## How to Win More 'Train to Compete' Bets

Look for athletes who demonstrate high levels of Grit, which is the passion and perseverance to pursue long-term goals.

**(Duckworth, 2016)**

Although they should now be specializing in your sport, look for athletes who have had previous success in other sports.

**(Krepps, 2016)**

# My Study's Four Participants



**Brad Gushue:**  
Olympic & World  
Champion...and Elite  
Amateur Golfer



**Marc Kennedy:**  
Olympic & World  
Champion...and CJFL  
Quarterback



**Brent Laing:**  
World Champion...  
and PGA of Canada  
Golf Professional



**Nolan Thiessen:**  
World Champion...  
and US College  
Baseball Player

# Key Question #1 – Round Table

What have you learned about **Talent Identification**  
that might help your organizations?

# Back to Our Working Definitions

**Talent Identification** is the ongoing process of identifying athletes with the potential to advance towards the elite level of sport (i.e., national team/professional sport).

**Talent Development** is the ongoing process of helping athletes to develop the full range of skills that will be required to compete at the elite level of sport.

# Deliberate Practice (Ericsson et al., 1993)

**Deliberate Practice** refers to structured training activities that are specifically designed to improve a specific aspect of performance within a given domain.

**Deliberate Practice** requires full effort and attention, and offers opportunities for repetition, immediate feedback, and error detection and correction.

# SCORE with Deliberate Practice

**Deliberate Practice is both**  
*Purposeful* (i.e., improvement oriented) and *Informed* (i.e., coached, based on elite athletes' skills).

(Ericsson & Pool, 2016)

Specificity

Challenge

Oversight

Reflection

Engagement

# Don't Forget About Competition

**Calendar planning of competition targets the key events of the season, while striking the right balance with respect to training loads.**

**(Canadian Sport For Life, 2014)**

**Beyond allowing athletes to test their skills, competition also can also provide them with meaningful learning opportunities.**

**(Krepps, 2016)**

# The Evolving Role of Coaches

'Participation Coaches' work with younger athletes and focus on enjoyment, while 'Performance Coaches' work with older athletes and focus on excellence.

**(Côté & Gilbert, 2009)**

Athletes' expectations of coaches change over time, with teaching and motivation valued at earlier stages, and knowledge and high standards valued at later stages.

**(Gulbin et al., 2010)**

# Talent Development is like 'Laying Bricks'

You Start with a Few Bricks



You End Up with a Brick Wall



# Build the Foundation at Train to Train

Canada's Long-Term Athlete  
Development framework  
recommends a **60:40** Training to  
Competition ratio at Train to Train .  
**(Canadian Sport for Life, 2014)**

On the training side of this equation,  
coaches should employ about **50%**  
Deliberate Practice and **50%**  
Deliberate Play with this age group.  
**(Côté & Fraser-Thomas, 2008)**

# A Strong Train to Train Foundation

**Athletes should consolidate sport-specific skills and tactics, and learn to cope with the physical and mental challenges of competition.**

**(Canadian Sport for Life, 2014)**

**Coaches should embrace ‘Seasonal Specialization’ by allowing athletes to pursue another sport in your off-season(s).**

**(Krepps, 2016)**

# Lessons Learned from Other Sports



**Marc Kennedy:**  
Olympic & World  
Champion

“One thing I learned from these sports was the work ethic. It was about being there for two hours a day, every day, being on time, and busting your butt.”

# Finish the Structure at Train to Compete

Canada's Long-Term Athlete Development framework recommends a **40:60** Training to Competition ratio at Train to Compete.  
(Canadian Sport for Life, 2014)

On the training side of this equation, coaches should employ about **80%** Deliberate Practice and **20%** Deliberate Play with this age group.  
(Côté & Fraser-Thomas, 2008)

# A Sound Train to Compete Structure

Train sport-specific skills under competitive conditions, and encourage these athletes to address individual strengths and weaknesses.

**(Canadian Sport for Life, 2014)**

Try to create opportunities for these developing athletes to interact with already-elite athletes, ideally as part of their daily training environment.

