
Citation:

McCarthy, L (2025) If Assessment Is Learning, Then What? Education Sciences, 15 (4). pp. 1-15.
ISSN 2227-7102 DOI: <https://doi.org/10.3390/educsci15040480>

Link to Leeds Beckett Repository record:

<https://eprints.leedsbeckett.ac.uk/id/eprint/12071/>

Document Version:

Article (Published Version)

Creative Commons: Attribution 4.0

© 2025 by the author

The aim of the Leeds Beckett Repository is to provide open access to our research, as required by funder policies and permitted by publishers and copyright law.

The Leeds Beckett repository holds a wide range of publications, each of which has been checked for copyright and the relevant embargo period has been applied by the Research Services team.

We operate on a standard take-down policy. If you are the author or publisher of an output and you would like it removed from the repository, please [contact us](#) and we will investigate on a case-by-case basis.

Each thesis in the repository has been cleared where necessary by the author for third party copyright. If you would like a thesis to be removed from the repository or believe there is an issue with copyright, please contact us on openaccess@leedsbeckett.ac.uk and we will investigate on a case-by-case basis.

Review

If Assessment Is Learning, Then What?

Liam McCarthy 

Carnegie School of Sport, Leeds Beckett University, Leeds LS6 3QQ, UK; l.mccarthy@leedsbeckett.ac.uk

Abstract: While recognizing both the difficult yet important nature of sport coaches' work, as they seek to achieve a wide range of positive outcomes across different participant populations and domains, it is important to acknowledge the value of professional development. As quality coaching becomes an increasingly important agenda item for sport coaching stakeholders, these learning opportunities have come under increased scrutiny. For example, there is growing interest in the role and function of assessment as a consistent feature of these programs. While appearing to be burdened by the legacy of educational concepts such as assessment for learning (formative assessment) and assessment of learning (summative assessment), which depict learning and assessment as distinct entities, the present article sets out to make a compelling case that learning and assessment are one and the same thing. In doing so, this article revisits and summarizes a body of recent work that proposes concepts with which to build a new approach and points to examples of such an approach in action. Engaging in the process of conceptual development, the article will then offer an *assessment as learning* metaphor for the attention of coach education and development program designers and facilitators. Through engagement with this work, readers are encouraged to reframe and reposition the role, function, and practice of assessment. In doing so, they are invited to consider how they would facilitate assessment opportunities differently if they were considered to be learning opportunities in their own right.

Keywords: assessment; assessment as learning; learning-oriented assessment; sport coaching; coach education; coach development



Academic Editor: Thomas M. Leeder

Received: 24 February 2025

Revised: 2 April 2025

Accepted: 9 April 2025

Published: 12 April 2025

Citation: McCarthy, L. (2025). If Assessment Is Learning, Then What? *Education Sciences*, 15(4), 480.
<https://doi.org/10.3390/educsci15040480>

Copyright: © 2025 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Sport coaches (coaches, from hereon) play an instrumental role in facilitating physical activity, play, and competition, contributing to vast and varied societal agendas (e.g., health, community development, and elite performance) (Department for Culture, Media, and Sport, 2023). This work is not easy, and so professional development programs exist as both a mechanism for coach support and to raise standards of practice. These programs are globally commonplace, a part of the coaches' lifeworld, and baked into the architecture of a sector seeking to increase quality and become progressively more professional (Lara-Bercial et al., 2022). They are most often designed and delivered by a sport's national governing body (NGB) (Wang et al., 2023) but also include university degree programs (bachelors and masters level) (Lara-Bercial et al., 2016) and sport-agnostic provision offered by national agencies (e.g., <https://www.ais.gov.au/coach-development/programs> (accessed on 10 April 2025)). They are increasingly valued by coaches, employers, and deployers and appear to be on a general trajectory of greater sophistication (e.g., adopting ideas such as reality-based learning and project-based learning). It could be argued that healthy academic and community scrutiny has led to this shift in how we support coaches, characterized by centering the learner, foregrounding their context, and seeking to do development work in situ where possible.

Despite this positive arc, coach assessment processes and practices have (for the most part) failed to be updated (McCarthy, 2024b). Indeed, it seems that little has changed since Cushion et al. (2003) recognized that “assessment breeds anxiety, undermines individual self-esteem, and creates an insular mentality” (p. 224) 22 years ago. This is problematic since assessment is a consistent feature of these programs the world over; coaches are often certified, qualified, licensed, recognized, and/or rewarded in some way for their participation, engagement, and success in meeting a series of competencies, standards, learning outcomes, or expertise statements. It is not within the scope of this article to speculate as to why assessment has not been a priority for more detailed consideration or to elaborate on how we might have arrived here—that has recently been done elsewhere (McCarthy, 2022, 2024b; McCarthy et al., 2022). It is, however, the aim of this article to take stock of where we are (which we come to next) and propose what might be. By taking this future-focused position, the intention is to take the reader on a journey toward an alternate reality for assessment in coach education and development work. Specifically, underneath this broad purpose, the article will work toward two aims. First, building on the foundations laid out in McCarthy et al. (2022) and McCarthy (2024b), in particular, the concept of assessment as learning (AaL) in development programs for coaches will be further extended and refined (a conceptual development task). Second, the implications of this for organizations and individuals who design and facilitate these programs will be set out, and a metaphor will be offered to support and sustain change. In short, the reader is invited to deliberate over and ultimately respond to the central question: if assessment *is* learning, then what?

The article is conceptual and presents no new empirical data, accordant with the “Review” submission format. Consistent with the practical guidance from Reese (2023), it will provide new perspectives on old issues, encourage a leap of the imagination, and work with useful theoretical frameworks to yield new material. The flow of what follows is aligned with Reese’s recommendation that conceptual writing be led by scene-setting elements such as a statement and justification of purpose, which precedes problem-solving and top-level theoretical ideas. A description of “what is” is then presented, and an explanation of “what might be” is proposed. The latter is comprised of concept extension and refinement, along with the addition of new ideas. All of these are ultimately assembled and arranged into an illustrative metaphor for coach assessment that intends to facilitate the shaping and framing of what might otherwise be viewed as a series of disparate concepts. According to McGlone (2007), to use metaphor is to “piggyback” onto more concrete and familiar ideas, increasing linguistic codability—describing and explaining how things work. It should be said at this point that concepts are introduced and explored in a way that invites the reader to think about what they *could* do with them rather than what they *should* (North et al., 2024). As practitioner and author, in doing and writing up this work, concepts have been encountered and used in a way that might not have been the original intention or their primary purpose. In a parallel process, you are invited to do what you will with this work in the very same way. North et al. (2024) emphasize this important distinction between a focus on “getting it right” and instead asking, “what can I do with this?”.

