

Evaluation of the AIS Coach Summit Program

Prepared by

Dr Paul Perkins

High Performance Coach Development Advisor

People Wellbeing and Development

Associate Professor (Adjunct) University of Canberra Research Institute for Sport and Exercise

November 2022

Table of Contents

INTRODUCTION	4
Purpose	4
Rationale	4
Key points	4
Acknowledgments	5
Disclaimer	5
Attribution	5
BACKGROUND INFORMATION	6
Program summary	6
Approach	6
Methods	6
Structure	6
Underlying principles	7
Delivery	7
Groups and timings	7
Online sessions	8
Conversations and discussions	9
APPROACH TO INVESTIGATION	10
General outline	10
Philosophical assumptions	10
Evaluation questions	11
Data generation	11
FINDINGS	12
Summary	12
Question 1: How well was the program designed and implemented?	12
Question 2: To what extent did the program meet the needs of participants?	13
Question 3: What went well?	14
Question 4: What improvements could be made?	15

Additional findings	16
Key behavioural traits	16
Essential facilitating skills	17
Learning through a community of practice	18
Time and effort required to deliver and monitor the program	19
Measuring value	20
General outline of the value creation framework	20
Summary of value created by participation in the program	21
Immediate value	21
Potential value	21
Personal assets (human capital)	21
Relationships and connections (social capital)	22
Resources (tangible capital)	22
Collective intangible assets (reputational capital)	22
Transformed ability to learn (learning capital)	23
Applied value	23
Realised value	24
Reframing value	24
Interpretation of value creation measures	25
REVIEW OF IMPLEMENTATION PROCESS	26
General outline	26
Brief summary of implementation science	26
Retrospective review of process	27
Analysis of implementation steps	28
Summary and breakdown of implementation steps	29
Step 1: Exploration	29
Step 2: Installation	29
Step 3: Initial implementation	30
Step 4: Full implementation	30
Next steps	31
CONCLUDING COMMENTS	32
Final thoughts	33
References and further reading	33

Introduction

Purpose

This evaluation report assesses the relevance, efficiency, impact, effectiveness and sustainability of the Coach Summit Program. The following interpersonal information-gathering techniques were used to determine the ability of the program to generate value for its participants and host organisation.

- Recording of simple metrics such as topics discussed, modes of communication, rates of engagement and number of sessions completed.
- Examination of written and verbal correspondence recorded throughout the program to extract themes and special individual stories.
- Analysis of program evaluation forms.
- The now well-recognised indigenous practice of 'yarning'.

Rationale

Evaluation underpins the work of the AIS Coach Development Team and entails the collection and analyse of information about a program's activities, characteristics, and outcomes. In the present context, a highly systematic approach was employed to examine the implementation process, highlight accomplishments, offer recommendations for improvement, and inform strategic decisions.

Key points

The evaluation revealed that the Coach Summit Program achieved numerous positive outcomes, including:

- Development of resources aimed at enhancing the learning process.
- Progressive expansion of the program to a point where it is now catering to the needs of 21
 High Performance (HP) coaches.
- Implementation of a novel approach to support the development of adaptable leaders and skilful custodians.
- Creation of an inquiry-focused participatory culture where members believe that their contributions matter and feel a sense of connection with one another.
- Realisation of original plans to provide coaches with authentic and meaningful professional development opportunities through the use of more social and collaborative approaches to learning.
- Establishment of links with the University of Canberra Research Institute for Sport and Exercise.
- Generation of considerable interest across the Australian HP sport system.



Acknowledgments

The author is grateful to the Australian Institute of Sport (AIS) for hosting the program that forms the basis of this report and would like to thank the High Performance Coach Development Manager, Mr Bill Daveron, for his unwavering trust and support. Credit is due also to Mr Neil Craig, the program's primary facilitator, who not only shared an enthusiasm for the project but provided great advice and much wisdom over the course of its journey.

The author would like to thank the wonderful coaches who participated in the program for their sustained passion and commitment, and for the support and friendship they gave him during his time as program facilitator and community convenor. Last but by no means least, the author wishes to recognise the help provided by Professor Allan Hahn (Queensland Academy of Sport and the University of Canberra Research Institute for Sport and Exercise), who greatly assisted with the preparation of this report and gave regular guidance and much-needed advice at various times throughout the project.

Disclaimer

Every attempt has been made to ensure that the information contained in this report is accurate and ethically sound. However, the author and other persons involved with the development of the report cannot be held responsible and/or liable for any issues that might occur as a result of its use.

Attribution

This document is shared under a non-commercial, share alike 4.0 International <u>creative commons</u> licence





Photo by Ben Lowe available for free on Unsplash

Background Information

Program summary

The AIS Coach Summit Program was designed to meet the needs of coaches who are working at the highest level of the Australian sport system. It aimed to enhance their ability to consider different perspectives and ways of thinking through engagement in meaningful discussions and the examination of real-world experiences.

Approach

The Program supported a learner-centred approach to development and was underpinned by philosophical and theoretical principles of social constructivism. Coaches were involved in all aspects of the learning process and generated their own unique views and perspectives whilst also contributing to the construction of new actionable knowledge. This approach is similar to the way in which traditional "libraries of information" are created in Aboriginal and Torres Strait Islander societies and allow the elders of these communities to develop their knowledge and expertise.

Methods

Methods employed to achieve the learning and broader social objectives of the program were participation in regular online interpretive conversations, continual consultation, development of supportive relationships, appropriate challenging, repeated cycles of personal reflection, and the provision of structured opportunities for coaches to test new ideas and theories in respectful and encouraging environments.

Structure

Below is a brief summary outlining how the program was delivered and the strategies used in an attempt to keep the coaches connected.

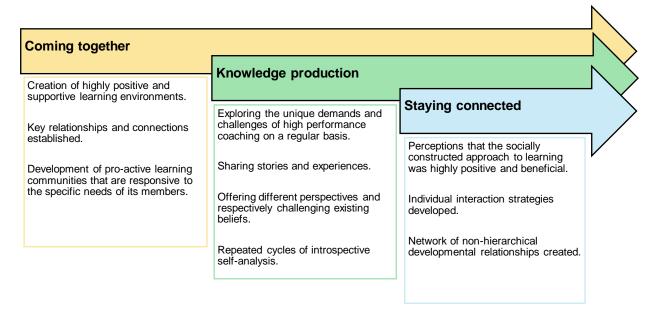


Figure 1: Schematic illustration of the delivery process used to maximise the likelihood that successful outcomes would be achieved.

Underlying principles

The program was underpinned by the following principles:

- · Human beings are fundamentally social.
- Learning is at the very core of our existence.
- Knowing comes from active participation in an activity that we are passionate about.
- Our identities change as we learn.
- Social structures encourage and enable meaningful interactions.

Delivery

The program was delivered over a twelve-month period and utilised "real-world" experiences to identify and explore the unique demands and challenges of HP coaching. The process entailed fortnightly "yarning sessions" with Neil Craig and/or the author and involved small groups of coaches (with a maximum of four coaches per group) exploring contextually relevant and personally identified topics of interest in respectful, encouraging and highly supportive environments.

