Framing a Social Learning Space for Wheelchair Curling

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The purpose of this paper is to delineate how an intervention aimed at increasing the learning capability of Canadian wheelchair curling coaches was framed by a systems convener in collaboration with stakeholders from different levels. Social learning theory, in particular a landscape of practice perspective, provides the conceptual framework. The methodology was collaborative inquiry with people from across the landscape to delineate the intervention strategies through cycles of reflection and action. The participants included parasport coaches, researchers, and Curling Canada technical leaders. Based on preintervention findings, the intervention was driven by (a) the use of technology to overcome barriers and the implementation of learning activities at competitions, (b) the use of a collective learning map to promote meaningful learning, (c) the involvement of the sport organization leadership to promote the participation of influential people, and (d) a reflection of how subpar outcomes occurred when the systems convener failed to engage with the sport organization leadership. The discussion sheds light on the many roles of systems conveners and the importance of promoting strategic and enabling values. Sport organizations should engage a systems convener who can effectively align learning goals with the available resources and the strategic mission of the organization.

Keywords: coach development, disability sport, landscapes of practice

Beginning a decade and a half ago, coach developers began to frame studies about coach learning within social learning theory (Lave & Wenger, 1991; Wenger, 1998), particularly through the concept of communities of practice (e.g., Bertram, Culver, & Gilbert, 2016; Culver & Trudel, 2006, 2008). Wenger (1998) provided some basic assumptions underlying social learning theory: (a) human beings are fundamentally social, (b) learning is at the very core of our existence, (c) knowing is active participation in an enterprise that we care about, and (d) as we learn we become, that is our identities change. Communities of practice are but one form of a social learning space; that is, a space where learners can engage openly and authentically with others as learning partners with the aim of making a difference, small or big, that will impact their practice(s). Such spaces range in form from conversations, to networks, to different learning communities or teams. The participants in a social learning space will not necessarily care about making the same difference, but as long as their interactions benefit their individual aspirations, the learning partnership will be healthy. The likelihood of such interactions resulting in benefit to the participants depends on the nature of their engagement in the social learning space. It is therefore important, if coaches are to have their aspirations met through their participation, that we understand what that nature of engagement looks like. Engagement and participation being intricately linked to social learning has led to the need to develop social learning leaders whose role is to nurture such learning. This paper introduces the idea of the systems convener as a social learning leader in a parasport coach landscape of practice (see below) and describes the work of this leader as well as the social learning space and its learning activities. The paper also reveals how the value creation framework (Wenger, Trayner, & De Laat, 2011; Wenger-Trayner, Wenger-Trayner, Cameron,

Eryigit-Madzwamuse, & Hart, 2017) was used to frame and explain the social learning space.

Communities of practice have gained popularity within different domains due to their ability to engage passionate people eager to make a difference to a common practice (Wenger-Trayner & Wenger-Trayner, 2015b). Organizations that provide optimal conditions for communities of practice to prosper involve collaborators in thinking and acting strategically. This has been true in sport coaching where scholars have highlighted the importance of both involving leadership and key people (e.g., Bertram, Culver, & Gilbert, 2016; Culver & Trudel, 2008), and aligning social learning objectives with broader organizational strategies (Culver, Trudel, & Werthner, 2009; Occhino, Mallett, & Rynne, 2013). In an effort to expand our understanding of the complex nature of most professions that involve multiple communities of practice and networks throughout the different levels of the broader practice, Wenger-Trayner and Wenger-Trayner (2015b) introduced the landscapes of practice concept and metaphor.

Landscapes of practice are unique from communities of practice and have only recently begun to be explored within sport coaching (Culver, Kraft, Din, & Cayer, 2019). The potential of a landscape of practice perspective for sport lies in the potential to build learning capability across sport organizations. Learning capability is different to learning capacity in that capability is the ability to learn. While critiques of the concept of communities of practice have raised issues such as power imbalances within the community and the potential for the reproduction of existing practices (e.g., Cushion, 2008; Cushion & Denstone, 2011), the convening of new social learning spaces that cross the boundaries between various communities of practice and leverage the learning potential at their boundaries can build this capability on a systemic level (Wenger, 2009). For instance, the system convener can address possible power imbalances as already identified in some

types of sport structures in which the hierarchy is extremely rigid (e.g., Culver & Trudel, 2008). Thus, taking a landscape of practice perspective allows for the strategic targeting of system wide changes to practice when framing interventions.

Wenger-Trayner and Wenger-Trayner (2020) dedicate a whole section of their new book to framing. As defined by them, the term framing is used very intentionally to portray a distinct activity that includes aspects of designing and planning but which is much broader. Framing as a mode of social learning is neither procedural nor closed-ended; it is ongoing and integral to the process of social learning. For the Wenger-Trayners, framing is both an emergent and dialogic process which can provide the contours of a social learning space but not the specifics of what the learning will look like. In the act of framing, participants in a social learning space engage with each other as they strive to make a difference. An important role within a social learning space is that of the systems convener. A systems convener is someone who develops relationships and partnerships in order to maximize the synergies that respond to common learning needs or goals within a landscape of practice (Wenger-Trayner & Wenger-Trayner, 2015b). In doing so, the systems convener is a partner with the other participants in the framing process.

While communities of practice usually already exist in landscapes of practice, a systems convener may forge new communities of practice. Wenger-Trayner and Wenger-Trayner (2015a, p. 97) aptly nuanced the relationship between communities of practice and landscapes:

For [systems] conveners, however, communities of practice are primarily interventions in the landscape. Along with networks, projects, conversations, and relationship building, communities of practice are ways for conveners to forge new learning partnerships, create new capabilities, and enable new identities in the landscape.