2. Notes on Terminology

Before making headway into examining “what is” and exploring “what might be”, it feels particularly important to define some of the common terms that will be used throughout. Woodburn and Schembri (2024) signal the importance of working towards a shared vocabulary if we are to successfully stimulate and sustain productive conversations about coach assessment. They argue that the words we use matter, that they are often culturally and politically bound and emotionally laden. Particularly since terms have been borrowed

and bolted on from broader education research and practice, which are themselves reflective of specific education systems in different parts of the world. On this subject, Taras (2008) encourages caution (“what is good for one sector is not always appropriate for the other” p. 395) when writing about the nuances in assessment terminology and concepts between the secondary and tertiary education systems. Understanding contexts, inclusive of their idiosyncratic similarities and differences, is crucial for making informed decisions. Taras (2008) invites us to consider how each sector has developed its own specific expertise in assessment, which has evolved from its own unique historical and logistical contexts; the challenge to “sport coaching” is when and how we begin to develop our own.

Of greatest importance for this article are three main terms. First, assessment for learning (AfL) (or formative assessment) describes an approach comprised of episodic (often clearly defined, multi-point) activities designed to generate insight that is used by both the coach and educator/developer to identify areas of opportunity relative to a prescribed standard (Black & Wiliam, 1998). Sadler (1989) is responsible for one of the most recognizable definitions: “Formative assessment is concerned with how judgments about the quality of student responses (performance, pieces, or works) can be used to shape and improve the students’ competence by short-circuiting the randomness and inefficiency of trial-and-error learning.” (p. 120). Similarly, Looney (2005) emphasizes assessment frequency for the identification of learning needs and to adjust teaching accordingly, while Shepard et al. (2005) described assessment during the instructional process for the purpose of improving teaching or learning.

Crucially, formative assessments are preparatory in nature—they exist to serve a future assessment of learning (AoL) (or summative assessment) process. While often viewed positively, AfL has been subject to critique within the literature. According to Dann (2014), AfL is still not well understood; she asserts that little progress has been made since the work of Sadler (1998) and Black and Wiliam (1998). Like Torrance (2012), Dann (2014) points to the mechanistic use and limiting nature of AfL, which can constrain the scope of learning and reduce opportunities for creative and critical thinking. Further, Torrance (2007) contends that the responsibility for putting in the “hard work” can be shifted towards the educator/developer because of a substantial amount of “hidden work” that arises as a consequence of implicit learner expectations. If we subscribe to the notion that it should be the learner who is doing most of the doing, then this is problematic (Race, 2014).

Second, then, AoL describes a process of gathering data on a coach’s performance against a prescribed standard at the end of (and separate from) a defined period of learning (Gupta, 2016). Symbolism, quantification, and comparison are important features of AoL, perhaps born out of a view that educational institutions and the programs that they offer are mechanisms for sorting and sifting (Earl, 2012). Boud (2000) is highly critical of AoL: “There is no point in having a reliable summative assessment system if it inhibits the very learning which it seeks to certify. . . . Existing assessment practices are perhaps the greatest influence inhibiting moves towards a learning society.” (p. 155). However, despite this, *more* learning-oriented approaches like that being offered herein, may seem revolutionary. The deliberateness of the added italics is important here. There is still, clearly, something to be learned from participating in an AoL, high-stakes, performative activity (even if that something is just about us and how we respond). In his critical review of formative assessment, Bennett (2011) signals the subtleties and nuance in the relationship between AoL and AfL: “a summative assessment should fulfill its primary purpose of documenting what students know and can do but, if *carefully crafted*, should also successfully meet a secondary purpose of support for learning” (p. 7) (*emphasis added*).

Third, and finally, AaL describes a process where development is foregrounded, and students take an active role in leading themselves in their own learning journey. It rep-

resents a rejection of the *either/or* proposition that the two former concepts may lead us toward (assessment *before* or *after* learning (Yan & Boud, 2021)) and instead suggests that all assessment can be learning-oriented while still recognizing and rewarding learners' advancement toward a standard (McCarthy, 2024b). Yan and Boud (2021) define AaL as: "Assessment that necessarily generates learning opportunities for students through their active engagement in seeking, interrelating, and using evidence." (p. 13). The authors highlight three key features of AaL, which, I argue, are perhaps rare in coach assessment processes and practices today. First, Yan and Boud (2021) invite us to think about assessment as the enactment of a learning strategy; this is perhaps contrary to where we might ordinarily begin, considering assessment as a tool or method to evaluate the successfulness of a learning strategy. Second, the authors encourage us to think about what participants could learn from engaging in the task directly, alongside all the peripheral activities. For example, in an applied project-based assessment, a coach is developing knowledge and understanding of an issue through inquiry, as they are also developing skills (for researching, curating, and sequencing convincing arguments) and attitudes (toward lifelong learning). Lastly, emphasis is placed on the self-regulated and reflective role of learners; AaL stresses greatly the development of metacognitive skills and capabilities.

As part of a broader curriculum model, AaL is considered to be a learning strategy rather than an assessment method (Yan & Yang, 2021). The adoption of an AaL strategy requires a restructuring of development programs and resequencing of activities to constitute a new arrangement of learning, teaching, and assessment. To illustrate this, Yan and Boud (2021) coined the phrase "assessment while learning" as a descriptor for AaL, positioned against "assessment *then* learning" and "assessment *after* learning" for AfL and AoL, respectively (p. 14). In the context of this article, AaL can be characterized by high levels of coach empowerment, ownership, and autonomy over the learning and development journey (Berry, 2008). Through unbroken generative feedback and reflection processes, the coach can become increasingly metacognitively capable and, thus, set their own goals and monitor progress (Mentkowski, 2006). Where AoL, driven by pre-determined and non-negotiable standards, serves the agenda of the awarding organization most. In contrast, AaL serves the agenda of the coach (Woodburn & Schembri, 2024). If there was a seriousness in the sentiment of a truly learner-centered approach to education and development programs, then this should surely be considered.