Groups and timings

The following Tables show when the online catch-ups were held. It should be noted that the learning groups were formed based on information obtained as part of the registration process including times and days of availability self-nominated by the coaches.

Table 1: Overview of the learning groups that came together in November 2021 and that have since been exploring personally identified topics of interests on a fortnightly basis.

Learning Group 1	Learning Group 2	Learning Group 3
Monday afternoons	Wednesday afternoons	Thursday mornings
15:00 - 16:30	15:30 – 17:00 11:00 – 12:30	
Louise Sauvage	Myriam Fox	Stacey Marinkovich
(Para-athletics)	(Canoe-kayak slalom)	(Netball)
Tim Decker	Alois Rosario	Belinda Stowell
(Cycling)	(Para-table tennis)	(Sailing)
Peter McNeil	Rohan Taylor	Adrian Hinchliffe
(Freestyle mogul skiing)	(Swimming)	(Diving)
	Brad Tutton	Colin Batch
	(Beach volleyball)	(Hockey)

Table 2: Overview of the second cohort of coaches that commenced their learning journeys with the program in February 2022 and have been using personal experiences to explore the unique demands of HP coaching. Unlike the first cohort that consisted of either NIN or NSO Head Coaches, the practitioners in these learning groups were a mixture of head, assistant and developing coaches. The aim here was to engage with a wide-range of coaches to better understand the needs and challenges of Australian HP coaches.

Learning Group 4	Learning Group 5	Learning Group 6
Monday afternoons	Wednesday afternoons	Thursday mornings
12:00 – 13:30	13:30 – 15:00	09:30 – 11:00
Jenny Duncalf	Krisztina Szedlak	Mark Prater
(Squash)	(Artistic swimming)	(Rowing)
Karen Murphy	Joshua Fabian	Euan Mcnicol
(Lawn bowls)	(Gymnastic)	(Sailing)
Anthony Potter	Ricci Cheah	Simon Naismith
(Hockey)	(Para-archery)	(Volleyball)
Brad Ness	Michael Crisp	
(Wheelchair basketball)	(Surfing)	

Online sessions

As noted above, learning groups met on a fortnightly basis. A breakdown of the sessions is presented below.

Table 3: Summary of the online sessions and the amount of data they produced. Data for Cohort 1 relate to a 12-month period of engagement, whereas for Cohort 2 that period was 9-months. The amount of text-based data is that recorded by the author of this report.

Key Information	Cohort 1	Cohort 2
Number of online sessions.	35	24
Number of discussion hours.	52.5	36
Amount of text-based data each cohort generated through regular online catch-ups and discussions (field notes, journal entries and observational data).	~ 20,258 words	~ 12,260 words

Conversations and discussions

The following provides a brief overview of the topics that were discussed across the six different learning groups and the ways in which they were explored.

Table 4: Summary of the different subjects coaches investigated during their time together.

Management topics	Performance issues	Leadership challenges
The challenges and issues of	Performance wellbeing.	Coach/athlete relationships.
social media.	The benefits of reflective	Adaptive leadership.
Coach wellbeing.	practice.	Systems thinking.
Athlete wellbeing.	Using practitioner research to	Building sustainable systems.
Formulating successful actions and strategies.	frame and enhance current practices.	Athlete leadership groups.
Micro-monitoring not micro-	Competition preparation during	Sharing visions.
managing.	Covid.	The importance of culture.
Psychological contracts.	Adaptability intelligence.	Developing inter-
Engaging with key	Developing competitor IQ.	organisational relationships.
stakeholders.	Normalisation obedience.	Emotional intelligence.
Managing complex and	Trade-mark performances.	Encouraging, inspiring and
challenging situations.	Pressure training.	motivating others.
The need to establish clearly defined roles and expectations.	Triadic reciprocal models of behaviour.	Cultivating positive training/learning environments.

Table 5: Approaches used to encourage dialogical learning.

Strategies	Examples
Collective	Coaches investigated topics together through meaningful discussions.
Reciprocal	Coaches listened to each other, shared their ideas, and considered alternative points of view.
Supportive	Coaches felt safe to express their ideas openly and freely.
Cumulative	Coaches used conversations to progressively establish common understandings.
Purposeful	Coaches discussed topics with specific outcomes in mind.

Approach to Investigation

General outline

In an effort to gain both broad and deep understanding of the program, reactions to it, issues arising from its implementation and its potential for further development, the evaluation process followed the examples of Bloor & Macintosh [1], McLaughlin & Ritchie [2] and Kirschbaum & Knafl [3] by re-using existing data to tease out new understandings about a situation. Arguments in favour of this approach can be found in Hinds, Vogel & Clarke-Steffen [4], Sandelowski [5], Szabo & Strang [6], Thorne [7], Fielding [8] and Law [9].

These authors contend that secondary analysis of existing data can be used to generate new knowledge, new hypotheses, or support existing theories [4]; reduce the burden placed on respondents by negating the need to recruit further subjects [5]; provide an improved benefit/cost ratio for vulnerable groups who may be at risk from repeated data-gathering intrusions [6]; and allow for wider use of data from atypical or inaccessible respondents [7-9].

In the context of the present work, a secondary analysis was made of data collected as part of normal operational procedures carried out by the AIS Coach Development Team to evaluate program effectiveness. The use of this approach was considered justified on the following grounds:

• Compatibility of the primary data with secondary analysis

Thorn [7] notes that the "fit" between the purpose of the analysis and the nature and quality of the original data is an important factor when determining whether to use secondary analysis. As the data were originally collected for the purpose of program assessment, and this was the purpose also of the secondary analysis, a high level of compatibility exists.

Position of the secondary analyst

Fielding [8] believes that the value of re-using qualitative data is maximised when extensive context is provided about the primary study. Silva [10] and Moore [11] also emphasise the importance of knowing the context of the fieldwork practices and note that without this knowledge, there is the potential for the data to be de-contextualised. The present work attempted to ensure that the context and meaning of the data were not lost by using the person originally responsible for the primary data collection to conduct the secondary analysis.

Philosophical assumptions

The work was framed by an epistemological constructivist understanding that knowledge is socially co-constructed and generated from various perspectives [12], and was guided by an ontological point-of-view that the coaches would offer different versions of the reality that when analysed would create a detailed understanding of the experience [13].



Evaluation questions

Table 6 provides an overview of the questions that were developed by the author at the start of the program to help define the boundaries of the eventual evaluation. This simplified the process of deciding what data had to be collected, analysed and reported.

Table 6: The questions used to help guide the data generation, collection and analysis phases of the evaluation process (adapted from Better Evaluation 2016 [14]).

Areas of focus	Evaluation questions		
Process	How well was the program designed and implemented?		
Outcomes	2. To what extent did the program meet the needs of participants?		
Learnings	3. What went well?4. What improvements could be made?		

Data generation

Data for the evaluation were generated from the following qualitative research methods and includes insights from 21 of the 22 coaches.

- A comprehensive review of key documents (progress reports and contact logs).
- Informal interviews (yarning) with purposively selected individuals.
- Targeted analysis of secondary data (program evaluations, emails, text messages and registration forms).
- Field notes.
- Observational data (journal entries).
- Informal focus group discussions (online catch-ups and a face-to-face event held in Alice Springs).