Although communities and landscapes of practice are contributing to the development of coaches within able-bodied sport, in the disability sport coaching context, these concepts are yet to be implemented. The literature has suggested many aspects of coach development that are found within able-bodied sport, such as the importance of learning from those on the integrated support team (e.g., Tawse, Bloom, Sabiston, & Reid, 2012), peer coaches (e.g., McMaster, Culver, & Werthner, 2012), and mentors from the sport (e.g., Douglas, Falcão & Bloom, 2018). Coaching people with disabilities requires coaches to further develop a network outside of the sport realm to learn how to best work with their athletes' abilities (DePauw & Gavron, 2005). Notably, disability sport coaches were found to expand the network of people they access to include athletes, athletes' relatives and caregivers (Cregan, Bloom, & Reid, 2007; Duarte & Culver, 2014), mentors from outside the sport (Duarte & Culver, 2014), and classification specialists (e.g., Purdy, Purdy, & Potrac, 2017). Moreover, as an example of how coaches use their networks, interactions during competitions allow coaches to observe new equipment and technologies (Legg & McClure, 2017; McMaster et al., 2012). There are, however, some major impediments that coaches face to learning from others. For instance, disability sport participants are sparse geographically (Kohe & Peters, 2017), competitions (Silva, 2017) and coach education programs are very limited (McMaster et al., 2012), and financial resources are scarce even at the highest levels of the sport (Peters & Kohe, 2017). Such a complex context lends itself to the use of a guiding framework that recognizes the complexity of learning landscapes.

In disability coach development studies, often the coach or coaches provide the sole perspective utilized to describe their developmental pathways (e.g., Peters & Kohe, 2017). Coaches' pathways in disability sport are highly influenced by the support found in their networks, team, and organizational infrastructure (Cregan et al., 2007; Peters & Kohe, 2017). Peters and Kohe (2017) called for more strategic approaches to disability sport coach education and development pathways. One way that organizations could strategically support coaches interested in advancing their knowledge is by enabling a social learning space. Within coaching, researchers have highlighted the crucial role of a person who nurtures social learning spaces such as communities of practice (e.g., Culver & Trudel, 2006, 2008) and learning communities (Bertram, Gilbert, & Culver, 2016). In a landscape of practice, this person is the systems convener.

While the coach development literature has already introduced the concept of communities of practice for coaches (e.g., Bertram, Gilbert, & Culver, 2016; Culver & Trudel, 2006), to our knowledge, only Duarte, Culver, and Paquette (2020) have looked at coach development from a broader landscape perspective. As every landscape is unique in its composition, this perspective requires a thorough understanding of the context. To do so, Duarte et al. created a metaphorical representation of the wheelchair curling (WC) landscape in Canada (see Figure 1). Many of the notable features contained within the WC context represented in Figure 1 can be found in other disability sport coaching literature. For example, Fairhurst, Bloom, and Harvey (2017) found the recreational and competitive hills (contexts/streams) overlap and in curling teams comprising recreational athletes and Paralympic medalists (both wheelchair curlers and from other parasports who transitioned to curling) curl against the national teams of other countries (Duarte et al., 2020). Many of the WC coaches were actually seeking advice from the same influential people (e.g., national team coaches, sport science experts), mirroring what was previously found (e.g., Cregan et al., 2007; Taylor, Werthner, Culver, & Callary, 2015). In Figure 1, training camps and competitions are identified as places for coaches to have access to other athletes (cf. Cregan et al., 2007), sport experts (cf. Tawse et al., 2012), peer coaches (cf. McMaster et al., 2012), and observe new tactics and equipment (cf. Legg & McClure, 2017). A few barriers were identified within this landscape that are in agreement with the literature including the frequency, location, and costs of attending competitions (e.g., Campbell, 2017; Silva, 2017) and training camps (e.g., Taylor, Werthner, & Culver, 2014; Wareham, Burkett, Innes & Lovell, 2018), making them exclusively accessible to very few coaches and teams. These barriers make interactions among coaches very rare, which explains the obvious constraint for social learning.

Following as it does from the mapping exercise described in Duarte et al. (2020), this study is the next step in a collaborative effort to frame a social learning space to increase the learning capability of the WC coaching landscape. To our knowledge, this study is the first work that presents the framing process for nurturing a social learning space of (para)sport coaches using a landscape approach. The purpose of the current paper is to delineate how the intervention was framed by the systems convener in collaboration with stakeholders from different levels (i.e., recreational and high-performance coaches, and sport leaders). To situate this paper within the overall research project, the framing of the intervention follows the preintervention, which comprised mapping the landscape and the exploration of the coaches' learning interests (see Duarte et al., 2020). The final part of the larger

Figure 1 — Canadian wheelchair curling landscape. Adapted from “Mapping Canadian Wheelchair Curling Coaches’ Development: A Landscape Metaphor for a Systems Approach” by T. Duarte, D. Culver, and K. Paquette, 2020, *International Sport Coaching Journal*, 7(2), pp. 117–126.

research study is the assessment of the learning value: a subsequent paper will report on the outcomes of the intervention.

Methodology

Given the purpose of creating a social learning space intervention, employing a research methodology that accounts for the integration and ongoing collaborative involvement of its participants was essential. Collaborative inquiry is among the many methodologies that conduct research with people (Heron, 1996) located within the participatory research paradigm (Bray, Lee, Smith, & Yorks, 2000). Two philosophical traditions influenced the collaborative inquiry: (a) Dewey’s American pragmatism and (b) phenomenology (Bray et al., 2000). On one hand, Dewey’s pragmatism lends its perspective in that people’s experiences are validated through the application of the empirical method (e.g., problem formulation, reasoning based on data, developing and testing hypotheses, etc.). On the other hand, hermeneutic phenomenology views learning as the dialogic act between what is being interpreted and the interpreter. Therefore, the reality of collaborative inquiry is both objective (pragmatism) and subjective (phenomenology; Heron, 1996). In its essence, collaborative inquiry requires cycles of reflection and action on lived experiences (Bray et al., 2000). One of the characteristics of collaborative inquiry is that the initiating researcher (in this case, the first author) has a preliminary plan that is then shaped by the co-researchers as the project advances (Bray et al., 2000). At the core of both, collaborative inquiry and social learning are groups of people who care to make a difference and interact in order to advance both the inquiry and the practice. Recently, Wenger-Trayner and Wenger-Trayner (2020) suggested that participants have different needs and perspectives and will interact with the social learning space. According to their needs, their interactions can be divided into five levels of engagement: (a) core group members (passionate and engaged members who nurture the

CoP), (b) active participants (practitioners who define the community), (c) occasional participants (members who join activities of special interest), (d) peripheral participants (newcomers or members at the boundaries of a community), and (e) transactional participants (nonmembers who either provide value to or receive value from the community only occasionally). In the proceeding section, the participants and their various roles and levels of engagement will be presented.

