

**Assignment 3: Education Technology & Sports Coach Development in 2030**

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It is 2030, and 5G technology is helping Canadians interact with one another through online learning tools. Physical activities promoting lifelong health, community, and work-life balance are culturally paramount. Each Canadian shoulders their responsibility to moderate strain on the health care system while stimulating individual and regional goods and services. Active for Life sports, like cycling, match this cultural shift and provide an opportunity to explore new places, make new friends, and develop fitness at any age. Demand for quality skills instruction, especially for new adult cyclists, is still high after the initial bicycle boom of 2020 caused by the Covid-19 pandemic shutdown. Safe sport regulations initiated during the sport's 'Return to Play' in 2021 helped ensure all coaches, especially youth coaches, carry clear background screenings, ethics training, and NCCP coach certification. Over the past ten years, safe sport violations have decreased. In addition, customer satisfaction surveys and increased participation numbers, especially recreational teens, indicate a healthy and vibrant recreational sports community. The National Coaches Certification Program (NCCP) now includes social constructivist learning method after a successful decade of using constructivism between 2010 and 2020. This switch to the constructivist learner-centred approach included the use of open educational resources (OER), new and more accommodating evaluation methods, and coach choice between real-world or digital learning environments. As a result, coaches receive comprehensive mentorship, improved customer service, and experience a learning method that role models how to interact and coach athletes and customers.

This exploratory futurist paper employs causal-layered analysis to help decode how coach development leaders shifted guiding metaphors, cultural worldviews, organizational systems, and measured data to manifest a more engaged and compliant coach community by 2030. Causal layered analysis (CLA) allows stakeholders to vertically analyze the components of a scenario, split into the following levels: litany and quantitative data, social causes and policy, culture and worldview, and myth and metaphor (Inayatullah, 1998). CLA exists in the context of post-structural thought, which, like other

post-modern theories, proposes the thoughts and actions of all stakeholders are first dictated by their group association, instead of their individual traits, and that objective analysis of a scenario by a single stakeholder is not possible. Rephrased, post-structuralism is more focused on what viewpoints and information are missing from an analysis (Inayatullah, 2004). However, CLA acknowledges how guiding narratives construct cultural worldviews, and subsequently, organizational structures and ways of measurement. Therefore, CLA incorporates a vertical gaze and does not fully adopt the post-modern stance; rather, it “divorces hierarchy from its feudal/traditional modes.” (Inayatullah, 2004, p. 9). Using CLA to analyze complex social scenarios, like our futures hypothesis of coach development, helps leaders integrate multiple narratives from different stakeholders and heightens the richness of the analysis (Inayatullah, 1998). In the coming two sections, we use CLA’s four levels to contrast how coach development leaders altered their outlook in 2021 to achieve a new coach development paradigm by 2030.

Cycling Canada published its 2030 strategic plan in 2021 and altered the landscape for cycling in the country. This strategic plan included a director of education, one of five director positions overseeing the key components of the organization. This shift moved conversations and decisions about coach development away from a volunteer committee to a central figure with a supporting team, who took on the responsibility of implementing the new vision and measuring the resulting successes or failures. Before this time, annual meetings discussed broad metrics, including the number of coaches participating in courses, those achieving certification, and the total number of events facilitated; however, the accuracy and breakdown of the reports poorly informed the guiding committee. In 2022, the new director of education adopted quarterly reports to match the seasonal nature of training better and make changes throughout the year. More developed participation and certification reports help illustrate which modules and resources proved helpful and which slowed or ended a coach’s pursuit of certification. One of the most important changes in the program involved the accommodation of