Findings

Summary

This section initially focuses on addressing the evaluation questions and presents findings, recommendations and justifications for each identified area of focus. Additional findings are then presented and discussed before examining the ways in which the program generated value for the participants and host organisation. Here, the "value creation framework" of Wenger, Trayner and de Laat [15] was used to assess outcomes in ways that extended beyond what could have been achieved through the use of statistical analysis alone.

Question 1: How well was the program designed and implemented?

When responding to this question, the evaluation found that the program was designed, implemented and operated as intended (see section 4 for a detailed report of the implementation process). According to the coaches, the following were the key features of the program:

- The use of less formal approaches to learning and development.
- An emphasis on peer-to-peer interactions.
- The relaxed conversational approach to knowledge acquisition (dialogical learning).
- Examining real stories, current topics and lived experiences.
- Learning from knowledgeable peers from different sports.
- · Being continually consulted.
- Development of a sense of connection between group members.
- Diversity in the learning groups (e.g., male/female coaches, para/able body sports, individual/team sports).
- Use of published research to reinforce learnings and complement what was being discussed.

Recommendations

- Support for the delivery of the AIS Coach Summit should be continued.
- Future iterations of the program should include the above design features and be implemented in ways that enable progressive, holistic identification and resolution of realworld problems through repeated cycles of observation, reflection, planning, action and evaluation conducted in collaboration with coaches and other key stakeholders [16,17].

Rationale

 The design features outlined above are consistent with research showing that most coaches tend to favour informal approaches to learning above the formal methods typically employed in coach accreditation courses [18,19].

Question 2: To what extent did the program meet the needs of participants?

To answer this question, the author made use of data generated from group discussions, evaluation forms and yarning sessions. Analysis of the data revealed the following key points.

Part 1: Did the program meet the needs of the coaches?

- 5 of the 21 coaches (24% of participants) thought the program met all of their needs.
- 7 of the 21 coaches (33% of participants) said the program met nearly all of their needs.
- 9 of the 21 coaches (43% of participants) indicated that the program was successful in meeting most of their needs.

Part 2: Did the program meet the expectations of coaches?

- 8 of the 21 coaches (38% of participants) said the program exceeded their expectations.
- 13 of the 21 coaches (62% of participants) believed the program fulfilled their expectations.

Recommendations

- Guiding principles aimed at ensuring future iterations of the program continue to meet and/or exceed the expectations of coaches should be developed.
- Insights and learning from the current program should be used (where possible) as a basis to support the above initiative.
- Future endeavours should be underpinned by well-designed monitoring and evaluation strategies that are clearly articulated and customised to capture and address the challenges of real-time program delivery so that outcomes can be accurately measured against strategic objectives.
- Operational funding should be allocated to support the evaluation of future iterations of the program and other coach development initiatives.

Rationale

 Implementation of the above suggestions could aid the generation of new learnings which, in turn, could contribute to better designed programs and a more detailed assessment of their impact [20].

Question 3: What went well?

The list below is based on data generated from the evaluation forms, contact logs and yarning sessions and highlights some of the mutually beneficial outcomes the program achieved for its participants and host organisation.

- The program proved to be a useful test case for understanding the benefits of more social and collaborative approaches to learning.
- The program developed reputational and knowledge capital for the AIS Coach Development Team.
- The small independently operating learning groups enabled real stories to be shared and discussed at each session.
- The flexible and accommodating format allowed coaches to participate in the program even when overseas and faced with difficulties related to time zones.
- Exploring personally identified topics of interests provided more effective learning opportunities for the coaches by connecting their motivation to the subjects and discussions.
- A focus on discussions rather than presentations was an effective learning method that created numerous cogitative and physical artifacts (e.g., development of new ideas and course resources).
- Mixing with other HP coaches on a regular basis created a sense of connection for participants and, in some cases, enhanced their experience of the program.

Recommendations

- The above points should help shape future iterations of the program to maximise the potential for achievement of similar mutually beneficial outcomes.
- The social structures that enabled the meaningful interactions to take place should be a core feature of future programs and initiatives.

Rationale

- Most adults are task-oriented, which means they learn best when the information relates to their experiences [21-23].
- Adults tend to learn better when the information is related to a perceived need [21-23].
- Mutual respect and trust encourage people to share their views more openly and freely [21-23].
- Coaches are more willing to engage in learning programs when they are certain the content is directly relevant to the needs [24].

Question 4: What improvements could be made?

There was a strong consensus amongst the coaches (87% of participants) that whist the program was effective at meeting their needs, it could also be improved by:

- Hosting face-to-face introduction sessions at the beginning of future programs to help build relationships and connections.
- Whole cohorts coming together more often (e.g., every 3 months).
- Staging monthly rather than fortnightly online sessions.
- Providing more flexibility so that coaches can switch between learning groups to fit in with their other commitments.
- Having coaches discuss specific topics at whole cohort sessions (a current issue or area of concern).
- Inviting relevant guests to online sessions on the condition that they understand they are to be guest members of the group rather than guest presenters.
- Providing opportunities for participants to observe other coaches in their daily training environments.
- Having clearly defined expectations in place so that coaches know what is expected of them
 in terms of their commitment and levels of engagement.

Recommendations

- Operational funding should be allocated to support and encourage situational learning (coaches visiting certain training environments to observe and learn from each other).
- Social learning leaders such as Neil Craig should be utilised in the above initiative to enhance and maximise the learning.
- Participating coaches and group facilitators should work together at the start of future iterations of the program to establish a calendar of events and reenforce expectations.

Rationale

Research shows that:

- Better outcomes are typically achieved when programs are continually shaped by the inputs of people for whom the solutions are being sought [25,26].
- New approaches must be constantly developed and applied for performance to continuously improve [27].
- Many coaches have enhanced their skills through more social and collaborative approaches that have been both observational in nature and based in their work situations [19].

Additional findings

In addition to addressing the evaluation questions, an attempt was made to accurately record the characteristics of coaches who appeared to get the most out of the experience. This was done by reviewing the author's journal notes, analysing observational data and re-examining the evaluation forms and contact logs. The same procedure was then repeated to identify the facilitating skills that aided the knowledge production processes, and to determine the amount of time it took to deliver and monitor the program. A final review of the data was then carried out to better understand the social nature of learning and the ways in which it enabled the coaches to create new ideas and contextually relevant bodies of knowledge. The findings from this work appear below.

Key behavioural traits

Analysis of the data revealed that the coaches who appeared to get the most out of the experience:

- Prioritised the program and attended almost every session.
- Individualised and customised the learning to fit their goals and needs.
- Monitored their own progress and evaluated the effectiveness of the learning.
- Were highly motivated and committed to improving.
- · Shared openly and actively sought feedback.
- Took a lot of notes.
- Asked a lot of questions and constantly sought clarification.
- Had regular contact with other group members and the facilitator outside of sessions.
- Took substantial responsibility for their own learning and development.
- Had an ability to form respectful and meaningful relationships.

Something to consider

The personal traits highlighted above are consistent with those of self-directed learners - an autonomously led approach to the organisation of learning and attainment of knowledge [28,29]. This finding is important because it is compatible with research showing that while most coaches tend to favour informal approaches to learning, self- directed learning is the preferred method for expert coaches [18].