Participants

A total of 25 participants representing three groups (i.e., coaches, technical leaders, researchers) formed the social learning space. To recruit the first group of 16 coaches, purposeful and snowball sampling strategies were employed (Creswell, 2007; Sparkes & Smith, 2013) to reach active regional and provincial WC coaches in Canada. The first group (i.e., C1, C2 ... C15) accounted for a majority of the population of active WC coaches in Canada, and these coaches came from seven provinces and 14 cities. In this study, quotes from coaches are presented to illustrate how the communication between different levels occurred as it was facilitated by the systems convener (first author). Because of that, these coaches are only presented briefly in Table 1. Although two coaches led a learning activity, the only role for the members of this group was to participate in the social learning space activities.

The next two groups of participants had more complex and varied roles. The second group of participants included six Curling Canada (CC) technical leaders (i.e., TL1, TL2 ... TL6). The term technical leader is commonly used within the Canadian amateur sport system to refer to positions pertaining to governance and leadership such as the high-performance director/coordinator, head coach, and coaching staff. As this paper is focused on the framing of the intervention, the roles of the technical leaders and researchers are further explained in Table 2. The third group of participants includes the three researchers (the authors), as presented in Table 3.

Table 1 Demographics: Wheelchair Curling Coaches

Characteristics	Number of coaches
Gender	
Male	9
Female	7
Age (years)	$R = 51-67$; $M = 59.5$ years
50–60	12
60–70	4
Residence/population	
Town of <100,000	7
Small city 100,000–400,000	3
Big city >400,000	6
Curling coaching context* (years coaching)	$R = 0-36$; $M = 19.5$
No experience	2
Recreational stream	2
Developmental stream	2
Competitive stream	8
Coach developers	5
Wheelchair curling coaching context ^a (years)	$R = 1-12$; $M = 6.5$
Mainly recreational athletes	4
Recreational and competitive athletes	6
Mainly competitive athletes	5
Professional background	
Retired	7
Working	9
Level of engagement SLS	
Peripheral participant	2
Occasional participant	3
Active participant	6
Core member	5

Note. SLS = social learning space.

^aCoaching contexts are based on Trudel and Gilbert (2006). Two participant coaches are wheelchair users and one coach made use of a wheelchair during a 6-month period.

Ethical approval was granted from the University of Ottawa research ethics board, and informed consent was obtained from all participants. Since the WC community is small, the risk of identifying the owner of a quote was/is possible. Because researchers and participants (coresearchers) collaborated closely, confidentiality and anonymity were negotiated throughout the research (Williamson & Prosser, 2002). Resultantly, a few initiatives were undertaken to mitigate this issue. First, the first author was the only person to have access to the raw data of the individual interviews. Second, the group chose not to share the online meetings on Basecamp. This decision facilitated the provision of a safe environment for coaches to share their thoughts without being concerned about the revelation of their identities.

Making Meaning and Constructing Knowledge

Collaborative inquiry calls for methods that are highly experiential and the meaning-making process involves analysis, interpretation, reflection, and contemplation (Bray et al., 2000). These methods serve research objectives while simultaneously developing the learning of adults. The social learning space included a series of online and face-to-face activities that provided participants with opportunities to interact with others at different levels (i.e., individual, group, organizational) during a 13-month time frame.

Table 4 describes the social learning space activities that took place from April 2016 to May 2017. The first activity was a social gathering that occurred during the Canadian Wheelchair Curling National Championship where the first author invited coaches to participate and cocreate the social learning space, while the last activity comprised the final interviews. In-person and online in-depth interviews occurred at three different moments of the inquiry, at the beginning (mapping interviews), mid-point (follow-up interviews and mapping interviews for new participants), and at the end of the intervention (final interviews). These in-depth interviews utilized semi-structured guides and were conducted in-person or online through GoToMeeting. The interview guides were created using the value creation framework (Wenger et al., 2011; Wenger-Trayner et al., 2017). The interviews encompassed questions to understand the coaches' experiences within the social learning space, ranging from the user friendliness of the platforms, barriers to participating, relevance of the themes, and value gained.

Table 2 Curling Canada Leaderships Roles and Engagement Within the Social Learning Space

Identifier	Curling Canada roles	Role within the intervention	Level of engagement
TL1	Oversees HP programs and technical leaders for the AB and WC NTPs (including NextGen for both)	Sponsored the intervention by providing the time of the other technical leaders and other logistical support	Occasional participant
TL2	Oversees programing for the WC NTP (including NextGen) Supports coach development	Co-led two online camps with TL3	Active participant
TL3	Oversees programing for the WC NTP (including NextGen) Supports coach development	Co-led two online camps with TL2 Active participation on the online platforms	Core member
TL4	Oversees nutrition services and programing for the AB and WC NTPs (including NextGen for both)	Led one online camp	Peripheral participant
TL5	Oversees strength and conditioning services and programing for the AB and WC NTPs (including NextGen for both)	Led one online camp	Peripheral participant
TL6 ^a	N/A	N/A	Transactional participant

Note. AB = able-bodied; HP = high performance; N/A = nonavailable; NTP = National Team Program; TL = technical leader; WC = wheelchair curling.

^aTL6 demographics are not presented to protect the identity of this person who chose to remain anonymous.

Table 3 Researchers' Roles and Engagement Within the Social Learning Space

Identifier	Experience	Role within the intervention	Level of engagement
First author	10 years of experience with disability sports, 8 years of coach development research, and 5 years as a coach	Systems convener, learning facilitator, logistics coordinator, liaison between coaches and CC	Core member
Second author	20 plus years of experience as a coach, 20 plus as coach developer, and 20 as qualitative researcher including areas of social learning and disability sports	Supervised the work of the first author	Peripheral participant
Third author	10 years of experience in applied and research coach development, 10 years of mental performance consulting, CC technical leader of the NTP	Multiple roles as he acted as the liaison between researchers and CC; ranging from designing of the project and also delivered two online camps	Core member, critical insider

Note. CC = Curling Canada; NTP = National Team Program.

