Coach Behaviour Analysis: Developing Practice & Coach Effectiveness

Dr. Christopher Cushion
School of Sport Exercise and Health Sciences.
Background

- Why coach behaviour?
- Impacts:
  - Performance
  - Social & emotional well-being
  - Affect
- Controllable
  - Measurable & Changeable (research, interventions)
A key determinant in effect of coaching programmes is the relationship between coach and athlete.

No right way to coach, but …

Learners Learn

- Coaches (through practice & behaviour) help that process – sometimes.
Development of Coach Analysis Intervention System

- Technology!
  - No existing all encompassing Instrument
  - 23 Primary and Secondary Behaviour
  - Secondary Behaviours
    - Timing, Recipient, Content, Questioning Type, Silence, Practice Environment- (9, plus transition).
1 coaching moment: 20 seconds of coach delivery
5 different modes of coach intervention (behaviour)
Hand held CAIS application (iPAD)

- Hand-held device ‘customised’ templates from CAIS-
  - Multiple ‘bespoke’ coding templates
- Focus on specific primary & secondary behaviours
- Code ‘live’- give instant feedback
- Synch to video
- Coach education/ coach development tool
Some implications from research

- Coaches notoriously poor at describing their own behaviour (low self awareness) - 80:20
  (e.g. Smith & colleagues, Cushion & Jones, Partington & Cushion inter-alia)
  - “I use a lot of questioning”
  - ‘I don’t ask any questions, they never know the f*****g answer’
  - (we’ll come back to questioning!)
  - Limited understanding of relationship between practice, behaviour & learning
Coaches Low Self-Awareness

- Cushion & Redwood-Brown (2010)- 12 coaches ‘high performance’ track- coaching representative athletes range of sports
- 75% of the coaches had only one behaviour where perception matched actual behaviour
- 75% of the sample had no agreement between coach and athlete perceptions
  - Perceived 7 rated (1-7) 0% actual
- Only one coach had agreement between coach and athlete perceptions and actual behaviour
Developing Coach Behaviour
Research: Relationship between coach behaviour & practice type

- Ford et al., (2010)- 25 youth coaches U9, U13, U16 x elite, sub-elite, non-elite
- Modified ASUOI analysed coach behaviour, 70 sessions
- Training form (Tf) versus Game form (Gf)
  - 60% coaching time ‘training form’- no diff by age
- Largest single behaviour- Instruction
  - “few differences in coaching behaviour by function of age and skill” (p.493)
Developing the Research

- Partington & Cushion (2011)- 12 Elite Youth coaches- behaviour & practice type
  - Used CAIS (Cushion et al., 2012) analysed 65 coaching sessions plus follow-up interviews
    - 52% Training form (Tf)- no diff by age
    - Instruction largest single behaviour but reduced 46%(Tf) - 38%(Gf) (p=<0.001)
    - Silence increased 4.4%(Tf) - 8.8(Gf) (p=<0.011)
    - Questions reduced 11%(Tf)- 9%(Gf)
      - Twice as likely to ask a ‘closed’ or ‘convergent’ question regardless of age or form
Low Self-Awareness!

- **Behaviour-**
  - “I thought my levels of instruction would be a lot less, this is quite surprising”.
  - “I don’t really appreciate behaviour changes…I don’t plan to change my behaviour between a warm-up [Tf] or a phase of play [Gf]”

- **Questioning**
  - “When I have asked players questions…it takes longer for them to understand so I then use instruction”
  - “I mainly use questions which I have heard…but if I’m honest I struggle to devise my own divergent questions”

- **Approach**
  - “Decision making players”, “facilitating knowledge construction”, “player ownership by asking questions”
  - Limited underpinning knowledge/understanding, ‘epistemological gap’
Developing the Research

- Harvey, Cushion & Cope (2012)- 3 coaches, 3 different sports
- Using CAIS, season long observations, games & practice, plus interviews.
  - Instruction largest category for all & significant difference between Tf practice states & others
    - GenPosFeedback; CorrFeedback; PveModeling; significantly greater in Tf practice states
  - Interviews: Low self awareness/understanding, ‘epistemological gap’
Developing the Research