Essential facilitating skills

Results from the analysis are presented below and show that the program's primary facilitator, Neil Craig, played a critical role in the learning process and the transfer of new knowledge. Nevertheless, it should be noted that Neil only worked with coaches from the first cohort so the findings are limited to the responses of participants from groups 1, 2 & 3 and therefore cannot be considered as necessarily providing a representative view of all people involved in the program.

Table 7: Overview of the skills that were displayed by the primary facilitator that guided discussions and aided the learning of coaches from the first cohort.

Roles	Key Skills
Group Leader	 Modelled appropriate communication skills (Listening, repeating and summarising). Maintained safe and conducive learning environments. Helped learners apply content to their profession. Provided constructive feedback during discussions. Managed group dynamics.
Agenda Manager	 Ensured planned timings were adequate and appropriate. Kept discussions on topic. Managed time to ensure topics were thoroughly explored.
Content Expert	 Answered all questions in detail. Shared personal experiences that enhanced learning and credibility. Used appropriate terminology for the topic and the learners. Openly shared relevant knowledge with group members.
Role Model	 Maintained positive and professional demeanour. Modelled the behaviour that was being sought. Had credibility as a HP coach and social learning leader. Encouraged continual learning. Was seen as an influencer of success.
Consultant	 Helped participants understand and apply the concepts. Identified factors that supported or hindered the learning process. Helped coaches manage the above factors to ensure that generation of new knowledge occurred. Acted as a sounding board for new ideas and work practices.

Learning through a community of practice

Results from the analysis made it clear that the socially constructed relationships (learning groups) offered opportunities for participants to pursue a particular form of learning in an attempt to make a difference to something they are deeply passionate about (HP coaching). The illustration below is intended to reflect this process, along with the ways the multiple interacting learning trajectories and partnerships within each group generated new ideas through active participation in coach-specific communities of practice. In the Figure:

- Community refers to the social structures that formed the shared domains of interest and enabled meaningful interactions to take place (the independently functioning learning groups).
- Practice refers to the specific areas of focus around which the communities developed and
 the ways in which the personally identified topics of interest were pursued (e.g., meaningful
 discussions, information sharing events, mutual engagement in problem-solving activities,
 exploring real-world problems).
- Identity refers to the ways in which the identities of community members (the coaches, Neil
 and the author) have changed through their participation in the program (e.g., better
 learners, more effective leaders, members of a special community).
- Meaning refers to the processes that enabled community members to make sense of their
 experiences and gave significance to their actions (e.g., responses to the evaluation forms,
 implementation of new ideas, sharing stories about their experiences).

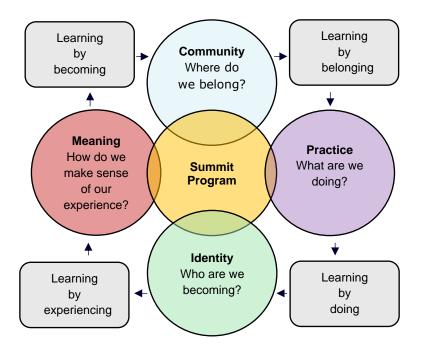


Figure 2: Illustration highlighting the dynamic nature of social learning and ways in which it was pursued by the coaches in the summit program.

Time and effort required to deliver and monitor the program

In an attempt to accurately reflect the time and effort that was devoted to the implementation, delivery and monitoring of the program, a final review of the data was undertaken and revealed the following key points:

- An average of 4.5 hours per week was spent facilitating or co-facilitating online sessions.
- An average of 5 hours per week was spent taking and reviewing field notes.
- An average of 1 hour per week was spent updating contact logs.
- An average of 7 hours per week was spent researching topics from the sessions.
- An average of 6 hours per week was spent developing resources and locating relevant web-based information to share with the coaches.
- An average of 1 hour per week was spent contacting coaches outside of the sessions.
- An average of 1.5 hours per week was spent discussing matters with the project team.
- An average of 26 hours per week was devoted to the program.

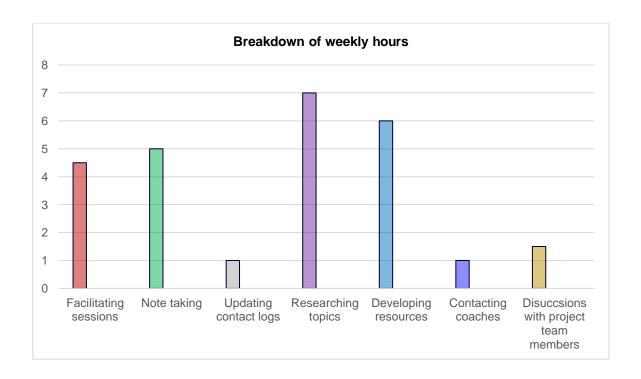


Figure 3: Breakdown of hours spent by the author delivering and monitoring the summit program.

Something to consider

The specific and intentional focus given to the delivery and monitoring of the program is consistent with the organisation focus principle which implies that having only a small number of objectives is often more productive, effective, and efficient than attempting to achieve a broad range of outcomes [27,30]. This suggests that in the present case a single focus on a clear objective (improvement of current program) could be a successful strategy.

Measuring value

As mentioned earlier, the value creation framework of Wenger et al. [15] was used to examine the ways in which the program created value for the participants and host organisation. The process involved exploring data generated from the socially orientated learning activities listed below:

- Sharing and learning from each other's experiences.
- Sharing personal stories.
- Offering different perspectives.
- Sharing suggestions, presentations and documents.
- · Helping each other with challenges.
- Challenging existing beliefs through appropriate questioning and periods of reflection.

General outline of the value creation framework

The value creation framework was developed to help measure the value that individuals and organisations can generate from participating in a community of practice and/or other social learning networks [15]. The Figure below highlights the fact that over time, the personal stories and different perspectives that make up these shared endeavours often become valuable learning resources with multiple benefits and different forms of value.

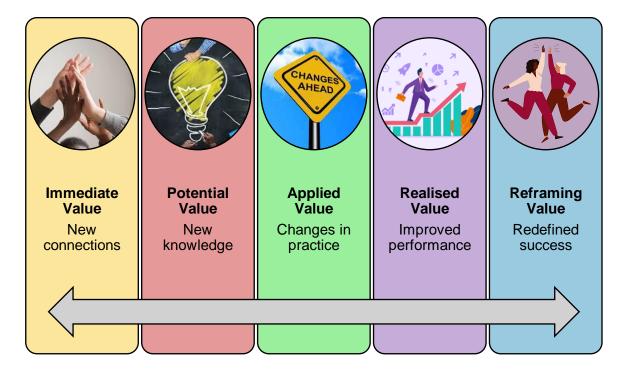


Figure 4: Schematic overview of the various types of value that were produced through participation in the Coach Summit Program, as identified through use of Wenger's Value Creation Framework.

Summary of value created by participation in the program

The following provides a brief summary of the benefits that arose from participation in the program and highlights the different ways by which value can be measured within social learning spaces.

Immediate value

This form of value occurred through a range of positive and mutually beneficial interactions and activities, including:

- Coaches engaging in regular online discussions and openly sharing their personal experiences and stories with each other.
- Coaches offering a range of different perspectives.
- Coaches helping each other through thought-provoking dialogue.

