

### Asking Good Questions and Games-based Activity



The questions a coach asks can have a major influence on how much their players or athletes learn. This summary of a recent journal article shows how theories of learning can be applied by coaches in a Games-based Approach to stretch learning beyond what players can achieve on their own. Asking the correct question is critical to success, and the researchers provide practical guidance to help coaches plan, implement and review their questioning skills.

## Introduction

Games-based Approaches (GBAs) to learning and coaching are not new, and there is significant evidence that they work. So why are they not more widespread in coaching?

For GBA researchers Stephen Harvey and Richard Light, what is stopping the adoption of these practices is that they require a profound shift in the role of the coach – from directing and controlling to facilitating and guiding. Key to this shift is the ability to use questioning to facilitate learning. This means moving beyond simple yes/no questions to open-ended questions that foster debate and discussion between player and coach, and among players themselves. For them, questioning is the key to learning.



## Why is questioning important for learning?

The learning theory that underpins GBAs to coaching is social constructivism. In other words, people construct their own understanding and knowledge of the world through experiencing things and reflecting on those experiences. Therefore, games and activities that encourage players to reflect on what they have just done will increase learning.

The role of the coach is to create the environment that will allow this to happen, and two theories of learning support this – the Zone of Proximal Development and Complex Learning Theory.

### The Zone of Proximal Development

Developed by the Russian psychologist Lev Vygotsky in the early 1900s, this is a theory that emphasises the importance of language and social interaction in learning. The 'zone' in this case refers to the gap between what a child can learn on their own and what they could learn with adult guidance or in collaboration with peers. For Vygotsky, the most effective instruction aims at this zone just beyond existing knowledge.

If he was a coach, you could imagine Vygotsky getting his players to think about what they have just done in a way that stretches them beyond what they already know. To do this, he would use questions to generate debate and discussion.

### Complex Learning Theory

Complex Learning Theory was developed by Brent Davis and Dennis Sumara, experts in learning theory and education. They saw it as a way to draw together a number of different views on how people learn.

As the name implies, they proposed that learning was a complex process of adaptation that is both social and interpretative in nature. It rejects the idea that learning is just an internal representation of what is going on outside. Rather, it promotes the idea that learning is the combination of mind and body – of action and then reflection on the meaning of that action. Put simply, the world is inseparable from us, and we can only understand it (and learn) by experiencing it.



When done well, Games-based Activity provides a useful way to see these theories in action. The games themselves are set up in a way that allows the players to make decisions independently and adapt to new situations. They also provide coaches with what one researcher called 'the scaffold' – a way to support players in making sense of their actions, both internally and externally, through conversation and debate.

Using this scaffold for support, a coach can ask well-constructed questions that target the zone of development that will increase players' knowledge beyond where they could have reached on their own. Therefore, the key to applying these theories is an ability to ask good questions at the right time.

## What makes a good question?

If you are going to help players move beyond their current level of development, then the questions need to stimulate thinking and social interaction. However, research in education and coaching has shown there are questions and then there are good questions. A study of teachers in 1986 found that only 7% asked the type of open-ended questions that inspire debate. A similar result occurred in 2008 with teachers in Singapore who had learnt to teach with a GBA. The latter example shows that it is not enough to just take a GBA unless you back it up with good questions.

Research with coaches has found similar results. When researchers observed coaches in action, they found that less than 10% of coaching behaviours involved questioning, and the vast majority of these were closed and technical, rather than open questions.

In 2005, research from American psychologist Spencer Kagan suggested that questions can be divided into those that are **skinny** or **fat**, **high consensus** or **low consensus**, and **review** or **true**:

- **Skinny** questions require yes/no answers and little thinking, while **fat** questions require more evaluation.
- **High consensus** questions are those for which the group would provide the same or similar response, while a **low consensus** question would get different responses due to the diverse perspectives of the group (eg based on different levels of skill or prior experience).
- **Review** questions simply ask learners to recall information, whereas **true** questions call for more thought and detail.

Not surprisingly, the best combination of the above are **fat, low consensus, true questions**.



## Questioning in practice

All the research suggests that moving towards this type of questioning is a step change for coaches who traditionally tend to ask closed questions about understanding. However, Harvey and Light believe that by following a simple 'plan, implement, review' process, coaches can start to change their questioning approach. A full list of guidance provided by the researchers is reproduced at the end of this summary, but key points are highlighted here.

### Plan

Developing a list of starter questions is a good way to build experience with asking the correct question. Examples of questions to start these types of conversations are shown below. The words in bold are the starting question, with the rest of the question purely an example that could be changed to suit your context. (In this example, the context is a 'piggy in the middle' 3 vs 1 possession game.) You can see that the questions are worded to get players to assess, evaluate and draw conclusions.

- **How are you deciding** when it is best to make the pass?
- **How could you improve** your off-the-ball movement to make it easier for the person in possession of the ball?
- **What is the most important thing** the players off the ball must do in order for them to be successful in maintaining possession of the ball?
- If you passed the ball harder to your teammate, **what might happen?**

### Implement

In their research paper, Harvey and Light suggest how such questions could be used in practice:

- Stop the game at a teachable moment and pose a question. Divide the learners into small groups to discuss the possible solutions. Then test one of the possible solutions in the subsequent bout of game play.
- A more personalised alternative is to call out one individual from each team and ask them the question, matching this to their Zone of Proximal Development.



