

"Coming together is a beginning, staying together is progress, and working together is success."

Henry Ford (1863–1947)

Created by UEFA's Technical Development unit and UEFA Goalkeeper Advisory Group reporting directly to the UEFA Jira Panel

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COVER IMAGE: Belgium before their game v Portugal - UEFA EURO 2020, round of 16



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Liverpool FC goalkeeper Bruce Grobbelaar joking with the fans at Anfield; April 1988. Source: Getty

1 Introduction

'Goalkeepers are different!' Why do so many people, even football coaches, still perceive goalkeeping as something almost exotic that is difficult to grasp and therefore nearly impossible to comprehend, let alone coach and teach? The answer to that question is not straightforward.

It might be due to a lack of a clear universal definition of the goalkeeper's role within the team. Some people still insist that goalkeeping is just about making saves, while others say that the modern game requires goalkeepers to focus predominately on attacking play and so they should therefore be seen as additional outfield players. This interpretation has even led some countries and regional associations to officially change the position's name from goalkeeper to 'goal player' ².

It is the goalkeeper coach's job to confidently describe and assess the role, performance and development of those they are coaching. Some also develop their own, more or less descriptive, goalkeeping philosophies and devise training methods from them. A few goalkeeping coaches eventually become coach educators and provide regional and national associations with

goalkeeper-specific content, which might be based mainly on their individual experience.

If only one person feels confident enough to talk about goal-keeping, others will probably actively intervene only in serious matters, such as a decisive mistake by the goalkeeper. The same applies to goalkeeper coaches who are not confident or competent enough to talk about topics relating to the team as a whole. Such a lack of confidence or knowledge on both sides often leads to reduced communication between the goalkeeper coach and the rest of the coaching staff. As a result, the goalkeeper coach is often less involved in team-related discussions and goalkeepers themselves are less involved in team training.

Nonetheless, developments in the modern game, which is the subject of extensive research and academic work, indicate in particular that future goalkeeping programmes would benefit from greater integration rather than isolation, and from training simulations that take account of the actual demands of the game³. UEFA's motto 'The goalkeeper needs to be part of the team, not apart from the team' must be seen as a general but valid guideline to a modern approach to effective player and team development. This does not mean that goalkeepers should

always and exclusively work within the squad, but rather that all coaches must aim for the most effective way to develop all players individually but also as a unit. From a goalkeeper-specific standpoint, it is about finding the appropriate balance between individual training⁴ and group work to maximise the goalkeeper's potential and ensure they can fit into the team at the required competition level. An important fact to consider is that the goalkeeper's involvement in the game is dependent not only on the behaviour of teammates and opponents, but also external factors such as the weather or the pitch conditions, to name just two. So, if goalkeepers want to develop specific skills⁵, they need to practise in an environment that reflects match conditions, which can only be achieved by establishing a meaningful collaboration between the goalkeeper coach and the other coaching staff when planning and running the training session as a partnership.

However, before goalkeeper coaches and other staff work together, they need to understand each other's roles. From a goalkeeper perspective, this can be achieved by providing coaches at all levels with a general understanding of the goalkeeper's role along with clear definitions of the general and specific tasks that they carry out during the game. In addition, knowledge and understanding of the game needs to be broken down into key principles that must be considered as the foundations of successful goalkeeping.

If goalkeeper coaches can also add knowledge about the overall team functions and team tasks to their specific expertise, this is a win-win as everyone can work together more effectively. Of course, it is important to consider that many football cultures are not used to actively involving the goalkeeper coach in team-related discussions yet, but that does not mean that they would not benefit from it.

To accelerate this process and support the UEFA goalkeeper coach education programme, a major source of misunderstandings and misinterpretations needs to be addressed. Despite the introduction of a 'reality-based learning philosophy' and the revised UEFA Coaching Convention, which already support the UEFA Goalkeeper A and B courses, the approach to goalkeeping-specific course content is still very different throughout Europe and between national associations. There is, surprisingly, often little common ground when it comes to describing technical and tactical specifics, which should actually be universal.

One of the main responsibilities of UEFA's goalkeeping coach education programme is to guarantee a shared minimum educational standard that enables coaching qualifications to be acknowledged throughout UEFA's territory. This can only be achieved if generic references – objective, reliable, globally acceptable and applicable to all cultures, ages and genders – are established.

Existing documents, such as the syllabuses of the UEFA GK A and B diplomas, not only cover goalkeeper-specific content but also promote the philosophy of 'thinking from the game' and emphasise the effective integration of the goalkeeper within the team and the goalkeeper coach within the staff.

And yet, many coaches still seem to lack a clear understanding of exactly how the goalkeeper's role is embedded within the team function and how such a holistic development approach can be applied.

This document, which sets out the requirements of goalkeeping in the modern game and takes general match principles into account, has been drafted by UEFA's Technical Development Unit with a view to improving understanding and increasing support for teams and their coaching staff. This will enable us to define a clear and logical approach to the general rules of goalkeeping, paving the way for coaches around the world to generate sustainable, forward-thinking training methodologies and seminal coach education programmes with a lasting impact on coaches and players.



England goalkeeper Mary Earps and captain Leah Williamson celebrate their semi-final win v Sweden - UEFA Women's EURO 2022

- 4 In goalkeeper development, terms like 'individual or isolated training' usually refer to routines, e.g. technical exercises, that feature characteristic sequences of goalkeeper actions and should be clearly linked to the requirements of the game.
- The term 'skill' needs to be differentiated from the term 'technique' within the football setting. According to Lennox, Rayfield and Steffen (2006), "technique is the ability to perform a physical task, whereas skill is the ability to perform a task in a game setting". From an academic point of view, McMorris (2014) defines skill as "the consistent production of goal-orientated movements, which are learned and specific to the task".

^{1 &#}x27;Goalkeeping', 'goalkeepers' and related vocabulary should always be understood as referring to athletes and coaches of all genders.

The term 'goalkeeper' traditionally refers mainly to defensive tasks whereas the term 'goal player' is more neutral as it includes attacking tasks as well. The same principle applies to the term 'goalkeeper coach'. It will be important to observe the evolution of such terminology in the coming years. Further information can be found using the link in the reference list at the end of the document.

³ German sports scientist and professional goalkeeper coach Fabian Otte, together with fellow scientists Sarah-Kate Millar and Stefanie Klatt, argue in their article 'Skill Training Periodization in "Specialist" Sports Coaching' (2019) that goalkeepers and other players will benefit from "introducing training challenges under consideration of representative game demands and the athlete's perceived level of task complexity." UEFA's 'EURO 2020 Technical Report' also highlights the effective integration of the goalkeeper within the team, especially in the teams that reached the latter stages of the tournament.

2 Evolution of goalkeeping

'You have to know the past, to understand the present' Carl Sagan (1934–96).

This famous quotation applies when discussing how goal-keeping and its coaching has evolved over time and why it will continue to do so.

Goalkeepers were officially introduced in the game in 1871, when the rules of football were amended to allow one dedicated player to handle the ball 'for the protection of his goal' only.⁶ However, the game was very different back then, with distinct tactical formations and even different pitch markings (Figure 1)⁷.

Over the next six decades, the rules for the goalkeeper's position were regularly amended. Eventually, in 1931, it was decided that goalkeepers could handle the ball for any purposes within their own penalty boxes, and that they would also be allowed to take up to four steps while carrying it. During football's early days, training methods had not yet been standardised⁸, so players mainly developed by gaining experience in matches and adapting their own strategies and behaviour to the styles, strengths and weaknesses of their opponents.

The introduction of international competitions, such as the World Cup, had a massive influence on football's natural evolution, as it gave teams with different cultural and tactical backgrounds the chance to face each other and also forced them to adapt. Although this process was brought to a halt by WWII, it experienced a significant revival during the 1950s, not only because football became more professional worldwide, but also thanks to the foundation of UEFA. The European governing body's subsequent establishment of competitions throughout the continent enabled not only national teams but also clubs to regularly challenge each other in a structured competitive format. ⁹

On account of the increased professionalisation, demand for improved performance grew and gave new meaning to formal

coaching, which until then had been mostly based on trial and error. Literature on training and goalkeeping was published and a new academic field, sports science, emerged. Its impact on football training became clear when coaches started to apply the innovative principle of periodisation to the sport.¹⁰

Specific goalkeeper training started to become a regular feature around the 1970s, roughly a hundred years after the position had been formally established. It was mainly the head coach, and later the assistant coach, who dedicated specific time to providing some drills for the goalkeepers, usually before or after the team training session. These tended to be very repetitive physical exercises of goalkeeper-specific movements focusing on load and intensity rather than on game context. Consequently, while goalkeepers may have become fitter, their tactical awareness and goalkeeping skills mainly improved through game experience rather than through specific training routines. However, it would be unfair to judge the choice of training content in former times in the light of our current knowledge. In fact, the constructive intention to work with goalkeepers specifically using exercises that were related to their position should be appreciated, as it constituted a turning point in the evolution of football coaching. The goalkeepers themselves often determined the content and the progression of the exercises, whereas the coach's duty and responsibility (whether it was the head or assistant coach) was limited to delivering the exercises in the way the goalkeepers

This approach obviously forced goalkeepers to think deeply about their own position. They started to break down technical details from the game with the aim of turning them into specific exercises that could then be practised during the week's training sessions. This created a player mentality of enormous personal responsibility, yet on the other hand also led to the perception that goalkeeper coaching was specific and 'very individual' and that only the 'expert' could really handle it. This pushed clubs and coaches to appoint specialists, and the goalkeeper coach was born.