Examples of immediate value

Three pertinent and representative comments demonstrating the importance of connection and how it generated immediate value for the coaches were as follows:

"I appreciated the consistent attendance of our group despite heavy schedules in our sports.

This enabled real stories and current topics to be shared at each session, which were facilitated well by Neil & Paul".

"I like the fact that we got to listen to other coaches first and on the topics we were discussing. Also the way Paul was able to keep each session free flowing".

"The automatic bond when seeing the other coaches in person has been really special, and it's nice to see how the online interaction can break down the barriers for open communication and shared learning".

Potential value

According the Wenger et al. [15], the activities and interactions outlined above can often produce benefits that are not realised immediately but stored as potential value in the form of knowledge capital, which can be further divided into the following five categories: personal assets (human capital), relationships and connections (social capital), resources (tangible capital), collective intangible assets (reputational capital), and transformed ability to learn (learning capital) [15]. The following demonstrates how these various forms of capital were created through active participation in the program.

Personal assets (human capital): The regular online catch-ups and positive interactions created this form of capital by assisting participants with the development of new strategies to help deal with the challenges of HP coaching, as evidenced by the following quote:

"There are things that I have definitely added and shared with others throughout the program. It has also created another layer of confidence for me. Knowing you are not the only one facing similar challenges and issues through our discussions has reinforced my thinking".



Relationships and connections (social capital): In the current context, the socially constructed relationships could be considered a valuable source of capital since there was a general perception amongst the coaches that they were highly rated and respected. This in turn, appears to have assisted in the sharing of thoughts and the creation of new networks, as indicated by the following feedback:

"Participation in the program has expanded my coaching network and I feel comfortable to contact any of the coaches outside of the program for advice".

"I am eager to continue connecting with other coaches from other sports to continue learning".

"Having the opportunity to share stories, thoughts and feelings in a safe environment with other HP coaches was one of the things I enjoyed most about the program".

Resources (tangible capital): All the coaches were given opportunities to engage in activities that enhanced their access to this form of capital, including the sharing of research findings and links to relevant online stories, receiving regular updates, participating in the online sessions, and having access to specially created resources (physical artifacts). The creation of tangible capital is clearly demonstrated in the following extracts:

"I really appreciated the time Paul took to go away and research topics from the discussions and provide us with additional information".

"Was great to receive research/science that complemented what we discussed but didn't drive what we had to talk about".

"The follow up by Paul of papers or further knowledge on subjects was an asset as it promoted further learning in my own time on particular areas of interest or applicability".

Collective intangible assets (reputational capital): Whilst analysis of the data did not reveal any evidence that participation in the program created this form of capital for the coaches, it could be argued that formal recognition of the program as an innovative approach to coach development ensured that reputational capital was generated for the host organisation:

"The AIS Coach Summit Program is revolutionary as it unites our high performance system and enables our coaches to forge important relationships with their peers from other sports" – Acting AIS Director Mattie Clements (social media).

"This program really enables us to lift our heads and look to the future, not just in our own sports, but what we need to do to develop the future of coaching" – Program participant (social media).

"This has been a very valuable program that the AIS has put in place and it also improves our support networks. We can now ring each other up wherever we are travelling and catch-up in an informal way and maintain that connection" – Program participant (social media).

"Through the AIS Coach Summit Program, I've learnt so much from the other coaches and their experiences, how they handled different situations and how I can learn from them and integrate that into my programs" – Program participant (social media).

Transformed ability to learn (learning capital): The emergence of this form of capital is demonstrated by perceptions that the relaxed conversational approach to learning (as opposed to more formal and direct teaching methods) was highly regarded by the coaches because it provided "a more personal learning experience" and created "new opportunities for learning", through "collaborating with others". Importantly, a vast majority of the coaches (18 of the 21, 86% of participants) indicated that they saw merit in the use of this approach because it increased opportunities for the acquisition of new knowledge, attitudes and beliefs, as is evident from the following extracts:

"There was a casual nature about the sessions which promoted healthy discussion and learning. As a coach, I felt safe to talk through any issues or assist others with my comments".

"I really enjoyed hearing how others have developed their coaching careers and how they have worked to implement new ideas".

"I was able to gain different perspectives on some methods and learnt from the other coaches when they shared their experiences".

"This is the best coaching environment/learning program I've been involved with as a coach.

We discuss real coaching issues, not prearranged textbook learnings".

"The group that I'm involved with has 2 team coaches and 2 individual coaches, it's a great mix, learning from each other. I feel we are all curious and questioning but in the right way".

Applied value

As can be seen from the examples below, the creation of applied value was indicated by descriptions that learnings obtained from the program's artifacts and/or social relationships had been applied to a specific task with the aim of obtaining a better outcome.

"I have definitely introduced a couple of new initiatives based on the discussions. It has also reinforced some current methods I already have in place".

"Yes, I think I have changed a few things that I do from the knowledge I gained from others on the program. It's also reassuring when you do some things and know you are not alone".

"I definitely have incorporated some of the thoughts and practices discussed in our program to improve my previous practices".

"It's work in progress, I have adopted and adjusted a few things".

"Learning from the other coaches helped me to re-think some of my own practices and avoid some potential pitfalls".



Realised value

According to Wenger et al. [15], indicators for this type of value must reflect changes in what counts as success for participants and their environments. In the present case, the following examples represent some of the ways applied value was realised by the coaches in areas that were important to them:

"Changes have been made to my own work and to the program as a whole, including coaching structure, methods to deal with athletes and highlighting the importance of culture".

"I've implemented new strategies to help manage my life and help prevent burnout"

"The resources saved me a lot of time and helped me develop some new ideas that have been successfully implemented and well received".

Reframing value

The final form of value occurs when "social learning causes a reconsideration of the learning imperatives and the criteria by which success is defined" [15, p: 21]. In the present context, this change occurred at both individual and organisational levels and created new markers for success. Nevertheless, it should be noted that learning within a community of practice is a constant process of negotiation so the threshold at which something is considered to constitute reframing is never clearly defined [31,32]. Therefore, the following should not be considered as a representative view of all the coaches in the program but as an example of how participation in social learning spaces can and will produce various results for participants.

Table 8: Summary of how reframing value emerged from participation in the program.

Examples of reframing value at an Examples of reframing value at an individual level organisational level Regular engagement in the joint endeavour has Learnings from the program are being changed some of the coaches' understanding translated into institutional change and and definition of what matters. encouraging solution development. The social learning process encouraged The program is creating new learning periods of reflection and an examination of partnerships for the host organisation. existing beliefs. The program is causing the AIS to reconsider Coaches pursued topics that were important to and redesign the role of at least one of its them and therefore created their own markers employees. for success. The program is generating data that can be The program led to a sense of becoming for used to create new frameworks to help drive some individuals (more effective leaders) and forward effective professional practice. the continued refinement and realisation of new Outcomes from the program could help the ideas (athlete trade-mark performances). host organisation become more efficient with program design and delivery.

