Talent Engineering
An Integrated Approach to Coach and Athlete Development

Wade Gilbert, PhD
California State University, Fresno
Advancing the Science of Teaching America’s Youth Through Sports and Physical Education
Job Instruction Training

We Can Do It!

Participant’s Session Guide & Implementation Manual

Mark Warren
Bryan Lund

Training Within Industry

Training Within Industry Program

Job Instruction

A short, intensive training program for supervisors and job instructors presented by Training Within Industry Service in cooperation with Federal and State representatives for Vocational Education.
HOW TO GET READY TO INSTRUCT

Have a Time Table—how much skill you expect him to have, by what date.

Break Down the Job—list important steps, pick out the key points. (Safety is always a key point.)

Have Everything Ready—the right equipment, materials, and supplies.

Have the Workplace Properly Arranged—just as the worker will be expected to keep it.

Job Instruction Training

TRAINING WITHIN INDUSTRY
Bureau of Training
War Manpower Commission

KEEP THIS CARD HANDY

GPO 16-35140-1

Front of the Job Instruction Card

HOW TO INSTRUCT

Step 1—Prepare the Worker
Put him at ease.
State the job and find out what he already knows about it.
Get him interested in learning job.
Place in correct position.

Step 2—Present the Operation
Tell, show, and illustrate one IMPORTANT STEP at a time.
Stress each KEY POINT.
Instruct clearly, completely, and patiently, but no more than he can master.

Step 3—Try Out Performance
Have him do the job—correct errors.
Have him explain each KEY POINT to you as he does the job again.
Make sure he understands.
Continue until YOU know HE knows.

Step 4—Follow Up
Put him on his own. Designate to whom he goes for help.
Check frequently. Encourage questions.
Taper off extra coaching and close follow-up.

If Worker Hasn’t Learned, the Instructor Hasn’t Taught

Back of the Job Instruction Card
You Haven’t Taught Until They Have Learned

Step 4—Follow Up
Put him on his own. Designate to whom he goes for help.
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If Worker Hasn’t Learned, the Instructor Hasn’t Taught

Back of the Job Instruction Card
What is effective coaching?

Becoming an effective coach?
To share an evidence-based framework for engineering an integrated system for coach and athlete talent development.
• Settings matter more than individual behavior intentions
The Science of Settings: Complex Families
Complex Family Settings

ATTACHMENT  
*(structure)*

+ 

AUTONOMY  
*(freedom)*
Autonomy = Games
Percentage of U.S. pro athletes born in small towns sharply outnumbers those living in big cities.

<table>
<thead>
<tr>
<th>City Population</th>
<th>U.S. OVERALL</th>
<th>PGA</th>
<th>NHL</th>
<th>MLB</th>
<th>NBA</th>
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</thead>
<tbody>
<tr>
<td>&gt;500,000</td>
<td>51.8%</td>
<td>13.1%</td>
<td>13.2%</td>
<td>14.6%</td>
<td>28.5%</td>
</tr>
<tr>
<td>&lt;100,000</td>
<td>27.5%</td>
<td>56.8%</td>
<td>56.3%</td>
<td>54.5%</td>
<td>39.0%</td>
</tr>
</tbody>
</table>
The influence of community on athletic development: an integrated case study

Shea Balish* and Jean Côté
Talent Development
Principle #2

• Needs are the sparks that ignite, and sustain, the talent development fire
"We realized a while ago that it's better to learn than be dead."
Talent Identification and Development: The Need for Coherence Between Research, System, and Process

ANNE PANKHURST and DAVE COLLINS

Institute of Coaching and Performance, University of Central Lancashire, Preston, United Kingdom
The Science of Needs (Deci & Ryan, 2000)

Self-Determination Theory

Competence
- need to be effective in dealing with environment

Humans' three basic needs
- Autonomy
  - need to control the course of their lives

Relatedness
- need to have a close, affectionate relationships with others
The Science of Needs: Self-Determination
(Mageau & Vallerand, 2003)
Self-Determination Theory: A Case Study of Evidence-Based Coaching
ATHLETES’ OUTCOMES

Competence

Confidence

Connection

Character
Self-Determination Theory

- Competence
- Humans' three basic needs
- Relatedness
  - Autonomy
  - Confidence
  - Connection
  - Character
Coach education effectiveness
(Trudel, Gilbert & Werthner)

Coaching and coach education
(Trudel & Gilbert)
Needs-based Development Systems

(Gilbert, Gallimore, & Trudel, 2009). A learning community approach to coach development in youth sport.
Self-Determination Theory

Mastery

Needs

Settings

Complex Family
Talent Development
Principle #3

• Personal mastery focused on continuous improvement
• Personal mastery focused on continuous improvement
People go back to the starts of his career, the 21 missed cuts. But if we look at adversity in the right light, it provides a foundation for growth.
WORLD WAR II

[Image of soldiers firing a gun]
For him it was just, one by one, how do you make this last operation go better than the last one? Science is a series of dead-end alleys. It is not a eureka moment, it is not an act of genius, it required sticking to this problem for a couple of decades.
Incremental view of ability
The Science of Mastery:
Growth Mindset
Fixed Mindset
Intelligence and talent are fixed at birth.