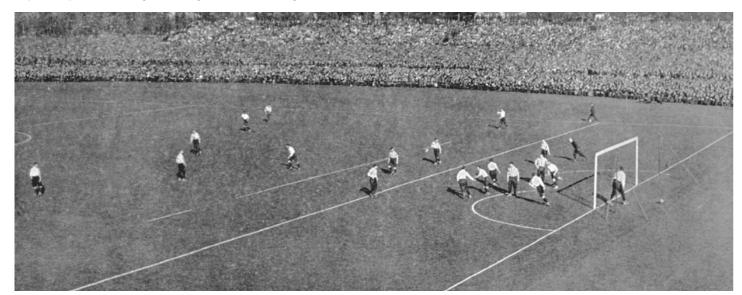


Figure 1: FA Cup Final 1901, Tottenham Hotspur v Sheffield United. Source: Getty

- 6 Further detailed information can be found through the link provided in the References section at the end of the document.
- 7 Modern-day pitch markings finally came into being in 1902, with an added halfway line, goal areas, penalty areas and a penalty spot as it is known today. The penalty arc was added in 1937 after suggestions from various European football associations. It is, therefore, the only part of the football pitch markings not 'Made in Britain'.
- 8 From 1850 to 1920, coaching knowledge about training methods was still evolving, with no universally accepted standards of best practices. Coaches did not share information or details about what worked and what did not. See reference: Kiosoglous (2013).
- 9 UEFA was founded in 1954, the European Cup introduced in 1955, the Cup Winners' Cup and the EURO in 1960, and the UEFA Cup in 1971.
- 10 The concepts of periodisation, training organisation, biomechanics and exercise physiology were the result of Russian scientist Leonid Matveyev's research in 1962. See reference: Kiosoglous (2013).



Liverpool FC assistant coach Ronnie Moran working on goalkeeping drills with Ray Clemence in March 1977. Source: Getty

From the 1980s and through the 1990s, goalkeeper coaching eventually became a profession in its own right and was mainly practised by former goalkeepers. They were usually recruited on the basis of:

- <u>Their competence:</u> Experience as a goalkeeper was the main prerequisite as it automatically implied position-specific knowledge.
- An ad hoc selection process: Due to a lack of formal job descriptions and recruitment procedures, most goalkeeper coaches were hired based on personal relationships with

However, no goalkeeper coach education existed at that time, so goalkeepers and their coaches usually shared their experiences and views about the position and often decided by mutual agreement what kind of training routines should be performed during the sessions. Most of their ideas were based on previous, mostly individual and often isolated, training experiences in shot-stopping with the occasional drill for defending crosses.

This collaboration led to a special bond between goalkeepers and their coaches. Training grounds started to mark out goal-keeping training areas, often a long way from the main pitch where the rest of the team was practising, and the head coach would simply call a goalkeeper in to join the team for finishing exercises, small-sided games or tactical routines. The goalkeeper coach often worked solely in the designated area with the remaining goalkeepers and hardly ever interacted with the broader team practice.

In the following decade, some specialists took things even further, setting up almost independent goalkeeping departments within clubs or launching creative business ideas. So-called 'mobile goalkeeper coaches' visited various different clubs each week to deliver individual training sessions without ever interacting with any of the clubs' own coaches or watching any of the keepers' matches. 'Goalkeeper schools', dedicated 'clinics' and 'camps' grew like mushrooms and spread all over the world. A new full-time profession thus took root during this period and, shortly after its establishment, brought about significant development in the game.

The introduction of the back-pass rule in 1992 was yet another landmark and the first significant rule amendment since 1931¹¹. It was probably the change that most affected the profile of goalkeepers in subsequent years and increased the demand for quality coaching. Up to that point, goalkeeping was mainly about defensive tasks, but suddenly and for the first time in football's history, the goalkeeper was required to be actively involved in continuous open play situations, when the team was in possession of the ball. Many goalkeepers struggled to adjust their skillset to the new requirements and tried to survive by just clearing the ball as far away from their own penalty box as possible.

¹¹ Minor amendments had already been made to the Laws of the Game in the 1960s to deal with time-wasting techniques used by goalkeepers. Then, in 1997, the back-pass rule was extended to cover throw-ins by the goalkeeper's teammates and time-wasting was further restricted with the introduction of the six-second rule.

Evolution of goalkeeping

UEFA Goalkeeper Coaching

A few forward-thinking head coaches and goalkeeper coaches did adapt quickly and integrated goalkeepers into their 'in possession' strategies. Moving from 'surviving by clearing' to 'creating by building up' was a completely new style that very few managed to assimilate when the rule was first introduced.

Then coach educators started to think seriously about the goalkeeper's future role within the team. National associations gradually set up specific goalkeeper coach education courses and it started to become clear that the goalkeeper's role was not isolated but deeply embedded in the team.

The game itself and the responsibilities placed on goalkeepers evolved even further. Football's globalisation was accelerated by the 1995 Bosman Ruling, which suddenly opened up the international market and led to free movement between countries. This in turn intensified a unique exchange of knowledge about tactics and the application of training methodologies between cultures. The impact was huge.

At the same time, new competition formats, such as the Premier League and the UEFA Champions League, created unprecedented revenues, causing technicians to think hard about new opportunities to gain a marginal competitive advantage.

Over the past two decades, teams have established more efficient attacking strategies (e.g. focusing on one-touch finishing and fewer distance shots), new technologies have developed balls that enable less predictable trajectories for the goalkeeper, and new football pitches have surfaces that make even quicker passing sequences possible during the game, to name but a few changes. Such developments have significantly affected goalkeeping and led to different physical, cognitive, technical and behavioural requirements.

A new and extremely inquisitive generation of goalkeeper coaches, sports scientists and match/performance analysts has emerged and shown increased interest in understanding how goalkeepers can be developed effectively using a holistic approach and optimising their new role within the team. Literature featuring descriptive coaching guidelines about certain goalkeeping techniques was no longer considered conclusive enough and so research activities shifted towards specific, interactive tactical behaviour that was dependent on the actions and decision-making of other players, both teammates and opponents.

Over the same period, additional technological developments, such as the use of event and tracking data for game analysis purposes, accelerated this process and provided alternative explanations and interpretations. For the first time in football history, non-goalkeeping experts also tried to find performance patterns and used objective evidence to underpin their arguments, which ran contrary to the opinion-based culture of traditional goalkeeper coaching. For coaches looking for areas of improvement, this evidence was seen as vital to understanding the actual requirements of the game for goalkeepers.

An adjustment to the short goal kick rule in 2019 again demonstrated that even a slight amendment to the game's laws could cause a widespread change of on-pitch behaviour and, therefore, another evolutionary shift.

Since the rule was implemented, all major football leagues have seen a significant increase in the tactic of building from the back by using short goal kicks.



