

# The Coach Development Framework for the International Ice Hockey Federation

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<p>The here presented Master's Thesis had as its objective to create a Coach Development Framework (CDF) for the International Ice Hockey Federation (IIHF).</p> <p>The main phases of the thesis work included benchmarking of well-developed and extensive coach education frameworks from countries that have a well-established sport governance such as the USA, Canada, United Kingdom, New Zealand, Ireland, Australia, and South Africa, as well as the International Sport Coaching Framework and the European Sport Coaching Framework by the International Council For Coaching Excellence. The literature review included besides the different sport frameworks also peer-reviewed articles for certain chapters of the IIHF CDF as well as books by renowned experts on coaching topics. The benchmarking of this coach development literature was the foundation for the creation of the thesis product, the International Ice Hockey Federation Coach Development Framework (IIHF CDF).</p> <p>The IIHF CDF was reviewed by a number of experts from different countries whose comments and suggestions were gladly incorporated in the final stage of the work before submission.</p> <p>The IIHF CDF is presented in its entirety in the appendix to this thesis.</p> <p>The result of the thesis work is the actual IIHF CDF (see appendix). Introduction, background, work progress, literature review, Coach Development System/Programme recommendations, discussion and conclusions are presented in the present document.</p> <p>Concluding it can be said that athlete development is only possible when the coaches working with the athletes possess the necessary core competences and capabilities, understand the premise of athlete-centred coaching and internalize life-long learning.</p>	
<b>Keywords</b> IIHF, Coach Development, Structure, Framework, Knowledge, Coaching	

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## Thank you!

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# 1 Introduction

Recent publications such as the International Sport Coaching Framework (ISCF) by the International Council for Coaching Excellence (ICCE) or the Quality Coaching Framework by the United States Olympic Committee (USOC QCF) show quite plainly that a new era in coaching has started. Away from purely technical, tactical and strategic game-play coaching to coaching based on fundamental core competencies, values and best principles with the athlete and athletes' needs as the focal point.

The current situation within ice hockey coaching unfortunately still is focusing on the what to coach, meaning technical and tactical skills and strategies, neglecting the how to coach to a great extent, meaning focusing on the players' needs, their developmental stages and the coaching environment, using effective and quality coaching methods.

To target the discrepancy within ice hockey coaching, between the current situations in coaching towards effective and quality coaching, the International Ice Hockey Federation (IIHF) has collected best principles and core values, in the IIHF Coach Development Framework (from now on IIHF CDF; the full IIHF CDF is available in the Appendix 2). The IIHF CDF informs coaches, administrators, parents, educators and everyone involved in ice hockey of what the key aspects of quality coaching are.

It functions as a guide for all IIHF Member National Associations (MNAs), which informs on the principles of quality and effective ice hockey coaching.

Fundamental values, core competencies and evidence-based practices are the foundation of quality coaching. Quality coaching motivates, supports, develops, and helps players reach their potential and will instil a life-long participation in ice hockey. Low quality coaching on the other hand has detrimental effects on players; it demotivates, leads to injury, burnout and dropout and diminishes the enthusiasm of the players. With the IIHF CDF the IIHF supports the development of quality practices in every MNA. Quality coaches will provide quality coaching sessions which will develop motivated players to the best that they can be.

The next chapters focus on the process of the thesis work while developing the IIHF CDF. Starting with the introduction to the project, which gives insights on the commissioning of the project. Chapters 2, 3 and 4 focus on coach education and learning, competencies of coaches, as well as the current situation of coach education systems. Chapter 5 gives insight on how coaches develop their knowledge. Chapter 6 benchmarks international frameworks, policies and strategies, as well as literature on relevant articles and books in coach education and development. The benchmarking is followed by a summary of the

similarities within the works, in both journal articles and books and the frameworks, policies and strategies. The remaining chapters cover the IIHF CDF as the product outcome of the thesis work, a discussion on the presented works, both thesis and IIHF CDF, is followed by conclusions on effective coaching and quality coaches.

Chapter 10 describes in detail the aim of the project as well as previous work that was done around coach education and development by the thesis author and a prior IIHF workgroup.

The here presented Master's Thesis has as its objective to develop The IIHF Coach Development Framework (IIHF CDF). The full IIHF CDF is presented in appendix 2, and the following chapters present the steps of the thesis process. To clarify, the here presented thesis is product based, the product is the IIHF CDF as presented in its draft format in appendix 2. The thesis part describes the project aim, the project steps, literature research, benchmarking and review, as well as discussion and conclusions, These were all necessary steps for the author to develop the knowledge base for the creation of the IIHF CDF.

The current IIHF Coaching Committee (CC; elected for 4 years in autumn 2016) made it their priority to develop and improve coach development worldwide and with that aim to provide a coach development framework for the IIHF MNAs to support the growth and development of ice hockey worldwide.

The aim of the IIHF CDF is not to be a fixed set of rules that can only be applied in its entirety, but to function as a guideline for MNAs when developing their own coach development programmes, including athlete-centred coaching approaches, decision-making based on strong values and establishment of a coaching philosophy.



## 2 Coach education and learning

Although it could be assumed that coach education automatically leads to learning it is shown in this work that the case might not be that simple.

Learning can be defined as a change of the thinking and doing processes of the learner (Nelson, Cushion & Potrac 2006, 248). This means that the learner will use the newly learned information and combine it with previous acquired knowledge to form new ideas and knowledge, which is then applied in a practical setting. This shows, that although the coach education curriculum contains what is generally considered knowledge that coaches need for their daily work, that unless they incorporate the newly learned information into their preexisting knowledge it will not lead to a change in their coaching. That is why it is so important when planning coach education systems and curricula that the points from chapter 5 are well considered.

Coach education covers the formal part of coach learning (Mclean & Lorimer 2016, 73; Piggott 2015, 284). Coaching degrees, certification and re-certification and coaching diplomas belong to the formal coach education. Combined with in-formal learning opportunities they make up what is called mediated learning (Callary, Werthner & Trudel 2011, 32) (see figure 1 for more details).

Unmediated learning, also in-formal learning, is basically any other way a coach develops coaching knowledge outside of formal and non-formal learning situations, this might be watching a podcast on coaching, or a video, a discussion with another coach, reading a book or following a webinar (Callary et al. 2009, 32; ISCF 2013, 39).

Chapter 5 focuses in more detail on the different learning styles that are applied by coaches on their development path from a novice coach towards an expert or master coach.

Chapter 4 focuses in more details on the current situation of coach education systems and gives examples from around the world and chapter 3 briefly touches on the core competencies required for coaching. The core competencies are in more detail discussed in chapter 8.6.

There are different ways how coaches learn and acquire the knowledge they need for their daily work as coaches.

Research has focused on coaching knowledge and development, learning preferences of coaches, and effectiveness of formal coach education in the past decades e.g. Abraham & Collins 2011; Callary, Werthner & Trudel 2011; Cushion, Armour & Jones, 2003; Côté 2006; Erickson, Bruner, MacDonald & Côté 2008; Morris-Eyton & Coopoo 2014; Santos, Mesquita, Graca & Rosado 2010.

### **3 Core competencies in coaching**

Coaches need to possess a range of competencies and qualities in order to be able to execute their job. Chapters 6 to 9 analyse and evaluate the core competencies and qualities of coaches in more detail as international institutions and national sport governing bodies define them.

Generally speaking, coaches provide guided training sessions to players of all ages and engagement levels, from beginners to high-performance, in various sporting settings and with varying demands (Pyke 2013, 4).

Coaches support player development within the sport but also outside of it through providing positive and challenging experiences, guiding decision-making, promoting integrity, fair play, respect and anti-doping and enhance players' fundamental and sport-specific skills through planned training (National Coaching Foundation 2008, 6).

The competencies include but are not limited to communication, planning, leading, managing, learning and reflecting, evaluating, organizing, recruiting, and analysing (ISCF 2013, 32).

The competencies and qualities that coaches need to fulfil these different coaching demands are on one hand conveyed to coaches in formal and in-formal coach education settings and through non-formal learning by the coach (see chapters 5 to 9 for more details).

## 4 Current situation of coach education systems

Coach education systems, pathways, programmes, curricula and syllabi have been developed by most of the international sports federations/associations, the national sports federations, sport institutions, sport governing bodies and others in the field of sport and sport education. Most of these coach educations are structured into levels, where a coach progresses from one level to the next after having accumulated enough contact coaching hours in the previous level, or there is need for a re-certification (Piggott 2015, 285). The coaching education courses vary from length from a few hours to several days, or have a certain amount of credits attached to them, and usually consist of classroom and practical sessions, in the case of ice hockey on-ice session, and maybe an off-ice dryland session, to distribute content knowledge, followed by a final pass/fail written examination. Of course these statements paint a very bleak picture of the current states of coach education and it is most likely not true in its full extend but it is certain that coach education or better development could be organized and conveyed much better (Lyle, Jolly & North 2010, 36). Examples for current coach education curricula and programmes are easily accessible on most ice hockey federations and associations homepages.

For example:

Sweden <http://www.swehockey.se/Hockeyakademin/Kurser/Utbildningsstegen/>

Switzerland <https://www.sihf.ch/de/development/education/activ/>

Finland <http://www.leijonapolku.fi/>

USA <https://www.usahockey.com/coachingcertification>

Canada <https://www.hockeycanada.ca/en-ca/hockey-programs/coaching/essentials/nccp>

England <https://eiha.co.uk/eiha-education-program/coaching/>

## 5 Coach Development

The previous chapters have established that in order to properly support the development of athletes coaches are required to possess a wide array core competencies and capabilities which are developed through a targeted and well-designed coach development process.

A Coach Development System/Programme will be most successful, if it takes the different learning styles of their participants, here coaches, into account. This is achieved through blending of different learning and instruction methods together in a well-designed curriculum.

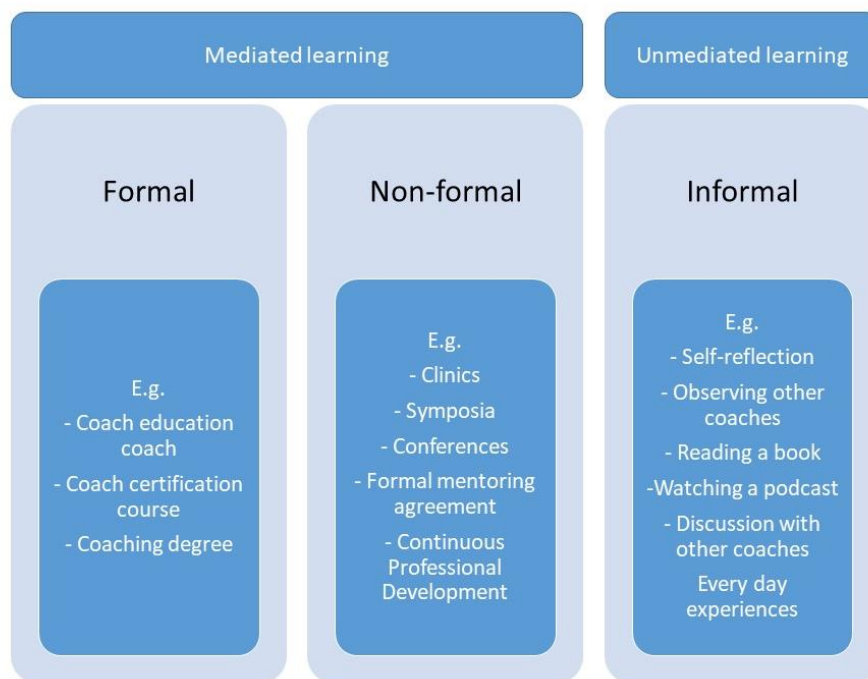


Fig. 1 Learning situations of coaches (after Mclean and Lorimer, 2016, 73)

The different learning methods can be divided into formal, informal and non-formal learning, figure 1 provides examples on the different learning methods.

Formal learning is directed by another person (Mesquita, Ribeiro, Santos & Morgan 2014, 125), e.g. the educator at a Level 1 coaching clinic. The just described coach education is considered a formal learning opportunity. Formal learning and non-formal learning are combined under the term mediated learning.

Non-formal learning opportunities within coaching are for example seminars, symposia, conferences and special clinics, where the topics and speakers have been pre-selected (ISCF 2013, 39) (see figure 1); but the coach can either choose to participate in them or

choose not to do so, without an immediate effect on their current coach education status or certification level.

However, several studies in the past have investigated how coaches learn about coaching and develop their coaching expertise and the outcome was through a mixture of informal, non-formal and formal learning (Abraham & Collins, 2011; Cushion et al. 2003; Mesquita et al. 2014; Stoszkowski & Collins 2016).

Informal learning, also unmediated learning, includes observation of other coaches and listening to other coaches (Cushion et al. 2003, 218), practical application, reflective practice (Abraham & Collins, 2001, 6), experience (Cushion et al. 2003, 215), and self-reflection (Cushion et al. 2003, 224). As well as knowledge-sharing with other coaches (Mesquita et al. 2014, 124; Stoszkowski & Collins 2016, 797), 'communities of practice' (Morgan, Jones, Gilbourne & Llewellyn 2013, 531) reading a book, checking videos online (ISCF 2013, 39), and other methods the coach selects to learn (Mesquita et al. 2014, 125).

As presented by Mesquita et al. (2014, 127) in their study on Coach Learning and Coach Education, coaches preferred informal learning situations, where the coach chooses what to learn as well as selecting the learning method. Within the informal learning situations, the coach is able to select what to learn on the base of their individual needs.

The discussions and results presented in the previous chapters give good guidelines and indications how to structure a coach development system/programme and the different teaching and learning styles to be incorporated, to address the myriad of different preferences by the attending coaches.

This includes for example learning situations where the attending coaches have to combine theoretical and professional knowledge to analyse a situation or problem (Morgan et al. 2013, 528). This approach is even more effective when the attending coaches are discussing the topic at hand in a group forming a 'community of practice', where thoughts are exchanged, different perspectives shared, and the process capacity is increased (Morgan et al. 2013, 531).

Cushion et al. (2003, 222) argue that mentoring could be implemented into the coach education/development programme to develop a coaches knowledge but guided through a selection process of the mentor, to ascertain a certain level of competency of the mentor. This idea is shared by Mesquita et al. (2014, 125).

Figure 2 presents an overview on coaches' preferences for learning, which are worth considering, when creating the course delivery specifications within the Coach Development Systems/Programmes.

## Coaches learn and develop best, when:

- the learning styles are closely connected to their own coaching environment
- they are able to have an input to the content
- their learning needs are met
- their learning preferences are taken into consideration
- they have an input to the design of the course
- their previous knowledge and understanding is recognized
- their knowledge and perceptions are being challenged
- they are treated as individuals
- their weaknesses are improved
- they can easily transfer content to their own coaching environment
- they are faced with challenges and situations from outside their own sport, to develop a bigger understanding
- they apply theory in a practical environment
- educators use a wide range of learning resources
- their background is acknowledged
- they see the relevance of the topic/material to their own situation
- they are in charge of their own learning
- they can demonstrate their abilities
- they can learn when and where it suits them
- they are interested in what they are learning
- they are motivated

Fig. 2 Coaches' learning preferences (Callary et al. 2011, 36; National Coach Development Program 2015, 13; Nelson, Cushion and Potrac 2013, 205; Stoszowski & Collins 2016, 801)

This indicates that in order for a Coach Development System/Programme to be successful different learning delivery methods (informal, non-formal and formal) should be integrated with each other to cater to the different needs and preferences of the learners (here coaches) (ISCF 2013, 39).