Table 4 Social Learning Space Activities

Level	Activities	Goals	When	How
Individual level	Three meetings in-person	Relationship building and knowledge sharing/constructing	April and November 2016, March 2017	In-person at competitions
	38 in-depth interviews	15 mapping interviews: Understand the WC landscape and map coaches' learning needs ^a ($M = 58$ min)	April and November 2016	In-person or using GoToMeeting
		10 follow-up interviews: Monitor their perceptions of the learning activities ($M = 32$ min)	November 2016	GoToMeeting
		13 final interviews: Assess* the value creation ($M = 38$ min)	April 2017	GoToMeeting
	Brief surveys	Receive feedback on the relevance of the webinars and check how they intended to apply the knowledge	After online camps	Survey Monkey
Group level	Three social gatherings	Provide a space for relationship building and knowledge sharing/constructing	April and November 2016, March 2017	In-person at competitions
	Four online group meetings ($R = 88$ – 93 min)	Co-construct knowledge, share information, decision making on the next steps	May, June, November 2016; February 2017	GoToMeeting
	Two focus groups ($R = 60$ – 66 min)	Assess* the participants perspectives as a group	April 2017	In-person and GoToMeeting
Organizational level	Online forums (1,001 posts)	Enhance coach to coach communication across the country	From May 2016 until April 2017	Basecamp
	Nine online camp ($R = 87$ – 95 min)	TL led: increase transparency and share NTP best practices	July, August, October, November, December, 2016; January, March, 2017	GoToMeeting
		Coach led: share and co-construct knowledge		GoToMeeting

Note. NTP = National Team Program; TL = technical leader.

^a See Duarte et al. (2020).

*A subsequent paper will report on the outcomes of the intervention.

These interviews provided feedback on the intervention and allowed coaches to individually communicate their perspectives.

Four types of online tools were used to facilitate the interaction among participants. Both Basecamp and GoToMeeting were at the core of the intervention while Survey Monkey (online surveying tool) and Doodle (online polling tool) added a few functions to help tailor and assess the learning activities. Specifically, Basecamp is an online collaborative website used by people to work remotely on various projects. Within the social learning space, Basecamp leveraged the social interactions as it was a hub for coaches to engage in a variety of key learning tasks, such as (a) posting questions and responses to each other, (b) seeing and adding to the group agenda and schedule of the learning activities, (c) sending direct messages to each other, and (d) accessing and posting

resources for the community (e.g., videos of online camps, presentations, interesting articles). Given the online engagement experience of the coaches, there was some learning that was involved for certain participants to be able to use the program (as well as the other three online tools). As such, training sessions were conducted to facilitate the use of these tools. Next, GoToMeeting was used to host the online meetings and online camps. GoToMeeting is an online platform that supports audio for up to 25 attendants and live video for up to seven attendants at a time. It also provides a recording feature that allows users to record both the audio and the presenter screen during the meeting.

In collaborative inquiry, typically the starting point of meaning-making is the experiential stories of participants (Bray et al., 2000). Thus, the findings will explore some excerpts of stories from

the coaches, dialogues between the first and third authors, and our reflections as we attempted to make sense of how to create new learning partnerships in the landscape. While Braun, Clarke, and Weate’s (2016) thematic analysis was the process used to identify, interpret, and report themes from the preintervention and the assessment of the intervention, the present paper focuses on how the intervention occurred. Therefore, following the collaborative inquiry process, an interpretative analysis was used to make sense of experiential data (Bray et al., 2000). Because collaborative inquiry is not a linear process, meaning can emerge in the early stages of the process. Thus, it is important to keep a trail of experience (Bray et al., 2000). Aligned with collaborative inquiry, our trail of experience was composed of conventional qualitative research material like audio and video recordings of meetings and interviews, a reflective journal, documents shared online, and concept maps (Bray et al., 2000). The many different pieces of data generated were organized in the qualitative data analysis software NVivo 12 (QSR International, Melbourne, Australia). For instance, the comments posted on the online platform were captured and transformed into PDF format and later analyzed as a regular transcript. The interviews, focus groups, and online meetings were audiotaped and transcribed verbatim. The field notes, observations, and reflections were scanned and uploaded as PDF files into NVivo. Resultantly, 615 single-space pages were analyzed. Explicitly, the on-going cycles of reflection and action in the framing of the learning activities (a major part of the analysis) involved extensive strategic conversations between the first and third authors. Wenger-Trayner et al. (2017) value creation framework provided the theoretical scaffold that allowed the researchers to frame the intervention using a deductive–inductive approach.

Value Creation Framework

At first, the value creation framework (Wenger et al., 2011) was developed as a tool to promote and assess complex social learning interventions. In sport, researchers have used it to assess the value created within a coaches’ communities of practice (Bertram, Culver, & Gilbert, 2016). More recently, the value creation framework has also been suggested as a framing tool for social learning spaces due to its potential to understand the nuances of creating learning values (Wenger-Trayner, et al., 2017; see Table 5). The term cycles is used in the framework because the learning occurs as value is “transported” across the different cycles and sometimes within a specific

cycle. For example, sometimes applied value is not realized due to a lack of enabling value (e.g., see Bertram, Culver, & Gilbert, 2016). Given the current paper’s interest in framing a social learning intervention, we focus on enabling and strategic values because they are critical for healthy social learning spaces (Wenger-Trayner & Wenger-Trayner, 2020). Without considering these complementary value cycles, any given intervention will be much less likely to succeed. Enabling value refers to support processes from logistical, financial, technological, and human resources that make the existence of the community possible. Strategic value entails the maintenance of strategic conversations with influential people (e.g., NTP coaches, sport experts) who can provide clarity regarding the context. Thus, the use of the value creation framework, and particularly by focusing on enabling and strategic values, we were better positioned to increase the learning capability of the landscape (Wenger-Trayner & Wenger-Trayner, 2020).

Validity

Validity was considered within this study through a relativist lens (Burke, 2016). This relativist-qualitative research perspective draws criteria for validity from an ongoing list of characterizing traits, in contrast to utilizing a universal list of judgment strategies. This approach enabled the authors to select criteria appropriate to the unique nature of the study, thus enhancing both quality and rigor (Burke, 2016). Specifically, the criteria of transparency, coherence of the research, and the resonance of the topic were selected. Within the criterion of transparency, the authors worked as critical friends to each other (Burke, 2016; Sparkes & Smith, 2013). This collaboration was significant as both the second and third authors offered unique and important perspective as mentioned above. Next, coherence was deemed integral to this study in order to demonstrate alignment between the study’s purpose, methods, and results. In an effort to do so and create the desired resonance, the authors have attempted to highlight rich accounts to promote naturalistic generalizations (Burke, 2016). Finally, the participants were given access to the final quotations chosen for the paper in order to edit, delete, or add any pertinent or personal information they wished.