Interpretation of value creation measures

Although the above highlights the different ways in which benefits arising from the program can be measured, it is important to understand that a hierarchy of levels does not exist in the value creation framework and that one form of value will not automatically lead to another. According to Wenger et al. [15], this is because learning, like performance, is a non-linear and dynamic process with distinct phases of knowledge production and the subsequent application of that knowledge. These authors also contend that in order to appreciate the multiple benefits of collaborative efforts, value should be considered the product of independently operating learning cycles that are capable of producing enormous benefits in their own right, and consequently may not necessarily have to come together in order for successful outcomes to be achieved [15]. Therefore, the true success of the program should not be determined by whether it reached the final cycle (reframing value) but on the quality of outcomes created by each separate learning cycle.



Photo by Ian Schneider available for free on Unsplash

Review of implementation process

General outline

The information presented in this section of the report is informed by a combination of practical experience gained from running the program and the reading of relevant research literature. The practical experience provided opportunities for the author to have meaningful and continual dialogue with coaches to identify program aspects on which they placed most value, to the extent that some of them could be considered co-developers of the program and architects of their own learning experiences. Reading of the literature enabled interpretation of these experiences in the context of the broader conceptual framework of implementation science - "the scientific study of methods and strategies that facilitate the uptake of evidence-based practice and research into regular use by practitioners" [33]. While the work was undertaken by the author alone, it is reflective of a highly collaborative process in which the coaches and other project team members were central in bridging the gap between theory and practice [34,35] (Figure 5).

Brief summary of implementation science

Unlike clinical research which takes place in controlled environments, implementation science is interested in understanding how interventions work in real-world settings and the ways in which they can be improved. However, and perhaps most importantly for the current work, it also focuses on the factors that can affect the implementation process [36] and offers appropriate frameworks to demonstrate how proven strategies can be successfully transferred to other situations and contexts when key internal components of a program are compatible with external influences and drivers [37-39].

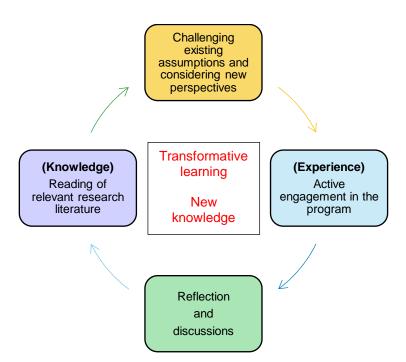


Figure 5: Simplistic illustration based on the work of Ha, Bosch & Nguyen [35] to show how the information presented in this section was constructed.

Retrospective review of process

The framework below was developed from a thorough and systematic review of the implementation evaluation literature [40] and outlines the mechanisms required to build the capacity to implement and sustain evidence-based practices in real-world conditions [33,36]. In the current context, it was used to identify the factors that enabled initial implementation of the Summit program.

Key components	Real word meanings	Summit examples	
Usable interventions	Define idea	The work was clearly defined and aimed at addressing one of the strategic goals of the AIS Coach Development Plan.	
Implementation teams	Team work	Selected personnel from the AIS Coach Development Team shared the responsibility for the planning and implementation of the program.	
Implementation drivers	Capacity and infrastructure	The initial success of the program was the result of numerous factors, including the competency and experience of team members, the capacity of the host organisation and the quality of the activities.	
Implementation stages	Planned phases	 Examples of this include: The introduction of a second cohort of coaches three months after the program started. The present evaluation, which should be seen as a precursor to a new phase of the program. 	
Improvement cycles	Continued improvement	In the present case, this involved the routine review of data to support the change process.	

Figure 6: Overview of the Active Implementation Framework [40] and how it was employed by the author to interpret and present the findings outlined in this section of the report.

Something to consider when attempting to implement new programs and/or practices

- 80% success in 3 years when using implementation science.
- 14% success in 17 years without implementation science [41].

Analysis of implementation steps

The following makes use of the implementation stage component of the above framework and demonstrates how an initial idea was successfully transformed into practice (Figure 7). It is hoped that the information will support the implementation and uptake of other projects and help them achieve their goals. For example, research shows it can take up to 2 to 4 years for a well-designed, well-defined and well-researched program to achieve (if at all) its intended outcomes and that conducting stage-appropriate implementation activities is necessary for the development of new organisational and systems thinking [42,43]. Whilst the decisions and actions required to effect this change can be accomplished through a set of planned stages, introductions of new initiatives often require constant adjustment and refinement in order for them to achieve their objectives [44]. Therefore, and as can be seen in the Figure below, the implementation of the Summit program should not be seen as a one-off event but as a process of continual refinement that aims to make the program increasingly effective in meeting the needs of a specific targeted population group distributed across multiple settings and different locations.

Implementation stages					
Exploration	Installation	Initial implementation	Full implementation		
	Actions and activities				
Establishment of project team.	Undertaking scoping activities.	Activation of improvement cycles.	Not yet accomplished.		
Clear definition of concept. Development of feedback loops.	Development of readiness. Creation of monitoring and evaluation strategies. Development of project plan.	Identification of problems and development of solutions. Building implementation capacity.			

Figure 7: Summary of activities undertaken by the project team to ensure the Summit program was implemented as intended. It is worth noting, however, that the Figure does not reflect the non-linear and interdependent nature of the actions that occurred at different stages of the project and that were often revisited when circumstances changed (e.g., when data identified an area of concern, or when there were changes to staffing).

Summary and breakdown of implementation steps

The following summarises how the first three steps of the framework were employed in the Summit program and presents suggestions aimed at supporting the realisation of the fourth stage: Full implementation.

Step 1: Exploration

The goal of the exploration stage is to examine the degree to which a program can meet the needs of the intended audience [41]. In the present context, this involved:

- · Establishing a project team.
- Using data to demonstrate a need and want for the program.
- Consulting with key stakeholders to develop a clear understanding of the requirements.
- Having a clearly defined concept.
- Creating feedback loops to share insights and accelerate project development.

Step 2: Installation

The installation stage begins when a decision is made to move ahead with an initiative and entails preparation of work required to activate a program [41]. For the Coach Summit project, this involved:

- Establishing an implementation leader/project coordinator.
- Reviewing relevant literature and undertaking other scoping activities to show that the program was feasible, practicable and assessable.
- Developing a comprehensive project plan and set of operational procedures.
- Creating an underpinning philosophy and set of values.
- Developing an inclusion and exclusion criteria based on known characteristics of coaches most likely to benefit from the program.
- Identification and recruitment of key personnel (e.g., a well-known former professional coach and highly respected social learning leader).
- Developing a monitoring and evaluation plan.
- Framing the work as a participatory action research project.



Step 3: Initial implementation

It is during this phase of the implementation process that the original concept is tested and refined through use of strategies designed to promote continuous improvement and systemic solutions [41]. Examples of how these activities were pursued in the Summit program are as follows:

- Rigorous monitoring procedures were employed to test logistics and determine the overall feasibility of implementing larger-scale programs.
- Practices were constantly examined and modified based on participant feedback.
- Extensive consultation with selected personnel (e.g., coaches from the program and certain members of the AIS Coach Development Team) was undertaken to identify challenges and address issues.
- Data from multiple sources were used to shape program improvement.
- Measures identified during the initial planning phase were used to track progress.