Two central defenders provide options for Welsh goalkeeper Danny Ward to play a short goal kick inside the penalty area. The ball could also be delivered into the space around the halfway line or to wide areas. Turkey v Wales – UEFA EURO 2020, group stage

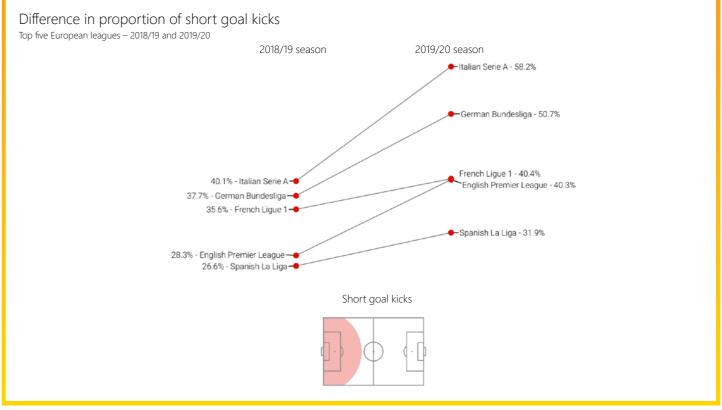


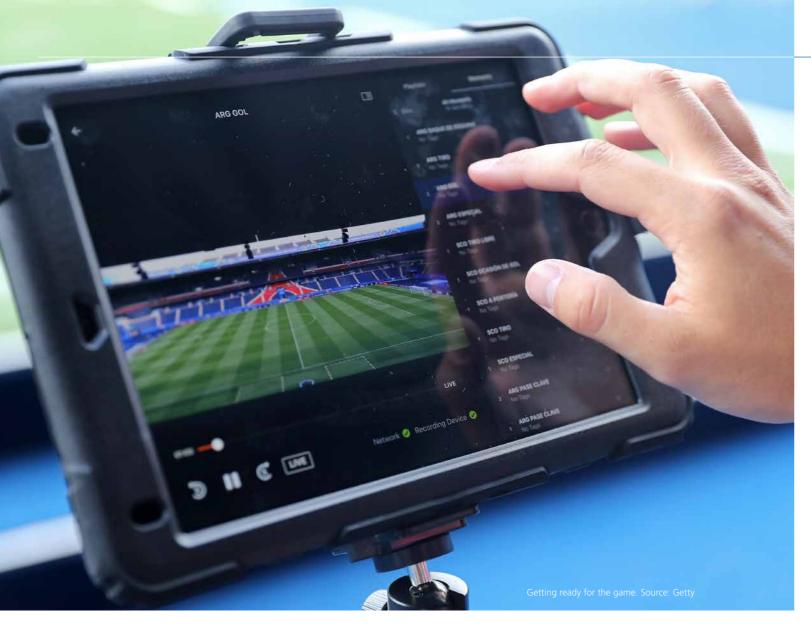
Figure 2: Difference in proportion of short goal kicks between seasons, Tom Worville, 2020

As goalkeepers have traditionally been the players to take goal kicks, they must be considered a fundamental component of such team goal kick strategies. However, initial data from 2019/20 (the first season that featured the new goal kick rule) suggests that playing more short goal kicks also leads to conceding slightly more high-quality chances. This would confirm that, despite trying to make use of the short goal kick to build from the back (Figure 2), many teams failed to do so effectively and ended up facing more shots on target against them than they had the previous season.¹²

As seen in the past, adapting to a rule change and finding ways of using it effectively is usually a slow process. At the outset, forward-thinking coaches can achieve a competitive advantage until everybody else has adjusted to the new context. Thus the time spent on the training ground should be used effectively and, when applicable, also collectively.

Head coaches, goalkeeper coaches and other staff members might have started far apart, but with the emergence of evidence-based training approaches, they have moved towards each other and they will continue to do so as their mutual understanding grows.

¹² All data by Tom Worville, presented during the StatsPerform Optapro Forum 2020 in London. However, more research is required to fully understand the long-lasting effect of this rule change, as technical observations at EURO 2020 identified some teams that successfully applied new tactical approaches to overcome immediate threats.



3 Structure of the game

As established so far, goalkeeping should be defined as a crucial assignment that is deeply rooted within the team rather than an individual discipline. To fully understand how and to what extent goalkeepers collaborate with their teammates, we need to break down the game itself, starting with its prerequisites.¹³

3.1 Game prerequisites

Football is played using one ball on a delineated pitch of specific dimensions divided into two equal halves, each with a goal. Each team must defend its designated goal and score by placing the ball into the opponent's goal. The two competing teams consist of eleven starting players¹⁴ including one goalkeeper. Goalkeepers are the only players allowed to use their arms and hands, within a specified area of the pitch. The underlying laws of the game define not only the scope of what players are allowed to do but also the consequences in case of misconduct. The referee and assistant referees¹⁵ ensure that these laws are upheld throughout the match, which usually lasts for 90 minutes (two 45-minute halves separated by a break of 15 minutes).¹⁶

3 2 Δim

The aim is to win by scoring at least one more goal than your opponent. Consequently, scoring goals and preventing the opponent from scoring are the two most crucial components of the game.

3.3 Team functions

From kick-off, the teams vie for possession of the ball. In the flow of the game, one team is seen as attacking, while the other is defending. Ball possession switches from one team to the other at various moments of play, called 'transitions', experienced by a team in two different ways: you either win possession or you lose it.

3.4 Phases of play

If the ball goes over the touchline, a goal has been scored or the referee stops the game for various reasons (foul play, offside, etc.), the game restarts with 'set plays', whereas ongoing and continuous sequences are specified as 'open play'.

- 13 The prerequisites are kept to a minimum, since we expect readers to already be familiar with the game.
- 14 Size of the pitch, size of the goals and number of players on a team depend on the age category of the competition as well as the region and the country in which the match is played. Detailed information can be provided by the national and local governing bodies that regulate official competition formats.
- 15 This can also include video assistant referees (VAR).
- 16 Match times may also vary, depending on age groups and competition formats for which tournament regulations may also feature extra time or reduced regular times.

3.5 Game principles

To increase the probability of success, players must find effective solutions to any given problem they encounter during the game. Tactical awareness, skills and decision-making are therefore vital performance ingredients for all players. To ensure that players comply with the demands of the game, certain well-defined principles^{17,18}, need to be mastered and applied during play as illustrated in Figure 3.

GAME PRINCIPLES

Team functions	Attacking (in possession)	Transition	Defending (out of possession)
Phases of play	Open play Set play	←	Open play Set play
Team tasks	Build upCreate chancesFinish on target	←	DisturbPrevent chancesDefend the goal

Figure 3: Game principles of football

If a team is attacking, it is by definition in possession of the ball, and can therefore:

- build up an offensive action;
- create a goal-scoring opportunity;
- achieve a successful attempt on target.

The defending team, on the other hand, is by definition out of possession and will perform team tasks to:

- disturb the opposition;
- prevent the opponent from creating chances;
- protect and defend its own goal.



Austria's goalkeeper Manuela Zinsberger with a successful interception v Norway – UEFA Women's EURO 2022, group stage

- 17 Alan Wade published his first version of '5 Key Principles in Attacking and Defending' in 1970 in the 'Official Coaching Manual of the Football Association'. His contribution must be acknowledged as a legacy that even influenced The FA's playing and coaching philosophy, 'The England DNA', first published in 2014.
- 18 Da Costa et al. (2009), Tactical principles of soccer: concepts and application. Our simplified model draws on this work; see the References section for a link to the full document

Structure of the game

3.5.1 Attacking team tasks

ATTACKING TEAM TASKS TEAM PRINCIPLES

Build up	Direct play Play as directly as possible towards the opponent's goal
Build up	Possession-based play Exploit spaces and create options to play together effectively
Create chances	 Occupy spaces/positions in front of the goal Deliver through balls, crosses and cut-backs into dangerous spaces for scoring Perform individual actions towards the opponent's goal
Finish on target	 Shoot Head Use other body parts and options if shooting and heading cannot be achieved

3.5.2 Transition to defending

During an attacking phase, possession can be lost to the opposing team, giving rise to a 'transition to defending'.

TRANSITION TO DEFENDING	GENERAL DESCRIPTION	DETAIL
When?	Moment of game turnover and sequence of play during which the team loses possession to their opponent	Building-up phaseCreating chances phaseFinishing on target phase
Where?	Area of the pitch where the transition moment and transition phase take place	 Opponent's penalty area Area between opponent's penalty area and halfway line Area between halfway line and own penalty area Own penalty area
Who?	The player losing possession	GoalkeeperDefenderMidfielderForward
What?	Action plan and considerations to be applied once the ball goes to the opponents	 Direct pressing on the ball by a player/unit/team. Retreating quickly back into a defensive formation enabling the team to act out of a compact shape to regain the ball.

3.5.3 Defending team tasks

Once a team has reorganised into a defensive formation after losing possession, it needs to perform team tasks in defence to increase its chances of winning the ball back.

DEFENDING TEAM TASKS	TEAM PRINCIPLES
	Work together as a unit/team to force the opponents to make a mistake, or to play back or wide Work together as a unit/team to prevent a deep pass Avoid exploitation of the team's own vulnerable spaces
Disturb	 From a defensive shape Continuously reduce playing space for the opponent by acting out of a compact team shape Create deceptions (traps) for the opposition players and make them play predictably Move as a unit according to the movement of the ball and the opponent
Prevent chances	 Prevent through balls, crosses, cut-backs and individual attacks Block through balls, crosses, cut-backs and individual attacks Intercept through balls, crosses, cut-backs and individual attacks
Defend the goal	 Actively block attempts on target React to attempts on target Cover the goal

3.5.4 Transition to attack

If a team manages to regain possession by applying defending principles successfully, the players need to switch again from a defensive to an attacking mindset. This moment is called 'transition to attack'.