Findings

The purpose of this manuscript is to report on the design and delivery of an intervention aimed at increasing the learning

Table 5 Value Creation Framework Cycles

Cycle	Example	Key question	Value created
Immediate value	Activities and interactions	What is the experience like?	“I enjoyed attending the meeting.”
Potential value	Knowledge capital	What comes out of it?	“They shared drills A, B, and C.”
Applied value	Changes in practice	What are you learning in the doing?	“I used a new drill.”
Realized value	Performance improvement	What difference does it make?	“Athletes seemed to like the variety.”
Strategic value	Conversations with stakeholders	What is the quality of engagement with strategic stakeholders?	“The online camps were aligned with the NTP.”
Enabling value	Raising effectiveness	What makes it possible?	“CC provided logistical support.”
Transformative value	Redefining success	Does the difference you make have broader effects?	“Participant coaches felt empowered.”
Orienting value	It’s a big world out there	What else is potentially relevant?	“The authors consistently looked at other learning theories.”

Note. CC = Curling Canada; NTP = National Team Program.

capability of Canadian WC coaches using the landscape of practice conceptual framework. Given that the intervention was preceded by a mapping exercise to help tailor the intended landscape of practice intervention for the respective participants (see Duarte et al., 2020), the next step was to make use of the information provided from the mapping exercise to increase the learning capability of the landscape. Thus, Duarte et al. (2020), as a result of their analysis and interpretation, provided a list of three main considerations for systems conveners who seek to lead social learning interventions in complex landscapes: (a) manage the limitations of the landscape by leveraging preexisting infrastructure, (b) prioritize meaningfulness of learning initiatives with coaches, and (c) incorporate the influential people noted in the mapping exercise and make use of their willingness to share. These three considerations are what drove the framing of the intervention. Moreover, the challenges experienced by the systems convener are subsequently reported.

Manage Limitations of the Landscape by Leveraging Preexisting Infrastructure

Managing limitations. The coaches came from seven different provinces, making face-to-face interactions very difficult, and consequently rare. During the initial, in-person social gathering that launched the project, the first author asked the group of coaches: “When was the last time you met with a group of WC coaching peers?” The answer came almost immediately from C4: “Last year at Nationals.” Some coaches’ personal connections and their proximity to the NTP coaches and camps (distributed across the country) made it possible for them to have access to information more often than those coaches who lacked these personal connections or geographical proximity. Given the geographical barriers of this landscape, we believed that the use of online tools and platforms could provide a valuable opportunity to enhance connections within the WC coaching group and between the WC coaches and the NTP. Therefore, to provide regular group meetings, we sought out technological options to hold different types of learning activities that promote social interactions among the participants. At the time, the third author was making use of a few different platforms to support his work with the NTP athletes:

We [NTP coaching and support staff] are currently in the process of integrating a few different tools to streamline our ability to communicate with each other and the [NTP] athletes We trialed Slack [software] for a while, but it didn’t meet all of our needs, so we’re thinking of moving to a program called Basecamp. We also use GoToMeeting for all of our online conference meetings and video review sessions. We’ve really enjoyed it . . . and the athletes have provided great feedback so far. (Third author)

As a result, the intervention used four online tools: Basecamp, GoToMeeting, Survey Monkey, and Doodle.¹ The CC provided access to its subscription to GoToMeeting, while Basecamp, Doodle, and Survey Monkey were free of charge at the time of the intervention. Although these online tools afforded many advantages to the intervention, their use was not without a few challenges. For instance, C6 apologized on Basecamp: “I am sorry I couldn’t attend the meeting last night. My internet connection was very bad.” Also, other coaches commented on difficulty hearing others at times due to audio interference on GoToMeeting: “The program worked great other than the sounds going in and out at times, and I would miss something what was said” (C2). Following

each online camp, the recordings were shared on Basecamp. Doodle facilitated the scheduling of learning activities and agenda items/topics, and Survey Monkey was used to support coach reflection following their engagement in online camps. For instance, after an online camp on tactics and drills, C13 answered the question “what do you believe you can apply immediately to your practices?” stating, “I plan on using the NTP drills showed on the online camp with my team leading to the championship, however I envision some struggles as some athletes don’t like to change the way they practice.”

Leveraging existing infrastructure. Given that increasing the number of competitions and training camps exceeded the scope of this intervention, we aimed at implementing social learning activities within the existing events, thereby leveraging existing infrastructure. Thus, instead of leaving the connections, sharing, and cocreation of knowledge that might take place to chance, learning activities were designed to improve the likelihood that learning would occur. At competitions, the learning activities involved individual discussions between the first author and coaches including group meetings and social gatherings. Two face-to-face social gatherings were organized at the National Championships (one per year). The first social gathering involved some basic catering and beverages (budget \$150) at the hotel of the championship and was very much appreciated by the coaches. For instance, C9 mentioned the social gathering during an in-depth interview,

I’ve been to three nationals . . . so I have a whole lot of experience, but this is the first time that at the event there has been something offered of value of recognition for the coaches as opposed to sitting around saying, well what did I like about the event? And what I didn’t This was the first time that somebody like [the first author] would come in.

For the training camps, the social learning strategy was to create online camps that would increase the access of the coaches to CC technical leaders including Sport Science and Sport Medicine (SSSM) providers, NTP coaches, and other coaches who were invited to share their expertise on specific topics (see “Prioritizing Meaningful Learning” section). Another way to leverage the structure already in place to support coach development was to recognize the coaches’ participation at both online meetings and online camps as professional development credits. The third author connected the first author with the staff member responsible for coaching accreditation at CC, and during a strategic conversation, the intervention and the major concepts of social learning were explained. The commitment of CC to not only make professional development credits available but also the material they have developed for coach education was positively surprising: “We generally control electronic access to coach education resources due to copyright issues and loss of revenue generation. That being said, the way people learn is changing and we need to change with it” (TL6). This comment sheds light on the weight CC put on coach development in the face of business decisions. As a result of that phone call, a total of 147 professional development credits were awarded for the coaches who participated in the online meetings and online camps during the first 13 months of the intervention.