A well-designed Coach Development Programme has at its centre the developmental needs of the coaches, conveys an athlete-centred orientation, supports coach-led environments and fosters lifelong learning.

It is further proposed that Coach Development Systems/Programmes include assessment of core competencies during active coaching sessions, to show a transfer of formal training knowledge to actual coaching practice (ISCF 2013, 25).

## 6 Benchmarking Coach Development Frameworks

During the past decades, especially in the English speaking nations, coach education and development, as well as the development of frameworks and strategies within sports have been in focus.

In 2008 Coaching Ireland published their updated coaching framework – Coaching Strategy for Ireland 2008-2012, which together with the National Coaching Development Plan – Implementation Manual, aims at developing coaches. This updated coaching framework was based on an earlier version from 2004, which makes the Irish framework most likely a pioneer in sports coaching frameworks. No older frameworks were found during the benchmarking process, although they most certainly exist.

The latest development within Irish sports is the publication of the National Sports Policy Framework 2018-2027 in 2018.

sports coach UK (now UK Coaching) published the UK Coaching Framework – A 3-7-11-Year Action Plan on developing coaching within the UK in 2007. This was followed in 2012 with the updated version of the UK Coaching Framework – Embedding Excellent Coaching Practice.

In 2016 Sport England launched their framework Coaching in an Active Nation – The Coaching Plan for England 2017-2021.

Sport New Zealand (formerly SPARC) published their Community Sport Coaching Plan 2012-2020 in 2012. In 2016 Sport New Zealand made the strategic decision to review and update the Community Sport Coaching Plan for the period 2016-2020. The original Coaching Strategy for New Zealand was first published in 2004, and the Coach Development Framework in 2006. Increased demands to focus on high performance and developments in coaching made it necessary to divide the coaching strategy into the Community Sport Coaching Plan 2016-2020 and the High Performance Sport New Zealand Strategy 2017-2020.

Together with the Coaching Framework from Ireland 2004 the New Zealand Framework is one of the first frameworks to be published focusing on coach development.

In Australia National Sporting Organizations (NSO) are in charge of developing their own Coach Development Framework, they are supported in this development work through a toolkit, which is provided by SPORTAUS and the Australian Institute of Sport (AIS) with support by the Australian Sports Commission.

In 2012 the International Council of Coaching Excellence (ICCE) in cooperation with the Association of Summer Olympic International Federations (ASOIF) and Leeds Beckett University (LBU) published version 1.1. of the International Sport Coaching Framework (ISCF), a non-sport specific framework functioning as a guideline document for sports and institutions from around the world, which was followed by version 1.2 in 2013.

The South-African Model for Long-Term Coach Development was published in 2012 by the South African Sports Confederation and Olympic Committee (SASCOC), with the key target of formal qualification and recognition of coaches within South Africa. The South-African Model for Long-Term Coach Development is based in large parts on the ISCF version 1.1.

In 2017 the European Sport Coaching Framework (ESCF) was published by CoachLearn, to highlight the specific circumstances of coaches in Europe and to support sport federations, institutions and governments within the European Union to develop, improve and renew coach development systems tailored to the specific needs and situations within Europe.

The United States Olympic Committee published the United States Olympic Committee Quality Coaching Framework (USOC QCF) in 2017.

In Canada the Coaching Association of Canada is in charge of coach education through their National Coach Certification Programme which is delivered in cooperation with National Sport Organizations.

The following chapters present the just listed frameworks, toolkits and policies in more detail, highlighting similarities towards the end.

But, due to changes in the society and the respective game itself, it is no longer sufficient for coaches only to possess sport-specific tactical and technical knowledge. A modern-day coach must be aware of the changed demands of the game. As well as how to deal with physiological and psychological needs of their athletes and how to develop the athletes in the long-term, applying athlete-centred coaching approaches. (ISCF 2013, 7.)

## **6.1 The International Council of Coaching Excellence**

The International Council of Coaching Excellence (ICCE) was established in 1997 as a not-for-profit, international organization. Nowadays the ICCE represents institutions from more than 30 countries from all over the world. The mission of the ICCE is on a global scale to lead and support the development of coaching, they further pursue to develop and improve the level of coaching.

The ICCE is actively promoting research as well as being involved in research projects on diverse topics all related to sports, such as coaching, high performance, coach development, coach developer development, education, children, young adults and adults in sport, females in sport, female coaches, best practices and more. The ICCE regularly publishes research papers, guides, frameworks and articles on the field of coaching and related subjects.

The ICCE is furthermore actively promoting networking between the member countries to exchange coaching know-how, best practices and helps to establish exchange of coaches



between countries and seeks to facilitate recognition of coaching degrees, licences and certificates between countries.

On top of all this promotes the ICCE the Olympian values, which are integrity, honesty, fairness, inclusion, tolerance and commitment to excellence, as well as advocating ethical & safety issues in sports and coaching, and knowledge & competency exchange. More information can be found at: [www.icce.ws](http://www.icce.ws)

### **6.1.1 The International Sport Coaching Framework Version 1.2 (ISCF)**

The ISCF was first published as version 1.1 in 2012 and a review of the ISCF was published in 2013 as version 1.2 by the ICCE in cooperation with the ASOIF and LBU.

The ISCF can be used by national and international sports federations and associations, sport organisations, education institutions concerned with the development of sport coaches, and for other institutions as a guide when developing the structure and content for their coach education (ISCF 2013, 5). The idea of the ISCF is not to function as the only possible model for the development of coach education but more to function as a guide, to show possible solutions and directions when establishing a coach education, to give the possibility to use ideas that will work in the unique setting of each sport, federation, association and country.

The ISCF (2013, 7) points out that lifelong learning and an athlete-centred orientation are key abilities of a coach.

As pointed out by the ISCF (ISCF 2013, 14) the demands and expectations on coaches in any sport and at any competition level have changed considerably in the past decades. Away from purely volunteer run training sessions to full-time employed professional coaches, to put it in its extremes, being fully aware that also during past decades some coaches were volunteer coaches, some part-time paid and some full-time paid coaches. However, the coaching profession certainly has undergone a change to the effect that being a coach in our times is considered a real vocation.

The ISCF provides the user in 10 chapters with in-sights, ideas, guidelines, suggestions and background information for the establishment of a coach education/coach development programme/system.

Coaching roles, their associated knowledge, competences and responsibilities are defined, such as Coaching Assistant, Coach, Advanced/Senior Coach and Master/Head Coach (ISCF 2013, 26), as well as the domains (children, adolescents, adults, talent development, performance, high performance) the coaches are working in, and whether they work within the participation or the performance categories.

The participation category describes a sport environment where the participants participate for the sake of involvement and fun (enjoyment).

The performance category describes a sport environment, which emphasizes competition, winning and achievement.

The category, domain, role and status defines directly the competences a coach needs to possess in order to carry out their job properly. The competences a coach possesses can be categorized into six primary functions, which are set the vision and strategy, shape the environment, build relationships, conduct practices and structure competitions, read and react to the field, and learn and reflect (ISCF 2013, 32). The depth or level of competency a coach possesses depends on the coaching role the coach is carrying out, e.g. a coaching assistant only needs low levels of competency in setting the vision and strategy but a master/head coach requires a high level of competency for the same function.

The ISCF gives further suggestions on certification systems for coach education and recognition of prior learning. The ISCF closes with a chapter on suggested applications of the framework on a worldwide scale to not only improve coach education, but to also provide better working conditions, and development possibilities for coaches as well as to support vertical and lateral movement of coaches between the domains, categories and between countries.

The ISCF has functioned as a guiding document for the development of numerous sport framework for example the South African Model for Long-Term Coach Development in South Africa, the United States Olympic Committee Quality Coaching Framework in the United States, the coaching frameworks in Portugal, Japan, Poland, Italy, and India. The International Golf Federation and the Professional Golfers Alliance (PGA Alliance) adapted it for the specific needs of golf coaching into the International Golf Coaching Framework.

### **6.1.2 The European Sport Coaching Framework**

The European Sport Coaching Framework (ESCF) was developed by the CoachLearn project ([www.coachlearn.eu](http://www.coachlearn.eu)) during 2014-2017, and published in 2017. In its introduction chapter the ESCF points out that it does not mean to replace the ISCF but more so provides countries of the European Union with tools, examples and a framework that is applicable for the unique situation of coaches and coach education within Europe.

The ESCF follows the ISCF in determining the key areas of coach development presented in figure 3.

An athlete-centred vision encompasses coach development, expertise, practice, and certification and recognition and together they make up the coaching system.

The purpose and function of the ESCF is similar to that of the ISCF. It serves as a guide and tool for coach development in governments, sport institutions, institutions of higher education, sports institutes, federations and associations within the European Union in developing their coach development programmes, to develop a coaching work-force which is

equipment with tools, knowledge, and ideas to meet the demands of today's athletes, competitions and games.



Figure 3. The Coaching System and its five key areas (based on ESCF 2017, 10)

As was also pointed out already in the ISCF, the coaching work force usually consists of unpaid volunteer coaches, part-time paid coaches and full-time paid coaches (ESCF 2017, 16). This difference in the coaching status of coaches is reflected in the coaches' interest for professional development, professionalization of their own work and organization (ESCF 2017, 16).

One key aspect of the ESCF is to emphasize that coach development has an athlete-centred vision, which is part of the coaching philosophy and the responsibilities of the coach; this is also a key point in the ISCF (ISCF 2013, 7).

The main task of a coach is positive athlete development. Through the combined application of the coaches interpersonal, intrapersonal and professional knowledge during the coaching process the 4 C's of athlete development, competence, confidence, connection and character, are continuously developed within each athlete. This process develops the athletes into people who will be valued members of society (ESCF 2017, 15).

The ESCF puts an emphasis on the development of a coaching philosophy by every coach, which should be grounded on strong values and believes to make ethically decisions within the coaching context in accordance with the rules of Fair Play, Anti-Doping and Integrity to promote positive athlete experiences (ESCF 2017, 20).

As was also already depicted in the ISCF, coaches are coaching in two categories, participation and performance, and within these two categories they are working in three domains, children, adolescents and adults in the participation category and with emerging

athletes, performance athletes and high-performance athletes in the performance category respectively (ESCF 2017, 22).

This separation of participants and athletes into different domains and categories has a direct implication for the development of the coaching workforce. Coaches need different skill sets and competences to work with children than when working with high-performance athletes. This is immediately taken up in chapter 4 of the ESCF, where coaching expertise and coaching knowledge are presented and discussed. Chapter 5 focuses on coach development and how coaches, who are adult learners, learn and how coach developers can be of help during the coach development process. The next chapter, chapter 6, delves deep into coach certification and recognition, discussing the professionalization of coaches, certification, recognition of prior learning, coaching qualifications and their alignment to the European Qualification Framework as well as giving guidelines on the coach development process. The final chapter of the ECSF provides reasoning on why it is beneficial to improve and develop coach education systems, how current programmes can be evaluated and improved and how coach development and the coaching workforce have become a global player with cross-border exchange.

## **6.2 Ireland – National Sports Policy 2018-2027 and previous frameworks**

The latest development within sports and sport coaching in Ireland is the publication of the National Sports Policy 2018-2027 (Department of Transport, Tourism and Sport 2018). In Action 30 it is described how a new coaching development plan will be developed by 2019 and executed by Sport Ireland Coaching (National Sports Policy 2018-2027, 69).

Until now National Governing Bodies (NGB) develop coach education and execute the education efforts with support by Sport Ireland. A key document in the development of coaches and the coach development programme is the National Coaching Development Programme (NCDP) – Implementation Manual (NCDP by the National Coaching & Training Centre and the Irish Sport Council 2015). It functions as a manual and guide for NGB's in developing coach education targeted at coaches for each step on the Irish coaching ladder, assist with recruitment as well as the deployment of coaches. The implementation steps of the manual are a needs analysis and planning, course design, course delivery and review, quality assurance and coach/tutor deployment, support and recertification (NCDP 2015, 3). The steps of the coaching ladder are aligned to the athlete pathway to develop coaches who are equipped with knowledge and capabilities to cater to the needs and demands of the athletes they are working with in each of the athlete development stages, this includes technical, tactical, physical, mental, lifestyle and personal skills (NCDP 2015, 9 & 13). Athlete in this context encompasses participation and performance participants.

Furthermore are six coaching capacities described which align well to the competencies as defined by the ISCF (ISCF 2013, 32-33). Key points of the NCDP are that the coach education is athlete-centred, outcome-based, uses adult learning principles, coaching capacities and Irish sport values, such as ethics, fair play and a drug-free sport are conveyed (NCDP 2015, 5 & 13).

### **6.3 United Kingdom and England Coaching Frameworks**

The UK Coaching Framework from 2008 and its successor from 2012 both have the main function of a reference point for organisations involved in coach development and the delivery of coaching. The updated framework from 2012 emphasizes with its vision “*Excellent coaching every time for everyone*” (sports coach UK 2012, 2) that the key driving force in the UK coach development are effective coaching practices in a quality programme delivered by quality coaches. It is building on the success of the previous framework. The overarching values of the framework are fair play, athlete-centred, commitment to self-improvement, equality and equity, self-awareness, welfare and responsibility, and a holistic view on athlete development (sports coach UK 2012, 8). Athlete in this context includes participants and players, everyone involved in sports independent of their performance level.

The framework clearly states further that the Coach Development Model has to be aligned to the Participant Development Model to have the needs of the participants in focus, and to equip the coaches with the knowledge and principles needed to cater to the needs of the participants (sports coach UK 2012, 28).

The Coaching Plan for England 2017-2021 – Coaching in an Active Nation, has as its main objective to increase the coaching force in England with coaches with new coaching roles. Coaching is changing, as are the participants in sport, so the coaching force has to expand and include coaches who are new to coaching. But these new coaches will be able to encourage, motivate, engage, provide a great experience and support these new participants in the sport.

This is the statement by Sport England in their framework (Sport England 2016, 5 & 6).

The Coaching Plan for England further aims at less people having a negative coaching experience, which is a main reason for drop-out, but instead having better experiences to start with physical activity and to stay engaged with the physical activity. Through good coaching, the well-being (physically and mentally) as well as the development (confidence, character and connection) of the participants and of the coach are improved. (Sport England 2016, 8 & 9.)

Although focusing on the recruitment of persons into coaching who have previously not been coaching or even considered to become a coach, the main key points of this frame-

work also focus on participant-centred coaching, providing engaging and fun training sessions, assessing coaches during their coaching sessions, support life-long learning, and continuously promote good coaching practices. (Sport England 2016, 21-27.)

#### **6.4 Sport New Zealand**

In New Zealand National Sport Organisations (NSOs) are in charge of the delivery of coach development for coaches in the participant, development and performance sector in sports, as specified in the Community Sport Coaching Plan 2016-2020 (New Zealand Community Sport Coaching Plan 2016-2020, 6). The Strategic Plan 2017-2020 for High Performance defines that coaches of performance and high-performance athletes are supported through a variety of development programmes by High Performance Sport New Zealand (High Performance Sport New Zealand 2017, 4).

Fundamental principles of the Community Sport Coaching Plan are a participant-centred approach to coaching, coaches are leaders in their environment, and that the most important part of coach development is that coaches are able to learn through experience and are continuously developing (lifelong learning). Achieved through formal and informal learning opportunities, and that in order to offer effective coaching in all settings collaboration and alignment between all institutions and systems involved in coach development is in place (New Zealand Community Sport Coaching Plan 2016-2020, 6). The High Performance Strategic Plan 2017-2020 on the other hand is performance-driven, athlete-centred and coach-led (High Performance Sport New Zealand 2017, 4).