TRANSITION TO ATTACK	GENERAL DESCRIPTION	DETAIL
When?	Phase of play during which the team gains possession	Disturbing phasePreventing chances phaseDefending the goal phase
Where?	Area of the pitch where the transition takes place	 Opponent's penalty area Area between opponent's penalty area and halfway line Area between halfway line and own penalty area Own penalty area
Who?	The player gaining possession	GoalkeeperDefenderMidfielderForward
What?	Action plan and considerations to be implemented once the ball is in possession	 Direct play forward to exploit opponent's disorganisation Focus on possession-based play

Structure of the game

UEFA Goalkeeper Coaching

3.6 Characteristics of set plays

As already mentioned, a game of football consists of open play sequences but also of set play situations when the game restarts from a particular location on the pitch.

While team functions and tasks can be applied to both phases of play, it is important to highlight certain characteristics related to each set play.

Once the game is stopped, both teams have an opportunity to organise themselves appropriately before it proceeds. The players need to pay special attention to whether a restart requires a referee's whistle or not. If no whistle is necessary, a restart can be carried out quickly. This possibility should always be considered by both teams, as it contains an element of surprise that could potentially have a significant impact on the outcome of the game.

Figure 4 shows features that are beneficial for the attacking team and can significantly influence the choice of attacking strategies. On the other hand, the defending team needs to be aware of its disadvantaged position in such cases.

SET PLAY	START/RESTART FROM	REFEREE SIGNAL TO RESTART	MIN. DISTANCE OF OPPONENT	DIRECT ATTACKING GOAL ALLOWED	OFFSIDE RULE
Kick-off	Centre mark	Yes/whistle	9.15m/10 yards	Yes	n/a
Penalty kick	Penalty spot	Yes/whistle	9.15m/10 yards	Yes ¹⁹	n/a ²⁰
Corner kick	Within the corner area	No	9.15m/10 yards	Yes	No
Goal kick	Anywhere within the goal area (six-yard box; 5.5m)	No	Outside penalty area	Yes	No
Free-kick	Designated location on the pitch excluding the opponents' goal area (six-yard box; 5.5m)	Yes/whistle: • if appropriate distance is required • after caution/red card • after injury • after substitution In all other cases no whistle, but arm signal is required ²¹	9.15m/ 10 yards ²²	Direct free-kick: Yes Indirect free- kick: No	Yes
Throw-in	Designated location on the touchline	No	2m/2.2 yards	No	No
Dropped ball	Designated location on the pitch	No	4m/4.5 yards	No	Yes

Figure 4: Characteristics of set plays in football

Figure 5 shows the difference in consequences for the attacking team and the defending team depending on the rules that apply during various set plays.w

CONSEQUENCES FOR ATTACKING TEAM

RULE APPLICATION DURING SET PLAYS

CONSEQUENCES FOR DEFENDING TEAM

ATTACKING TLAM	DUNING 3LT PLATS	
Any number of attacking players can be positioned close to the opponent's goal to increase the chances of scoring.	If the offside rule does not apply	The presence of more of the opponent's players in front of the goal could require a greater number of defenders to control the opponent's moves and protect the goal.
A restart can be carried out quickly, with an element of surprise, especially if the defending team is still not organised.	If restart does not require a referee's whistle	The defending team needs to get organized as quickly as possible to prevent exploitation of vulnerable spaces.
An unchallenged, controlled strike with precise preparation and execution is possible.	If a direct strike on goal is allowed	Because the ball cannot be challenged, the defenders can only focus on ball interceptions, blocks and goal-defending strategies, e.g. setting up a barrier wall when facing a direct free-kick.
The bigger the minimum distance, the more variety a kicker has in delivering the ball.	Minimum distance to ball	The more variety a kicker has in delivering the ball, the more difficult it is to predict the trajectory of the ball and to defend vulnerable spaces.

Figure 5: Rule applications and consequences for attacking and defending teams during various set plays

To decide upon the right strategy, however, both teams need to consider the current status of the game:

- How much time is left?
- What is the current score?
- What is the team's immediate priority?
- Which team task can accomplish this priority aim?

The current data from top European competitions suggests that roughly 25–30% of all goals scored have their origin in a set play.



Italy's goalkeeper Gianluigi Donnarumma with a high starting position before an outswinging corner kick. Italy v Austria – UEFA EURO 2020, round of 16

3.7 Team organisation

Football teams try to win games by embedding the players' abilities into effective team organisation. As every team needs a functioning balance between attack and defence, clearly some players will focus more on offensive moves, whereas others direct their attention primarily towards the defensive part of the game. Therefore, each position requires specific considerations that enable the team to function effectively as

a whole. Synchronisation, mutual understanding and effective relationships between players are vital ingredients for success. Looking at the modern game, top teams are extremely versatile and manage to switch between different team organisations and game plans multiple times during a single match.

¹⁹ During the special event of a penalty shoot-out, no potential follow-up sequence (e.g. rebound finish by an attacking player or clearance by a defender) is allowed if the penalty is missed, for example if the goalkeeper saves the ball or if the ball hits the post. The sequence ends right after it has been determined whether the ball went into goal, went wide or was saved by the goalkeeper. Since a significant number of important games are decided in penalty shoot-outs during the knock-out phase of European competitions, teams need to pay special attention when preparing for such decisive moments.

²⁰ The offside rule is not applicable to kick-offs and penalty kicks, as no attacking players are allowed closer to the goal than those carrying out these restarts.

²¹ The referee indicates an indirect free-kick by raising his arm vertically, whereas a direct free-kick is indicated by a horizontal arm signal by the referee and the restart occurs without the referee's whistle.

²² If an indirect free-kick is awarded for the attacking team inside the opponents' penalty area, the defending players might be less than 9.15m/10 yards away because they are allowed to position themselves inside the goal area.

4 Goalkeeper's role

During a match, obviously not all players are in direct contact with the ball at the same time. It is important to distinguish between players with the ball, around the ball and away from the ball, whose roles are all related to designated team tasks (see chapter 3.5., p. 13). The same principle applies to the two goalkeepers on the pitch, whose active involvement in play is determined by the state of possession, phases of play, location of players and the ball, as well as by the head coach's tactical approach.

4.1 Varying levels of involvement

In general, it is important to state that goalkeepers, like all other players, are always involved, because they do not remain passive, without any physical movement or verbal interaction throughout the game. We therefore need to differentiate between action with the ball and without the ball.



Figure 6: Donnarumma's regular involvement is effective in supporting Italy's defensive organisation. Belgium v Italy – UEFA EURO 2020, quarter-final

There are three different levels of direct goalkeeper involvement:

Regular involvement

This occurs during stages of play that do not require the goal-keeper to deal with the ball and where imminent involvement with the ball is unlikely. The player is in observation and communication mode, positioned according to the stage of play and the required team shape so as to communicate effectively with teammates about tactical issues (e.g. player positions; shape of units; potential threats) or motivate them when necessary. See Figure 6

High involvement

This usually describes goalkeeping activities that precede or enable involvement with the ball. This includes actively supporting and preparing the execution of a particular team task, such as creating space or asking for a back pass, giving clear instructions to teammates when setting up a wall to defend against a free kick, or getting into a set position when anticipating an imminent delivery or shot on target. Understanding the game and the team's detailed requirements are important skills for the goalkeeper during this level of involvement. See Figure 7.



Figure 7: Donnarumma is highly involved and ready to defend the goal as well as the area around him. Belgium v Italy – UEFA EURO 2020, quarter-final

Ball involvement

In this situation, the goalkeeper is required to get directly involved with the ball (e.g. handling the ball; passing the ball) or with the player with the ball (e.g. putting pressure on the attacker in ball possession during a 1v1 situation). See Figure 8.



Figure 8: Donnarumma decides to intercept the ball and executes a low dive to his left. Belgium v Italy – UEFA EURO 2020, quarter-final

Such involvement is imperative so that the goalkeeper can support the team in its efforts to successfully accomplish crucial team tasks, such as defending the goal, preventing attempts on goal, and building up when in possession.

Regular involvement can be defined as the goalkeeper's default

Regular involvement can be defined as the goalkeeper's default mode, and must be maintained throughout the match unless the context requires the keeper to switch to high or ball involvement

It is important to understand that the effectiveness of the goalkeeper's execution is crucial, as it can have a significant

impact on the game's outcome. It is therefore logical for the goalkeeper, like any other player, to decide when and how to switch between levels of involvement. If game situations require the goalkeeper to deal with the ball but they refrain, this will make it less likely that the team will complete particular tasks successfully or make them more difficult to accomplish.