YouTube videos and other OERs that reside in the public domain and are available for redistribution under a creative commons license (Weller, 2020). Their inclusion helped new coaches prepare for in-person practice teaching modules, stimulate knowledge creation through the formulation and publication of personalized how-to-teach-a-skill videos, and contribute to developing a standardized instructor toolkit and curriculum. When participation and certification rates increased, it matched the hypothesis of numerous studies. Lee & McLoughlin (2007) claim students seek autonomy, connectivity, socio-experiential learning, and recognition by peers (as cited by Orus, 2016), and Ladson-Billings (2006) hypothesized students are increasingly inspired to close the achievement gap and invest in themselves, so long as the resources are available (as cited by MacGilchrist, 2020). Interestingly, the adoption of OERs in 2022 helped the coach education department reconsider its teaching practice and led to an interest in CLA (Weller et al., 2015). In 2013, Inayatullah said, “if you want another future, you have to measure it” (2013, 5:54). Cycling Canada’s coach development training program experienced heightened completion rates and customer satisfaction ratings by modifying the data collected, resources provided, and organizational structure. This summary introduces the first two levels of CLA: quantitative data and the systemic components that allow us to interpret the data accurately. Now let us explore how a change in the guiding metaphor altered the coach development culture over time.

In 2023, the driving metaphor of coach development changed from ‘coaches are ignorant’ to ‘coaches are human.’ This shift occurred when the education director conducted a causal-layered analysis with a CLA expert after a challenging and momentum less 2022. The CLA expert explained that metaphor and myth is the fourth and most influential level of analysis and encapsulates “deep stories, ... collective archetypes ... and a gut/emotional level experience” that informs a community’s worldview or culture (Inayatullah, 1998, p. 820). As a result, the previous top-down culture that believed coaches were unconsciously incompetent and required education, facilitated by a central organization, was reframed. Seeing coaches instead as humans: curious, experienced, and driven to improve and

contribute to the community helped formulate a new cultural worldview where coaches wish to feel supported and work with role models to help them experience great coaching throughout their development journey. Although the cultural shift took numerous years, this new guiding metaphor and worldview trickled through the national organization, existing coach staff, and prospective coaches by 2027 through team-building activities, professional development, and word of mouth, respectively. Survey data and coach completion rates first showed the effect of this change in 2025, with more significant impacts through 2029. These cultural changes pushed national and provincial organizations to invest more heavily and better accommodate unique needs, certify well-respected individuals as coach developers in each province, and invite coaches of all experience and certification levels to engage in mentorship and cross-sport professional development. In the past, certification took place through the written word only. Coaches consolidated their knowledge into very precise and neat digital portfolios, causing tension and failure by incorrectly integrating the messiness of learning (Hassan & Sutherland, 2017, as cited by Selwyn, 2020). More recently, coach evaluations used more straightforward language and more in-person observations to help coaches demonstrate their ability to thrive on not knowing to balance a session's goals with the immediacy of the scenario and optimize a 'that'll do' mentality (Selwyn, 2020, p. 104). Between 2027 and 2030, further program updates aligned coach development with Canadian universities and helped new coaches conduct a comprehensive study of previous work in the coaching field and find their voice before adopting an existing viewpoint (Caulfield, 2017a). Breakout rooms activities and post-certification surveys also pushed students to brainstorm their own test questions, and the education director used this information to inform ongoing changes to the curriculum (Jhangiani, 2017). The new cultural viewpoint also pushed administrators to update the user experience of the learning management system and create easy-to-follow pathways that channel productive engagement with the technology and encourage human agency (Brown, Rappert, and Webster, 2016, as cited by Selwyn et al., 2020). By changing the guiding metaphor to acknowledge

coaches are human and crave space and support, the cultural paradigm of coach education shifted and altered the technology used and data measured. Indeed, “culture eats strategy for breakfast” (Inayatullah, 2013, 7:16).

Lasting change requires a clear and accurate metaphor or narrative that helps move people forward and drives necessary cultural revisions. Over time, these changes affect organizations responsible for tackling systemic or social causes and interpreting quantitative measurements. A shift in the coach development narrative in the early 2020s helped more coaches complete the certification process, engage with peers, utilize open educational resources, and contribute to an ongoing dialogue through mentorship.

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