#### **6.5 Australian Sport Commission – Coaching and Officiating Framework Toolkit**

The Australian Sport Commission developed the Coaching and Officiating Toolkit to support their national sporting organisations (NSO's) in the development of their coach and officiating development programmes. The toolkit functions as a guideline when designing development programmes. It gives instructions on the overarching principles and values, such as taking the needs of the participants and their developmental stage into consideration, offering different options for participants to join the sport, developing enough coaches and officials for the number of participants, and taking the preferences in learning styles of adult learners into consideration (Australian Government & Australian Sport Commission, 3).

Compared to the frameworks by sports coach UK, Sport New Zealand or the ICCE, the toolkit functions more as a guide when actually developing the coach and official development programme or system as well as materials for coach and officials development (the actual curriculum and syllabus). It does not provide much guidance on values, apart from

the notion of considering the needs of the participants/athlete, philosophy or coaching, the different roles and functions of a coach or the core competencies a coach should possess. The toolkit is an excellent additional source together with the other frameworks for sport associations/federations when developing, improving or updating their own coach development programmes/systems.

## **6.6 Coaching Association of Canada and Sport Canada**

The Coaching Association of Canada (CAC) has been in charge of the National Coaching Certification Program (NCCP) since 1974. The CAC oversees the qualification statuses of coaches in Canada and differentiates coaches into three categories: In Training, Trained and Certified. Coaching workshops are offered in collaboration between the CAC and the different sports (National Sport Organisations) in Canada to deliver sport-specific NCCP training. Coaches have the opportunity to participate in multi-sport modules provided by CAC besides the sport-specific workshops, which are part of a coaches on-going training. For most sports the coach education is divided into Instruction and Competition or into Instruction, Community and Competition. NCCP workshops provide coaches with sport-specific technical abilities, decision-making knowledge and leadership abilities. (Coaching Association of Canada 2018)

The NCCP defined five core competencies: Valuing, Interacting, Leading, Problem-solving and Critical Thinking, which build the core of the coach education, which has at its aim that coaches are able to demonstrate their competencies. Coaches demonstrate these five core competencies during their everyday coaching practices (Coaching Association of Canada, NCCP Model Diagram).

Sport Canada published the Sport Development Framework in 2015 (amended version) which is based on and fully endorses the Canadian Sport for Life (CS4L) long-term athlete development pathway document (Government of Canada, 2015). The CS4L is the key document within Canada that informs NSO's on the athlete's needs and how to implement them in the coach education and during the curriculum preparation process, in both general and sport-specific situations (Canadian Sport for Life 2016, 63).

## **6.7 United States Olympic Committee**

In 2017 the United States Olympic Committee published the Quality Coaching Framework (USOC QCF).

Key purpose of the USOC QCF is to provide National Governing Bodies (NGB), coaching education providers, sport organizations, programmes and coaching associations with best principles of quality coaching to be implemented in coach education programming

and coach education programmes, when developing coaching standards, during programme evaluation, and to function as a resource for the development of quality coaching. The outcome will be that better coaches will provide participants and performance athletes with better coaching experiences. Key aspects of the USOC QCF are to provide quality coaching through the consistent application of professional, interpersonal and intrapersonal knowledge (essential coaching knowledge) by the coach, based on athlete-centred outcomes fitting to the environment the coach is working in; as well as emphasizing evaluation of the coaches, athletes and programmes. The final chapter of the USOC QCF is concerned with the well-being of the coach, because only if coaches are themselves healthy and mentally strong, are they able to provide quality coaching to their athletes. (United States Olympic Committee, 2017)

Quality coaching is achieved through the alignment of the coaching environments (participation and performance) with the stages of athlete development as described in the Athlete Development Model (ADM) (USOC QCF 2017, 12); and a holistic approach to athlete development and well-being through consistent application of the 4 C's model (USOC QCF 2017, 22 & 23). The 4 C's model supports athlete development through development of competence, confidence, connection and character (USOC QCF 2017, 23). The USOC QCF further promotes that quality coaches display ethical decision-making and integrity, as well as having a firmly grounded coaching philosophy based on values that support holistic athlete development (USOC QCF 2017, 24 & 33).

## **6.8 South-African Model for Long-Term Coach Development**

The South-African Model for Long-Term Coach Development (SA LTCD) is a very detailed model for coach development. In large parts it is similar to version 1.1 of the ISCF. Both documents were created almost simultaneously and the working-groups for both documents consisted partly of the same persons.

The SA LTCD is a non-sport specific coach development framework with the aim to progressively align South African National Federations coach education and development programmes to it (SASCOC 2012, 13). A key aspect of the SA LTCD is the recognition of formal qualifications of coaches, to align coaches' qualifications to the National Qualification Framework. The SA LTCD together with the South African Sport for Life document are key components of the South African Coaching Framework (document not accessible) (SASCOC 2012, 9). The SA LTCD recognizes that coaching is a blended profession with volunteer coaches, part-time paid and full-time paid coaches, adding the status of pre-coach to the coaching workforce.

Another aspect of the SA LTCD is that it recognizes prior learning (RPL) of coaches in alignment with the South African Qualifications Authority. It describes four coaching do-



mains for coaches, these are children, participation for adolescents and adults, emerging/talented and performance and elite performance. The roles of coaches within the SA LTCD are Coaching Assistant, Coach, Senior Coach and Master Coach. (SASCOC 2012, 13 &14)

The SA LTCD further defines the roles of the coaches, describes their main working objective and the coaching domains, the extent of their prior experience and learning, gives recommendations for the course format and duration (curriculum), alignment with the National Qualification Framework and cumulative experience and learning of a coach within their deployment area. (SASCOC 2012, 16-18)

The primary functions of a coach have been adopted from the ISCF (version 1.1), these are Set the vision, Shape the environment, Build relationships, Conduct practices and structure competitions, Read and react to the field, and Learn and reflect (SASCOC 2012, 22). Each primary function is then further broken down into competences, core, sport specific and domain specific knowledge and learning outcomes, for each of the coaching roles (SASCOC 2012, 23-79). Within the primary functions listed athlete-centred coaching, integrity and respect, development of a coaching philosophy, continuous professional development and other competences are further detailed. Finally, the SA LTCD gives guiding statements on assessment of coaches and learning; based on a combination of different methodologies, including peer-observation, work logs, practical assessments, and others (SASCOC 2012, 87).

## **6.9 Frameworks of International Sport Federations/Associations**

Following is a selection of international federations/associations coach education/coach development frameworks or materials presented. The list does not claim to be complete, but it shows that some international federations/associations have a coach education/development programme, based on coaches' competencies, core values, and an athlete-centred orientation, in accordance with the ISCF and ESCF.

### **6.9.1 World Association of Basketball Coaches (WABC) in association with Fédération internationale de basket-ball (FIBA)**

WABC published the Coaches Manual in 2016 in association with the FIBA. It is an improved manual and replaces the previous book 'Basketball for Young Players'. The Coaches Manual endorses the core competencies and the athlete-centred orientation as described in the ISCF; emphasizing holistic development of the players' on- and off-the court. (FIBA-WABC 2016.)

### **6.9.2 Fédération internationale de natation (FINA; aquatics)**

In 2017 FINA published the FINA National Member Federations Administration Guide which functions as a guide for National Member Federations when creating and enhancing their development programmes. Chapter 6 focuses on the support of coaches and the development of coach education. Key points are the establishment of a Code of Conduct for coaches and a coach education programme, which promotes life-long learning, development of competence, fair play and integrity, anti-doping and athlete development. (FINA National Member Federations Administration Guide 2017, 98.)

### **6.9.3 International Association of Athletics Federations (IAAF)**

The Official IAAF Guide to Coaching Athletics is a comprehensive volume on athletics coach education. Although also covering physiological development of athletes, physical fitness, training planning, technical skill learning, mental skills and a healthy diet. The guide emphasizes the lifelong learning and development of the coach, an athlete-centred approach to coaching, as well as the importance of a strong value base as a foundation for the development of the coaching philosophy and an adherence to fair play, anti-doping and integrity. (Thompson 2009.)

### **6.9.4 International Golf Federation and PGA World Alliance**

The International Golf Federation and PGA World Alliance adapted the International Sport Coaching Framework (version 1.2) into the International Golf Coaching Framework. Differences between both frameworks are the use of terminology, e.g. athlete or participant was exchanged to golf player, and details were added to support the development of coach education systems within national federations, unions and the PGA, based on the requirements of golf. (International Golf Coaching Framework 2015.)

## **7 Literature review on coach education and coach learning**

Although not all of the literature presented in table 1, or cited in this synopsis was used during the writing process of the IIHF CDF for the IIHF. This this literature review or selection was still of importance for the working process and the knowledge development of the thesis author. It also provides interested readers with additional literature resources on coach education, coach learning, and knowledge development of coaches, which can be applied when creating new sport coach development course content and course delivery guidelines.

A first literature search on SPORTDiscus with full-text in the advanced search option resulted in 373 publications.

Search terms were education and coach, publication date was selected to be between 2010-2018, with full text, references, and English abstract available, publication language English, peer reviewed, and publication type academic journal.

However, already in the first 20 publications listed a few publications resulted with having only one of the search terms listed in the key-word list. Passing the first 20 publications the results for publications with both search terms got even lower. Already within the first 30 hits, most of the publications were not selected due to their emphasise on totally different issues within the coach education than the present publication is dealing with.

9 publications were selected on the basis of their title and the key-word list for closer inspection (table 1).

Publications prior to 2010 were neglected in this process because of the many changes within coach education and development in recent years and older publications would not reflect these changes.

Table 1. 9 selected publications from the top 30 results in SPORTDiscus (keywords coach and education)

Publication date	Title	Authors	Journal
2014	Coach learning and Coach Education: Portuguese expert coaches' perspective	Mesquita, I., Ribeiro, J., Santos S. & Morgan K.	The Sport Psychologist, 28, 124-136
2016	Are coach education programmes the most effective method for coach development?	McClean, J. and Lorimer, R.	International Journal of Coaching Science, 10,2, 71-88
2013	Changing the face of coach education: using ethno-drama to depict lived realities	Morgan, K., Jones, R.L., Gilbourne, D. & Llewellyn, D.	Physical Education and Sport Pedagogy, 18, 5, 520-533
2016	Sources, topics and use of knowledge by coaches	Stoszowski, J. & Collins D.	Journal of Sports Sciences, 34, 9, 794-802
2013	Enhancing the provision of coach education: the recommendations of UK coaching practitioners	Nelson, L., Cushion, C. & Potrac, P.	Physical Education and Sport Pedagogy, 18, 2, 204-218
2011	A Brief Online Survey to Help a Sport Organization Continue to Develop its Coach education Program	Callary, B., Werther, P. & Trudel, P.	International Journal of Coaching Science, 5, 2, 31-48
2010	The earning formats of coach education materials	Lyle, J., Jolly, S. & North, J.	International Journal of Coaching Science, 4, 1, 35-48
2010	What Coaches Value about Coaching Knowledge: A Comparative Study Across a Range of Domains	Santos, S., Mesquita, I., Graca, A. & Rosado, A.	International Journal of Applied Sports Sciences, 22, 2, 96-112
2015	The Open Society and coach education: a philosophical agenda for policy reform and future sociological research	Piggott, D.	Physical Education and Sports Pedagogy, 20, 3, 283-298

However, besides this targeted literature search on SPORTDiscus with the keywords coach and education, many other literature sources were resorted to during the writing process, most of them as actual cited sources, some of them only to develop the authors knowledge in more depth on certain areas.

These include books on coaching such as Coaching Better every Season by W. Gilbert (2017), She can coach! by C. Raynaud (2005), Coaching Excellence by F. Pyke (2013), Successful Coaching by R. Martens (2012), and Sport and Character by C. Clifford and R. Feezell (2010).

In addition peer-reviewed journal articles such as Assessing the needs of coaches in developing a coach education framework by H.F. Morris-Eyton and Y. Coopoo (2014), Coaching and Coach Development in New Zealand L. Kidman and D. Keelty (2015), Coaching and Coach Education in Ireland by F. Chambers and R. Gregg (2016) and Sport Coaching as a 'profession': challenges and future directions by P. Duffy et al. (2011) were analyzed.

The here presented resources are only a snapshot of the actual literature sources used in the writing process of the synopsis and the IIHF CDF, the full list can be found in the reference lists of both documents.

## **8 Commonalities of the different frameworks, policies and plans**

Most of the just presented frameworks, policies, or plans have more in common than they are different from each other, although some emphasize certain topics and issues more than others, which is most likely due to the specific country they were written in and for. Heritage and tradition as well as the current situation in sports and sports coaching play a fundamental role when designing such frameworks, policies or plans. This is especially well pointed out in the introductory chapter of the USOC QCF, that despite the creation and application of the American Development Model, what can be observed on a daily basis is far away from and the existing knowledge on quality coaching (USOC QCF 2017, 6). Due to this gap between not-executed quality or effective coaching and the existing knowledge around effective and quality coaching many sport institutions and governing bodies have made it a point to develop coaching development frameworks, strategic plans, and policies to inform practitioners, coaches, administrators, educators and others on the importance of continuously striving towards effective and quality coaching. In the following the central common points of the earlier presented frameworks, plans and policies are summarized.

### **8.1 Values**

Most common values described in the frameworks, policies and plans were an athlete-centred orientation, life-long learning by the coach and coach-led practices. Further values that all involved in sports should adhere to are anti-doping, fair play and integrity. The development of a coaching philosophy by a coach was also deemed an important aspect of the coach development process. The coaching philosophy should be grounded in the coaches value system and adhere to good sportperson principles.

### **8.2 Athlete-centred orientation**

At this point it seems necessary to define athlete-centred coaching approaches, because without a clear definition of what athlete-centred coaching means, is and represents, all further discussions on coach development and life-long learning will be meaningless.

Athlete-centred coaching is:

“Coaching based on recognising the needs of the athlete, planning and delivering a practice and competition programme accordingly. Coaching should be informed by an understanding of the process of long-term athlete development (LTAD).”  
International Sport Coaching Framework Version 1.2 (2013)

However, this definition still lacks a deeper explanation of how a coach recognizes the needs of their athletes, and what else athlete-centred coaching encompasses outside of planning and delivering training sessions and competitions accordingly.

A coach applying an athlete-centred coaching approach during coaching athletes invests time in getting to know the athletes and their needs. The coach should be aware of their athletes interests, commitments and enjoyment, motivation, what is important to them, how they learn best, where and what they have difficulties with and what they expect from their coach (ESCF 2017, 10; Gilbert 2017, 25-48; Martens 2012, 22-25; Pyke, 2013, 40, 229-238;).

### 8.3 Coaching categories and domains

A consensus has been achieved which is followed by almost all sport governing bodies and institutions that the coaching categories are participation coaching and performance coaching. These two categories are further divided into domains, the categories and domains are shown in figure 4.



Fig. 4 This figure presents the coaching categories (participation and performance) as well as the domains (coaching children, adolescent, adults and emerging athletes, performance athletes and high-performance athletes) (based on the IIHF PDG courtesy of Aku Nieminen ppt presentation)

## 8.4 Coaching roles

Most commonly coaching roles are termed (see figure 5):



Fig. 5. Coaching roles (as defined in the ISCF 2013, 26)

However, depending on the country, these might vary somewhat. Some frameworks suggest a pre-coaching role, which precedes the Coaching Assistant.

