Beyond the Workouts: Take-a-ways from Research on Successful Coaching

Marshall J. Milbrath, ABD, M.Ed.

Director of Exercise and Sport Studies Assistant Professor



Benedictine University College of Education and Health Services Exercise and Sports Studies







Gun's up!

- 1. Why is a college professor speaking at Convention?
- 2. How do successful coaches have developed expertise?
- 3. What do successful coaches use to guide their coaching?
- 4. How can we implement this in the Indoor Season?





Get Out of the Blocks...

- 1. Find someone who you have not spoken with this week who is at least 4 spots away from you
- 2. Move your stuff over to them and sit next to them
- 3. Introduce yourself with the following information:
 - Where you are currently (e.g., Job, City/State, Years Into Your Career)
 - Where you were 6 years ago
- 4. You have 4:00...

	MODE
- set	MODE STAPISTOP
and the second s	E E
	MIN SEC 1/100 S.
A/h	10 LAP MEMORY
	WATER RESISTANT

Raise your hand if six years the person next to you was:

A Coach

Raise your hand if six years the person next to you was:

An Athlete





Brief Background

- NCAA Division III
 **XC-inner
- Education
 - Ph.D. Sport and Exercise Science (in progress)
 - M.Ed. Exercise Physiology
 - M.Ed. Curriculum & Instruction
- High School Coach 6 years total
- Volunteer Assistant Coach
 - Longwood University *********
 - University of Northern Colorado











Current Position

Benedictine University

- Director of Exercise and Sport Studies
- Assistant Professor

• Research Topics

- Characteristics of Expert Coaching
- Knowledge used in Coaching
- Decision-Making in Coaching
- Social Justice Promotion through Coaching
- Various T&F Topics in history and performance





International Council for Coaching Excellence



BY THE INTERNATIONAL OLYMPIC COMMITTEE



Coaching Knowledge

- Studies on Coaching Knowledge have identified three main categories
 - Scientific Knowledge or "Why we do what we do" (e.g., Physiology, Psychology, Biomechanics)
 - Sport-Specific Knowledge or "What we do" (e.g., Technical knowledge, Tactical knowledge, Specific drills)
 - Coaching Knowledge or "How we do what we do" (e.g., Communication, Teaching Skills, Planning, Analysis/Assessment)
- Let's see our preferences!





The Role of a Coach Researcher

How do you get a PhD in coaching???

How we get answers

What can we
know the
reality of
something?

<u>Traditional Science</u>
Reality is:
✓ External
✓ Independent
✓ Waiting to be discovered

Reality is:

 \checkmark constructed through interaction

Science through Others' Experiences

- $\checkmark\,$ dependent on the setting
- ✓ dependent on the person in the setting







The Role of a Coach Researcher

What we don't do...

- Look for a universal way to coach
- Look for "secrets"
- Believe that someone becomes an expert coach by going to school and reading books







The Role of a Coach Researcher

What we do...

- Try to understand team environments
- Search for coaching behaviors that consistently work
- Investigate how the things that coaches know are in coaching relate to each other
- Share coaching settings alongside research findings so readers can decide how it applies to them















Stockowski & Collins (2017)





Research on a Track Coach

Participant

- Single-case, case study
- 10+ years, Regular Nat Champs, Peer-Recognized

Data Collection

- Four-day onsite visit
- Interviews
 - Head Coach: 5 interviews (3 hours, 45 minutes)
 - Two assistant coaches: 1 joint interview (45 minutes)
 - 2 pairs of athletes, 2 male, 2 female (45 minutes each)
- \bullet Training Session Observations: 5 training sessions, 9 $^{1\!\!/_2}$ hours



What we found

First Order Themes	Second Order Themes		Third Order Themes	Category
Physiology		Scientific Knowledge		
Psychology			('ologies)	
Periodization				
Endurance Running Requirements	Sport-Specific Knowledge			
Competitions				
Adopted Values and Attitudes				
Personal Development Goals		Knowledge of how to coach endurance runners		
Performance Goals	Knowledge of Goals			
Competition Goals			Coaching Knowledge	
Individual Characertistics		Knowledge of how to		
Individual Circumstances		coach his athletes		
Individual Communication Styles		coach his aunetes		

Explaining and Instructing		
Cultivating Team Environment	Person Focused Actions	
Assessing Athletes		
Competition Planning		
Organizing Training Schedules	Sport Focused Actions	
Implimenting Predetermined Training	Sport Focused Actions	
Implimenting Responsive Training		

How has coaching knowledge been taught?

IAAF/USATF Introductory Coaching Manuals

	USATF				IAAF		
	Gambetta (1981)	Gambetta (1989)	Rogers (2000)	USATF (2008)	Freeman (2015)	Thompson (1991)	Thompson (2009)
Scientific	15.5%	17.8%	0%	38.3%	20.5%	76.1%	75.6%
Coaching	3.1%	2.7%	5.4%	0%	2.9%	23.9%	24.4%
Sport Specific	81.5%	79.6%	94.6%	61.7%	76.5%	0%	0%

*Cursory analysis of pages dedicated to content, unpublished





(ICCE, 2013)

Principles of Effective Coaching

Doing the following effectively are critical for getting athletes to

- Explanations
- Demonstrations
- Cues
- Feedback





Principles of Effective Explanations

- Plan what to say in advance
- Gain attention before starting
- Keep it short and simple
- Invite questions
- Check for understanding





Principles of Effective Demonstrations

- Position so all could see
- Provide correct demonstration in silence
- Provide multiple demonstrations from different angles
- Check for understanding





Principles of Effective Cuing

- Accurate (Sport-Specific Knowledge)
- Brief and important for the skill being performed
- Appropriate to the learner's skill level and age
- Sequentially organized with opportunities to rehearse



Principles of Effective Feedback

- Promote self-analysis ("what did you notice...")
- Limit input to 1-2 key points
- Give specific positive feedback
- Give specific informative feedback
- Ask the athlete, "What will you do now?"





Practicing the "How" with IKCR Principles

Introduction

• The coach clearly explains what she/he will be doing

Key Points

• The coach explains the key points that she/he will be teaching the athlete

<u>Coach</u>

• The coach conducts the practice





Practicing the "How"

Review

- Reviewer starts by asking the coach what they did well (refer to the key points)
- Reviewer follows up by asking what the coach could have done to make the practice even better
- Next ask the rest of the group which points the coach hit and which if any were missed or not quote right
- lastly provide your own feedback if required





Take-a-Ways: Point #1

Why is a college professor speaking at Convention?

- Coaching research is written to better understand coaching practices that work
- ✓ Coaching research is largely written to help coaches





How do successful coaches have developed expertise?

- ✓ Coaches use different types of knowledge
- ✓ 'Knowledge of Coaching' is often a heightened interested, but it is the hardest to accesses learning opportunities



Take-a-Ways: Point #3

What do successful coaches use to guide their coaching?

- ✓ Scientific and Sport-Specific Knowledge to create a general approach
- ✓ Emphasis on 'Coaching Knowledge'
- 'Wholesale approach' for use regardless of the group
- Understanding the individual circumstances and characteristics of the individual athletes.



Take-a-Ways: Point #4

How can we implement this in the Indoor Season?

- ✓ Challenge yourself to use principles of effective
 - Explanations
 - Demonstrations
 - Cues
 - Feedback
- ✓ Use the IKCR Principles to improve "how" you coach
 - Ask a reviewer to use these with you for your own development
 - Use the principles with assistant coaches to develop them