One final task is to say something about the potential breadth of educational and developmental experiences for coaches, and associated nomenclature. First, most commonly, there is a type of coach support that involves coaches' participation in programs that are driven by pre-determined and standardized content and curricula; for example, a centrally designed NGB program that is delivered locally, across the country, to hundreds of coaches each year (e.g., the UEFA C License, delivered by the English Football Association). In this case, we might think of those facilitating that as *coach educators*. Second, there is an increase in more sophisticated development programs for coaches that include in situ support and recognize the importance of working with coaches' issues and interests that emerge at the intersection of themselves, their work, and their context. For example, the Higher Education Diploma in Professional Football Coaching, designed and delivered by the Premier League and validated by Leeds Beckett University (McCarthy & Roberts, 2023). Individuals working with coaches in this way could be considered *coach developers*. Nonetheless, it is not the intention of this article to prescribe a set of terms; quite the opposite, sensitivity to geographic and cultural interpretations is important.

Throughout the remainder of this article, the term educator/developer will be used. Whether a person is delivering content to coaches as part of a weekend-long program or supporting a coach through a season-long reality-based learning opportunity, then every-

thing herein still applies. For example, establishing what good looks like (as a principle of assessment below) can either be achieved by using a pre-defined rubric or through a negotiated set of standards against which we might consider attempts to successfully notice, frame, and overcome a series of authentic coaching problems. Clearly, however, there are differential demands on, for example, resources (individual, organizational, and systemic). There are historical and political considerations, too, where greater degrees of freedom exist in some places to do some things and not elsewhere to do others. Some of this will be dealt with toward the end of the article. However, it must be clear upfront that regardless of the prevailing conditions, it is possible and desirable to foreground learning in assessment experiences for coaches in their development (McCarthy, 2024a, 2024b). AaL can be a broad and inclusive approach—we will explore how below.

3. Assessment as Learning: Concepts and Examples

To summarize, the current state of play is to acknowledge where we are and what we have as we build toward reframing assessment opportunities as learning opportunities in development programs for coaches. In recognition of and response to the dearth of assessment-specific literature in the coach education and development domain (Hay et al., 2012), a series of concepts for high-quality assessment processes and practice have been offered. These amount to a suggestion that assessment could be more authentic, embedded, ongoing, all-point, collaborative, developmental (metacognitively, in particular), and driven by a shared or negotiated and transparent vision of what good looks like (McCarthy et al., 2022; McCarthy, 2024b). None of these ideas are radical nor new; all appear consistently and widely in the broader education literature, yet they show up much less in the development programs and practice for/of supporting coaches (McCarthy et al., 2022). For Hay et al. (2012), this is due to “little research effort or conceptual consideration has been directed towards the potential contribution of assessment to the recognition and promotion of learning in the sports coaching space” (p. 187). However, where they do exist, the aim of this section is to provide a succinct precis of the ideas represented and draw attention to examples of existing practices underpinned by one or more of them.

A prerequisite to moving beyond the limitations and unhelpful duality of AfL and AoL is to acknowledge that learning, teaching, and assessment are meshed (Hattie & Jaeger, 1998) and that their separation only hinders progress (Yan & Yang, 2021). In any given moment of a development interaction or episode, all three processes occur simultaneously. For instance, during a classroom-based planning activity, a coach educator/developer assesses the coach’s knowledge, understanding, skills, and attitudes relative to a standard (more on this later) to guide their next move. Effective educator/developer learning and teaching practices are, then, inherently assessment practices. In this example, the coach may receive specific task support, be introduced to a new task, or be encouraged to share their work with others. This perspective reveals how insights generated through engagement with learning opportunities are used for understanding and appreciating progress; I argue that there is no need for a further isolated and discreet AfL episode nor a performative AoL opportunity to form an assessment.

This is consistent with Adams’ (2006) observation that assessment can be “an aspect of the learning and teaching process rather than an adjunct” (p252) should we redesignate assessment as a dynamic, integral, and ongoing feature of the learning and teaching process. However, the traditional/typical structuring and sequencing of development programs often reinforce the separation of learning, teaching, and assessment (Adams, 2006; Shepard, 2000). Assessment deadlines, assessment days, and the introduction of an “assessor” are all features of a powerful messaging system. Therefore, eliminating all multi-point (AfL) and endpoint (AoL) assessment activities and adopting an all-point approach (considering

a coach's progress over time) is an important step in communicating that all learning activities are assessment opportunities (Yan & Boud, 2021). If assessment is learning, why would we reduce, specify, and defer it?

The notion of all-point assessment leads us to two additional concepts signaled in the work of McCarthy et al. (2022): authentic and embedded assessment. In order for coaches to engage deeply and immersively, such that they are learning in and through the experience (Yan and Boud (2021) use the phrase "assessment *while* learning" [p. 14]), tasks should be meaningful and situated in time and space. The notion of uniform deadlines is restrictive in encouraging the learning we hope to promote since they demand that something be done—even if not immediately useful or helpful. Instead, by embedding assessment in coaches' everyday reality, we present them with a chance to engage at a time when it is most necessary, as determined by the conditions in which they are coaching. It is understood that this presents challenges to traditionally (perhaps inescapably) rigid program structures or resource-poor environments; however, this type of mass customization, as Sart (2014) would describe it, should be an aspiration. To operationalize this idea, we might adopt a project-based approach (Bell, 2010; Helle et al., 2006; Papanikolaou & Boubouka, 2010) to coach learning; McCarthy and Roberts (2023) provide an example of where this has been done successfully with academy football coaches on a two-year development program in England.

One desirable outcome of project-based approaches to coach learning, which underscores the inseparability of assessment, learning, and teaching, is the development of metacognitive skills (Blumenfeld et al., 1991; English & Kitsantas, 2013). These skills underpin coaches' capacity to engage in self-directed lifelong learning (Cornford, 2002), which appears to be a common goal of many development programs for coaches (Deek et al., 2013; Dohme et al., 2019; Duarte & Culver, 2014). It is sensible not to assume the automatic development of these skills but rather to promote their emergence quite intentionally through tasks that require elaboration (making connections between ideas) and organization (curating and sharing novel outputs) (Cornford, 2002).

Lastly, as part of this brief and high-level summary of available ideas with which we can begin to assemble an overall AaL strategy, developing and negotiating a shared and transparent position on what good looks like between the coach and coach educator/developer is important. Oftentimes, this is pre-determined and prescribed. For instance, a coach education program is likely to have learning outcomes (goals), activity briefs (what is required), and quality criteria (what it looks like when these activities are done well). However, sometimes it may be within the gift of the coach educator/developer to negotiate these with the coach (e.g., they are operating with a framework for freedom). In any case, working together to internalize what good looks like and then jointly establish priorities is important where assessment is considered to be learning.