## 8.5 Coaching status

The situation in almost all nations around the world, with only very few exceptions, is that the coaching work-force consists of volunteer, part-time paid and full-time paid coaches, hence called blended profession (ISCF 2013, 14). Of which the volunteer coaches usually by far make up the largest group, followed by the part-time paid coaches (see figure 6). Full-time paid coaches are the smallest group and are usually mainly found in performance and high-performance settings.

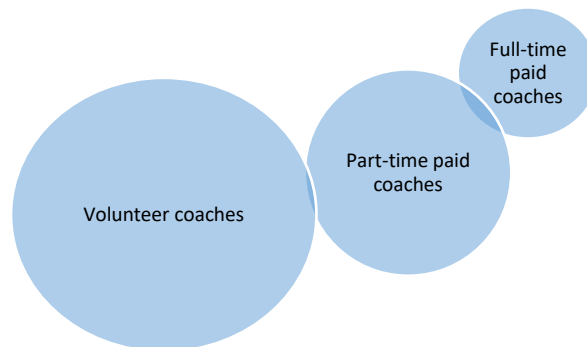


Figure 6. Illustrates the coaching work-force

## 8.6 Coaching knowledge and competence

Most of the reviewed literature considered the core competencies or functions of a coach the central point within the coach development programme. These core competencies or functions prepare and support the coach for their daily tasks related to coaching, administration and management. The core competencies or primary functions (see page 12) are based on the coaches' interpersonal, intrapersonal and professional knowledge, also called essential coaching knowledge, which are a key aspect for the coach to be able to successfully perform all required duties and roles.

## **9 Concluding remarks concerning international frameworks, toolkits and peer-reviewed articles**

As already briefly touched upon in chapter 6 and following sub-chapters, the different coach development frameworks, policies, strategies, toolkits, books on coaching and peer-reviewed articles reviewed for the here presented thesis and the IIHF CDF have many similarities.

Similarities in describing the coaching work-force as being a blended profession consisting of volunteer, part-time and full-time paid coaches (Duffy et al. 2011, 93; ESCF 2017, 15; ISCF 2013, 14).

The professionalization of this blended coaching work-force varies to a great degree, this is mainly due to the coaching status. Volunteer coaches become very often involved in coaching because they are parents coaching their own children, are former athletes, are just interested in starting to coach, they very often see coaching more of a hobby than an actual profession. They might hence be less interested and maybe also less willing to put a lot of effort into gaining professional competencies for coaching (Duffy et al. 2011, 118; ISCF 2013, 15). They are however, the ones affecting a player's perception of the sport and the sporting environment to a great extent, hence they are obliged to participate in coach development efforts. No excuse should be made by anyone involved in coaching and coach development, only quality coaching is acceptable.

Quality coaching is the unification of the coaches' essential coaching knowledge (professional, interpersonal and intrapersonal knowledge), an athlete-centred orientation and environmental (contextual) fit (Côté & Gilbert 2009, 315; ISCF 2013, 30; USOC QCF 2017, 10).

This is further supported by the notion of lifelong learning and development of coaches (Australian Government & Australian Sports Commission, 3; FINA National Member Federations Administration Guide 2017, 98; ISCF 2013, 7; New Zealand Community Sport Coaching Plan 2016-2020, 6; Thompson 2009, 6).

All of the frameworks, policies and plans emphasize the holistic development of players/athletes, this means not only to see them as players or athletes, but as human beings who have needs outside of the sporting context. The coach successfully caters for these needs if an athlete-centred orientation is part of the coaching philosophy (Australian Government & Australian Sports Commission; Canadian Sport for Life 2016, 63; High Performance Sport New Zealand 2017, 4; NCDP 2015, 9 & 13; Sport England 2016, 21; sports coach UK 2012, 8; Thompson 2009, 9; Tiikkaja 2014, 38; USOC QCF 2017, 22).

With an athlete-centred orientation the coach is developing human beings, irrespective of their gender, creed, age, race, language, socioeconomic status, ethnic origin or disability.



This holistic athlete development is further emphasized in several frameworks with the 4 C's model. The 4 C's model emphasizes the implementation of confidence, character, connection and competence principles for athlete development in quality coaching (Côté & Gilbert 2009, 312; Gilbert 2017, 27; ISCF 2013, 34; Sport England 2016, 8; USOC QCF 2017, 23).

Many frameworks have determined coaching functions or competencies because in order for a coach to successfully work in their environment and fulfil their tasks they need these capabilities. The core competencies or functions have been determined as setting vision and strategy, shaping the environment, building relationships, conducting practice and structuring competitions, reading and reacting to the field and learning and reflecting (Coaching Association of Canada, NCCP Model Diagram; ISCF 2013, 32; NCDP 2015, 15). The depth of knowledge on each of the core competency and the responsibility for it depends on the coaching roles, as well as on the coaching status.

The ISCF (2013, 25) emphasizes that a clear description of the coaching roles and competences will ease the coach development system/programme process. Only with well-defined roles, competencies and domains will it be possible to create the content of the coach development curricula to develop coaches holistically and equip them with knowledge for their coaching environment. An alignment of the coaching roles across countries will ease the transfer of coaches between nations for work purposes.

Core competencies and clear defined capabilities will help with assessment of the coaches' abilities in the actual coaching context. The coaching roles suggested by the ISCF (2013, 26) are Coaching Assistant, Coach, Advance/Senior Coach and Master/Head Coach. The same coaching roles were also defined by Duffy et al. (2011, 101).

The different literature resources all point out, that the coaching category is divided into participation and performance (Australian Government & Australian Sports Commission, 7; Côté & Gilbert 2009, 315; ESCF 2017, 23; ISCF 2013, 23; USOC QCF 2017, 12).

The domains within the categories are: children, adolescent and adults within the participation category and emerging athletes, performance athletes and high-performance athletes with the performance category (Duffy et al. 2011, 99; ESCF 2017, 23; ISCF 2013, 23; USOC QCF 2017, 12).

A last point that all of the presented literature had in common was emphasizing, that coaching is grounded on core values, ethical-decision making and a well-defined coaching philosophy (Gilbert 2017, 5; National Coaching Foundation 2008, 11; USOC QCF 2017, 24).

Values function as guiding principles for coaches in every day coaching situations and inform coaches on making the right kind of decisions. The coaching philosophy of every coach should be grounded in their own beliefs and values, and is anchored in their culture and informed by traditions.

Ethical-decision making, integrity, anti-doping and fair play are pillars of quality coaching (ISCF 2013, 35; National Coaching Foundation 2008, 11; USOC QCF 2017, 24).

Gilbert (2017) and the USOC QCF (2017) both deem the well-being of the coach an important factor in providing quality coaching. Only if the coach is also taking care of their personal well-being and is able to deal with stress from coaching and with stressors within their work through application of coping strategies can they provide quality coaching and support the development of their athletes.

## **10 Aim of the project**

The aim of the here presented project is to create a Coach Development Framework for the IIHF, which will function as a guideline for the IIHF Member National Associations when developing or improving their Coach Development Programmes/Systems.

As already stated in the introduction chapter, the IIHF Coaching Committee elected in autumn 2016, made it their aim to develop materials and guidelines for the IIHF MNA's to support their work in coach development and ice hockey.

During the IIHF Coaching Committee Meeting on December the 8<sup>th</sup> 2016 in Zurich, Switzerland, all committee members agreed unanimously that the IIHF Coach Education is the main priority for the committee for the current election period.

The IIHF Coaching Committee gave this priority task to the then Sport Manager Aku Nieminen (now IIHF Membership Development Manager).

Aku Nieminen mandated Frauke Kubischta (Coordinator for International Ice Hockey Operations at the Sport Institute of Finland, Vierumäki, Finland), in her position as liaison between the IIHF and Vierumäki, to start collecting materials and to benchmark coach education curricula and Coach Development Frameworks to advance the project. When Frauke Kubischta, the thesis author, was accepted to the Master's Degree Programme in Sport Coaching at Haaga-Helia University of Applied Science, the decision was made that she would take on this task in developing the IIHF Coach Development Framework as her master thesis.

### **10.1 Background on previous coach education work**

The initial idea for developing a new Coach Education Framework for the IIHF was already conceived during autumn 2013 by the then Development and Coaching Committee of the IIHF. For the purpose of advancing the project a working group consisting of Adam Sollitt (then employed Project Manager of the IIHF located in Vierumäki, Finland) and three Haaga-Helia University of Applied Sciences (HHA UAS) Degree Programme students (DP) (Frauke Kubischta, Marko Pykälä and David Laszlo) was established.

Another DP student, Nico Sirviö, provided help for translation of materials from the Swedish Ice Hockey Association. This initial working group started to collect and benchmark coach education materials, mainly coach education structures and content topics, from Hockey Canada, USA Hockey, the German Ice Hockey Federation (Deutscher Eishockey Bund, DEB), the Swedish Ice Hockey Association (Svenska Ishockeyförbundet, SIHF), the Finnish Ice Hockey Association (FIHA; Suomen Jääkiekkoliitto SJKL), the Swiss Ice Hockey Association (Swiss Ice Hockey).

As well as other coach education related materials such as the UK Coaching Framework, the South African Coaching Framework, from International Sport Federations (e.g. International Rugby Board), the International Council for Coaching Excellence (ICCE), as well as scientific publications on coaching research (e.g. Côté & Gilbert, 2009).

A conscious decision was made to disregard the IIHF Coach Education materials from 1999 and 2002, which are currently still in use by several IIHF MNA's in their coach education programmes. In order to start from nothing when building the new Coach Education Framework, to avoid to just give the existing material a do-over and to not really produce something new, modern and up-to-date to be applicable in the new coaching domains.

The initial step was to evaluate the coach education materials, frameworks and resources, in the case of the coach education materials from the MNA's video and skype calls were organized to collect additional information from the coach educators and persons in charge of designing the coach education for the respective MNA's.

Evaluation included a thorough analysis of the advantages and possible disadvantages of the coach education in respect to their applicability in different coaching environments, sport political settings and different cultures. Emphasize was put on selecting parts of the coach educations which could be used in creating the Coach Education Framework for the IIHF.

The literature search, benchmarking and review indicated that the Coach Education Framework should be athlete-centered and focus on lifelong learning and development of coaches. Furthermore, the Coach Education Framework would offer education for coaches to be involved in the participation, performance or specialization streams. Five coaching levels were named: Coaching Orientation, Coaching Assistant, Coach, Advanced Coach and Master Coach (based on the ISCF 2013, 26). The coaching levels require a varying depth of knowledge in the seven core competencies, which were selected as, and are Personal and Professional Development, Developing Vision, Building the Environment, Human Relation Skills, Leading, Problem Solving and Critical Thinking (loosely based on the functions as described in the ISCF 2013, 32).

Figure 7 illustrates the streams, coaching levels and core competencies, which were established based on the extensive literature review and benchmarking of the above listed resources. Each of the streams include female hockey, which is highlighted because unfortunately very often female hockey is somewhat neglected and not treated equally to male hockey, or does not receive the same support. So, it was felt that it needs to be pointed out that the coaching streams also include female hockey.

The purpose of creating figure 7 was to give the IIHF Development and Coaching Committee a visualization of the framework ideas and to present them to other IIHF committees, the IIHF Council, the leadership and to use them in the Coach Education Framework material.

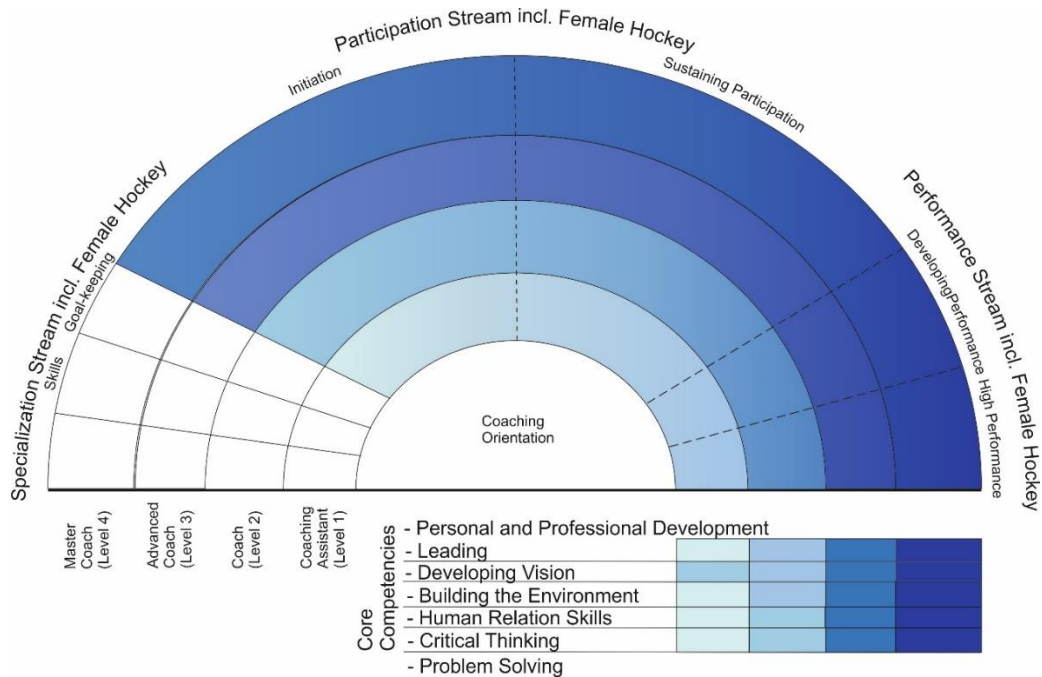


Figure 7. Coaching streams, coaching levels and core competencies of the IIHF Coach Education Framework. Darker shading reflects greater emphasis on knowledge build-up in that particular core competency by the coach of that coaching level

The core competencies were further illustrated in a so-called pie chart, see figure 8, where personal and professional development is the all-encompassing and overarching competency and the other six core competencies are enveloped in it (core competencies are based on the ICCE functions as described in the ISCF 2013, 32). Because without a willingness and a requirement for continuous and lifelong personal and professional development coach education as such will not take place. The core competencies with varying degrees of emphasis for each coaching level were defined in an extensive PowerPoint presentation, and the coaching levels were described as to their main field of deployment.

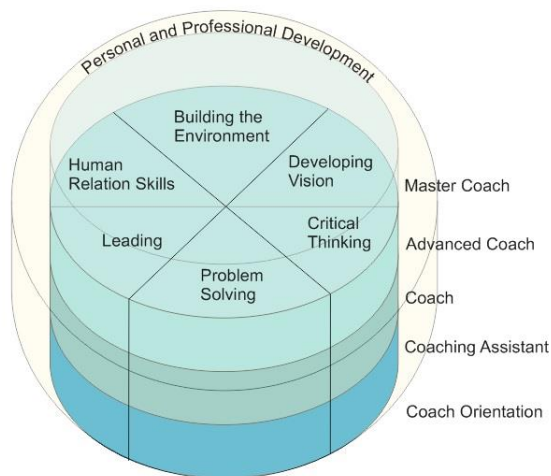


Figure 8. Pie chart depicting the coaching levels and the core competencies

The work done by this first working group was presented during the ICCE Global Coach Conference in Vierumäki, Finland, in August 2015, during the poster session (see appendix 1).

However, the aim of this first working group was more to actually establish course content for an IIHF Coach Education Framework and less so to develop a framework that would function as a guide for IIHF Member National Associations (IIHF MNAs) when designing their own coach development programmes. Informing MNAs on the more philosophical aspects of coaching, concerning development, an athlete-centred coaching and lifelong learning.