Growth Mindset
Intelligence and talent can go up or down.
IT'S NOT HOW GOOD YOU ARE, IT'S HOW GOOD YOU WANT TO BE.
Leaders in sport need a growth mindset so they can transform themselves and believe in their ability to influence the transformation of others. A growth mindset is simply a way of viewing the world and being open to possibilities for growth.
“What matters most is what you learn after you know it all”
The Pyramid of Teaching Success in Sport: Lessons from Applied Science and Effective Coaches

WADE GILBERT
California State University, Fresno, California, USA

SWEN NATER and MARK SIWIK
BeLikeCoach, Cleveland, Ohio, USA

RONALD GALLIMORE
University of California, Los Angeles, California, USA

An Integrative Definition of Coaching Effectiveness and Expertise
by Jean Côté and Wade Gilbert

Reprinted from
Volume 4 · Number 3 · 2009
How can we create an integrated talent development setting for high school sports?
- 2,400 students
- 650 athletes
- 21 sports
Getting Started: What Matters?

Core Values
High School Athletics

Participate

Achieve

Engage
FHS Athletics: Integrated Talent Development System

**Envision**
“what’s possible?”
- Sport-specific target outcomes
  - Participation
  - Engagement
  - Achievement

**Enact**
“coach & notice”
- Conduct practices and competitions
  - Post-competition reflection cards

**Examine**
“What happened?”
- Collect evidence
  - Target outcomes
    - Participation
    - Engagement
    - Achievement
  - Participant feedback
    - Competence
    - Confidence
    - Connection
    - Character
    - Climate
    - Coaching

**Enhance**
“close the gaps”
- Evidence-based reflection
  - Strengths spotting
  - Identify gaps
  - Self-study plan
    - Strengths matching

Debrief off-season self-study product
Coach Virtual Mentor Library

Pre-season
In-season
Post-season
Off-season

Off-season Check-Ins
Envision
“What’s possible?”

Enact
“coach & notice”

Examine
“what happened?”

Enhance
“close the gaps”

Pre-Season

In-Season

Post-Season

Off-Season
Enhance “close the gaps”

Enact “coach & notice”

Examine “what happened?”

Envision “What’s possible?”

Pre-Season | In-Season | Post-Season | Off-Season
Enhance
“close the gaps”

Examine
“what happened?”

Enact
“coach & notice”

Envision
“What’s possible?”

In-Season

Pre-Season

Post-Season

Off-Season
Positive Youth Development: A Measurement Framework for Sport

by

Matthew Vierimaa, Karl Erickson, Jean Côté and Wade Gilbert

Reprinted from


Volume 7 · Number 3 · 2012
Envision
“What’s possible?”

Enact
“coach & notice”

Examine
“what happened?”

Enhance
“close the gaps”

Pre-Season

In-Season

Post-Season

Off-Season
## Sport Program X

### Target Outcomes

<table>
<thead>
<tr>
<th>Target Outcomes</th>
<th>Development Rate (%)</th>
</tr>
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<tbody>
<tr>
<td>Participation</td>
<td>88%</td>
</tr>
<tr>
<td>Engagement</td>
<td>54%</td>
</tr>
<tr>
<td>Achievement</td>
<td>62%</td>
</tr>
<tr>
<td>Athlete Feedback</td>
<td>93%</td>
</tr>
<tr>
<td><strong>Overall Development Rate</strong></td>
<td><strong>ODR= 74%</strong></td>
</tr>
</tbody>
</table>
IS THE SYSTEM HELPFUL?

• Yes, it was helpful in a way that allowed me to see where I need to improve upon as a coach.

• Very helpful. It gave me a true insight as to what I needed to improve on and what I was doing well.

• Feedback from the athlete survey was definitely helpful. It tells me how well I am doing as a coach.

• The process is great. It works really well for me.
Settings

Needs

Mastery

Growth Mindset

Self-Determination Theory

Complex Family
Long-term, repetitive success is a matter of building a principled system and sticking to it; principles are anchors.
Growth Mindset

Mastery

Needs

Self-Determination Theory

Settings

Complex Family

FRESNO STATE