This can be achieved by openly discussing and centering goals and quality criteria in all interactions between coaches and educators/developers as waymarkers and staging posts on a collaborative learning journey. Specifically, Bearman and Ajjawi (2021) argue that this "can provide valuable opportunities for students to make meaning, in particular with respect to holistic, dynamic and highly tacit concepts which are poorly captured in writing" (p. 362). The authors frame working with quality criteria in this way *invitational*. By that, they mean it invites the coach into a productive space (where the coach's context, the task, and the criteria come together and are no longer considered in isolation), sustains learning (builds coaches' capacity to review their own work, themselves), and invites reflection (on the relationship between the coach's work and the criteria).

By doing this, we can leverage the benefits of assessment as a message system (Hay et al., 2012) and draw attention to the most salient aspects of and opportunities for pro-

fessional development. There has been some debate about the most appropriate ways to do this. [Lara-Bercial and Bales \(2022\)](#) suggest that the use of professional competency statements is most common (e.g., [Demers et al., 2006](#); [van Klooster & Roemers, 2011](#)), but options include expertise statements ([Collins et al., 2015](#)) and capability assessment ([Bachkirova & Smith, 2015](#)). However, what we use to communicate and negotiate a vision of “good” (e.g., competency framework, rubrics, exemplars, etc.) is much less important than the principle of doing it.

By establishing a common, shared direction of travel among stakeholders, we can explore the potential to promote the development of metacognitive skills and positive attitudes toward learning, preparing and enabling coaches to evaluate their own work in the way the coach educator/developer might. It can compel coaches to identify themselves the discrepancies between actual and expected standards of practice and establish moves to bring the two closer together ([Sadler, 1989](#)). This is a feature of [Piggott et al.’ \(2024\)](#) intervention with undergraduate sport coaches, who draw on the work of [Sadler \(2013\)](#) while offering an example of supporting coaches with “acquiring a concept of ‘high-quality’ work; the ability to judge the quality of their own work-in-progress; and the ability to choose from a widening pool of ‘moves’ to improve the quality of work.” (p. 111).

The concepts shared within this section represent some of the raw materials with which to shape a metaphor for an AaL approach to supporting coaches’ professional development. They are proposed on the basis that an opportunity exists to think about and do assessment differently. The goal of this article is to argue that prioritizing this represents the greatest opportunity we have to influence coaches’ experience of and attitude toward professional development and lifelong learning.

4. Assessment as Learning: Strategy and Practice

The task of this section is to extend the ideas shared so far and contribute new ones for consideration as part of a compelling AaL approach to supporting coaches. An approach that stands alongside familiar and enticing, but perhaps less productive, AfL and AoL approaches. Less productive in the sense that both AfL and AoL fail to foreground learning in the way that AaL does ([Yan & Boud, 2021](#)), which is problematic since learning is the primary goal of development programs (it should be considered the single priority, the reason they exist). This section is an outcome of much rumination and ideation in the field with coaches, those who support coaches, program architects, policymakers, and a wide set of open-minded individuals and organizations willing to explore change.

4.1. If Assessment Is Learning Then... We Consider Coaches as Valuable Stakeholders Since They Have a Significant Stake

In assessment, it is typically the coach who stands to lose or gain the most—they clearly have a considerable stake in the process. [McCarthy and Callary \(2024\)](#) describe assessment as a gatekeeper, where the associated qualification, certification, or license grants access to paid (or better paid) jobs, career progression, the ability to work in a specific context, and the next “level” of training (in commonly conceived linear pathways of professional development). However, most often, their positioning and role within the activity do not reflect this. Assessment may often be done *to* coaches and not *with* coaches, contrary to the Latin roots of the word—*assidere*—which means to “sit beside” ([Earl, 2007](#)). [Nash and Sproule \(2012\)](#) provide examples of this, in their work which portrays coaches’ perceptions of their education experiences. Unsurprisingly, assessment features for the wrong reasons, with coaches reporting a lack of clarity of who was assessing them, what they were being assessed on, and concerns about the authenticity of the assessment.

An AaL approach can empower coaches to take charge of their own learning and development, increasing their motivation and engagement as a result. With greater agency to establish and pursue goals while self-monitoring progress, assessment is conceived not as something that is imposed but rather something that is embraced. In a model of assessment where power and responsibility are more equally shared (Leach et al., 2001), increasingly ownership of the process tilts toward the coach, and shifts in coaches' attitudes toward and relationship with learning can occur (McCarthy & Roberts, 2023). As a result, a renewed sense of partnership in the process can emerge (Yan & Boud, 2021).

Edwards and Kloos (2024) argue that building trust within the coach-coach educator/developer partnership creates a rapport that ensures the assessment opportunity is experienced in the most positive light, positioning it as a valuable learning opportunity for the coach. According to Hargreaves (1997), it is naïve to determine that assessment measures learning without influencing it. As the notion that a certificate/qualification/license is the endpoint of development falls away, and with a greater ongoing understanding of how they are progressing, coaches become far more immersed in and engaged with the process of lifelong learning and development.

4.2. If Assessment Is Learning Then... We Place Greater Importance on What Coaches Are "Developing" Rather than What They Are "Demonstrating"

In more traditional and widely used assessment protocol than what is being advocated for here, it is common that learners are required to demonstrate what they know, understand, or can do (Campbell & Murray, 1996). Gervais (2016) defines this as "an outcome-based approach to education that incorporates modes of instructional delivery and assessment efforts designed to evaluate mastery of learning by students through their demonstration of the knowledge, attitudes, values, skills, and behaviors" (p. 99). Observables, then, come to dominate success criteria, rubrics, and competency statements. For example, Callary et al. (2014) examined seven national high-performance coach education programs and noted how, in some cases, competence was assessed by direct observation of performance with an expectation that theories taught would show up in practice (the problematic nature of this is explored in Section 4.4).

Coaches carry the encumbrance of "showing" and "evidencing", and the educator/developer is tasked with "looking" and "reviewing". Not only is this burdensome for both parties, but we must appreciate that some of the most important features of effective and ethical coaching operate below the surface—they are unobservable (North, 2017). We must also recognize that positioning the coach educator/developer in such a way is incongruent with the AaL ideas explored so far.

Implicit within the "show me" doctrine is the notion that we are not journeying together, that there is risk involved (i.e., is it good enough evidence?), and that the outcome is more important than the process. Instead, when we invite coaches to develop (knowledge, understanding, skills, and attitudes), there is a moment of liberation, an opening-up, a willingness to be curious and engage in trial and error, and with that, the likelihood of much greater progress will be made. Within this, the role of the coach educator/developer is reoriented from error detector and corrector to supporting the coach in appraising the results of their experiments.