But, already during 2014 some of the members of the group left due to personal reasons and the two remaining group members were not able to push the project forward. In 2015 one more member left due to starting his work-placement. The last person remaining from the project group (the thesis author) kept her interest for the project alive and continued to incorporate parts of the project into the Elective Studies for the DP students as well as into the Coaching Methods and Development Course of the Degree Programme. The results of these endeavours were unsatisfactory.

This previous work certainly had a large influence on the topical knowledge development of the thesis author, but this previous work did not find its way as such in the here presented final IIHF Coach Development Framework.

## **10.2 Re-naming of the framework and the IIHF Player Development Guide**

To keep in line with the development idea of players and coaches, the IIHF Coach Education Framework was renamed to IIHF Coach Development Framework (IIHF CDF), to emphasize the continuous on-going, lifelong learning and professional development of coaches, which is based on an athlete-centred coaching philosophy.

This re-naming is supported by numerous publications on coach development from around the world. For example, the ISCF specifies in its opening chapter that coaches are required to continuously develop themselves in order to be able to support each individual athlete they are working with, and to have the capabilities to fully meet the needs of their athletes (ISCF 2013, 7). Furthermore, Sport New Zealand also focused on the lifelong learning and development of coaches during their work in 2006 on their coach education and hence decided after debates that it should be called Coach Development Framework (Kidman & Keelty 2015 , 332) to emphasize the development instead of the education. Furthermore, the decision was made that an actual framework, functioning as a guiding document, should be the final product of the thesis work, not the creation of a coach development system/programme with curriculum content.

This framework would inform MNAs on capabilities of quality coaches, athlete-centred orientation, lifelong learning and give suggestions on how to proceed in developing their own Coach Development Programme with the needs of the coaches as learners in its focus. During discussions with the IIHF Sport Manager Aku Nieminen (now IIHF Membership Development Manager), who functions as the main contact person for the thesis author, it was decided to base the Coach Development Framework on the IIHF Player Development Guide (IIHF PDG). The IIHF PDG is being simultaneously developed by an IIHF work-group. The IIHF PDG guides coaches to provide training sessions, which are appropriate to the developmental stage of the players. The IIHF PDG further provides coaches with the knowledge and expertise to coach within the start, stay and succeed streams of the IIHF PDG (see figure 9). Figure 9 depicts the Start, Stay and Succeed streams of the IIHF PDG.

The start stream is for players coming to join hockey without any previous experience in hockey. Most commonly players start to play ice hockey when they are children or adolescent, but it is also possible to start playing ice hockey as an adult, hence the Start stream extends past 40 years of age.

The stay stream encompasses intermediate and advanced (performance) ice hockey players of any age, from children all the way to old-timers. This stream also includes former professional and high-performance players who are continuing to play ice hockey after their career within the succeed stream.

The succeed stream is the smallest stream of the three streams, it is comprised of high-performance and professional ice hockey players, playing ice hockey on an international, Olympic and professional level. Only a very small fraction of all the ice hockey players within the stay stream make it to the succeed stream.



Fig. 9 Start – Stay – Succeed stages of the IIHF PDG (by courtesy of Aku Nieminen ppt presentation)

### 10.3 Description of the project steps

In figure 10 the project steps from the first meeting of the IIHF Coaching Committee in Zurich, Switzerland, in December 2016 until the thesis submission in October 2018 are presented on a timeline.

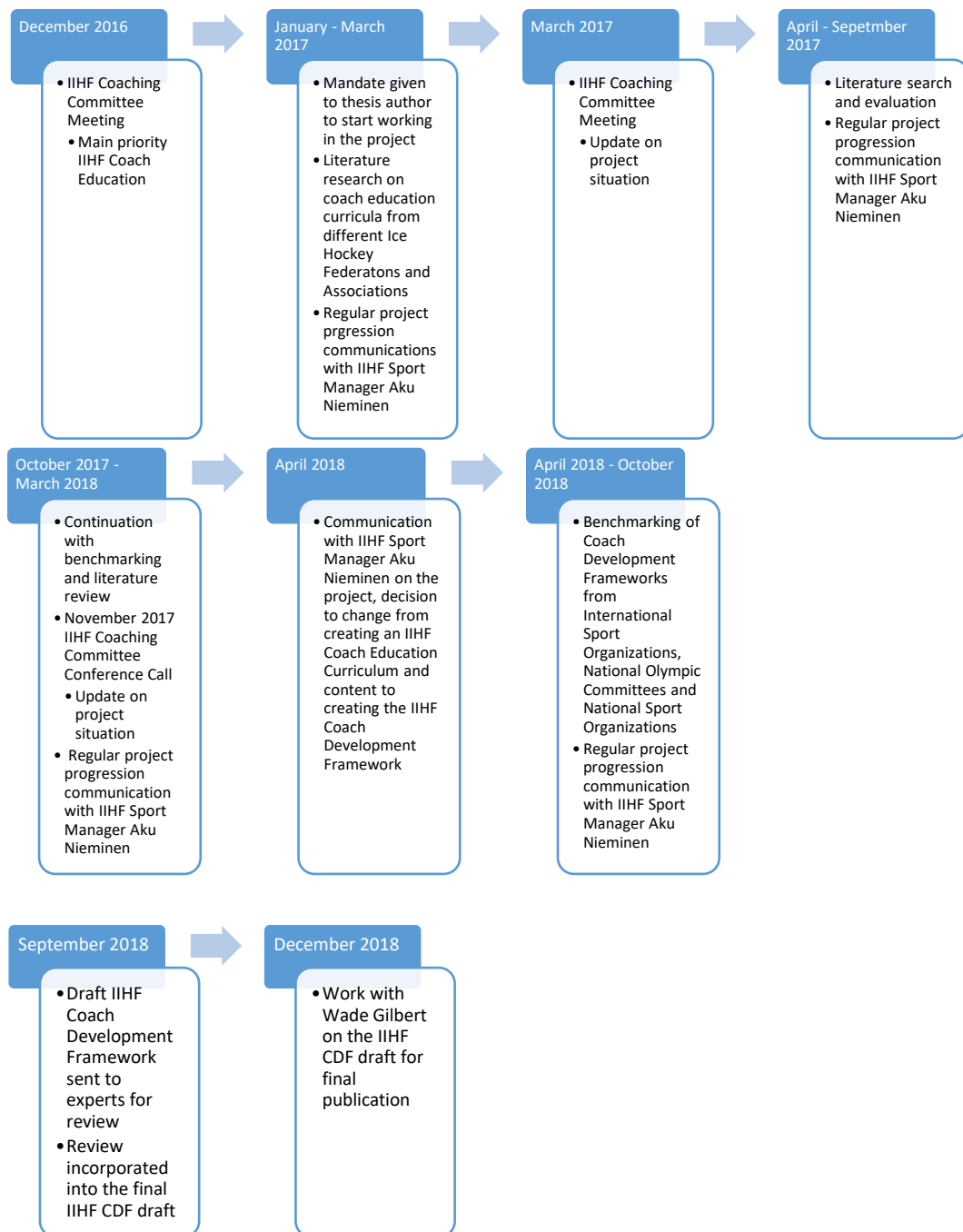


Figure. 10 Outlines the project steps of the IIHF PDG development and thesis process



The main steps during the IIHF CDF development were literature review and benchmarking, meetings and discussions with the thesis supervisor as well as with the IIHF Sport Manager Aku Nieminen. These discussions and meetings supported the structural and content development of both, the IIHF CDF as well as the thesis.

Main outcome of the discussions were the name changes of the IIHF Coach Education Framework to IIHF Coach Development Framework, focusing on creating a framework instead of curriculum content, benchmarking of coach development frameworks instead of focusing on coach education structures of MNAs, and finally, to base the IIHF CDF on the IIHF PDG.

The IIHF expert group, which reviewed the IIHF CDF, provided the thesis author with valuable feedback and comments on the IIHF CDF.

Main comments and feedback were given on the well-selected topics of athlete-centred coaching, personal and professional development, core competencies and coaches' well-being. Suggestions were made to incorporate more figures and tables, as well as highlight key concepts and ideas in the text to improve the visual appearance of the IIHF CDF.

All comments and suggestions were gladly incorporated into the document by the thesis author because it helped with improving the structure and visual appearance of the document, as well as improving the logical order of the chapters in the document.

The outcome of the here presented project steps is the thesis and the IIHF CDF. The IIHF CDF is in its entirety presented in appendix 2 to this thesis. As has been noted before, the IIHF CDF is presented as a draft version, because the final review and layout will be determined by the IIHF at a date, which is set for after the thesis submission.

## **11 Project result: IIHF Coach Development Framework**

The previous chapters in this thesis covered the background and aim, reasoning, process steps, and literature review for the development of the IIHF Coach Development Framework (IIHF CDF).

The full IIHF CDF is presented in appendix 2, in its draft version. The final content review and layout will be subject to the IIHF Coaching Committee in cooperation with Wade Gilbert.

The aim of the IIHF CDF is to function as a set of guidelines and best principles for IIHF Member National Associations (MNA), as well as for sport institutes, education institutions, coaches, administrators, and others within ice hockey in the countries around the world, when developing coach development systems/programmes and coaching curricula or improving existing systems.

This aim is in full accordance with the IIHF Statutes and Bylaws 2018-2022, which define the role of the IIHF to support development of ice hockey within each MNA by providing resources and materials (IIHF Statutes and Bylaws 2018-2022).

The development of the IIHF CDF was informed through in-depth review and benchmarking of peer-reviewed journal articles on coach education, coach development and sport coaching, as well as benchmarking of international sport coaching frameworks (non-sport specific) and of sport-specific frameworks. The outcome is the IIHF CDF in appendix 2. It presents a concise document, which can be applied in its entirety or in parts. The IIHF CDF promotes the values of passion, commitment, knowledge, integrity and striving for excellency. It encourages furthermore athlete-centred coaching, ethical decision-making, lifelong learning and development of coaches, as well as the constant strive towards quality in coaching.

The IIHF CDF recognizes the changes that have occurred in the coaching profession in recent years and acknowledges these with guiding principles in the IIHF CDF, such as holistic player development, utilization of devices to gather information on player performance, lifelong learning of the coach, and well-being of coaches. It further follows suit the recommendations given by sport coaching frameworks to align the coach development pathway to the player development pathway, to ascertain that coaches will be equipped with the knowledge and capabilities needed for the coaching category and domain they are working in.

Another key aspect of the IIHF CDF is that it recognizes the composition of the coaching workforce, and provides suggestions how to best handle this within a coach development system/programme.

Other key elements of the IIHF CDF are the promotion of anti-doping, integrity, fair play and the establishment of a Code of Conduct for Coaches.

Further provides the IIHF CDF recommendations for the establishment of coach development programmes, delivery methods of the curriculum, the need for certification and re-certification as well as the important notion of practical assessment, to minimize theoretical knowledge assessment through written exams, which are unconnected to the practical working environment of a coach.

The IIHF CDF also aims at being a valuable document for MNA's when negotiating the professional status of the coach profession within their nation with Ministries of Education and educational institutions.

## 12 Discussion

The here presented development project looked into international sport coaching frameworks and national sport governing body sport frameworks.

Chapter 9 highlighted the similarities between the frameworks and the scientific literature on coach development with the result, that despite some differences in terminology the frameworks as well as the literature are supporting the presented views on athlete-centred coaching, lifelong learning of the coach and coach development.

With this strong support for athlete-centred coaching, lifelong learning and coach development across different sports as well as across national borders, the IIHF CDF follows suit and picks the notions of effective and quality coaching through application of athlete-centred coaching and lifelong learning up.

Key aspects of the IIHF CDF are athlete-centred coaching, lifelong learning and coach development, emphasizing the key competencies of coaches within the professional, intrapersonal and interpersonal knowledge domains.

The aspect of coaches' well-being was only presented in the USOC QCF, although a vast body of literature deals with the negative health effects that coaching has for coaches, these include stress, burnout, depression, loss of motivation, frustration and many other negative emotions and effects. Because coaches can only be effective and provide quality practices when they are themselves healthy, motivated, resilient, vital and feel enjoyment in what they do, the coaches' well-being was picked up by the IIHF CDF to promote it as a key aspect within coach development.

Compared to other frameworks, the IIHF CDF puts some more emphasize on Anti-Doping, Integrity and Match-fixing, as well as Fair Play and Respect because especially match-fixing is becoming bigger in ice hockey due to a growing global betting market. It is the aim of the IIHF CDF to inform the MNA's and the coaches of their responsibilities with anti-doping education and guidance of their players concerning integrity and match-fixing, as well as highlighting the notion of fair play and respect, to create a hockey culture where values and ethical decision making are part of the game.

The IIHF CDF does not include a chapter on coach certification or recognition, unlike for example the ISCF (2013, 43) because the coach development programmes/systems within each MNA is unique and is based on the coach education history, traditions and practices as well as usually informed by the Ministries of Education and Sport or other sport and education governing bodies. Hence, the IIHF CDF encourages each MNA to develop a coach certification and recognition system, which will fit their own coach development programme/system.

Feedback from the IIHF expert group on the IIHF CDF was very positive and suggestions mainly focused on the structure of the final document as well as on compressing some of the text into shorter paragraphs as well as supporting the text with more tables and figures. The feedback and comments were incorporated into the final IIHF CDF (see Appendix 2) and certainly improved the readability and logical order of the final document.

The project steps as presented in chapter 10 followed a logical pattern in order for the thesis author to establish a sound knowledge base on coach education, coach development, coach core competencies, quality and effective coaching, as well as coaches' knowledge domains. Without the extensive literature review and benchmarking process, the final IIHF CDF would not cover all the necessary and important areas for coach development, and would not fulfil its aim, which is to function as a guideline to inform coach development programmes/systems on quality and effective coaching.

Another person or workgroup might have selected a different approach to the project, maybe through contacting individual MNA's on their perceived needs within coach development. These perceived needs would then be used as the starting point in creating an IIHF CDF, however, this kind of approach would make it necessary that the MNA's would invest time and effort in for example answering an online survey on what their needs within coach development are and what kind of materials they need. This might potentially be a very time consuming approach. Furthermore, would each MNA define different needs and this would make it very difficult to create one concise document, which could be applied by all.

The approach, for writing of the thesis and the IIHF CDF, selected by the thesis author on the other hand didn't make it necessary to contact individual MNA's and hence was not restricted in schedule by external factors.

The main aim of the IIHF CDF is to function as a guideline for MNA's when developing their coach development programmes/systems, hence it should not be too detailed or too much focused on the needs of single MNA's but be vague enough so that it can be applied and used in many different situations and circumstances.

Of course, it is impossible to say, how many MNA's of the IIHF will utilize the IIHF CDF, or to what extent it will be applied within each MNA's coach development programme/system. But, it is to be expected that if it is important to MNA's to develop coaches who are effective and will provide quality coaching sessions, that most of the IIHF CDF will be integrated into their coach development programme/system.

To promote the IIHF CDF and to inform the MNA's and the hockey world of its existence, the following steps have been selected:

- Official launch of the IIHF CDF during the annual IIHF Coaching Symposium in connection with the IIHF Men's World Championships in Bratislava, Slovakia, in May 2019.
- The thesis author was also invited to present her findings at the coaching symposium in Espoo, Finland, in connection with the IIHF Women's World Championships in April 2019.
- Free access to the IIHF CDF on IIHF.com
- Key document for the IIHF Coach Developer Programme, which will be launched during July 2019. The IIHF Coach Developer Programme develops coaches from MNA's to develop coaches within their own MNA's.