- For more social learning through debate, a single player could be given a question that they could then ask their teammates at the next break in play.

The key to a good session is making sure the coach intervention matches the context, and this can depend on a wide range of factors (eg whether the issue involves the whole group, one team or even one individual). The stage of learning/development of the participant and the nature of the activity also need to be considered.

The researchers also provide a word of caution about these interventions. Stopping the whole group should be kept to a minimum, and the coach needs to ensure that as many different players as possible have a chance to speak.

### Review

An obvious danger with this style of questioning is that too much time is spent questioning and not enough time spent playing. This may have detrimental effects, with players learning but not enjoying the games any more. This makes review essential, and a number of suggestions range from asking another coach to observe your session to asking your players how engaged they felt in the session and how useful it was.

## Learning from the research

This research article was primarily about questioning within a GBA, and coaches interested in finding out more about this may want to look at the website <http://tgfinfo.weebly.com/>

However, the article also raises some interesting points any coach may want to consider:

- What is my style of questioning? How often do I ask questions? What type of questions do I ask?
- Can I ask a colleague to observe a session and record the type of questions I ask? Can I record myself in a session (video or audio) and listen to my questions?
- Am I asking questions at the right time and to the right players given their stage of development?
- How often do I sit back and let my players learn for themselves? Am I always in charge?
- Am I targeting the Zone of Proximal Development, or am I just getting a player to repeat what they already know?



## References

If you are interested in finding out more about this area, this summary is based on the article below:

Harvey, S. and Light, R. (2015) 'Questioning for learning in game-based approaches to teaching and coaching', *Asia-Pacific Journal of Health, Sport and Physical Education*, 6 (1): 1–16.

Other interesting articles are suggested below:

Cushion, C., Ford, P.R. and Williams, M.A. (2012) 'Coach behaviours and practice structures in youth soccer: Implications for talent development', *Journal of Sports Sciences*, 30: 1631–1641.

Davis, B. and Sumara, D. (1997) 'Cognition, complexity and teacher education', *Harvard Educational Review*, 67: 105–125.

Vygotsky, L.S. (1978) *Mind in Society: Development of Higher Psychological Processes*. Cambridge: Harvard University Press. ISBN: 978-0-674576-29-2.

## Guidelines

What follows are guidelines for planning, implementing and reviewing as suggested by Harvey and Light in their original paper:

### Planning

- 1 Think small and build – start with one class or coaching group.
- 2 Pick your favourite sport – if you are a teacher, pick a sport that you have good content knowledge in.
- 3 Plan learning activities focused on small-sided modified/conditioned games and/or game-like activities such as 'piggy in the middle' that build in tactical complexity. Coaches with little experience in GBA should plan ahead with options for making modified games easier or more challenging.
- 4 Prepare 'question starters'.
- 5 If possible, work with a colleague to plan your lesson, and have them observe your lesson. Peer collaboration is very helpful for meeting the challenges involved in a GBA and to ensure that all learners are participating in discussions.

### Implementing

- 1 Explain the game or game-like activity to learners, and ask questions to ensure they understand and keep the game simple. Provide a purpose question to set the scene before game play begins related to the goal of the activity, ie how can we defend space so the opponent does not score?
- 2 Let learners play the game, and give them enough time to begin to get a feel for it and to adapt to its constraints and the opportunities it offers. This would typically be suggested by evidence of engagement in the game.
- 3 Pause the game at an appropriate time. There can be a number of situations that operate as cues for stopping the game, but they normally involve recognition that the class or team has adapted to the rules and that they are beginning to wrestle with the challenge intended by the modified game.

- 4 Gather the learners in their small-sided teams to formulate strategies or action plans through intra-team dialogue, debate, discussion, and reflection. Use prepared 'question starters'.
- 5 Facilitate the discussion by active listening and prompting learners through the utilisation of probing questions. Ensure all learners have an opportunity to participate.
- 6 Ensure the learners formulate an action plan for the subsequent bout of game play.
- 7 Restart the game to allow learners to implement their action plan/strategy and see how it works. Remind them of the purpose question.
- 8 Stop the game and repeat processes 5 and 6.
- 9 Continue but within the limits of the time available for the session.
- 10 Finish with questioning to review learning to get an idea of how well the learners understand and to reinforce learning. Practitioners should also allow the learners to ask questions of the coach and/or of their peers.

### Reviewing

- 1 Ask a small group of learners (or your peer observer) about your use of questioning.
- 2 How engaged did they feel in the session?
- 3 How engaged did they look to you?
- 4 To what extent did they feel there were opportunities for learner talk as opposed to teacher talk?
- 5 Based on the above, how much did they feel empowered by your use of the questioning approach?
- 6 What did they feel they learnt by the use of questioning approach?
- 7 To what extent did they speak about the challenges they faced in your use of the questioning approach?
- 8 Moving forward, how do the results of this session enable you to scaffold learning in future sessions?