Outcomes from the above actions, included:

- Identification of implementations gaps (e.g., a lack of suitable trained social learning leaders).
- Creation of fidelity capital (i.e., the essential components of the program that will impact its ability to achieve the intended outcomes).
- Generation of new ideas for capacity building and sustainability.
- Enhancement of existing feedback loops.
- · Creation of program outcome data.
- Development of new decision-making processes.

Step 4: Full implementation

Although the program's implementation process has not yet reached this stage, use of the framework generated new learnings for the author around the complexity of the work and an understanding of why outcomes change when implementation practices are carefully addressed. The author now believes that the following actions are necessary to support future iterations of the program and enable it to reach its full potential.

- Build capacity for implementation drivers (e.g., development of new facilitators through active participation in online sessions and discussions with project team members).
- Enhance implementation support (e.g., overcoming existing administrative challenges and enhancing communication cycles).
- Develop new methods to measure and report areas of improvement and efficiency (e.g., value creation stories).
- Design and develop resources as new learnings become integrated into practice (e.g., information guides to support the facilitation of sessions and the creation of new programs).

Next steps

Below is a list of suggestions aimed at supporting full implementation of the Summit program. It is provided with a profound sense of respect for what has already been attempted and achieved, and for what is currently envisaged.

- Distribute this report to coaches and the AIS Coach Development Team to stimulate additional suggestions relating to the next iteration of the program.
- Liaise with members of the project team to discuss findings, recommendations and suggestions.
- Develop a new plan focussed on achieving full implementation.
- Clarify roles and responsibilities to strengthen implementation capacity.
- Establish processes and procedures to support new ways of working and thinking (social learning).
- Develop resources to support a constructivist pedagogical approach to learning.
- Redefine inclusion and exclusion criteria.
- Identify potential additional facilitators and design professional development activities to help them develop the required competencies.
- Wait until current initiative reaches full implementation before attempting to introduce new coach cohorts.
- Have relevant experts conduct a formal study on the program and the social learning practices.



Concluding comments

Experience accumulated and documented over a 1-year period suggests that the high-performance coaches participating in the AIS Coach Summit program have strongly embraced an opportunity to pursue further learning through regular online interaction with peers. This is demonstrated by their sustained attendance of the online sessions, and by feedback that they provided not just in response to a formal program survey, but also through comments made spontaneously throughout the duration of the program. Coaches particularly appreciated being able to individually and collectively identify the topics for the online discussions, since they saw this as maximising discussion relevance and the practical applicability of emergent new knowledge. The learning that they achieved through the peer-to-peer discussions was seen as comparing favourably with that previously accomplished via attendance of presentations given by content experts.

Interestingly, summaries of salient research distributed to the coaches in the aftermath of each online session were very positively received. This was apparently due to the contextual specificity of the summaries. The focus was on the ability of available research to offer possible solutions to recognised real-world problems, rather than on obtaining a general awareness of research findings and then having to assess their applicability.

The facilitation of the online sessions appears to have been critical to their success, and to the evolution of the online groups toward becoming genuine communities of practice. The characteristics and skill sets required for effective facilitation demand careful attention. The facilitation role necessitated a considerable amount of work outside of the online sessions themselves. While this naturally raises a question concerning cost-to-benefit ratio, it is notable that having high-performance coaches undertake formal, modular courses of study typically involves much greater cost and may often produce less proximal vocational learning.

The AIS Coach Summit program is underpinned by an acknowledgement of the specialised professional competencies of high-performance coaches and their capacity to be architects of their own learning journeys. Findings to date imply that the coaches have a real willingness to explore this capacity, especially if appropriately assisted with the task. The findings are consistent with the principles of self-determination theory.

The Coach Summit program is still at an early stage of development, and its long-term influence remains to be ascertained. Maintaining the current degree of coach engagement will almost certainly depend on allowing the program to evolve in ways advocated by the coaches themselves, so that it can become ever better at meeting their learning needs. Ongoing evaluation will be essential and will need to become more nuanced. Present indications, though, are that the program is creating multiple forms of value for the coaches and the AIS. All coaches who have participated in the program are keen to stay involved. The future therefore seems promising if organisational support for the program is continued.



Final thoughts

Supporting the development of HP coaches is a challenging task, since there is no single theory that explains human learning in its entirety [45]. Adding to this challenge is the idiosyncratic nature of learning [46-49] and the fact that effective coach development tends to occur through opportunistic and serendipitous methods as opposed to participation in structured programs [17,49,50]. While the AIS Coach Summit Program appears to be addressing these challenges by offering a more balanced and flexible approach to learning, its focus on achieving long-term context-specific outcomes by encouraging highly experienced coaches to re-consider existing feelings, beliefs and assumptions (i.e., their cognitive structures) is a highly challenging task. Attempting to meet this challenge will require a collaborative approach and is dependent on the willingness of key personnel from multiple organisations to work together [46,51].

References and further reading

- 1. Mclaughlin, E. and Ritchie, J. (1994) Legacies of Caring: The Experiences and Circumstances of Ex-Carers. Health and Social Care in the Community, 2, 241-253.
- 2. Kirschbaum, M. S. and Knafl, K. A. (1996) Major Themes in Parent-Provider Relationships: A Comparison of Life-Threatening and Chronic Illness Experiences'. Journal of Family Nursing, 2, 195-216.
- 3. Hinds, P. S., Vogel, R. J., and Clarke-Steffen, L. (1997) The Possibilities and Pitfalls of Doing a Secondary Analysis of a Qualitative Data Set. Qualitative Health Research, 7, 408-424.
- **4.** Sandelowski, M. (1997) To Be of Use: Enhancing the Utility of Qualitative Research. Nursing Outlook, 45, 125-132.
- **5.** Szabo, V. and Strang, V. R. (1997) Secondary Analysis of Qualitative Data. Advances in Nursing Science, 20, 66-74.
- **6.** Thorne, S. (1990) Secondary Analysis in Qualitative Research: Issues and Implications. Critical Issues in Qualitative Research Methods. Sage, London.
- **7.** Fielding, N. (2004) Getting the Most from Archived Qualitative Data: Epistemological, Practical and Professional Obstacles. International Journal of Social Research Methodology, 7, 97-104.
- **8.** Law, M. (2005) Reduce, Reuse, Recycle: Issues in the Secondary Use of Research Data. IASSIST Quarterly, 29, 5-10.
- **9.** Silva, E. R. (2007) What's [Yet] to Be Seen? Re-Using Qualitative Data. Sociological Research Online, 12, 1-12.
- 10. Moore, N. (2007) Using Qualitative Data? Sociological Research Online, 12, 1-13.
- **11.** Whittemore, R., Chase, S. K., and Mandle, C. L. (2001) Validity in Qualitative Re-search. Qualitative Health Research, 11, 522-537.
- **12.** Packer, M. J., and Goicoechea, J. (2000) Sociocultural and Constructivist Theories of Learning: Ontology, Not Just Epistemology. Educational Psychologist, 35, 227-241.