## 13 Conclusions

The here presented thesis together with the IIHF CDF (the product) presents a thorough analysis and review on the current state of coach development around the world. The information presented in this thesis is the base of the IIHF CDF. It would have not been possible to create the product, the IIHF CDF, without a clearly defined aim.

The IIHF CDF will function as a guiding tool for IIHF MNA's in the development and improvement of coach development systems/programmes, particularly with regards to athlete-centred coaching, lifelong learning and providing effective coaching.

Due to the fact, that coaching is seen as a blended profession, it is suggested that MNAs, coach developers, sport institutions and other involved in the development of coaches emphasize the development of not just part-time paid coaches and full-time paid coaches, but that also rich development opportunities exist for volunteer coaches. These development opportunities need to be easily accessible, low in cost, support the interest and motivation of the volunteer coaches to garner this incredible work-force who are most likely working with children and beginners in ice hockey. They are the ones providing the first positive experiences within the sport and are influencing a broad base of players whether to develop a lifelong love for the sport or to drop out.

These changed demands on coaches must be reflected in a modern coach development curriculum, which reflects not just the needs and the knowledge requirements of coaches working in the participatory sector but also in the performance and high-performance sector.

To conclude, coach development should incorporate the following propositions:

- Have an athlete-centred orientation
- Support lifelong learning and development of the coach
- Be aligned to the player development pathway
- Define the core competencies and capabilities of the coach
- Interpersonal, intrapersonal and professional knowledge (essential coaching knowledge) takes up a key position within coach development
- That coach development is based on strong values
- That coaches are required to develop their own coaching philosophy
- The coaching roles and responsibilities are defined
- The learning styles of the coaches are considered in the curriculum
- Anti-doping, integrity, respect and fair play are central values
- The various coaching environments are considered
- Support the recognition of coaching as a profession
- Promotion of coaches' well-being
- Practical assessment over theoretical knowledge reproduction in written exams
- That effective and quality coaching principles guide each coaching practice

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# Appendices

## Appendix 1 Poster ICCE GCE 2015

# Developing a Coach Education Framework for the International Ice Hockey Federation

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### Key-objectives

Key-objectives in establishing the Coach Education Framework for the International Ice Hockey Federation (IIHF) were to develop a framework which would cater to the needs of both target groups, coaches and athletes, as well as serve as a guideline and base for IIHF Member National Associations to develop their own coach education program.

- Competence-based coach education framework
- Engage in personal and professional development through life-long learning and long-term development of the coach
- Athletes needs-based/athlete-centred
- Guidelines for IIHF Member National Associations to develop own coach education program
- Development of an online e-learning resource, a tool-box and an evaluation tool
- Guidelines for establishing a national certification/license program

### Core Competencies

The core competencies were selected with the athletes/participants needs in mind, to equip the coach with proficient knowledge and expertise to establish an athlete/participant-centred coaching environment and at the same time support and engage the coach in life-long personal & professional development (long-term development).

- The core competencies are:
- Personal and Professional Development
  - Leading
  - Developing Vision
  - Building the Environment
  - Human Relation Skills
  - Critical Thinking
  - Problem Solving

### Coaching Levels

Four main coaching levels were determined:

- Coaching Orientation
- Coaching Assistant
- Coach
- Advanced Coach
- Master Coach

### Coaching Domains

- Three coaching domains (streams) were determined which represent the working environments of an ice hockey coach.
- The initiation stream (recruitment) is targeted at mainly children and youth, but also to adults, to discover the sport of ice hockey.
  - The sustaining participation stream is targeted at engaging the participants in worth while ice hockey practices to prevent drop-out.
  - The performance stream develops athletes from performance athletes into high performance athletes focusing on their developmental needs.
  - The specialization stream supports the continuous development of coaches and team related personnel.

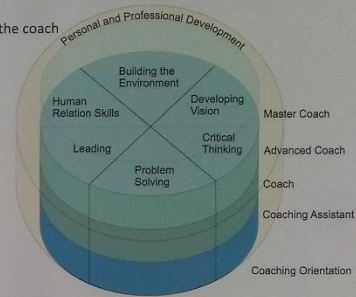


Fig. 1 Cake model for Core Competencies and Coaching Levels

### Outcome

The Coach EDU framework is outlaying the coaching levels (expertise) from the Coaching Orientation to the Master Coach level (Coaching Orientation; Coaching Assistant; Coach; Advanced Coach; Master Coach) in the different coaching domains (Participation Stream; Performance Stream; Specialization Stream). In each coaching level each coach has to develop and improve the seven defined core competencies. The core competencies were selected on the basis that each coach will have proficient knowledge to coach in his/her selected domain and to engage in personal and professional development through life-long learning. The core competencies were also selected on the basis that coaches will have the possibility to move vertically and horizontally through the domains. The core competencies are the same for all the coaching levels and for all domains but the duties and the depth of involvement depends on the level of coaching (Coaching Orientation to Master Coach).

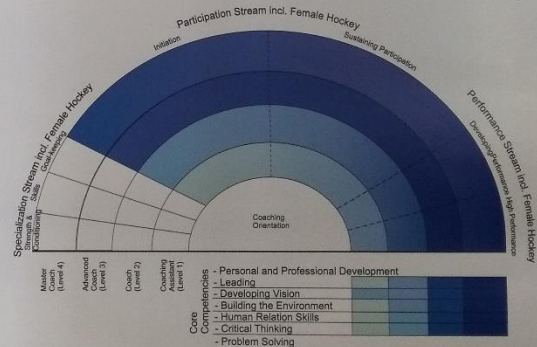


Fig. 2 Fan-model displaying the Coaching Levels, Coaching Domains and the Core Competencies for ice hockey coaches



## Appendix 2 IIHF CDF

International Ice Hockey Federation

# Coach Development Framework

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# 1. Introduction

The International Ice Hockey Federation (IIHF) is providing with these guidelines on coach development, a framework, which will provide coaches, administrators, educators and others within the sport and sport education environment with best principles for developing coaching expertise as well as development materials, courses and education/development opportunities.

The recently published IIHF Player Development Guide (IIHF PDG) is one such coach development tool which provides coaches and persons interested in becoming a coach with examples, knowledge and ideas for best principles and for practice sessions, developing their players with fun and engaging training sessions, based on the developmental stage of the players..

Additional resources for quality coaching and coach development will be made periodically accessible on [www.iihf.com](http://www.iihf.com).



The objective of the IIHF Coach Development Framework (IIHF CDF) is to:

- Provide best principles for Coach Development Programs
- Function as a guideline for Member National Associations (MNA) when developing their own Coach Development Programs
- Function as a guideline for improvement of existing Coach Development Programs
- Offer guidance on developing certification and re-certification standards
- To support the integration of the Coach Development Programs of each MNA into their respective National Qualification Frameworks
- Support the development in each MNA to recognize coaching as a full profession

The IIHF CDF recognizes that each MNA is faced with a very unique set of challenges in their coach development ranging from recruitment to developing coaches from the grassroots level to the high performance level, from recreational players to high-performance players.

Hence, the IIHF CDF seeks to provide the MNA's with suggestions on how to develop and create their own coach development programs to cater to the needs of their coaches.

The IIHF CDF will provide MNA's with best principles, which will help in the creation of coach development programs, which will be grounded on the principles of athlete-centred coaching, lifelong learning, using good principles and providing quality training sessions.

Creating coach development programs, which are grounded on the following principles:

- **Athlete-centred coaching**
- **Lifelong learning**
- **Using best principles**
- **Providing quality training sessions**

## 1.2 Role of the IIHF within Coach Development

As stated in the IIHF Statutes and Bylaws the objectives of the IIHF are to govern, develop and promote it (ice hockey) [...] throughout the world <sup>[1]</sup>. Furthermore makes the IIHF the necessary efforts to develop young players, as well as support the development of coaches and game officials. Through these Statutes and Bylaws the IIHF has the mandate to support its MNA's in their work and effort in developing ice hockey within their nation. However, the IIHF does not as an entity develop ice hockey in a specific MNA but provides, produces and distributes materials, resources and tools for all MNA's to support ice hockey development, player recruitment and coach development within each MNA.

## 1.2 Role of the Member National Associations

Each MNA is responsible for developing their own player development programs, as well as coach and game official programs, including certification and re-certification as well as assessment or accreditations.

With the Coach Development Framework (CDF) the IIHF provides its Member National Associations (MNA) with a guide to develop their own coaches using best principles.

**Better coaches will provide better training sessions, which will develop the players to reach their full potential and will instill in them a love for the sport and a lifelong quest for improvement and physical activity.**

## 2. Vision, Values and Guiding Principles

The IIHF CDF endorses the following vision, values, guiding principles and coaching philosophy and urges all MNA's to do so too.

### 2.1 Vision

Effective coaches providing excellent coaching will develop each player in ice hockey to the best of their abilities.

### 2.2 Values

- Passion
- Commitment
- Knowledge
- Integrity
- Strive for excellency



## 2.3 Guiding Principles

Guiding principles of the IIHF CDF are:

- Promoting life-long learning and continuous development principles not just for the coach but also for all players within ice hockey.
- To provide players in ice hockey with a safe and fun development environment which is provided through excellent and effective coaches.
- Coaches are applying athlete-centred coaching principles in every practice and cater to the different needs of their players.
- Fair Play, Sports Integrity and Ethical Coaching are part of every training session and competition.

## 2.4 Coaching Philosophy

Coaches are urged to develop their own coaching philosophy, which should be firmly anchored in their values and beliefs, and it should incorporate and reflect the values and guiding principles of the IIHF CDF. A coaching philosophy is on one hand the definition or the reasons of a coach to make the conscious decision to be a coach as well as the coaches core values, the reasoning for how things are done and decisions made.

**The coaching philosophy should reflect the following principles:**

- **Athlete-centred coaching**
- **Sport-specific knowledge**
- **Ethical Decision Making**
- **Coaching context**
- **Lifelong learning and development of the coach**
- **Player Development Guide and other performance models**

### 3. Coaching Knowledge and Competence

Today's coaches fulfill a number of different roles, not just providing the players with technical and tactical knowledge of the sport, but also being in a position to develop each player holistically as a person in the society outside of the sport. Coaches function as educators, leaders, listeners, mentors, administrators, communicators, supporters, guides, mentors and in many other roles <sup>[2]</sup>.

In order for coaches to be able to fulfill their role as a coach they need to possess coaching competencies and have essential coaching knowledge.



## 3.1 Core Competencies

The following core competencies have been endorsed by multiple institutions around the world.

### **The core competencies are:**

- **Personal and Professional Development**
- **Set the vision and strategy**
- **Shape the environment**
- **Build relationships**
- **Conduct practices and prepare for and manage competitions**
- **Read and react to the field**
- **Learn and reflect**

Many aspects of the core competencies can be found in more than one core competency, e.g. communication skills are an important aspect of building relationships, conducting practices, learning and reflecting as well as setting the vision and strategy. Personal and Professional Development as a coach and as a human being is of such high importance that through adding it as a seventh core competence extra emphasize is placed on it. Without the quest for continuous personal and professional development, also termed Kaizen <sup>[3]</sup>, development within the sport would not occur. Table 3.1. shows the core competencies (also termed primary functions) with their extended description <sup>[2]</sup>.



Tabel 3.1. Core competencies of coaches <sup>[2]</sup>

<b>Set the vision and strategy</b>	The coach creates a vision and strategy based on the needs and stages of development of the athletes and the organizational and social context of the programme.
<b>Shape the environment</b>	The coach recruits and contracts to work with a group of athletes and takes responsibility for setting out plans for specified periods. The coach also seeks to maximize the environment in which the programme occurs through personnel, facilities, resources, working practices and management of other coaches and support personnel.
<b>Build relationships</b>	The coach builds positive relationships with athletes and others associated with the programme, including personnel at the club, school, federation and other levels. The coach is responsible for engaging in, contributing to and influencing the organizational context through the creation of respectful working relationships.
<b>Conduct practices and prepare for and manage competitions</b>	The coach organizes suitable and challenging practices using effective techniques (e.g., practice design, demonstration, observation, feedback) to promote learning and improvement. The coach prepares for targeted competitions and also oversees and manages the athletes in these competitions.
<b>Read and react to the field</b>	The coach observes and responds to events appropriately, including all on- and off-field matters. Effective decision-making is essential to fulfilling this function and should be developed in all stages of coach development.
<b>Learn and reflect</b>	The coach evaluates the programme as a whole as well as each practice and competition. Evaluation and reflection underpin a process of ongoing learning and professional development. The coach also supports efforts to educate and develop other coaches.

Printing permission from Human Kinetics for table 3.1. from the ISCF pending

## 3.2 Essential Coaching Knowledge

In order for the coach to be able to develop players holistically, the coach needs to possess what is called essential coaching knowledge<sup>[4]</sup>. This essential coaching knowledge consists of professional knowledge, interpersonal knowledge and intrapersonal knowledge<sup>[4, 5]</sup>, see figure 3.1. This essential coaching knowledge is developed over time, through experience as an athlete and a coach, by participating in organized coach education opportunities, through exchange and discussion with other coaches, through observation and emulation of expert coaches, through reading books and publications, listening to podcasts or watching videos, to name but a few ways.

An integral part of the essential coaching knowledge are the values and the coaching philosophy of each coach and their respective goals, which will determine the actions a coach takes<sup>[2]</sup>. Values, philosophy and the goals function as the cement that holds professional knowledge, interpersonal knowledge and intrapersonal knowledge together and influences how a coach acts, reacts and behaves in situations.

The development path from a novice coach to a master/head coach is long and takes time.

Effective coaches are characterized as coaches who are true to their coaching philosophy with an athlete-centred coaching approach as the integral part of it<sup>[4, 6]</sup>. Effective coaches anchor their decisions in their Coaching Philosophy, which is firmly grounded in their ethical believe system and their values<sup>[7]</sup>. With a well-defined Coaching Philosophy which reflects the ethical principles and values a coach believes in, and which has athlete-centred coaching at its core, coaches are better equipped to deal with challenging situations within the team and sporting environment because their Coaching Philosophy and their value system will support them in making the right decision.

## Professional Knowledge

Very often also termed the 'how to coach' knowledge, consisting of technical and tactical knowledge on the sport, as well as sport related knowledge on sport science such as physiology and sport psychology <sup>[2, 5]</sup>.

## Interpersonal Knowledge

Interpersonal knowledge is defined as the ability of a coach to make connections with the players, other coaching staff members, persons involved in the sporting environment and to have regular interactions with all of the listed. It includes effective communication and the building of relationships with all involved in the sporting context <sup>[2, 5, 8]</sup>.

## Intrapersonal Knowledge

Intrapersonal knowledge is defined as the ability of a coach to self-reflect, be true to one's own coaching philosophy, values and ethical principles, and to strive for lifelong learning <sup>[2, 5, 9]</sup>.

