Ten instructional principles all coach developers should know

This draws on Neelan, M. and Kirchner, P. (2015) 'Research-based principles of instruction applied to workplace learning', 18 August [Blog]. Available at https://3starlearningexperiences.wordpress.com

1 Daily review



- o Begin a learning experience with a short review of previous learning.

 Daily reviews can strengthen previous learning.
- o Review through individual or collaborative reflection, perhaps as a structured discussion with peers in which all involved can review and discuss a learning experience or content.

2 New material in small steps



- o Present and digest bite-sized amounts of new material, then practise that material
- o Coach developers are often estimating what the exact learner needs are; sometimes it might be easy but sometimes it's harder.

3 Ask questions to support connections



- o Ask a large number of questions to support connections between new materials and prior learning.
- o Who determines what the critical questions are can be challenging since coach developers sometimes find it hard to empathise with what novices struggle with. Peer learning (i.e. among people with the same level of expertise) might work better. However, coach developers need to be open enough to admit if they don't know something.

4 Provide models

- o Models and worked examples support learners to solve problems faster.
- o This applies particularly for practice-based tasks where showing and articulating how something is done is important. For recurrent tasks such as responding to an injury (i.e. rule-based, performed in a highly consistent way) learners can work with flow charts or similar.

5 Guide learner practice

- o Guided practice of new material, ideally with someone looking over the learner's shoulder.
- o Although there are many advantages to peer learning, there is nothing like making use of good guided practice through observation and coaching.



6 Check understanding

- o Check learner understanding at each 'point'.
- o If the learning objective is clear and the steps to success are clear, it is also possible to identify the critical learning 'points'. This could be a pre-identified task to complete with objective evaluations that needs to meet certain standards (e.g. maintaining session momentum/energy as a training session passes through transitions).

7 Obtain success

- o Use guided practice (principle 5) to obtain a high success rate during practice.
- o Using guided practice (principle 5), a well-structured training/learning approach is required to achieve high success rates in contrast to more informal training.



- 8 Provide temporary support to learners (known as 'scaffolding') for difficult tasks (for example incremental steps)
- o It can be hard to know the exact level of scaffolding that each learner needs due to individual differences.
- o Practice-related learning requires personal coaching support (perhaps the best scaffold) and tools such as check lists and short instructional reading, podcasts or videos.

9 Demonstrate independent practice

o Require and monitor independent practice.

o To implement this you need to establish the standards that need to be met. This is probably easy for some tasks (e.g. athlete safety) but harder for others (e.g. coaching craft).



10 Regular review

o Engage learners in meaningful regular reviews.



o This can be done weekly and monthly through well-structured discussion groups, face-to-face or in an 'online community of practice' format. It is critical that there is a pre-defined outcome, otherwise the risk is 'discussion for the sake of discussion'.