4.3. If Assessment Is Learning Then... We Consider Feedback to Be Generative, Not Transactional

Feedback, a well-worn strategy for supporting learners in the arsenal of an educator/developer, is perhaps so established in practice that it is rarely considered critically. This can lead to a situation where, to borrow from Hattie and Jaeger (1998), more "dollops of feedback" are seen to be the solution to improving the educational experience—however, it is not that simple. If we subscribe to the very modest idea that to assess is to respond

to the question, “how are we doing relative to where we would like to be?”, feedback can be defined as any insight that prompts us to think about and act upon as we develop a response. The notion of revealing discrepancies between current and desired performance features heavily in the literature (e.g., [Black & Wiliam, 1998](#); [Sadler, 1989](#)). However, so often in practice (habitually implied by the structures and systems that define our working conditions), responsibility for identifying the space in which there is significant opportunity for growth is tilted toward the educator/developer. From here, escaping the “transactional trap” is not easy; the educator/developer can inadvertently become the provider/transmitter of feedback and the coach to the recipient. In the mind of the learner, this reaffirms a traditional hierarchy, that they are being assessed, assessments are being made of them, and that their role is diminished/they are passive.

A more generative framing of feedback is essential for a productive AaL approach. When coaches are invited to become partners in generating insight, they are empowered to monitor their engagement with learning activities and tasks and develop a greater understanding of progress towards goals ([Nicol & Macfarlane-Dick, 2006](#)). Of course, this takes a degree of self-regulatory skill; yet, if assessment is learning, then these skills can become the focus of that process. We might consider the role and function of feedback to be much more about developing the learner and not the work. Through this, the coach develops the self-monitoring skills and capabilities required to notice features of their work that require attention and determine what to do with that information ([Earl, 2012](#); [Gupta, 2016](#)). More than episodic self-assessment, these are the conditions through which to develop a quality of mind that iteratively acquires a repertoire of new moves with reference to personal goals and an internalized set of external standards.

4.4. If Assessment Is Learning Then... We Place Value on Habitual Critical Reflection

There is a consensus that a relationship exists between assessment, feedback, and reflection ([Sargeant et al., 2009](#)) in the educational context. Where learning is the primary interest of assessment (AaL), not only is it important to engage coaches in the goals and quality criteria (described in section two), the insights generated from this process (which we can define as feedback, see above) are a catalyst for reflection ([Carless, 2007](#)). Critical reflection, or working toward developing an *epistemology of professional practice*, as [Schön \(2001\)](#) terms it, is important in those professional contexts characterized by complexity, instability, and uncertainty. In contexts such as these, like coaching, technical law-like solutions do not apply since problems are often poorly defined, messy, and in constant flux ([Schön, 2001](#)).

According to [Muir and Lyle \(2024\)](#), “all of our actions and behaviors are based on some form of reasoning, whether tacit or explicit; it is a fallacy to refer to theoryless practice.” (p. 144). While theory might be defined as a form of codified knowledge and practice defined as what people actually do, these things quite clearly come together in the day-to-day work of a practitioner (or any other human being!). The tasks and activities within support programs and those who facilitate them can play an important role in helping participants explore their working models and how they are changing as a result of ongoing experience.

Working with all insights generated through assessment opportunities (which we can conceptualize as feedback), through an ongoing process of critical reflection, there can be latitude to work with the coach to notice things about themselves (e.g., identity, beliefs, and values), their practice (e.g., incongruence between intentions and reality), and encourage shifts in their work to emerge ([Muir & Lyle, 2024](#)). In doing this, it is suggested that the coach educator/developer listens, asks questions, and offers observations to influence the nature of the coaches’ reflections. In sidestepping the “transactional trap” described

above, we become open to considering who initiates the interaction, which insights become central to the conversation and why, and the turns that are taken as the reflective moment evolves (Muir & North, 2023). Dann (2014) underscores this idea by proposing that it might not be the feedback itself that holds the most significance but rather the ways coaches are encouraged to interact with it and how sensitive those are to the motivational and emotional states.

Unlike the typical concept of feedback, which may be analogous to the idea of “holding up the mirror”, Deary (2024) prompts us instead to consider reflection as “windows to other worlds”. “Beware mirrors”, he states, for it is too “easy to confuse ourselves with the person we see in them. We can become stuck staring at an inner movie, listening to an inner voice, reading an inner book that endlessly repeats back at us what we already know.” (p. 272). Reflection that is simply about documenting and diarizing can all too easily reaffirm what we think and who we are. The educator/developer, instead, can support a type of reflective process that prompts the coach to explore alternate realities: what they *could* think and who they *could* be.

Of course, this is unrealistic to achieve in a set of circumstances where assessment is intended to be, or perceived to be, judgment-oriented, high-risk, and endpoint. Already, it is argued, there is an uneasiness for the practitioner in engaging in the type of sensemaking work: “who wants to clarify and question assumptions they’ve lived by for a substantial period of time, only to find out that they don’t make sense?” (Brookfield, 2017, p. 5). There is a danger that when learning is not foregrounded explicitly in assessment, there is a narrowing of curiosity and an increased likelihood that coaches simply acquiesce—a long-standing critique of development programs (e.g., Piggott, 2012). Instead, using a learning-oriented, low-/no-risk, all-point approach to support coaches to generate insights about their work represents the greatest opportunity to take them on a (non-linear) journey toward exceeding any agreed vision of what good looks like.

5. The Lightbulb Moment

While there is little debate that continuous improvements in the way that coaches are supported is a feature of the last few decades, advances in how coaches are assessed are only found in pockets (e.g., McCarthy & Roberts, 2023) and not common. Unlike, for example, the broad acceptance of ideas such as learner-centeredness (Paquette & Trudel, 2018), communities of practice (Bertram et al., 2016), and reality-based learning (UEFA, 2020), which have no doubt elevated development programs much more widely. However, there does, at last, appear to be a growing and collective realization of what could change if our approach to coach assessment changes; this is demonstrated by the edited book/collection of case studies by McCarthy (2024b), the instigation of a global working group (International Council for Coaching Excellence, 2021), the inclusion of an assessment chapter within the International Council for Coaching Excellence (ICCE) Coach Developer Framework v2.0 (McCarthy, 2024a), conference symposia (McCarthy, 2023), and a steady uptick in peer-reviewed literature (Edwards & Kloos, 2024; Möhrle, 2024). I suggest that we are collectively having a “lightbulb moment”. The intention here is to capitalize on that and offer a metaphor; metaphors are useful devices in elucidating concepts, framing new ideas, and filling terminological gaps (Littlemore, 2016). See Figure 1.