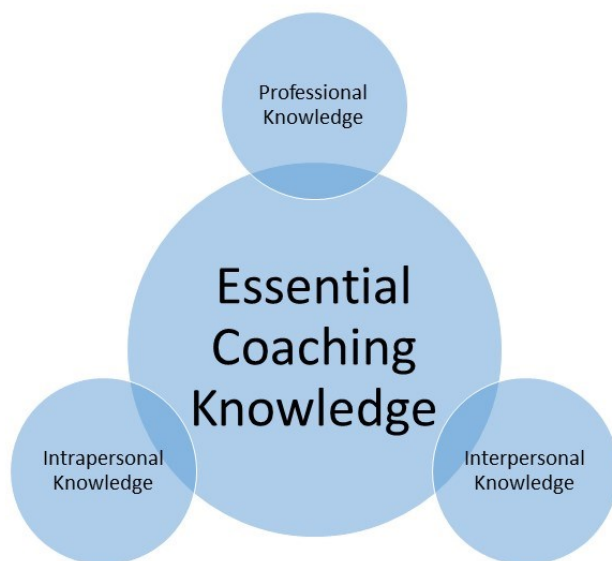


Fig. 3.1 Essential coaching knowledge consists of professional , interpersonal and intrapersonal knowledge

## Athlete-centred Coaching

An athlete-centred coaching philosophy has the needs of the player at its core. Figure 3.2 depicts what an athlete-centred coach does. When a coach applies the athlete-centred coaching philosophy key consideration is how to best develop the player meeting the needs of each individual. <sup>[6]</sup>

In order for a coach to be able to develop each player to the best of their capabilities the coach is required to apply the principles of lifelong learning and development to their own development path as a coach in order to keep in pace with the

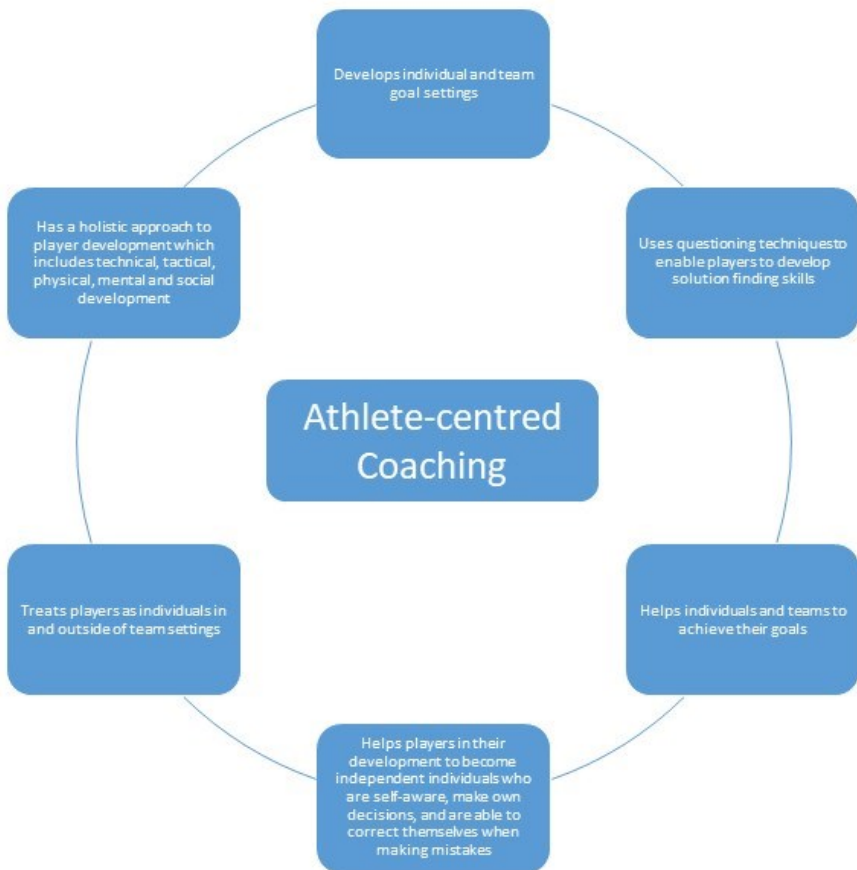


Fig. 3.2 Depicts aspects of athlete-centred coaching <sup>[10]</sup>

developmental needs of the player. <sup>[2, 6]</sup>

The 4C's model is a cornerstone of athlete-centred coaching <sup>[2, 4, 5]</sup>. When a coach consistently applies essential coaching knowledge (professional, interpersonal and intrapersonal) during their work with their players, players will develop competence, confidence, connection, and character <sup>[2]</sup>.

**Competence: developing a person who is competent on and off the field of play**

**Confidence: developing a person that is confident in all areas of life, and is able to cope with difficult situations**

**Connection: developing a person who is able to build strong connections with people inside and outside of the sport**

**Character: developing a person who possess strong values and ethical thinking, and who shows character in difficult situations**

## 4. Coaching Context

Coaching is an ever evolving professional area. Coaches need to possess an understanding of their players needs, keep up to date on the development of the game and its rules, have competencies and essential coaching knowledge to work within different environments and integrate their key responsibilities into their daily coaching practice.

The coaches come from various backgrounds and have a multitude of different reasons to be involved in coaching. This might lead to discrepancies in the time and effort these coaches are able and willing to put into their own development, however, through recognizing their needs and giving them the support that they need, every coach has the possibility to develop and provide effective coaching sessions.



## 4.1 The Coaching Force

The coaching force in most MNA's probably consists of a blend of unpaid volunteer coaches, part-time paid coaches and full-time paid coaches (see Fig. 4.1), termed blended professional area <sup>[9, 11]</sup>. This unique blend of coaches with different commitments towards coaching and self-development will prove to be a challenge for the development and execution of a Coach Development Programme. But through careful assessment and evaluation when mapping out the players of the sport and their needs, the composition of the coaching workforce and their competencies can be well-defined, which will then support the development of a well-designed Coach Development Programme, which will provide the coaches with the capabilities needed to work successfully with the players <sup>[7]</sup>.



Fig. 4.1 The coaching work-force, a blended professional area <sup>[9]</sup>

## 4.2 Coaching Environments

Broadly speaking coaching environments can be divided into two main streams, a participation-oriented stream and a performance-oriented stream <sup>[11]</sup>. These two streams can then be further divided into three sub-categories (see Fig 4.2).

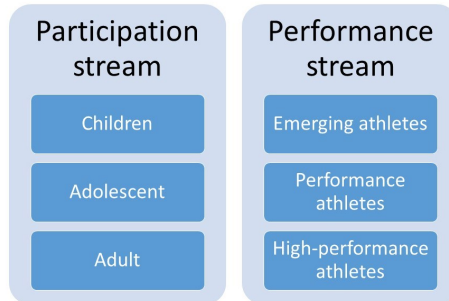


Fig. 4.2 Depicts the participation and performance streams with the player categories in each stream <sup>[9]</sup>

Of which the participation-oriented stream can further be sub-divided into beginner and participation, (see figure 4.3), in which start and stay phase belong to the participation-oriented stream, and the stay and succeed stream belong to the performance-oriented stream <sup>[11]</sup>.

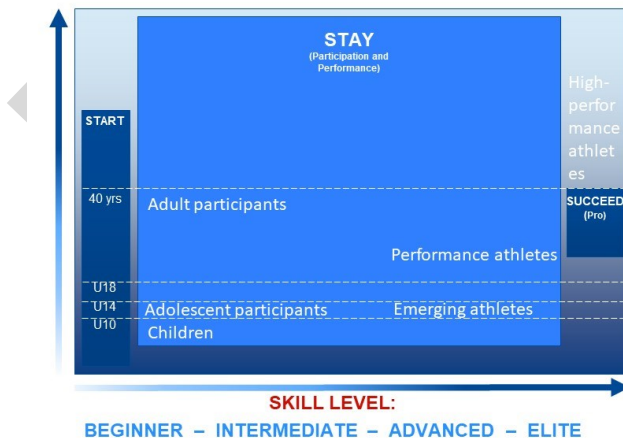


Fig. 4.3 Shows the participation and performance streams in relation to the IIFH Player Development Guide (courtesy of Aku Nieminen, ppt presentation)



## 4.3 Coaching roles

Due to large differences from one country to the next in terminology used for coaches, or set-up of the Coach Development Programmes, with a large influence on the structure of the Coach Development Programme by the State and National Governing Bodies, institutes of higher education, coach education institutions and agency awards, it will be limiting to suggest a fixed terminology.

Suggestions are <sup>[2]</sup>:

- **Coaching Assistant**
- **Coach**
- **Advanced/Senior Coach**
- **Master/Head Coach**

The term Assistant Coach applies to coaches of any development stage who are assisting a coach during practices and games who is on a higher developmental stage/expertise stage. The term Coaching Assistant on the other hand refers to the developmental stage of the coach itself. So a coach who has the capabilities of a Coaching Assistant can be an Assistant Coach for a Coach or an Advanced Coach <sup>[2]</sup>.

The term Expert Coach could be applied to coaches who have accumulated vast experience and knowledge over the course of their coaching career but choose to stay for example within the Stay environment of the IIHF PDG although they might seem overqualified for the position. These expert coaches can function as mentor coaches for less experienced coaches in the Stay environment and support their development. <sup>[2]</sup>

## 5. The IIHF Player Development Guide

The IIHF PDG, similar to other Long-term Player or Athlete Development guides, informs coaches, players, parents, administrators and others involved within ice hockey concisely on topics around on-ice and off-ice skill development, as well as personal development.

With the three phases of the PDG (Start – Stay – Succeed) coaches with different sets of key coaching skills are needed in order to be an effective coach at each of the developmental stages of the players.



As is described in the IIHF Player Development Guide (IIHF PDG) (see Fig. 5.1), players can follow different pathways throughout their participation within ice hockey.

The starting age of a player might range from 4 years to late adulthood, within the stay domain players might shift back and forth within participation and performance, depending on their capabilities, effort invested and development.

Only a marginal number of players will reach the Succeed pathway and will participate in high-level national, international and Olympic competitions or reach the professional level.

After their successful career as a high performance athlete, they might return into the stay domain to continue playing hockey on a less competitive level or make a change within their career path to another position within sports, such as coaching, managing or other sport-related tasks.



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Fig. 5.1 Displays the different possible player pathways within ice hockey (courtesy of Aku Nieminen, ppt presentation)

## Start

In the Start Phase players in ice hockey are beginners, independent of their starting age. The task of the coach is to provide a nurturing and supportive environment where the players can make positive experiences while trying out ice hockey for the first time. For young beginners this means to provide them with Fundamental Movement Skills (FMS) and to develop physical literacy. For older beginners this starting phase might also include FMS, but will properly advance much faster towards sport-specific skills due to an already existing general movement skill ability.

## Stay

The Stay Phase includes intermediate and advanced development and skills levels of the players. This phase concentrates on ice hockey specific skill development for participation and performance in competitive environments. This phase includes players who want to play ice hockey just for fun, to have social interaction, participate in sport as part of an active and healthy lifestyle or to have positive experiences, as well as players who have the determination to eventually compete on a high level and want to reach the Succeed Phase.

Hence many different coach types are needed for this Stay Phase. Coaches who support and develop players for lifelong participation in ice hockey, as well as coaches who enable players to reach their full potential and provide them with the competitive environment and development needed to reach the Succeed Phase.

## Succeed

Only very few players reach this phase. In this phase players compete on the professional and highest international level and in the Olympics. The requirements for and of coaches in this phase is considerably different when compared to the requirements of coaches in the Start or Stay Phase. In this highest level of player performance, the tasks of a coach are to guide, lead, manage and mentor the players during their quest to achieve expert level and but still providing fun and engaging practice environments.

## 6. Anti-Doping, Integrity and Fair Play

One of the key responsibilities of coaches is to provide the players with a safe playing environment. This includes considering safety issues prior to the training, as well as providing a drug-free training environment where fair play and respect are lived values.

The IIHF promotes anti-doping, integrity and fair play throughout their work at international events and camps.



## 6.1 Anti-Doping

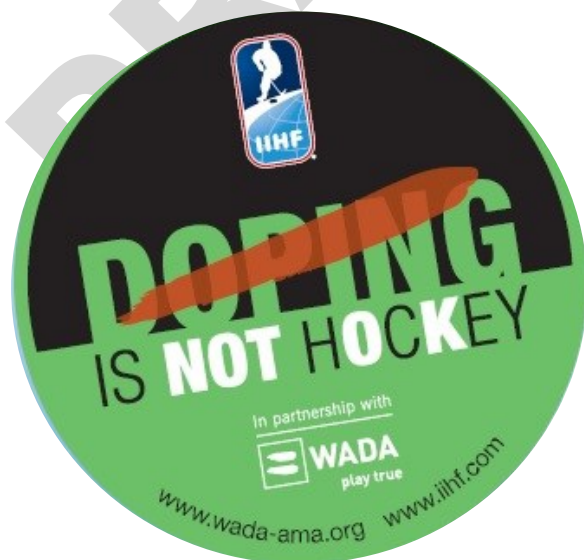
The IIHF works together, cooperates and has the mandate by the International Olympic Committee (IOC) to comply to the Anti-Doping rules (the Code) as set by World Anti-Doping Agency (WADA) to promote them to its MNA's, educate its MNA's and coaches on the rules and regulations.

### The Green Puck Campaign

The IIHF has developed the Green Puck Campaign and co-operates with the World Anti-Doping Agency (WADA), as a signatory to The Code, in the fight for a clean sport <sup>[12]</sup>.

The Green Puck Campaign aims at creating awareness about the risks of doping for the players life, as well as promoting clean sport for the true spirit of the sport. The IIHF rejects any use of doping, drugs, possession of prohibited substances and prohibited methods.

Furthermore, coaches are encouraged to promote the online learning by WADA for players, ALPHA on ADeL, to promote understanding of doping, its consequences on their life, negative effects of doping to body, mind and potential ineligibility to compete in their sport for the rest of their life.



## 6.2 Integrity and Code of Conduct

The IIHF promotes integrity in the game of ice hockey through education events and information sessions at World Championships, Youth Olympic Games, the IIHF Hockey Development Camp and the IIHF High Performance Camp, and the annual IIHF Coaching Symposium to coaches, team staff and players alike.

Through these lectures and workshops the IIHF aims at increasing the awareness and knowledge of coaches, players and team staff on competition manipulation, match-fixing, corruption, betting and the sanctions that are applied in case of a violation.

The IIHF Code of Conduct also called “The Code” states in 5 rules the conduct that should be applied by all persons involved in ice hockey<sup>[13]</sup>.

The preamble of the Code states the following<sup>[13]</sup>:

*This Code shall apply to conduct that damages the integrity and reputation of ice/inline hockey and in particular to illegal, immoral and unethical behavior.*

Sanctions that coaches, team staff and players can face, if they violate a rule can range from a warning to a lifetime ban.



## 6.3 Fair Play

Fundamental values for coaching, sport and everyday life are united under the term Fair Play<sup>[14]</sup>. Fair Play is an attitude, which is shown through sportspersonship behavior on and off the field of play.

The IIHF promotes Fair Play within the game of ice hockey and educates all coaches, team staff and players on Fair Play.

### **Fundamental values of Fair Play are<sup>[15]</sup>:**

- **Respect**
- **Friendship**
- **Team spirit**
- **Equality**
- **Sport without doping**
- **Integrity**
- **Solidarity**
- **Tolerance**
- **Care**
- **Excellence**
- **Joy**

Coaches, who are promoting in their coaching sessions and within their work with players and teams Fair Play, show a high level of integrity and are advancing the spirit of the game. Fair Play is an attitude, which is shown through the behavior of coaches, team staff and players' on and off the field of play alike.