- Partington & Cushion (2012)- 12 Academy coaches- Relationship between coaching behaviour and three player age groups (U10/11’s, u12-14’s, u15/16’s)
- Using CAIS analysed 67 training sessions plus follow-up interviews
  - Significant Differences-
    - Instruction (u10/11’s 49%-u15/16’s 34%)
    - Questioning (Divergent) (u10/11’s 0.85%-u15/16’s 3.2%)
    - Feedback (u10/11’s 5.8%-u15/16’s 14%)
    - Punitive (u10/11’s 0.95%-u15/16’s 4%)
‘Folk Pedagogy’

- **Instruction:**
  - “When they are playing a game in training it is quicker to tell them how to improve, rather than stopping the session” (under 11’s coach)
  - “There is an expectation from parents for the coach to be giving instruction whilst watching instead of just being silent. I try not to think about this but it naturally effects you when coaching” (under 10’s coach)

- **Silence**
  - “I am silent because I have nothing to coach….. no mistakes are being made” (under 12’s coach)
  - “I do not think of using silence when I coach, if I’m silent there is no process to this” (under 15/16’s coach)

- **Questioning**
  - “I use questioning because on my Level 2 & 3 I had to use questions to pass the assessment” (under 11 coach)
  - “I don’t use as much questioning because the players at this age might have not done this before” (under 10’s coach)
‘The data demonstrates that players’ age was *not* a determining variable in coach behaviour. Instead it was the coaches’ biography, experience and educational background that provided the understanding of learning, and informed their decisions around coaching behaviour’.
Contextual factors impacting coaches

- Experience (values, ways to behave)
- Expected in the Role
  - Managing impressions
- A function of outcomes- winning a priority
  - Control variables of coaching
  - Effective link to success- accountability
- Power
  - Credible, knowledgeable, decisive
  - Informational expert to develop legitimate power
- Tradition
Interventions to change coach behaviour/practice?

- Yes! For example…
  - Morgan (2006)
    - Impacted feedback patterns, perceptions of learning
    - 24 weeks, 7 week intervention
  - Harvey, Cushion & colleagues (2010/2011)
    - Practice structure, feedback patterns
    - Players game involvement/decision making
    - 15 weeks, 8 week intervention
    - Underlying assumptions, coach knowledge
- So; Time, Context, Follow-up
- Computer/video research/intervention (CAIS) (Cushion et al., 2012)
- Data + Video = powerful reflective tool
Learning, Practice & Behaviour: Research Evidence

- **Educational Psychology** (e.g. Kirscnher et al., 2006; Mayer, 2004; Merrill, 2009)
  - Non-directive coaching ALONE does not work
  - No evidence of superiority of any single instructional model/ approach (e.g., TGfU, PBL, Discovery Learning)
  - Depends on previous athlete knowledge & experience
  - **Know** your athletes
Principles of Instruction (Merrill, 2009),

- Connect Learner to be learned material
- Provide Mechanism for athlete: Selecting, organising, integrating?
- Activation- link to prior knowledge/experience
- Integration- Use the new skill in everyday practice
- Information only instruction is ‘zero level instructional strategy’
- In practice- directive and non-directive forms of coaching are poorly implemented.
What about practice?

- To be good at something need to practice a lot!!! (10k hours?)
  - Quality of practice key
- Learning linked to: Random Variable Practice, Contextual interference, Feedback/instructional quality (type, timing, investment in learning)
- Activity alone is insufficient for learning
- All learners able to draw appropriate learning?
- Singular approach to learning- athlete centered?
Coach behaviour: What (some?) Coaches Do

- Pattern of coaching
  - Silence (monitoring, athletes learn from own mistakes, coach reflects)
  - Feedback-appropriately timed, specific, task relevant, use of cues
  - Positive, encouraging, personalised
  - Quality of behaviour not quantity
  - Planned!
Some Conclusions

- Coach behaviour a controllable
- Raise self-awareness - knowledge & understanding
- Possible to change coach behaviour
  - Time!
- Practice/research link - Guidelines for coaches
For further reading...