Like the lightbulb, an AaL strategy for supporting coaches requires a stimulus, for example, a *task*, *assignment*, or *mission*, which acts as the charge (in the metaphor, this is illustrated with the power cord). This stimulus should be *authentic to, and embedded in, the coach’s day-to-day reality* (e.g., a practical coaching problem). It should be *recognizable, familiar, and feel immediately meaningful and interesting* (e.g., there is resonance and there is benefit to exploring and resolving the practical coaching problem). Although the stimulus may

be prescribed (as part of a large-scale education program) or consulted on (as part of one-to-one coach development initiatives), engaging with it should feel *important, motivating, and appropriately challenging* to the coach as part of their current role. Where possible, the stimulus should be negotiated or at least be flexible enough to accommodate any changes to the role or professional context.



Figure 1. The lightbulb moment.

In the same way that the filament in a lightbulb provides a pathway for electricity to ultimately generate heat and glow, in this metaphor, the filament represents *unbroken generative cycles of feedback and reflection*. These cycles are made possible as a product of the coach's engagement with lots of activities over a long period of time, generating countless insights. It is these cycles that gradually illuminate an area of study. The lampshade provides a focus for the light, a direction of/for energy and attention, which is illustrative of the need for boundary markers—*goals and quality criteria*. It is imperative helping to establish where and how far we are going. We can use the lamp to eventually look around the room at different artifacts, *developing* knowledge, understanding, skills, and attitudes. Our ability to shift the focus of the light allows us to explore different aspects of our professional person, practice, and context through AaL, which are all represented by the parameters of the room itself. The lamp does not sit outside of the room, isolated in the entirety of the sport coaching landscape. However, the *window into other worlds* allows us to look there if that is deemed to be important.

6. Conclusions

As this article draws to a close, it is only right to return to the original provocation that started it: if the assessment is learning, then what? It must be clear by now that if we consider learning and assessment to be the same thing, then there are significant implications for the design and delivery of development programs. [Yan and Boud \(2021\)](#) surmise that with consequences for learning paramount, assessment should be considered a learning strategy, not an individual method, bit part, or an afterthought. By inviting coaches to actively engage in monitoring their own progress and generate insights that shape their journey, we stand to facilitate more productive experiences and positively influence their attitude towards and relationship with their own development ([Dann, 2002](#)). Indeed, this might be the area of greatest potential through which to heighten the quality

of, engagement with, and impact from development programs. This assertion is made on the basis that assessment colors coaches' overall experience (Nash & Sproule, 2012), a lack of authentic assessment contributes to "washout" as coaches return to their working context, and a lack of engaging and productive assessment deters continued professional development (or encourages an instrumental relationship with it).

Doing this work requires a vision for what the role and function of assessment could be within development programs for coaches (McCarthy, 2024b), an extended set of ideas (McCarthy et al., 2022), and a metaphor that could be applied in practice. With this, there is a chance to attend directly to practical dilemmas in the field, such as this from a senior learning designer in a large national governing body, featured in the work of McCarthy (2022) (*emphasis added*):

So, you probably ended up with a situation where, 'right, we don't want that to be the assessment again and we kind of agree that that isn't the best or most appropriate thing to do', erm, 'but we don't really know what it should be', so actually it just creates a *black hole*. (p. 156)

There is no suggestion that the metaphor needs to be realized in its fullest, nor that it is the gold standard, but it may be a lodestar in moving beyond AfL and AoL as an apparently either/or choice. Simply taking elements of it as resource and other inevitable limiting factors allow, will have a notable impact on coaches' learning and experience. For instance, removing multi-point and endpoint assessments in favor of an all-point assessment approach need not take any additional resource whatsoever (it might even help to recover some, taking out the fees associated with assessors and expensive assessment days). However, as a word of caution: a distinction must be made between adopting some of the features (e.g., generative feedback, placing emphasis on what the coach develops rather than what they demonstrate) of this strategy (pragmatic) and relabeling existing practice (a rebranding exercise). In order to facilitate such an approach and leverage the benefit of the underpinning concepts, there does indeed need to be a reorientation of programs as they might typically be designed and facilitates (i.e., where teaching [content], learning [activities], and assessment are sequenced as a succession of events). AaL is a learning strategy, not a method or tool.

Funding: This study received no external funding.

Conflicts of Interest: The author declares no conflict of interest.

References

- Adams, P. (2006). Exploring social constructivism: Theories and practicalities. *Education*, 34(3), 243–257. [CrossRef]
- Bachkirova, T., & Smith, C. L. (2015). From competencies to capabilities in the assessment and accreditation of coaches. *International Journal of Evidence Based Coaching and Mentoring*, 13(2), 123–140.
- Bearman, M., & Ajjawi, R. (2021). Can a rubric do more than be transparent? Invitation as a new metaphor for assessment criteria. *Studies in Higher Education*, 46(2), 359–368. [CrossRef]
- Bell, S. (2010). Project-based learning for the 21st century: Skills for the future. *The Clearing House*, 83(2), 39–43. [CrossRef]
- Bennett, R. E. (2011). Formative assessment: A critical review. *Assessment in Education: Principles, Policy & Practice*, 18(1), 5–25.
- Berry, R. (2008). *Assessment for learning*. Hong Kong University Press.
- Bertram, R., Culver, D. M., & Gilbert, W. (2016). Creating value in a sport coach community of practice: A collaborative inquiry. *International Sport Coaching Journal*, 3(1), 2–16. [CrossRef]
- Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice*, 5(1), 7–74.
- Blumenfeld, P. C., Soloway, E., Marx, R. W., Krajcik, J. S., Guzdial, M., & Palincsar, A. (1991). Motivating project-based learning: Sustaining the doing, supporting the learning. *Educational Psychologist*, 26(3–4), 369–398. [CrossRef]
- Boud, D. (2000). Sustainable assessment: Rethinking assessment for the learning society. *Studies in Continuing Education*, 22(2), 151–167. [CrossRef]
- Brookfield, S. D. (2017). *Becoming a critically reflective teacher* (2nd ed.). Jossey Bass.