The decision-making process is a key performance component of goalkeeping and it therefore needs to be discussed in more detail.

Goalkeeper's role

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4.2 Goalkeeper's decision-making process

In an ideal world, the goalkeeper's decisions would consistently match the requirements of the game. But it is known from experience that this is not always the case, and coaches often ask themselves why. To find a conclusive answer to this question, it is important to understand some basic cognitive processes that can be applied to all players on the pitch.²³

Even when goalkeepers are not directly involved with the ball, they are still aligning themselves to what is happening on the pitch. Now, is every single step and positional adjustment the result of a conscious decision? No. During a match, the goalkeeper's actions are mostly automatic or instinctive. While goalkeepers are observing the action²⁴, their brains are permanently processing information and comparing it to previous experience. If the brain recognises familiar patterns between what is happening on the pitch and past experiences, it could trigger an automatic response, explaining the constant adjustment of the goalkeeper's position.

To effectively respond to a trigger, the brain must be able to correctly identify familiar contextual signals that indicate that a specific action or event may occur. These signals are known as 'situational cues'. If the brain knows from previous experience that a specific action is needed to accomplish a particular task successfully, an automatic response is possible without spending a long time deliberately thinking about it.

A football game is a complex scenario and it is difficult to identify situational cues during game sequences. So, what happens if a goalkeeper cannot identify them correctly?

If the brain struggles to successfully match the information from the pitch with the memory's model, logically it cannot provide the player with an automatic response and needs to come up with an alternative strategy.

First, it delays the response by activating the goalkeeper's attention (which takes time) and, second, it forces the player to think deliberately (which again takes time). The problem is that very few game situations, especially during open play, allow the goalkeeper to take this time. When the opposing team is attacking, vital decisions must be made within split seconds. Hesitation (e.g. 'stop-and-go' behaviour for through balls and crosses) indicates that the goalkeeper's brain is unable to identify cues when processing rapid movements of the ball and players within a particular space. The goalkeeper becomes trapped in the thinking process ('should I stay or should I go') and may struggle to come up with a suitable solution to the problem guickly enough.

Sometimes goalkeepers respond quickly but incorrectly (e.g. diving the wrong way in a 1v1 situation). This usually happens when the goalkeeper has not experienced exactly the same scenario before. The brain is then forced to come up with a substitute response based on the most similar previous experience, assuming that the same response might be appropriate. That, of course, is highly risky, and the less similar the new situation is to the one used as a model, the less likely a successful outcome.

In general, any action taken by a goalkeeper follows the same basic sequence:

- Observe events on the pitch
- Collect information and compare it with previous experiences
- Select key features
- Decide how to act by reacting to situational cues
- Execute the action appropriately

This process applies to all three levels of involvement, as goalkeeping actions can be observed during the whole game.

The ability to make the right decision consistently therefore has to be seen as a key performance indicator in goalkeeping. However, this is only possible if the player can automatically identify the correct situational cues. To avoid hesitation, indecisiveness and inadequate decisions, goalkeepers must accumulate as much game experience as they can. They need to feed their memory with a huge variety of cues but also with adequate responses that can be applied spontaneously during the match. Game experience and game-related training content therefore play a key role in the development of the goalkeeper's skill, decision-making and overall competence.

4.3 Goalkeeping principles

The goalkeeper's contribution during assigned team tasks usually depends on the state of possession, phases of play, course of the game and the head coach's general game plan. The following detailed discussion begins with goalkeeping principles being deduced directly from general team functions, team tasks and team principles. These principles can be applied effectively during both open play and set play sequences.

Figure 9 provides us with an overview, in which we consider the goalkeeper's:

- 'regular involvement' as a standard feature that needs to be maintained throughout the whole game and creates the foundation for every principle discussed;
- 'high involvement' as a prerequisite for any potential ball involvement;
- 'ball involvement' as a mandatory requirement.

When discussing the transition from defence to attack, we need to take account of the goalkeeper's specific advantage when holding the ball. This is the only time during an open play sequence when the ball cannot be attacked by an opponent. At that specific moment, the goalkeeper dictates the pace of the game and can decide at what moment and how to start a new attacking sequence²⁵. This is obviously important as it allows a controlled restart, similar to a set play and a potentially orchestrated attacking move. Quick counterattacks often occur in such transition moments when goalkeepers can make use of long throws or precise volley kicks into vulnerable spaces or to a player, while attacking teammates start their rehearsed runs once they realise that the goalkeeper is just about to get hold of the ball.

TEAM FUNCTIONS	TEAM TASK	TEAM PRINCIPLES	GOALKEEPING PRINCIPLES
	Build up	 Direct play Play as directly as possible towards the opponent's goal 	 Deal with the back pass and deliver long and accurate passes to progress into the opponent's half when required by game plan and game context Deal with the back pass and clear the ball to escape high pressure and risk
		Possession-based play Exploit spaces and create options to play together effectively	 Create options for a back pass to play together effectively After receiving a back pass, play effective passes to teammates or into areas that are not under immediate threat
Attacking (in possession)	Create chances	 Occupy spaces/positions in front of the goal Deliver through balls, crosses and cut-backs into dangerous spaces Perform individual actions towards the opponent's goal 	 Mainly regular involvement: positioning, communication → especially organising the rest defence (Note: delivering through balls applies to the goalkeeper during 'defending to attacking' transitions)
	Finish on target	 Shooting Heading Use other body parts and options if shooting and heading cannot be applied 	 Only applicable if required by game context, e.g. team chasing the game in stoppage time: support teammates during attacking set play situations (e.g. corner) and try to finish on target Applicable during penalty shoot-outs when goalkeeper is taking a penalty
Transition: attacking to defending	Build up Create chances Finish on target	 Where? – What part of the pitch? Who? – By individual/unit? 	 Regular and high involvement: subject to area of loss of possession → repositioning and clear communication If goalkeeper responsible for transition, then either pressure on opponent/ball or quick repositioning to defend goal
	Disturb	Pressing Work together as a unit/team to force the opponent to make a mistake, play back or wide Work together as a unit/team to prevent a deep ball Avoid exploitation of own vulnerable spaces	Mainly regular involvement: positioning and communication → focus on the distance between goal – goalkeeper – defensive line
Defending (out of possession)	Disturb	 From a defensive shape Continuously reduce playing space for the opponent by acting out of a compact team shape Creating deceptions (traps) for the opposition players and make them play predictably Move as a unit following the movements of the ball and the opponent 	Mainly regular involvement: positioning and communication → focus on the distance between goal – goalkeeper – defensive line
	Prevent chances	 Prevent through balls, crosses, cut-backs and individual attacks Block through balls, crosses, cut-backs and individual attacks Intercept through balls, crosses cut-backs and individual attacks 	 Intercept through balls, high crosses and low crosses Intercept dangerous open balls²⁶ during open play and set play sequences Intercept dribbling by opponent players during a 1v1 situation
	Defend the goal	 Actively block attempts on target React to attempts on target Cover the goal 	 Organise defenders appropriately during the set-up of the wall or during other dangerous set play preparations Deal with all direct attempts on target Prevent opponents from finishing by blocking them down in 1v1 situations or by forcing them to finish off target
Transition: defending to attacking	Disturb Prevent chances Defend the goal	 Where? – What part of the pitch? Who? – By individual/unit? 	 Launch a counterattack when playing directly and when opponent is not in a defensive shape (chance to effectively get behind the last defensive line) Play safe when possession-based play needs to be implemented Clear the ball to escape pressure if required

Figure 9: Goalkeeping principles based on team principles, tasks and functions

²³ This concept is based on American psychologist and academic Daniel Kahneman's 'System 1 and System 2' model; further information is available in his book 'Thinking Fast and Slow' (2011).

²⁴ It is worth mentioning that, due to the goalkeeper's unique position, the actions of the full pitch can be observed and processed most of the time, whereas midfielders, for example, are only able to process events from a fraction of the whole pitch. This consequently forces outfield players to move their heads more frequently in all directions than goalkeepers.

²⁵ Law of the Game 12 allows the goalkeeper to hold the ball for six seconds.

²⁶ Open balls usually come from deflections, after duels, tackles and similar events in which the ball rebounds off players in an uncontrolled way without being intentionally played and where no team has control over it.

Goalkeeper's role

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Equally important are transition moments from attack to defence. It is obviously essential for the goalkeeper to know where the ball has been lost and by whom in order to immediately adjust their position to avoid an unexpected threat. If the goalkeeper were to lose possession in or around the penalty area, this might give rise to an immediate threat as the goalkeeper might not be in optimal defensive position, leaving the goal unprotected. In this case, the goalkeeper should choose between: putting immediate pressure on the opponent who has just won possession or returning to the goal to protect it as quickly as possible.