Prioritizing Meaningful Learning

Figure 2 describes the overall process for designing and delivering one learning activity. The first three columns (lighter color) occurred within the first few months of the intervention while

Figure 2 — Framing a social learning space.

the last three columns are only one example of the seven online camps, which occurred across the time space of the intervention. Thus, the initial intervention strategy consisted of in-depth interviews (mapping interview) to identify potential areas of interest. A thematic analysis from these interviews resulted in the creation of a collective learning interest map. During the first two online meetings, the learning interest map was discussed thoroughly, and it facilitated the process of establishing common learning goals for the intervention. Each of these overarching themes was discussed further during the online meetings and on Basecamp, which resulted in the cocreation of seven subthemes (Figure 2). Since these seven subthemes were still broad and a learning activity would likely be introductory and therefore not as pertinent, we continued to dissect these topics through communications on Basecamp and by sending Doodle surveys with options of topics to finally narrow down to three topics considered most pertinent and meaningful for the coaches (for an example of the first online camp on sport psychology see Figure 2). The fourth column illustrates the topics selected. The first author contacted the online camp facilitators to make sure the content of the online camps were tailored to align with the coaches' interests. The first author had strategic conversations with the facilitators of the seven online camps to plan these learning activities. The day after the camp, a survey was sent using Survey

Monkey to follow-up with the coaches about their impressions and plans to use the knowledge gained through the activities.

The coaches' interests were divided into three overarching themes: WC-specific sport-sciences, WC-specific coaching knowledge, and communication (see Figure 2). The sport-science theme encompassed material offered on AB coaching courses, but not tailored for WC, such as sport psychology, nutrition, and strength training. C7 mentioned the particularities of WC athletes' physical training, "[if a strength and conditioning coach] trains them the wrong way, the [athletes] hurt their shoulder, [then] they do not live properly! They cannot transfer. So, it is all pretty delicate." However, these sport science topics were not a homogenous choice among the participants. A group of six coaches who are highly qualified (i.e., coach developer, advanced diploma certified, and/or long-time coach of national champion teams) did not demonstrate much interest in the sport-science topics.

The WC-specific knowledge was the second most relevant theme. Some coaches wanted to learn about chair adaptations and equipment, as exemplified by C1: "what is the better arm position to start, which head is the best head, how should [athletes] angle their chairs?" The final theme was communication (e.g., interpersonal skills and communication from the CC); while many coaches talked about interpersonal skills, only a few coaches mentioned the need to

develop them further. This theme overlapped with WC-specific knowledge as some coaches wished to learn about game strategy and tactics with their peers. “I would really enjoy more discussions with other coaches about strategy because it is different from AB curling” (C8).

The communication from the NTP was a subtheme that emerged in a very nuanced way. Particularly, some coaches praised the NTP coaches’ availability to support their teams’ efforts, while other coaches mentioned being isolated at their clubs. The first author commented at the end of the second online camp:

The whole reason for this group to exist is to provide you [coaches] the opportunity to engage with them to engage with each other and to engage with those sports scientists like the strength and conditioning trainer, mental trainer, the NTP coaches and to tackle needs that you are currently having.

Due the large influence the CC technical leaders had on a few of the coaches, the next section describes further how the intervention increases the access to these leaders.

Incorporating Influential People

A major task for the systems convener was to connect the CC technical leaders (e.g., NTP coaches, SSSM providers), deemed influential leaders, with the participants of the social learning space. The first author wrote in his reflective journal: “My job became so much easier! I don’t have to build any bridges; the bridge already exists – albeit a rope bridge. I just need to facilitate the access to [these individuals].” Once the collective learning interest map was discussed with the coaches, it was presented to the third author during a strategic conversation, the content of which is paraphrased here:

I will connect you with the SSSM providers who work with the NTP program. I will send them an email introducing you and your project. They are busy individuals, so, an email coming from me will position you better than if you approach them directly.

TL3 was also very active with the social learning space and recorded a video to be uploaded on Basecamp, referring to the plans of increasing communication with CC and sharing of information:

I am conducting strategic planning meetings for the WC program to take us into the next two years. So, it’s very timely that we are starting the [social learning space] . . . I think CC has something cool to offer across the country. I look forward to spending and sharing time with you on these [online camps] and doing a better job in the next while of disseminating information to you from the NTP, whether we share practice ideas, drills, competition and performance ideas, access to any of our SSSM providers. And just any new news on equipment . . . I just want to make this a free-flowing exchange of information. I know that I’ve always said to you that I’m here to welcome any new ideas or any questions or any thoughts. But we are going through a fairly major restructuring this year, and I will share more about that after we’re done. I think a lot of the answers will come after this [planning weekend]. (TL3)

Given his role as SSSM Lead, the third author was instrumental in orchestrating the access to the other members of the SSSM team. During the second online group meetings, the first author mentioned to the coaches a conversation he had had with the third author.

He [third author] told me: your job is to ask the coaches what kind of information they already have. We don’t want to deliver a presentation that is formatted for AB athletes. What do coaches want to know? Let’s have smaller capsules in which the presenter is going to conduct a topic and after 20 minutes we have 10 minutes for the coaches to discuss and ask questions related to that topic and then move on. If the coaches still have questions that could not be resolved during the call, the coaches can contact the SSSM with no charges. (First author)

During the check in interviews, C10 suggested the participation of CC leaders at competitions. “I think it would be good to have the High Performance Director come here to chat with us.” The coaches’ interests were communicated to the third author and an effort was made to involve other technical leaders. At the second social gathering during the subsequent National Championship, the High-Performance Director attended the event and addressed the group of coaches.

Lacking Enabling and Strategic Conditions

Until now, all of the experiences shared in the findings have been somewhat positive. This theme portrays some of the situations where the lack of enabling and strategic conditions resulted in subpar outcomes. At one regional event, none of the NTP coaches were able to confirm their participation. This led the first author to delay the logistics of a social gathering that should have occurred with the coaches attending the competition. As it turned out, only one coach stayed after the games and had a conversation with the first author. The first author wrote about the episode in his reflective journal: “Certainly the coaches did not see much relevance in meeting only with me, which makes sense, I am not a WC expert . . . I should reinforce the importance of having some NTP coaches for the next time.” When discussing the attendance (or lack) from the coaches, the third and first authors reflected on the importance of timing. The third author explained why none of the NTP coaches could attend the social gathering even though all three were at the event,

I apologize, but we were focussed on the selection of the athletes travelling to the World Championship next month. I do understand that the meeting with the coaches is crucial for the social learning space; however, the pressure to decide who’s on Team Canada drained us all during the competition. Also, we had two teams represented at the event while neither team performed particularly well; we did not have the energy to prioritize the social learning space. Plus, we would not have been good company to be around.