- Callary, B., Culver, D., Werthner, P., & Bales, J. (2014). An overview of seven national high performance coach education programs. *International Sport Coaching Journal*, 1(3), 152–164. [CrossRef]
- Campbell, L. M., & Murray, T. S. (1996). Assessment of competence. *The British Journal of General Practice*, 46(411), 619. [PubMed]
- Carless, D. (2007). Learning-oriented assessment: Conceptual bases and practical implications. *Innovations in Education and Teaching International*, 44(1), 57–66. [CrossRef]
- Collins, D., Burke, V., Martindale, A., & Cruickshank, A. (2015). The illusion of competency versus the desirability of expertise: Seeking a common standard for support professions in sport. *Sports Medicine*, 45, 1–7. [CrossRef] [PubMed]
- Cornford, I. R. (2002). Learning-to-learn strategies as a basis for effective lifelong learning. *International Journal of Lifelong Education*, 21(4), 357–368. [CrossRef]
- Cushion, C. J., Armour, K. M., & Jones, R. L. (2003). Coach education and continuing professional development: Experience and learning to coach. *Quest*, 55(3), 215–230. [CrossRef]
- Dann, R. (2002). *Promoting assessment-as-learning: Improving the learning process*. Routledge.
- Dann, R. (2014). Assessment as learning: Blurring the boundaries of assessment and learning for theory, policy and practice. *Assessment in Education: Principles, Policy & Practice*, 21(2), 149–166.
- Deary, V. (2024). *How we break: Navigating the wear and tear of living*. Penguin Books Ltd.
- Deek, D., Werthner, P., Paquette, K. J., & Culver, D. (2013). Impact of a large-scale coach education program from a lifelong-learning perspective. *Journal of Coaching Education*, 6(1), 23–42. [CrossRef]
- Demers, G., Woodburn, A. J., & Savard, C. (2006). The development of an undergraduate competency-based coach education program. *The Sport Psychologist*, 20(2), 162–173. [CrossRef]
- Department for Culture, Media, and Sport. (2023). *Get active: A strategy for the future of sport and physical activity*. Available online: https://assets.publishing.service.gov.uk/media/64ef008f13ae15000d6e302c/11187-DCMS-Sports_Strategy_Report_CM_ACCESSIBLE-02.pdf (accessed on 10 April 2025).
- Dohme, L. C., Rankin-Wright, A. J., & Lara-Bercial, S. (2019). Beyond knowledge transfer: The role of coach developers as motivators for lifelong learning. *International Sport Coaching Journal*, 6(3), 317–328. [CrossRef]
- Duarte, T., & Culver, D. M. (2014). Becoming a coach in developmental adaptive sailing: A lifelong learning perspective. *Journal of Applied Sport Psychology*, 26(4), 441–456. [CrossRef]
- Earl, L. M. (2007). Assessment as learning. In *The keys to effective schools: Educational reform as continuous improvement* (pp. 85–98). Corwin.
- Earl, L. M. (2012). *Assessment as learning: Using classroom assessment to maximize student learning*. Corwin Press.
- Edwards, J., & Kloos, K. (2024). National coaching certification program in Canada: Understanding the relationship dynamics between coach evaluators and the coach. *Leisure/Loisir*, 48(1), 149–181. [CrossRef]
- English, M. C., & Kitsantas, A. (2013). Supporting student self-regulated learning in problem-and project-based learning. *Interdisciplinary Journal of Problem-Based Learning*, 7(2), 6. [CrossRef]
- Gervais, J. (2016). The operational definition of competency-based education. *The Journal of Competency-Based Education*, 1(2), 98–106. [CrossRef]
- Gupta, K. (2016). Assessment as learning. *The Science Teacher*, 83(1), 43. [CrossRef]
- Hargreaves, D. J. (1997). Student learning and assessment are inextricably linked. *European Journal of Engineering Education*, 22(4), 401–409. [CrossRef]
- Hattie, J., & Jaeger, R. (1998). Assessment and classroom learning: A deductive approach. *Assessment in Education: Principles, Policy & Practice*, 5(1), 111–122.
- Hay, P., Dickens, S., Crudgington, B., & Engstrom, C. (2012). Exploring the potential of assessment efficacy in sports coaching. *International Journal of Sports Science & Coaching*, 7(2), 187–198.
- Helle, L., Tynjälä, P., & Olkinuora, E. (2006). Project-based learning in post-secondary education—theory, practice and rubber sling shots. *Higher Education*, 51(2), 287–314. [CrossRef]
- International Council for Coaching Excellence. (2021). *Report to the 2021 ICCE general assembly*. Available online: <https://icce.ws/wp-content/uploads/2023/01/report-to-the-2021-icce-general-assembly-111101.pdf> (accessed on 10 April 2025).
- Lara-Bercial, S., & Bales, J. (2022). The challenge of doing coach education and development in the 21st century: Past, present, and future trends. In *Education in sport and physical activity* (pp. 10–23). Routledge.
- Lara-Bercial, S., Bales, J., North, J., Petrovic, L., & Calvo, G. (2022). International council for coaching excellence position statement “professionalisation of sport coaching as a global process of continuous improvement”. *International Sport Coaching Journal*, 9(2), 157–160. [CrossRef]
- Lara-Bercial, S., Jimenez, A., Abraham, A., Bales, J., Colmaire, P., Curado, J., Dieffenbach, K., Ito, M., Mokglate, O., Nordmann, L., & Rynne, S. (2016). The international sport coaching bachelor degree standards of the international council for coaching excellence. *International Sport Coaching Journal*, 3(3), 344–348. [CrossRef]