In any case, goalkeepers should at all costs avoid finding themselves in 'no man's land'²⁷.

It is imperative for goalkeepers to apply the principles of their position consistently game after game. Appropriate leadership and training to guide goalkeepers throughout their careers is essential for them to achieve sustainable success.



Republic of Ireland U21 goalkeeper coach Rene Gilmartin reviews a video with goalkeepers Dan Rose and Sam Blair (left) during a training session. Source: Getty

Direction of competence development Goalkeepers intuitively identify situational cues correctly; they can effectively decide upon their involvement and thus respond effectively to the required tasks, regardless of the complexity of the situation. Unconscious Competence Goalkeepers understand when to do what and why but can generally only apply their skills automatically in a **Conscious Competence** simpler context; delayed thinking and inadequate skill application of their skills still occur in more complex situations. Goalkeepers start to understand when to do what and why but have not yet developed **Conscious Incompetence** adequate skills; delayed and faulty responses still occur. Goalkeepers do not understand the game situation and cannot **Unconscious Incompetence** respond adequately.

Figure 10: The four stages of competence; adapted from Broadwell, 1969; Curtiss and Warren, 1973; Howell, 1982

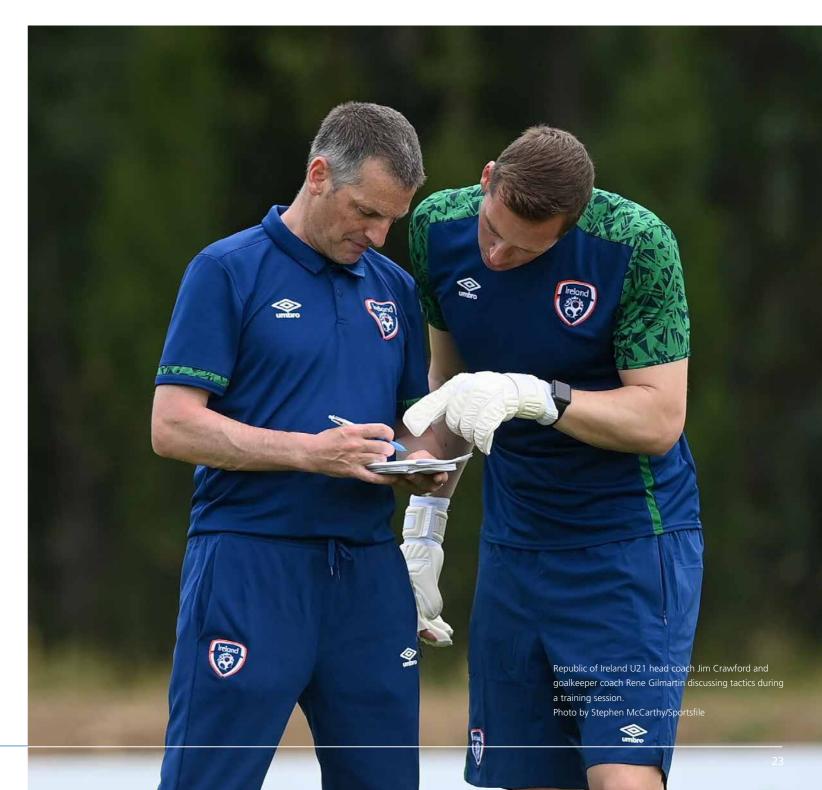
4.4 Developing the goalkeeper's skill

The aim of any meaningful goalkeeper development programme should be to gradually increase and ultimately maintain the goalkeeper's skill level. A fundamental understanding of the goalkeeping principles previously outlined is pivotal to defining such a programme, as delayed thinking and inadequate involvement will inevitably lead to inappropriate responses and poor execution of goalkeeping tasks. To avoid such unwanted outcomes, goalkeepers need to achieve the highest level of competence by the end of the programme and be able to apply it successfully to an ever-changing football environment. The four stages of competence shown in Figure 10 must therefore be applied to the whole development process.

After many hours, months or even years of practice, goalkeepers can achieve the level of unconscious competence they need

to consistently make quick, correct decisions despite facing complex tasks with multiple options, just like outfield players.

Throughout the season, goalkeeper coaches need to compare the current competence level of their goalkeepers with these four stages, taking account of individual and team-related topics as outlined in the goalkeeping principles. Coaches should establish whether the competence level corresponds to the team's requirements and competition level, and whether the goalkeepers are developing in line with the curriculum. Such sophisticated and demanding assignments clearly require goalkeeper coaches who are up to the task and can consistently design, deliver and adjust the content so that it is tailored to the needs of their goalkeepers and the team as a whole.



²⁷ The term 'no man's land' refers to a position on the pitch from which the goalkeeper cannot put adequate pressure on the player in possession or sufficiently defend the goal. A goalkeeper in this situation cannot influence the sequence of play and is therefore fully reliant on what happens between opponents and teammates.

Goalkeeper coaches and their development

As football has evolved, goalkeeper coaches are now fully accepted as an integral part of the coaching staff at all levels, both in the professional game and at grassroots/amateur level. While they are still considered specialists, they must also be perceived in the same way as assistant or support coaches.

It is important for all other staff members to have a clear understanding of the goalkeeper coach's role within the coaching team. This is the only way to achieve a meaningful and effective collaboration based on shared knowledge, experience and resources.

5.1 Goalkeeper coach: role

GENERAL TASKS

The main function of the goalkeeper coach is to improve the goalkeeper's performance level holistically by recognising and understanding individual and team strengths and weaknesses, then applying appropriate performance-enhancing measures during training.

The primary aim is to steadily optimise the goalkeeper's contribution to the team's overall performance and thereby to match outcomes. This is the starting point for collaboration between the goalkeeper coach, the head coach and all assistant coaches, both on and off the pitch.

It is important to include all the squad goalkeepers whether taking part in competitive games, friendly matches and training

5.2 Goalkeeper coach: general tasks

The main reference for the goalkeeper coach's tasks is the profile of the team, its players and its goalkeepers. The coaching process should be adjusted to the goalkeepers' abilities and must be based on individual needs within the team at any specific development stage.

Listed below are the general tasks that the goalkeeper coach is required to fulfil.

- 1. Evaluate the goalkeepers' performance in terms of their role during matches and training sessions
- Work effectively and efficiently with all staff to ensure the goalkeepers' needs are catered for
- Plan, execute and evaluate integrated development and performance programmes
- Connect and cooperate effectively with the goalkeepers

5.3 Goalkeeper coach: specific tasks

To successfully accomplish the broad range of general tasks, the goalkeeper coach must take effective measures in the areas listed below in Figure 11.

SPECIFIC TASKS

Evaluate the goalkeeper's performance during matches and training sessions

Communicate, plan and cooperate effectively with all staff members to ensure the goalkeeper's needs are catered for, both as part of the team but also individually

To plan, execute and evaluate development and performance programmes from a collective (team) and individual (goalkeeper) point of view

Connect and cooperate effectively with the goalkeeper

- Understand match performance
- Apply tools for performance analysis
- Build relationships
- Understand the environment
- Apply reality-based learning principles
- Apply adult learning principles
- Understand the role of the goalkeeper within the team
- Apply goal-setting and talent management
- Apply knowledge about training, fitness and psychology • Apply and constantly adjust goalkeeper-specific perfor-
- mance-defining knowledge
- Understand the environment
- Build relationships
- Understand psychological aspects of performance and take appropriate measures
- Differentiate between athletes

Figure 11: The goalkeeper coach's general and specific tasks

Understandably, the way these tasks are implemented depends on various parameters:

- Level of competition at which the goalkeepers are playing
- Age
- Sex/gender
- Stage of development: novice, advanced beginner, competent, proficient, expert²⁸
- Environment and culture of the organisation or club

To achieve the optimal coaching impact for such a broad range of athletes, the following methodological components must be applied to the people concerned:

Game analysis and goal setting

- ► Plan training session (practice designed in collaboration with coaching and support staff) Transfer onto the pitch (practice execution)
 - Evaluate session from a collective (team) and individual (goalkeeper) point of view

Adapt and improve goal setting

28 Stages of mastery: some theories suggest a five-step process for developing expertise in any given area. For more information, see the link provided in the references section.



Goalkeeper coaches working on assignments during a UEFA Share goalkeeping seminar in Germany, 2019. Source: DFB

Working in the high-pressure environment of professional football requires a different set of personality traits and skills from those needed at grassroots level.

While all kinds of football are equally important, different operational fields require different methods, a different weighting of specific tasks, and therefore different coaching profiles.

5.4 Goalkeeper coach: competence

characteristics and social skills.