## 6.4 IIHF Principles

Principles within ice hockey, which the IIHF promotes, are:

- **Fair Play**
- **Clean Sport**
- **Hockey for All**
- **Practices that are based on the developmental stage of the players**
- **Training which is based on Fundamental Movement Skills in the Start Phase and multi-sport participation**
- **Fun and challenging practices always taking the needs of the players into account**
- **Well-developed coaches for all players**

## 7. Coaches Well-being

It is a sad fact, that although coaches are concerned with the physical and mental well-being of their players, they usually neglect their own well-being. The coaching profession causes long working hours, travels to away games and competitions, little time for proper meals, own physical activity or rest and recovery, as well as sufficient time to spend with family and friends. Furthermore, job security is very often lacking for coaches, who are very often employed on short-term contracts, which depend all too often on the win-record of the team. Constant stress, sleep deprivation, poor nutrition, and lacking recovery or rest time has a negative effect on coaches. But it is as important for the coach to take care of their own well-being as being concerned with the well-being of their players, in order for them to be a quality coach. A stressed and burned-out coach will not be able to support their players' development properly <sup>[4]</sup>.



Common stressors coaches experience are:

Table 7.1 List of common stressors

Organizational Stressors	Competitive Stressors	Personal Stressors
<ul style="list-style-type: none"> <li>• Managerial conflicts</li> <li>• Lack of financial assistance</li> <li>• Role conflict</li> <li>• Administrative duties</li> <li>• Teaching duties</li> <li>• Pressure from organization to produce positive results</li> <li>• Conflicts between staff members</li> <li>• Multiple tasks</li> <li>• Travel</li> <li>• Weekend games</li> <li>• Lack of communication</li> <li>• Expectations from organization</li> </ul>	<ul style="list-style-type: none"> <li>• Managing athletes needs &amp; lives</li> <li>• Professionalism</li> <li>• Selection issues</li> <li>• Recruitment</li> <li>• Unable to control lives of team staff</li> <li>• Negative performance results by athletes</li> <li>• Competition</li> <li>• Athlete injuries</li> <li>• Intrusion of media</li> <li>• Lack of athlete and team discipline</li> <li>• Expectations from athletes, team staff and parents</li> </ul>	<ul style="list-style-type: none"> <li>• Sacrificing personal time</li> <li>• Worrying what others think about them</li> <li>• Overload</li> <li>• Irregular working hours</li> <li>• Not enough time for family or friends</li> <li>• Nonexistent job security</li> <li>• Expectations from family and friends</li> </ul>

The definition of stress is the result of an imbalance between stressors and coping strategies applied by the coach <sup>[16]</sup>, as depicted in figure 7.1.

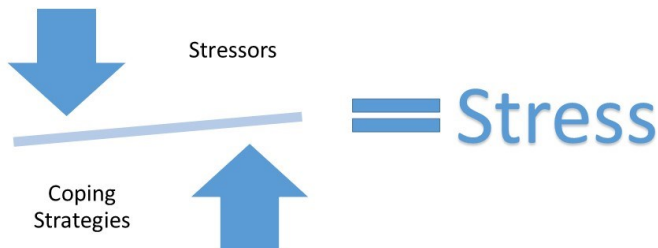


Figure 7.1 Shows stress as the outcome of an imbalance between coping strategies for stress and the stressors

When a coach experiences stress, very often a wide variety of symptoms manifest themselves. The symptoms and the strength and the extend to what they are displayed by a coach vary greatly from coach to coach.

Symptoms of stress are <sup>[6, 17, 18]</sup>:

- **Short tempered**
- **Tenseness**
- **Poor performance**
- **Constant feeling of being tired**
- **Inability to focus**
- **Headaches**
- **Diminished communication**
- **Feeling of being empty**
- **Feeling of being exhausted**
- **Inability to fall asleep**
- **Irritation**
- **Frustration**
- **Fatigue**
- **Low energy**
- **and many others**

To avoid burnout of coaches and extensive health issues which commonly develop together with burnout, coaches need to be aware of the stressors they are subjected to, as well as a series of coping techniques or skills to handle and manage the stress <sup>[6, 18]</sup>.

Possible coping strategies for coaches are <sup>[6, 16, 17, 18, 19]</sup>.

Table 7.2. List of coping strategies for coaches

Personal strategies	Professional strategies	Balance strategies	Communication strategies	Use of time during off-season
<ul style="list-style-type: none"> <li>• Set aside personal time to recharge</li> <li>• Include physical activity in daily schedule               <ul style="list-style-type: none"> <li>• e.g. morning walk, stretching, yoga, running, cycling</li> </ul> </li> <li>• Set aside time to reflect on thoughts and emotions</li> <li>• Meditation</li> <li>• Positive self-talk</li> <li>• Build a support network</li> <li>• Improve sleeping rhythm</li> </ul>	<ul style="list-style-type: none"> <li>• Communication</li> <li>• Problem solving</li> <li>• Management skills</li> <li>• Conflict management</li> <li>• Leadership</li> </ul>	<ul style="list-style-type: none"> <li>• Dedicate time to spend with family and friends</li> <li>• Delegate responsibilities</li> <li>• Prioritize</li> </ul>	<ul style="list-style-type: none"> <li>• Clear guidelines for team and athlete selection protocols</li> <li>• Athlete behavior standards</li> <li>• Athlete conduct</li> <li>• Expectations on coaching staff</li> </ul>	<ul style="list-style-type: none"> <li>• Develop communication plan for non-selection of players</li> <li>• Develop communication plan for removal of athlete from team</li> </ul>

**Learning and applying these coping strategies will help coaches to be more motivated, be less stressed and find the motivation again to coach and develop their players.**

## 8. Coach Development

The previous chapters focused on the types of knowledge a coach needs to possess to be adequately equipped to engage with and develop their players, in the sporting environment and outside of it, as well as the importance of being an athlete-centred coach, who takes the needs and abilities of their players as a priority during the development process. As well as taking care of their own well-being to be able to execute their job to the highest professional standard. The following chapter will focus on how coaches learn, acquire knowledge, transform their knowledge and apply it in their working environment.

The development path of a coach from novice (beginner) coach/coaching assistant with none or only little coaching experience to master/head coach takes a long time [2].



In order for coach development to be effective, it has to meet the needs of the learners, in this case the needs of the coaches <sup>[2]</sup>. Furthermore, it needs to equip the coach with relevant information and knowledge to develop the players in their charge, and provide the coaches with information for their coaching context <sup>[20]</sup>. Expert coaches might hold a formal coach education/development certification degree equivalent to the Master/Head Coach category but do not necessarily do so. Some expert coaches might not have attended a formal coach education/development opportunity within their sports federation targeted at this high level, but have acquired their expertise through informal (e.g. on-the-job learning, watching videos) and non-formal (e.g. coaching symposium) learning situations <sup>[2]</sup>. See figure 8.1 for examples of formal, non-formal and informal learning.

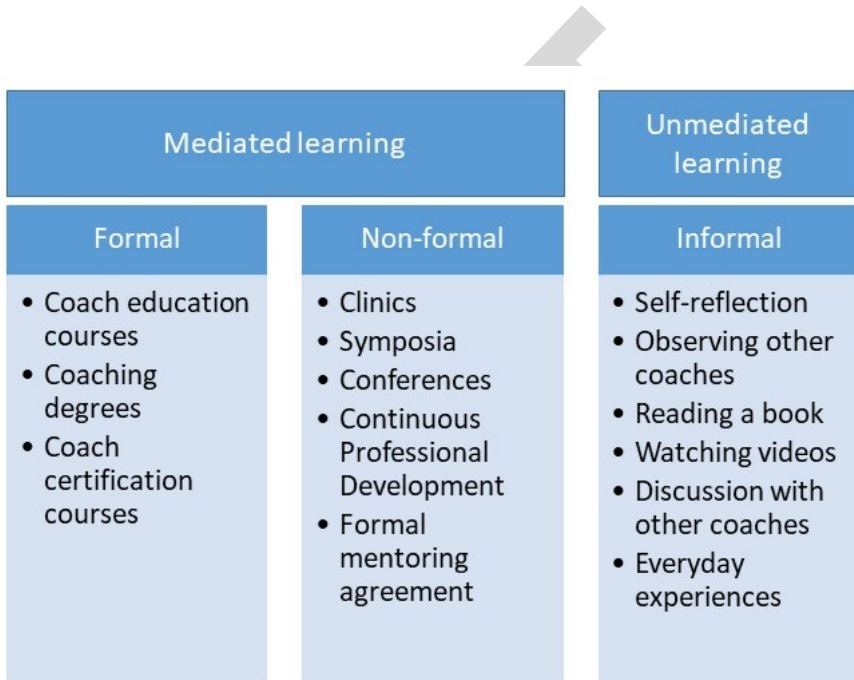


Figure 8.1 Depicts the different learning methods applied by coaches during their development process <sup>[2]</sup>

Coaches develop their coaching expertise over a long period through application of a combination of different learning methods. Examples of preferred learning methods of coaches are:

- Mentoring by an expert coach
- Peer-and self-assessment
- Reflection
- Practical work-experiences
- On-the-job training
- Practical assessment
- Evaluation and feedback

This is not to say that formal coaching degrees and coach education courses are not a valuable learning method, but the delivery method of these formal learning opportunities is often times not meeting the needs of the coaches.

An easy and inexpensive way to shed light onto the previous experience of the coaching force within an MNA and of the preferred way of learning of the coaches, the MNA's could send out a short online survey to all registered coaches to collect valuable information when planning their Coach Development Programme, syllabus and course design <sup>[21]</sup>.

The following chapter will give recommendations on the structure of Coach Development Programmes and their delivery methods.



## 9. Coach Development Programme

The Coach Development Programme will be most effective if different instruction and learning methods are combined in it to cater to the different learning needs of the coaches attending the programme. This implies a mix of formal, non-formal and informal learning situations combined with practical application and experiential learning opportunities, creating a supportive learning environment, which is competence-based <sup>[2]</sup>. Furthermore, a variety of different learning and instruction methods will develop creative and critical thinking processes, equipping coaches with capabilities that they can apply in every-day coaching sessions <sup>[22, 23]</sup>.



## 9.1 Key Pillars of a Coach Development Programme

The key pillars of a Coach Development Programme are to develop a coach holistically, taking special care to include the development of professional knowledge, interpersonal knowledge and intrapersonal knowledge and the development of understanding of a coaches own resources <sup>[8]</sup>, as well as to develop a learning environment that is targeted at the adult learner and meets the coaches needs (see Fig. 9.1) <sup>[2]</sup>.



Fig. 9.1 Depicting the key pillars of a Coach Development Programme

## 9.2 Alignment of the Player Development Guide and the Coach Development Programme

The first step before creating the curriculum and the syllabus of the Coach Development Programme, each Member National Association is strongly recommended to first develop their Player Development Programme or Model. This step will ensure, through detailed analysis of the composition of the players and their needs, that the Coach Development Programme will develop coaches who will have the capabilities to cater to the needs of their players. The reasons for participation in ice hockey are most likely very diverse, from just wanting to have fun, to finding friends, adding physical activity to the daily life to wanting to become a top competitive player. Furthermore, the players will come from diverse backgrounds and

will enter the sport of ice hockey at different developmental stages, some with already well-developed sport skills, others still requiring support in developing fundamental movement skills. Each player will look for their very own pathway within the sport of ice hockey, and the coach will be the person to guide and develop them to the best of their abilities to achieve their personal goals. However, this is only possible if the Player Development Programme/Model has been properly developed and the Coach Development Programme aligned to it. <sup>[7]</sup>

## **Developing a Coach Development Programme will only be of effect, if it is aligned to the Player Development Programme within the MNA.**

### 9.3 Coach Development Programme Delivery Methods

The creation of the curriculum/syllabus and the fitting content of the Coach Development Programme is the objective of the MNA, because national laws on adult education and development might dictate the structure of the final Coach Development Programme including assessment and certification.

Through this combination of different learning and instruction methods, the coach will be put in charge of their own learning, which will increase their motivation for learning and development <sup>[2, 24]</sup>. This includes the recognition of prior learning (RPL), which consists of knowledge accumulated prior to the start of a formal Coach Development Programme by the coach, as well as previous experience that will be part of every coach starting their very own development process <sup>[7]</sup>. This prior knowledge has been accumulated through different ways which most likely include own athletic or sport experience, prior education, pre-coaching tasks, reading, attending clinics or work-shops, having coached another sport previously, and many more <sup>[25]</sup>.

Possible learning and instruction methods of a Coach Development curriculum:

- Mentoring
- Peer-and selfassessment
- Reflection
- Assessment
- Practical work experience
- On-the-job training
- Evaluation
- Feedback
- Lectures
- Work-shops
- Learning Café
- Interaction between coaches
- Seminars

If different learning and instructional methods, based on adult learning principles, are used in the curriculum, the outcome will be of learning, transfer of knowledge and change in the coaching behavior, and coaches who are motivated towards lifelong learning principles <sup>[24]</sup>. Table 9.1 displays a set of statements that are true for adult learner.

Table 9.1 Itemizes common adult learning principles

Coaches learn best, when:
<ul style="list-style-type: none"> <li>• their learning needs are met</li> <li>• they have an input on the content</li> <li>• their learning preferences are recognized</li> <li>• they have an input into the course design</li> <li>• they are treated as individuals</li> <li>• they can transfer newly learned information to their coaching environment</li> <li>• when they can apply theoretical knowledge in a practical environment</li> <li>• they can demonstrate their abilities</li> <li>• can learn where and when it suits them</li> <li>• their previously acquired knowledge and capabilities are acknowledged</li> <li>• they are challenged with new concepts</li> <li>• they see the relevance of the material to their own work</li> </ul>

**To ensure a high level of transfer of knowledge provided in coach development (courses, clinics, etc.) to the daily coaching practice of a coach, it is recommended that the Coach Development Program includes a high level of on-the-job training, mentoring, evaluation, feedback, blended learning and active coaching practice.**

Through a well-designed Coach Development Programme quality coaching within each MNA will be achieved which will have positive outcomes for the players, the MNA as well as the coaches.

These positive outcomes will be [2, 4, 5, 6, 26, 27, 28].

- **Increased enjoyment in ice hockey participation**
- **Positive ice hockey and sport experiences for all**
- **Development of all players**
- **Develops fundamental and sport-specific skills**
- **Develops Fair Play, Integrity and an understanding on Anti-Doping**
- **Develops respect and discipline**
- **Increases self-esteem, resilience, self-worth**
- **Increases motivation and enjoyment**
- **Increases well-being and physical activity**
- **Increases recruitment numbers**
- **Develops social cohesion and community**
- **Increased self-development and personal growth**
- **Builds confidence, character, connection, and competence**
- **Supports sustained participation**

A common way of structuring a Coach Development Framework (CDF) is to determine how many levels, awards or certificate levels the CDF should have. The next step is to determine who the target group for each of the levels is, the coaches attending, their current knowledge and capability levels and what kind of players they work with. The third step is to determine the syllabus/curriculum for the CDF, which are closely linked to the assessments and outcomes of the coaches following the attendance of a course <sup>[25, 29]</sup>.

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## 10. Coaching as a Profession

As pointed out in Chapter 4.1 (Coaching Force) the coaching community consists of volunteer, part-time paid and full-time paid coaches, also termed a blended professional area <sup>[2, 11]</sup>. This unique situation has made it a challenge in the past to fully recognize coaching as a profession, however, with the continuous support and push of institutions such as the ICCE, coaching is more and more turning into a fully recognized vocation.

The IIHF CDF provides guidelines to each MNA to promote coaching as a profession within their nation, helping to establish coaching as a fully regulated vocation. The IIHF CDF should support the negotiations with the Ministry of Education and other institutions for adult education and vocational training to establish coaching as a fully recognized vocation.



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