- Leach, L., Neutze, G., & Zepke, N. (2001). Assessment and empowerment: Some critical questions. *Assessment & Evaluation in Higher Education*, 26(4), 293–305.
- Littlemore, J. (2016). Metaphor use in educational contexts: Functions and variations. In E. Semino, & Z. Demjén (Eds.), *The Routledge handbook of metaphor*. Routledge.
- Looney, J. (Ed.). (2005). *Formative assessment: Improving learning in secondary classrooms*. Organisation for Economic Cooperation and Development.
- McCarthy, L. (2022). *Coach education and assessment in football: A critical realist informed evaluation* [Doctoral dissertation, Leeds Beckett University].
- McCarthy, L. (2023, November 29–December 3). *Sport coach education, development, and assessment; international perspectives* [Symposium]. Presented at the International Council for Coaching Excellence (ICCE) Global Coaching Conference, Singapore.
- McCarthy, L. (2024a). Assessment of coaches and coach developers. In P. Crisfield, & J. Bales (Eds.), *International coach developer framework* (2nd ed.). International Council for Coaching Excellence. Available online: <https://icce.ws/project/international-coach-developer-framework/> (accessed on 10 April 2025).
- McCarthy, L. (Ed.). (2024b). *Sport coach education, development, and assessment: International perspectives*. Taylor & Francis.
- McCarthy, L., & Callary, B. (2024). Assessment in coach education. In S. Rynne, & C. Mallett (Eds.), *The Routledge handbook of coach development in sport* (pp. 237–251). Routledge.
- McCarthy, L., & Roberts, C. (2023). A Project-Led Framework for Coach Development in English Men's Professional Football: A Premier League Case Study. *International Sport Coaching Journal*, 11(3), 446–456. [CrossRef]
- McCarthy, L., Vangrunderbeek, H., & Piggott, D. (2022). Principles of good assessment practice in coach education: An initial proposal. *International Sport Coaching Journal*, 9(2), 252–262. [CrossRef]
- McGlone, M. S. (2007). What is the explanatory value of a conceptual metaphor? *Language & Communication*, 27(2), 109–126.
- Mentkowski, M. (2006). Accessible and adaptable elements of Alverno student assessment-as-learning: Strategies and challenges for peer review. In C. Bryan, & K. Clegg (Eds.), *Innovative Assessment in Higher Education* (pp. 68–83). Routledge.
- Möhrle, A. (2024). Competence—One term, various definitions: A scoping review for sports coach education and research. *International Sport Coaching Journal*, 1–21. [CrossRef]
- Muir, B., & Lyle, J. (2024). *Sport coach learning and professional development: Supporting coaches in performance sport*. Routledge.
- Muir, B., & North, J. (2023). Supporting coaches to learn through and from their everyday experiences: A 1:1 coach development workflow for performance sport. *International Sport Coaching Journal*, 11(2), 288–297. [CrossRef]
- Nash, C., & Sproule, J. (2012). Coaches perceptions of their coach education experiences. *International Journal of Sport Psychology*, 43(1), 33.
- Nicol, D. J., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education*, 31(2), 199–218. [CrossRef]
- North, J. (2017). *Sport coaching research and practice: Ontology, interdisciplinarity and critical realism*. Routledge.
- North, J., Muir, B., & Gillott, A. M. (2024). Developing coach developers in and for performance development and high-performance sport. In S. B. Rynne, & C. J. Mallett (Eds.), *The Routledge handbook of coach development in sport* (pp. 336–354). Routledge.
- Papanikolaou, K., & Boubouka, M. (2010). Promoting collaboration in a project-based e-learning context. *Journal of Research on Technology in Education*, 43(2), 135–155. [CrossRef]
- Paquette, K., & Trudel, P. (2018). Learner-centered coach education: Practical recommendations for coach development administrators. *International Sport Coaching Journal*, 5(2), 169–175. [CrossRef]
- Piggott, D. (2012). Coaches' experiences of formal coach education: A critical sociological investigation. *Sport, Education and Society*, 17(4), 535–554. [CrossRef]
- Piggott, D., Cowburn, I., Stodter, A., & Low, C. (2024). Assessment for learning in a sport coaching degree in the UK. In L. McCarthy (Ed.), *Sport coach education, development, and assessment* (pp. 108–122). Routledge.
- Race, P. (2014). *Making learning happen: A guide for post-compulsory education* (3rd ed.). SAGE Publications Ltd.
- Reese, S. D. (2023). Writing the conceptual article: A practical guide. *Digital Journalism*, 11(7), 1195–1210. [CrossRef]
- Sadler, D. R. (1989). Formative assessment and the design of instructional systems. *Instructional Science*, 18(2), 119–144. [CrossRef]
- Sadler, D. R. (1998). Formative assessment: Revisiting the territory. *Assessment in Education: Principles, Policy & Practice*, 5(1), 77–84.
- Sadler, D. R. (2013). Opening up feedback: Teaching learners to see. In S. Merry, M. Price, D. Carless, & M. Taras (Eds.), *Reconceptualising feedback in higher education* (pp. 54–63). Routledge.
- Sargeant, J. M., Mann, K. V., Van der Vleuten, C. P., & Metsemakers, J. F. (2009). Reflection: A link between receiving and using assessment feedback. *Advances in Health Sciences Education*, 14, 399–410. [CrossRef]
- Sart, G. (2014). The effects of the development of metacognition on project-based learning. *Procedia-Social and Behavioral Sciences*, 152, 131–136. [CrossRef]
- Schön, D. (2001). Chapter 13: The crisis of professional knowledge and the pursuit of an epistemology of practice. In J. Raven, & J. Stephenson (Eds.), *Competence in the learning society* (pp. 183–207). Peter Lang.

- Shepard, L. A. (2000). The role of assessment in a learning culture. *Educational Researcher*, 29(7), 4–14. [CrossRef]
- Shepard, L. A., Hammerness, K., Darling-Hammond, L., & Rust, F. (2005). Assessment. In L. Darling-Hammond, & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do* (pp. 275–326). Jossey-Bass.
- Taras, M. (2008). Assessment for learning: Sectarian divisions of terminology and concepts. *Journal of Further and Higher Education*, 32(4), 389–397. [CrossRef]
- Torrance, H. (2007). Assessment as learning? How the use of explicit learning objectives, assessment criteria and feedback in post-secondary education and training can come to dominate learning. *Assessment in Education*, 14(3), 281–294. [CrossRef]
- Torrance, H. (2012). Formative assessment at the crossroads: Conformative, deformative and transformative assessment. *Oxford Review of Education*, 38(3), 323–342. [CrossRef]
- UEFA. (2020). *Coaching convention 2020 edition*. Available online: https://editorial.uefa.com/resources/025d-0f8430a3fa11-5122cbe26f9c-1000/uefa_coaching_convention_2020.pdf (accessed on 10 April 2025).
- van Klooster, T., & Roemers, J. (2011). A competency-based coach education in the Netherlands. *International Journal of Coaching Science*, 5(1), 71–81.
- Wang, Z., Casey, A., & Cope, E. (2023). Coach experiences of formal coach education developed by national governing bodies: A systematic review. *Physical Education and Sport Pedagogy*, 1–13. [CrossRef]
- Woodburn, A., & Schembri, G. (2024). A Language for talking about coach assessment: Stimulating and sustaining productive conversations. In L. McCarthy (Ed.), *Sport coach education, development, and assessment* (pp. 13–28). Routledge.
- Yan, Z., & Boud, D. (2021). Conceptualising assessment-as-learning. In Z. Yan, & L. Yang (Eds.), *Assessment as learning* (pp. 11–24). Routledge.
- Yan, Z., & Yang, L. (2021). Assessment-as-learning in the global assessment reforms. In Z. Yan, & L. Yang (Eds.), *Assessment as learning: Maximising opportunities for student learning and achievement* (pp. 1–7). Routledge.

Disclaimer/Publisher’s Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.