An accepted degree of competence is required to ensure the goalkeeper coach works efficiently and fits in with staff working at all levels.

UEFA's Coaching Convention applies the term 'competence' to the specifics of football coaching and defines it as:

"... a combination of the practical and theoretical knowledge, skills, behaviour and values required to effectively perform the job of a football coach and all the tasks that this entails."29 It also distinguishes between football competence, personal

For coaches to fulfil their role, they have to apply a range of skills to specific tasks or functions. A thorough knowledge of the game and a good understanding of the technical, tactical, fitness and psychological aspects considerably enhance when and how these skills might be used effectively. However, whether the

coach's role is in development or in high-performance training, a deep knowledge and understanding of the culture and the environment in which they are operating and of the people that they are interacting with are also critical to success.

Each coach will have their own personality and habits that have

been acquired over the years, influenced by their own culture and background. They will also have acquired experience relating to the level at which they have operated. It would be of considerable benefit to fully understand how the coach's own personal behaviours and traits affect the various people they interact with. Developing emotional intelligence to help build effective working relationships is another important step in increasing the overall competence.

All these skills, which eventually enable the goalkeeper coach to excel in their operational field and have a sustainable impact on colleagues, players and goalkeepers, require a dedicated educational process over the course of time. However, this process needs to take account of the coach's individual performance behaviours observed and measured by the coach educator so that the individual characteristics can be benchmarked against specified criteria.



Using video analysis to break down match performance is a vital task for every goalkeeper coach

29 UEFA Coaching Convention: Further Education (clarification memo), p. 3-4.

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Goalkeeper coaches and their development

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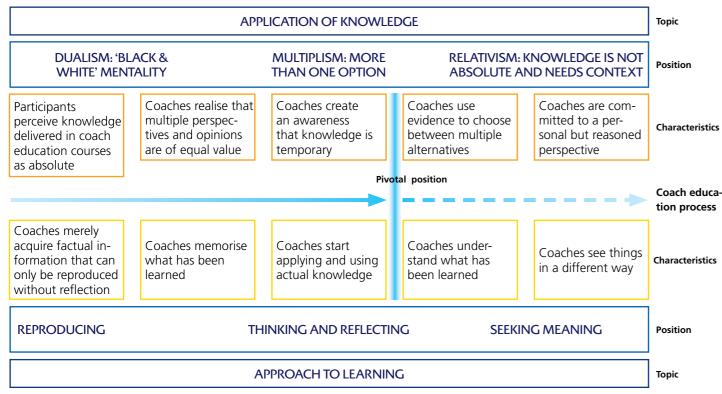


Figure 12: Coach education process: application of knowledge and approach to learning

5.5 Coach education pathway

To understand the development of coaching competence, it seems reasonable to briefly discuss the fundamental relationship between the 'application of knowledge' and the 'approach to learning', as it is directly related to our aim. Figure 12 illustrates the general developments in both areas as can be applied to football coaches over the course of their career.³⁰

The upper continuum, running left to right above the blue arrow in the centre, describes how adults usually perceive and use the knowledge they acquire throughout their lifetimes. The lower continuum, on the other hand, represents the development of personal approaches to learning.

If this model is applied to the realm of football coach education, it can be inferred that novice coaches with only a limited foundation of coaching-specific knowledge will be in the upper left, e.g. players who have just retired, career changers, people with limited knowledge but strong personal opinions. They are likely to start with a more 'black and white' mentality and will show little engagement, limited personal interest and mostly an extrinsic motivation in learning during coach education courses.

However, both the application of knowledge and the approach to learning can change significantly over time and can develop into evidence-based reasoning, critical thinking and a far more intrinsically motivated approach towards learning, eventually reaching the other end of the spectrum (right-hand side of Figure 28), which is preferable. This 'knowledge is power' mentality can be triggered by focusing on inspiring and relatable topics, actively and purposefully integrating coaches throughout the education process and applying reality-based scenarios that

include a real-life working environment. In this way, coach education will not be perceived as 'the authority' that merely delivers factual content in a top-down approach, but rather as a source of wisdom from which coaches can benefit throughout their careers. Understanding the correlation between the application of knowledge and the approach to learning is therefore important when designing and running courses.

Consequently, there is clear demand for developing goalkeeper coach competences and also enhancing their credibility. A specific goalkeeper coach education pathway, in line with and linked to the general coach education programme, has been developed within the scope of the UEFA Coaching Convention and now incorporates two fully established courses, namely UEFA Goalkeeper B and UEFA Goalkeeper A.³¹

To ensure that these courses meet the required standard in all associations, a number of measures have been established:

- Courses are designed for goalkeeper coaches working at specific levels.
- 2. Adult learning principles will be applied as the basis for interactive learning on all courses.³²
- During each course, the participants carry out their assignments and tasks in accordance with the principles of reality-based learning.³³
- 4. Courses, including the formative and summative assessments, comply with the current UEFA Coaching Convention.

30 The following explanation is based on the article 'On Vampires and Wolves – exposing and exploring reasons for the differential impact of coach education' by Dave Collins, Andy Abraham and Rosie Collins (2012), International Journal of Sports Psychology, 43; 257-258.

- 31 To access the UEFA GK A and UEFA GK B diploma syllabuses, see the link in the references section.
- 32 The principles of adult learning are value, authenticity, engagement, collaboration, feedback and challenge and should be considered during all coach education courses.
- 33 UEFA Coaching Convention: Reality-based learning, clarification memo

5.5.1 Reality-based learning

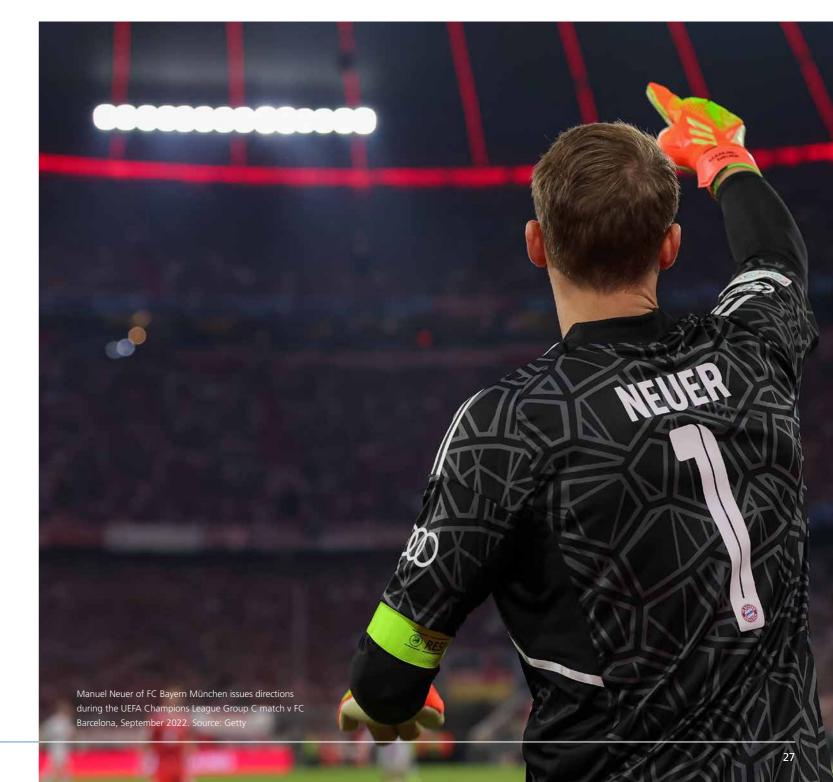
To ensure that the reality-based learning philosophy is fully embraced throughout the process, the following structure must be applied, as it enables the learning environment and course content to be merged with the coaches' day-to-day work.

- Residential meetings
- Online teaching and webinars
- Club-based practical work
- Club micro-group meetings
- Internships (coaches who are currently unemployed)
- Assignments
- Case studies/research
- Assessment

This structure ensures that coaches experience the realities of the job, which will help them to develop the knowledge, skills and personal characteristics that they need to excel at their particular level. By applying these measures, the lifelong learning process can be not only initiated but also maintained in the most sustainable way possible. During their educational journey, goalkeeping coaches will have the opportunity to embrace new theoretical knowledge and practical methods, and apply them directly to their working environment.

5.5.2 Stages of educational progress

On the following page, figure 13 provides an overview of the modules and topics taught at the various coach education levels. It distinguishes between general learning content (pale orange background), goalkeeping and football specific topics (white) and areas (pale red) that need to be emphasised due to their importance.