That was a valuable learning lesson that systems conveners should take into consideration: the emotions related to an important sporting event. The plans might quickly change when the competition outcomes are not those expected, making coaches prioritize more competitive goals rather than learning goals. Finally, another challenge was that of connecting with the third author, something that constrained the planning the activities. While the third author was doing his Ph.D. at the same university as the first author, his responsibilities with CC and other athletes required frequent traveling, working from home or remotely, and staying away for weeks. Thus, the connection between the two did not occur as often as desired, and in some instances, delayed the provision of enabling and strategic value.

Discussion

The purpose of the current paper is to delineate how an intervention aimed at increasing the learning capability of Canadian WC coaches was framed by a system convener in collaboration with stakeholders from different levels. As such and as previously mentioned, this paper does not address the outcomes of the intervention, that is, the specific learning value created. Rather, our concern is in how the participants engaged in the social learning space, remembering that in social learning theory, learning occurs through participation in social learning spaces. In early iterations of social learning theory, learning a practice was proposed to occur as a person navigates from the periphery of a community of practice to its core while engaging with more experienced others within the practice (Lave & Wenger, 1991; Wenger, 1998). With time, the idea that knowledge is most often spread across a much broader space than one community of practice led to Wenger-Trayner and Wenger-Trayner (2015b) to scale-up the theory whereby such a broader space might be construed as a landscape of practice, encompassing multiple social learning spaces of various sizes and forms. The current literature using a landscape of practice perspective is yet very limited, with a few papers related to interdisciplinary research (e.g., Clark et al., 2017) and education (e.g., Hodson, 2020). The examination of how a landscape of practice approach to coach development in parasport is timely and advances our understanding of coach learning and social learning in sport in several ways.

First, Cushion (2008) raised some concerns about communities of practice for coach development. For instance, he proposed that there is a danger that rather than being a venue in which coaches critically reflect on their practices, they might instead reinforce the rooted beliefs and old ways of doing things. Wenger-Trayner and Wenger-Trayner (2015b) acknowledged this critique and highlighted that a community of practice can, if not being critical of the way things are done, become ossified. In other words, in a community of practice, when there is no further negotiation of meaning and where the regime of competence goes unchallenged, this community of practice will become an avenue for the reproduction of “the way things are.” An example in sport of this could be traditional martial arts where the sensei has the ultimate power on what competence is. The possibilities for cross-pollination when different social learning spaces are nurtured across a landscape is a way forward for knowledge creation.

Second, the landscape of practice approach recognizes the different levels in which coaches are operating, along with the accompanying veils of power inherent in the system. Indeed, communities of practice are not often seen in the sport system outside of teams and clubs (Galipeau & Trudel, 2006) and this is at least in part related to issues of competition and power. The sport system is complex and depends of multiple layers of society to provide positive sport experiences for participants. A landscape of practice approach allows us to focus on coach development in a way that takes into account these multiple levels. Furthermore, the value creation framework, and in particular strategic and enabling value, effectively guides the framing of sport social learning spaces, raising the likelihood of learning value being created, but also permitting us to understand when learning does not ensue.

An intervention framed for this landscape should find ways to create new learning partnerships, that is, connect coaches with others in the landscape, in a deliberate and possibly facilitated way (Duarte, Culver, Trudel, & Milistetd, 2018; Trudel, Culver, & Werthner, 2013). The facilitation of learning activities as well as the creation of a learning environment that leverages the synergies

of different stakeholders within the landscapes is the responsibility of the systems convener (Wenger-Trayner & Wenger-Trayner, 2015a). This individual should understand how these learning efforts are going to impact the organization’s outcomes. Thus, an understanding of how to promote strategic and enabling values is an important asset for systems conveners, and integral to the process of framing a social learning space within a landscape perspective. Within the present intervention, the first author was the systems convener who made efforts to increase the learning capabilities of the landscape and support the learning of people based on their learning goals.

Enabling and Strategic Values

It is important to highlight that enabling and strategic values are complementary, and depending on the perspective taken, the same action could be interpreted as enabling or strategic. Enabling value includes social learning support, logistics and technology, strategic facilitation, and resources (Wenger-Trayner & Wenger-Trayner, 2020). The load of generating enabling value was shared in this intervention mainly by the first and third authors, that is the systems convener and CC’s SSSM lead. The communication between them created a “robust back-channel” that generated enabling value. For instance, the many strategic conversations between the first and third authors were a way to align expectations and increase the engagement of the CC technical leaders with the coaches. Wenger-Trayner and Wenger-Trayner (2020) label these conversations between key stakeholders’ strategic facilitation enabling value. The first author was responsible for the social learning support that encompassed the meeting facilitation, documentation, and agenda design (Wenger-Trayner & Wenger-Trayner, 2020). Although this type of support may seem more logistical than theoretical, given the importance of participation and engagement in social learning spaces, they are critical for learning to carry across the cycles of the value creation framework. This type of support is crucial as previously reported in other coaches’ communities of practice, some of which did not continue after the facilitator left (e.g., Culver & Trudel, 2008; Culver et al., 2009).

At first, the focus was on the coaches’ perspective. Therefore, the value created for coaches was at the core of the intervention. As the intervention unfolded, it became apparent to the systems convener that in facilitating learning value for the coaches, the potential for value to the CC was recognized by the organization. This was evident through the resources provided by CC for the social learning space. So, what was initially a researcher-guided initiative to develop coaches became a collaborative effort between the researchers, the CC, and the coaches themselves. The CC involvement surpassed the first author’s expectations, and the quote from the NTP coach above regarding sharing information illustrated their involvement in attaining the interventions’ goal of increasing the learning capability of the landscape. The first and third authors shared the responsibilities of framing the learning activities taking into consideration coaches’ different priorities and contexts (some coaches work with high performance while others work with recreational athletes). The access to staff, including the NTP coaches and SSSM providers from CC, increased the transparency of the program, allowing the coaches to pose any questions or have any type of conversation about the NTP. This fostered strategic value as sharing the same language between the coaches, the NTP, and the SSSM providers resulted in better alignment among these landscape actors (Wenger-Trayner & Wenger-Trayner, 2020).