- 13. Better Evaluation. (2016) Specify the Key Evaluation Questions (KEQs).
- **14.** Wenger, E., Trayner, B., and de Laat, M. (2011) Promoting and Assessing Value Creation in Communities and Networks: A Conceptual Framework. Rapport 18, Ruud de Moor Centrum, Open University of the Netherlands.
- **15.** Kemmis, S. and McTaggart, R. (2000) Participatory Action Research. In: Denzin, N.K. and Lincoln, Y.S., Eds., Handbook of Qualitative Research, SAGE Publications, Thousand Oaks, 567-595.
- 16. Stringer, E. (1999) Action Research. 2nd Edition, SAGE Publications, Thousand Oaks.
- **17.** Cushion, C., Nelson, L., Armour, K., Lyle, J., Jones, R., Sandford, R., and O'Callaghan, C. (2010) Coach Learning and Development: A Review of Literature. Leeds: Sports Coach UK.
- **18.** Nelson, L. J. (2010) Thesis: Understanding Coach Learning. Loughborough: Loughborough University.
- **19.** Cabrera, D., Colosi, L., and Lobdell, C. (2008). Systems thinking. Evaluation and Program Planning, 31, 299-310.
- **20.** Merriam, S. B., Caffarella, R. S., and Baumgartner, L. M. (2007) Learning in Adulthood: A Comprehensive Guide. San Francisco, CA: Jossey-Bass.
- **21.** Merriam, S. B. (2001) Andragogy and Self-Directed Learning: Pillars of Adult Learning Theory. In S. B. Merriam (Ed.), The New Update on Adult Learning Theory: New Directions for Adult and Continuing Education (pp. 3-14). Hoboken, NJ: John Wiley & Sons, Inc.
- **22.** Blondy, L. C. (2007) Evaluation and Application of Andragogical Assumptions to the Adult Online Learning Environment. Journal of Interactive Online Learning, 6, 116-130.
- **23.** Vargas-Tonsing, T. M. (2007). Coaches' Preferences for Continuing Coaching Education. International Journal of Sports Science and Coaching, 2, 25-35.
- **24.** Beard, J., Dale, P., and Hutchins, J. (2007) The impact of e-resources at Bournemouth University. Performance Measurement and Metrics, 8, 7-17.
- **25.** Gapp, R. and Fisher, R. (2006). Achieving excellence through innovative approaches to student involvement in course evaluation within the tertiary education sector. Quality Assurance in Education, 14(2), 156-166.
- **26.** Lahy, A. and Found, P. (February, 2015) Towards a Theory of Continuous Improvement. Conference Paper.
- **27.** Knowles, M. S. (1975) Self-Directed Learning: A Guide for Learners and Teachers. New York: Cambridge Books.
- **28.** Merriam, S. B., Caffarella, R. S., and Baumgartner, L. M. (2007) Learning in Adulthood: A Comprehensive Guide. San Francisco, CA: Jossey-Bass.
- **29.** Bessant, J., and Francis, D. (1999) Developing Strategic Continuous Improvement Capability. International Journal of Operations & Production Management, 19, 1106-1119.
- **30.** Wenger, E. (1998) Communities of practice: Learning, meaning, and identity. Cambridge University Press.

- **31.** Stoszkowski, J., and Collins, D. (2014) Communities of practice, social learning and networks: exploiting the social side of coach development, Sport, Education and Society, 19:6, 773-788.
- 32. University of Washington Implementation Resource Hub.
- **33.** Winter, M., Smith, C., Cooke-Davies., T, and Cicmil S. (2006) The importance of 'process' in rethinking project management: the story of a UK government-funded research network. International Journal of Project Management 24(8): 650-662.
- **34.** Ha, T. M., Bosch, O. J. H., and Nguyen, N. C. (2016) Practical Contributions of the Systems-Based Evolutionary Learning Laboratory to Knowledge and Stakeholder Management. Systemic Practice and Action Research 29, 261–275.
- **35.** Khalil, H. BPharm, MPharm, PhD, AACPA. (June, 2016) Knowledge translation and implementation science: what is the difference?. International Journal of Evidence-Based Healthcare, 14:2, 39-40.
- **36.** Spoth, R., Guyll, M., Lillehoj, C. J, and Redmond, C., and Greenberg, M. (2007, Oct) Prosper study of evidence-based intervention implementation quality by community-university partnerships. Journal of Community Psychol. 25;35 (8): 981–999.
- **37.** Sullivan, G., Blevins, D., and Kauth, M. R. (2008) Translating clinical training into practice in complex mental health systems: towards opening the "Black Box" of implementation. Implementation Science, 3:33.
- 38. Maher, E. J., Jackson, L. J., Pecora, P. J., Schultz, D. J., Chandra, A., and Barnes-Proby, D. S. (2009). Overcoming challenges to implementing and evaluating evidence-based interventions in child welfare: A matter of necessity. Children and Youth Services Review, 31(5), 555–562.
- **39.** Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M. and Wallace, F. (2005) Implementation Research: A Synthesis of the Literature. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network (FMHI Publication #231).
- **40.** University of North Carolina Active Implementation Hub.
- **41.** Prochaska, J. O., and DiClemente, C. C. (1982) Transtheoretical therapy: Toward a more integrative model of change. Psychotherapy: Theory, Research & Practice, 19(3), 276–288.
- **42.** Panzano, P. C., and Roth, D. (Aug, 2006) The decision to adopt evidence-based and other innovative mental health practices: risky business? Psychiatric Services, 57(8):1153-61.
- **43.** Saldana, L., Chamberlain, P., Wang, W., and Brown, H. (2012) Predicting Program Start-Up Using the Stages of Implementation Measure. Administration and Policy Mental Health, 39, 419–425.
- **44.** Romney Stephanie, R., Israel Nathaniel., and Zlatevski, D. (2014) Exploration-stage implementation variation: Its Effect on the Cost-Effectiveness of an Evidence-Based Parenting Program. Zeitschrift für Psychologie, 222(1): 37e48.
- **45.** Jarvis, P. (2006) Towards a Comprehensive Theory of Learning, Routledge, London.
- **46.** Werthner, P., and Trudel, P. (2009) Investigating the Idiosyncratic Learning Paths of Elite Canadian Coaches. International Journal of Sports Science & Coaching, 4(3), 433-449.

- **47.** Simon, S., and Johnson, S. (2008) Professional Learning Portfolios for Argumentation in School Science. International Journal of Science Education, 30, 669-688.
- **48.** Barak-Orland, L., and Yinon, H. (2007) When Theory Meets Practice: What Student Teachers Learn from Guided Reflection on Their Own Classroom Discourse. Teaching and Teacher Education, 23, 957-969.
- **49.** Abraham, A., Collins, D., and Martindale, R. (2006) The Coaching Schematic: Validation Through Expert Coach Consensus, Journal of Sports Sciences, 24, 549-564.
- **50.** Wright, T., Trudel, P., and Culver, D. (2007) Learning How to Coach: The Different Learning Situations Reported by Youth Ice Hockey Coaches. Physical Education and Sport Pedagogy, 12, 127-144.
- **51.** Perkins, P., and Hahn, A. (2020) Considerations and Suggestions for Design of a Learning and Development Program for Sport Coaches. Open Journal of Social Sciences, 8, 457-509.





AIS.gov.au











@theAIS #theAIS

Leverrier Street Bruce ACT 2617 PO Box 176 Belconnen ACT 2616 +61 2 6214 1111