**(Henriksen et al., 2010a, 2010b, 2011)**

# The Value of Training with Elite Athletes

“Elite athletes were really visible as role models, and arguably training with the elite level athletes may prepare the prospects for the next phase in their athletic career”

(Henriksen et al., 2011)

## Key Question #2 – Round Table

What have you learned about **Talent Development**  
that might help your organization?

## Featured Study #3 (Bullock et al., 2009)

This quasi-experimental study that sought to qualify a novice female Australian skeleton athlete for the 2006 Olympic Winter Games in a compressed 14-month time frame.

The study began with the **Talent Identification** component, which narrowed the field down to 10 athletes who had been quite successful in various other sports.

## Featured Study #3 (Bullock et al., 2009)

Then came the **Talent Development** component, which emphasized skeleton training and competition and eventually produced one athlete who qualified for the Olympics.

That athlete ended up finishing a very respectable 13<sup>th</sup> at the Games; a result that the researchers attributed to the intriguing concept of **'Deliberate Programming'**.

# Deliberate Programming (Bullock et al., 2009)

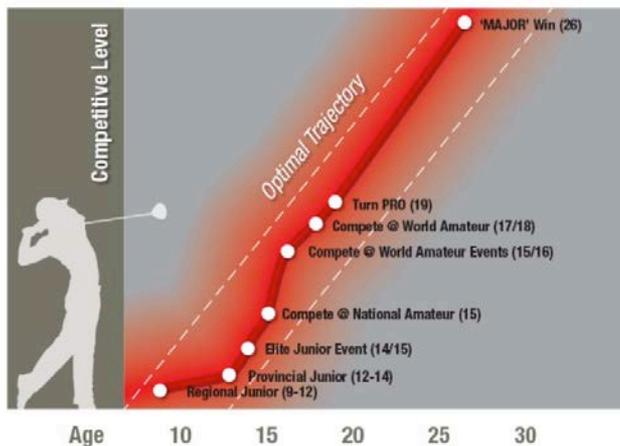
**Deliberate Programming** integrates all aspects of training, competition, and recovery with the goal of producing elite athletes as efficiently and effectively as possible.

**Deliberate Programming** includes strategic planning, expert coaching, skill training, sport science, sport medicine, equipment and technology, and financial support.

# Deliberate Programming for PSO's

1. Start with the career trajectories of your sport's elite athletes.
2. Define the skills and attributes that these elite athletes possess.
3. Design programs that will systematically develop the defined skills.
4. Identify prospects who have or can develop the defined attributes.

# The Career Trajectories of Your Elite Athletes



Golf Canada has done a terrific job of documenting the trajectories of their major champions, and of presenting them in an interesting way.

[golfcanada.ca](http://golfcanada.ca)

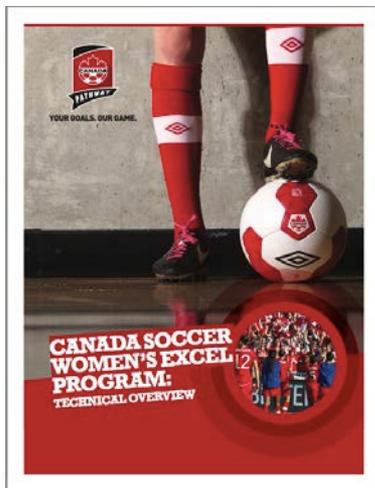
# Your Elite Athletes' Skills and Attributes



Although you might need to do some additional research, your sport's published LTAD document is a great place to start.

[sportforlife.ca](https://sportforlife.ca)

# Programs that Develop the Right Skills



Canada Soccer's Women's Excel Program is one of the best examples of a Talent Development program anywhere.

[canadasoccer.com](https://canadasoccer.com)

# Prospects who have the Right Attributes



RBC Training Ground is a great example of a Talent Identification program that creates interest and attracts hundreds of athletes.

[cbc.ca/olympics/trainingground](https://cbc.ca/olympics/trainingground)

## Key Question #3 – Round Table

What have you learned about **Deliberate Programming** that might help your organizations?

# One Last Question...

What have you done today to identify and develop the elite athletes of tomorrow?

**Thank You!**

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