The provision of professional development credits is a good example of how one policy change could be viewed as both enabling and strategic. In the view of the coaches, being able to receive professional development credits was enabling because it diminished the negative impact of the structural barriers (i.e., geographical distance, costs, travel time) and allowed them to attend, free of charge, learning activities from their homes. From the perspective of CC, the provision of professional development credits was strategic because it stimulated the coaches to engage in their ongoing development, with the possible outcome of an improved athlete pathway to high performance. Moreover, the assignment of the professional development credits also leveraged the SSSM providers already available for the NTP to share best practices across the landscape.

The Role of the Systems Convener

The work of a systems convener encompasses much preparatory work and different tasks (Wenger-Trayner & Wenger-Trayner, 2015a). Such work requires an understanding of the boundaries and how to leverage learning opportunities. For instance, the systems convener in this case (a) built relationships, (b) opened new learning opportunities, (c) balanced power relations, (d) facilitated learning activities, and (e) brokered strategic conversations.

Build relationships. Through mapping the coaches' learning landscape (see Duarte et al., 2020), the systems convener was present at events and started to build relationships. He also made efforts to understand of the boundaries and learning leverage points. One point raised by coaches was the perceived secrecy of the NTP (Duarte et al., 2020), which might have contributed to a lack of trust. Trust is of major importance in social learning spaces, and its absence is a constraint to successful communities of practice (Roberts, 2006). Within sport coaching, coaches are very selective of the few people with whom they share information and learn (Gilbert & Trudel, 2001; Lemyre, Trudel, & Durand-Bush, 2007). Callary (2013) suggested that the creation of a culture of sharing and collaboration was a major aspect of developing trust and maintaining a coaches' community of practice. Aware of this, the systems convener would make use of social gatherings, face-to-face interactions, and the endorsement of the CC leadership to advocate for social learning in disability sports. In doing so, he attempted to counter such contextual lacunas as the absence of resources and other structural barriers (e.g., few competitions and great geographical distances). These activities were targeted at building relationships and therefore trust among stakeholders.

Open new learning opportunities. Systems conveners should open new avenues for learning (Wenger-Trayner & Wenger-Trayner, 2015a). In this intervention, the systems convener created a variety of learning activities (e.g., online meetings, online camps, forums) that utilized learning material in different formats (e.g., manuals, articles, videos, podcasts) to increase the learning capability of the landscape. Since coaches' pathways are unique, offering a range of learning activities and formats could facilitate their access to knowledge that is historically either inaccessible or non existent (Trudel et al., 2013; Werthner & Trudel, 2009).

Balance power relations. Power is an important concept not to be ignored in social learning systems (Wenger-Trayner & Wenger-Trayner, 2015a). The systems convener in this case made efforts to balance the power in the landscape by empowering the coaches in shaping the intervention. The coaches were at the helm of selecting

the themes to be discussed during the online camps and online meetings, of scheduling, and of choosing what was shared in Basecamp. To ensure that every coach was heard (Wenger-Trayner & Wenger-Trayner, 2015a), the systems convener allocated time to group meetings and also individual interviews. Moreover, the intervention was continually presented as belonging to the coaches, not the researchers. Therefore, the coaches were encouraged to leverage their respective power to optimize the intervention and the gains made throughout their participation. This is highly aligned with the collaborative inquiry methodology in which power is balanced between the researchers and participants (Bray et al., 2000).

Facilitate learning. On many occasions, the systems convener facilitated learning by following a few learner-centered principles (Paquette & Trudel, 2018). As mentioned in the findings, many of the initiatives were designed to be meaningful learning activities for the coaches and therefore increased the likelihood of promoting learning. One such method involved prompting the coaches' reflections, which has been suggested to improve coach development (e.g., Taylor et al., 2015; Trudel et al., 2013). At different times during the intervention, the coaches were asked to self-assess and reflect on their strengths, weaknesses, and on how they would apply what was discussed in the social learning space.

Broker strategic conversations. Finally, a major aspect that differentiates the landscape of practice approach from the community of practice one is the strategic conversations with external stakeholders whose practices are linked but different to that of the coaches (Wenger-Trayner & Wenger-Trayner, 2015a). The systems convener was pivotal in brokering strategic conversations between CC and the coaches. Once the learning needs and goals of the coaches were established, CC was able to provide many instances of enabling value for the intervention that were strategically aligned with the long-term goals of CC.

Reflections and Recommendations

To our knowledge, this is the first time that the landscape of practice approach has been utilized to frame an intervention in the domain of coach development. Moreover, while many barriers to coach development have been systematically found within disability sports (e.g., DePauw & Gavron, 2005), this intervention was the first of its kind to employ a collaborative approach between researchers, a national sport organization, and coaches, aiming to minimize the impact of the barriers inherent in the disability sport coaching landscapes. As researchers, we put forth an important caveat since it is our hope that these findings should provide naturalistic generalizations that guide the building of learning capability in other unique landscapes. An important strength of collaborative inquiry is that it is based on lived primary experience and not secondary experience as is often the case in qualitative studies that seek to understand the insider perspective of participants. With researchers at the center of this lived experience they are "in a position to 'do justice' to their experience" (Bray et al., 2000, p. 94). However, given the important role of the system convener in a social learning space (here the collaborative inquiry group), caution must be applied. The systems convener must have a very good understanding of social learning theory and be trained in the various skills of a social learning leader. If not, the social learning space may not increase the learning capability of the landscape.

Lyle (2018) has challenged coach development scholars to conduct more applied research moving forward. For those interested in using this framework in the future, we believe it could be of value for work with coaches from individual sports and sport organizations, regardless of geography; or even coaches who do not compete against other members of the community. Moreover, the involvement of the sport organization leaders was substantial and future interventions should be aware that such support will likely differ. Finally, sport organizations looking to utilize a landscape approach for coach development are strongly advised to have a systems convener who can work toward organizing the many stakeholders and facilitating the framing of appropriate activities to address the group's collective goals. In this study, the systems convener was pivotal in building relationships, balancing power, opening learning avenues, and facilitating both learning and strategic conversations that promoted enabling and strategic values. Sport organizations should seek a systems convener as a first step toward providing enabling value, since this individual is responsible for linking the collective goals with available resources to achieve the strategic mission of the organization.

Note

¹Although we are endorsing these four tools, there are many other options available, both paid and free, available that offer the same or similar functionalities.

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