Goalkeeper coaches and their development

CORE SUBJECTS	NATIONAL GOALKEEPER DIPLOMA	UEFA GK B DIPLOMA	UEFA GK A DIPLOMA
Reality-based learning	What is UEFA? What is football? What is reality-based learning?	Analyse → design → train → reflect → adapt Working in a club setting	Working in a senior coaching team Recorded/evidence-based club experience
Environment	Why are you here? What do you expect from the course?	Development environment	High-performance environment Explaining your goalkeeper vision
Adult learning	Why? How? What?	Communication skills	Presenting/influencing
Role of the goalkeeper in the game	Understanding the decision- making process Goalkeeping principles	Applying the decision-making process Attacking → Transition to defend Defending → Transition to attack	Consolidating decision-making Problem-solving/finding effective solutions
Match analysis	Observing the game	Observing → Diagnosing + feedback	Applying tools for performance analysis Applying the decision-making mode
Match perfor- mance	Being part of a coaching team (multi-role)	Managing the game programme Matchday considerations	Managing all squad goalkeepers Matchday role: pre/during/post
Training	Rotating positions Transition to the full-size goal	Practice design: realistic + progressive	Managing differences Appropriate periodisation: individual/team-related
Technical	Fundamental goalkeeping	Developing technical efficiency	Developing and maintaining technical excellence
Tactical	Goalkeeping in small-sided games: 4v4 → 9v9	The role of the goalkeeper in the 11v11 game	Formation/systems/strategies/ set plays Improvising/adapting
Differentiation	Girls/boys Participation → development	Female/male Development → performance	Elite youth → senior elite/profes- sional From development to mainte- nance of performance
Goal-setting and talent manage- ment	Defining goals and talent Chronological age bias	Talent identification → recruit- ment and goal-setting Youth goalkeeper profiling	Senior goalkeeper profiling Club structure/budgets/loan system/recruitment/goals
Emphasis on: fitness	Basic knowledge of the human body; introduction to the main physical components	Main components/energy systems Maturation/growth issues	Effective load management, monitoring, documenting, reflec- tion and adjustment
Emphasis on: psychology	Appropriate communication by using instruction, motivation and feedback	Development issues Confidence/communication	Performance issues Winning mentality
Emphasis on: building relation- ships	Parents → coach → goalkeeper coach → coach (two-way)	Interacting with other coaches Personalities/behaviours	Managing up and down Dealing with media/job interviews
Emphasis on: personal character- istics	Open mind	Critical thinking and reflection	Adaptability

Figure 13: The stages of the goalkeeper coach's educational progress

5.6 Art of teaching

Having established the relationship between knowledge and learning, together with the content and stages of the goalkeeper coach's educational journey, it is clear that coach educators need to master the art of teaching³⁴ if they are to achieve their goal. As previously discussed, the keys to a meaningful learning journey are to get coaches hooked and engaged throughout the whole process, create a safe learning environment and encourage coaches to take responsibility for their own learning.

Coach educators therefore need to use a variety of effective interactive tasks during both theoretical and practical sessions to trigger their students' critical thinking and encourage them to join in and share their knowledge and experiences in a dynamic, beneficial and respectful way.

Coach educators should use interactive learning tools if they seem necessary to achieve a particular outcome during the session and if they are suitable for the students' educational level. It is important for the educators to choose their tools carefully so that they are effective and productive.

5.6.1 Top five considerations

Based on previous experience, five topics need specific consideration by the coach educators when running coach education courses, as set out in Figure 14.

The minimum of two qualified coach educators required by UEFA goalkeeper coaching courses enables effective use to be made of the interactive toolbox, taking account of these top five considerations. When one coach educator is delivering the session, the other can help by handing out specific tasks and providing additional support. If a student is delivering a session, both coach educators can support the group, which is of particular importance during a practical session when it is usually the case that not all coaches are actively involved with the players. Groups can be organised to observe specific details, such as the organisation and content of the session or communication between coaches and players, which should be first noted and later presented as valuable feedback.

TOPIC	WHEN	EXPLANATION
Knowing your audience	Pre-event During event	When preparing a course, coach educators should be aware of or quickly identify any participants with strong characters and predominantly binary mindsets. The dynamics and effectiveness of the course can be better controlled by preparing groups, tasks and responsibilities accordingly and in relation to the students' profiles. This enables courses to take place without conflict and irrespective of the reservations of individual participants. Note: Anticipate and manage potential conflicts.
Clarity	Pre-event During event	When handing out tasks or assignments, clarity is key. Tasks can be interpreted too narrowly, and participants get lost in unimportant detail; but they can also be too generic, in which case the required level of detail cannot be achieved. Note: Tasks need to be clear and precise to avoid ambiguous outcomes.
Listening and asking	During event	Communication too often focuses on talking. Coaches also need to learn how to listen to others, how to reflect upon differing opinions and how to ask questions to examine topics in more detail. Especially in the present-day football environment, in which many people argue from extreme positions, such a skill can help the coach overcome prejudice and opinion-based discussions. Note: Listening and asking questions are vital communication tools for the modern coach.
Generalisation v specificity	During event	Superficial statements like 'the goalkeeper should have done better' must not be accepted without adding a rational and logical explanation. What exactly should the goalkeeper have done better? What was the problem? Why did the goalkeeper choose this option? Why was it unsuccessful? Coaches need to learn to express themselves not only emotionally, but also rationally with specific descriptions and evidence to increase the goalkeepers' competence level. Note: Quality coaching requires clear and rational explanations.
Feedback	During event After event	Coach educators need to establish an environment in which feedback feels comfortable rather than being perceived as threatening or negative criticism. Providing feedback is an important ingredient to make students aware of their unused potential and guide them to a higher level. It is also an opportunity for educators to teach coaches correct feedback techniques. Cultural circumstances need to be considered when giving feedback. Note: Feedback must feel comfortable, but specific and actionable.

Figure 14: Top five considerations for coach educators.

34 UEFA's interactive coach educator toolbox has been proved to be of great help in emphasising interactive learning and critical thinking. It can be found in the appendix.

6 References

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7 Appendix

The following tools have proved to be of great use for coach educators, enhancing interactivity and the philosophy of sharing knowledge and experience.

TOOL NAME	CONCEPT	HOW?	WHEN/WHY?	TAKE CARE WITH	INTERACTIVE	INTERDEPENDENCE
Flipchart	Small groups: 3-5 Short task 0-10 min.	Brainstorming. Questions: 3-5 min.	Ice breaker. Get to know you. Why are you here?	Ensure appropriate level/type of questions for the coaches	Good	Fair
Poster presentation	Small groups: 3-5 Varied tasks 15-30 min.	+ allocated time to produce thoughts. e.g. 15 min.	If you need a short time to reflect. Share with second group.	Clarity of tasks. Ensure the groups are on track → countdown.	Good	Fair
Flea market	Small groups: 3-5 Varied tasks 30-45 min.	As above but: one stays to get feedback and others rotate.	As above and if questions are likely to be asked.	As above and timings. Clear messages. Vary the person staying.	Good	Fair
City tour	Small groups: 3-5 Varied tasks 45-60 min.	As above. Walk and observe all the other findings.	As above and if there is likely to be discussion/ debate.	Sentences and not bullet points. Clear and read- able. Balanced views/respect.	Good	Fair
Stopover	Small groups: 3-5 Table tasks 60+ min.	Every 10 min. move clockwise to the next table → add thoughts.	If all groups involved, might bring slightly dif- ferent thoughts	Avoid replica- tion. Might need prompting by tutors.	Good	Fair
Town hall	Small groups: 3-5 Table tasks 60+ min.	Each group presents to all other groups from their own table.	To let them experience presenting to peers.	Avoid central table presentations: 360°→ walk and talk. Front screen as a reference.	Good	Fair
Theatre	Small groups: 3-5 Table tasks; Rows for presentation 60+ min.	Presentation from the front of the room. Lectern? Walk and talk?	To let them experience formal presenting. Being challenged!	Reading screens. Too much information. Text/graphics. No eye contact.	Good (task) Low (unless Q&A)	Fair
Pair and share	Share experience 5 min. each/Q&A 5 min.	Informal/ personal. Non- threatening.	Ice breaker. Personal opinion.	Waffle: 5 min. to get your thoughts across.	High	High
1-2-4	Same task in pairs: share with a second pair 20+ min.	Common ground? Contra- diction? Varying opinions?	Ice breaker. Brainstorming. Set the scene.	Listening skills. Questioning skills. Communi- cation skills.	High	High
Fish tank	Small groups: 3-5 Discussion with the rest of the group surround- ing them. No allocated time	Debriefing to increase pressure of the interview. Everyone in close proximity	When they have expertise in their topic/theme of discussion (interviewee/ tutor)	Appropriate level of discussion. Bearing the audience in mind (e.g. terminol- ogy, language)	Fair	Low



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