

GAELIC GAMES PERFORMANCE ANALYSIS

GUIDE FOR GOOD PRACTICE











- PA Competence

PA ExperienceFinding an Accredited Gaelic Games Analyst

CONTENTS

I.	What is Applied Performance Analysis	6
2.	Six areas in which PA supports Coaches & Players	8
3.	What does a Performance Analyst do? - Creating Knowledge - Designing opportunities for knowledge to be understood and used - Reporting to the Coaching Team - Feedback to Players	12
4.	Working effectively with a Performance Analyst - Role Descriptors - PA Support Agreements	16
	- Timeframe	
	- Aims for Delivery - PA Projects & Deadlines	
	- Evaluation	
	- Sign off	
5.	How could your team/club benefit from the use of PA - Rationale: - Why do we need PA? - How could PA fit into your coaching philosophy? - What do you want to achieve with PA? - Circumstances - How much experience have players with PA, what is their readiness [their PA Age]? - How much time can management / players commit to PA? - What resources have the team to commit to expertise and equipment for PA? - How can you recruit someone with the expertise and time to provide PA support? - Experience and knowhow - Tips for starting with an analyst	19
6.	A Guide for Practice for using PA in Gaelic Games - What is the Gaelic Games Player Pathway? - Why do we need a Guide for Practice? - Principles for PA Delivery - Guide for Practice - Understanding Performance — Training & Monitoring - Pre-Game & In Game Analysis	24
	- Post-Game & Point in Time Review	
7.	How to find a Quality Assured Gaelic Games Performance Analyst - Background to the Gaelic Games Accreditation Programme - Aim and Objectives of the Accreditation Programme - Key Aim: - Objectives of Developing a Quality Assurance System - The Accreditation Programme and Process	30

8.	Opportunities to Learn about PA - Introduction to Performance Analysis - PA Courses - Gaelic Games Introduction to PA - Other Education Providers	33
	- Other places to learn about PA	
9.	How well are you using Performance Analysis? - Understanding Performance - Training & Monitoring - Pre Game - In Game - Post Game - Point in Time Review	35
Ар	ppendix	41
	Assistant Analyst (practicing at any level): Role Descriptor Template	41
	Club Analyst Lead: Role Descriptor Template	42
	Underage Intercounty Analyst Lead: Role Descriptor Template	44
	Senior Intercounty Analyst – Lead: Role Descriptor Template	47
	Code of Practice for Applied Performance Analysis Practitioners in Gaelic Games	51
	How to check the reliability of your data	52
	Reliability Tests	54



Overview

The Gaelic Games Player Pathway provides a structure for participation, development and performance to ensure positive experiences for all players through their clubs, schools, colleges and counties. Healthy and holistic player development is led by coaches and parents and supported by approaches and practitioners from sports science. Sports Science involves using science to optimise participation, performance and wellbeing in Gaelic Games. Performance analysis is a very applied practice in sports science that can be delivered with and through coaches, and in a multi-disciplinary team with other practitioners. This Guide for Good Practice provides a framework for the application of performance analysis, in all Gaelic Games contexts, across the player pathway, supporting consistent and appropriate delivery of timely insights to enhance participation and performance.

Aoife Lane

Chairperson of the Gaelic Games Sports Science Group



Guide for Practice Executive Summary

Performance Analysis (PA) is increasingly being used in Gaelic Games, however for many involved in Gaelic Games this is a new enough area which is evolving and developing at a rapid rate. The purpose of this document is to provide players, coaches, managers, administrators and all those involved in Gaelic Games a guide for what good practice is in relation to the application of performance analysis in a Gaelic Games setting.

The key elements included in this guide for practice are

- Explains what PA is and why we need it
- Identifies six areas in which PA supports coaches and players with examples
- Highlights the key principles of PA delivery, describing what is appropriate at each stage of the Gaelic Games Player Pathway.
- Provides tips for coaches who want to do their own PA and direction on where they learn about PA within Gaelic Games

- Describes the role of a performance analyst, how to find a quality assured analyst and provides role description templates which can be adapted by club or county administrators to ensure what analysts deliver is appropriate.
- For those already using PA, there is an audit tool which can be used to help understand how they can improve their practice

Why do we need a guide for practice?

Performance analysis is a constantly evolving discipline but is underpinned by some core principles. This guide for practice is to ensure that all stakeholders in Gaelic Games have a consistent and clear understanding of both the application and implications for using performance analysis at all levels of the Gaelic Games Player Pathway.

How to use the guide for Practice?

Some will benefit from starting at the beginning of this guide and working their way through the full document, for others, specific sections will be relevant at different times depending on their role and the stage of the player pathway they are involved with. This guide will provide a high level overview for many areas relating to performance analysis and will direct readers to other opportunites to learn more about performance analysis.

This document was written by the Performance Analysis sub-group which was led by Denise Martin and Colm Clear and comprised Johnny Bradley, Emma Byrne, Louise Byrne, Niall Collins, Brian McDonnell, Kevin McGuigan and Alan Swanton. The group would like to acknowledge the constructive feedback and many contributions from coaches, analysts and administrators to the work.





1.

What is applied performance Analysis

Applied performance analysis is the systematic analysis of performance to provide insights and feedback which aid participation and performance.

Performance analysis is used in modern coaching for three reasons:

1. Coaches cannot remember every detail of a match

We know that humans do not have the ability to remember every detail which occurs in a match. Even experienced and qualified coached have been shown to recall just 60% of key incidents accurately, as this quote from Brian Cody explains:

"I think you'll always see things on video that you won't have seen live, because otherwise you're a bit of a genius and I haven't met that fella yet."

Brian Cody (Kilkenny Hurling Manager)

2. It can be hard to see patterns and find insight in data

It can be very hard for coaches to take in and make sense of the amount of performance information now available to them. In performance analysis, all this information is integrated and analysed to see if there are any patterns or trends compared to previous games or compared to the best teams. This information should give the coach insight and help guide their reflection and decision making. It may not give answers, but help coaches ask better questions.

Insight is "something you didn't know or couldn't easily see"

Jacquie Tran (Senior Insights Researcher at High Performance Sport New Zealand)

3. Video and numbers are often more powerful than words in feedback

Many coaches use video and visualisations to create a picture of how they want a player or the team to play.

Vision is by far our most powerful sense and visual feedback has been shown to help players better understand the messages coaches are trying to deliver.

Video is also very important as a tool to allow players identify areas they want to work on.

Intercounty Gaelic players stated how they valued Performance Analysis feedback to help them understand the messages from their coaches.

Seeing how certain teams play/setup can be beneficial for visualization and preparation before games

PA helps everyone be on the same page. It makes sure we are implementing the game plan to the best of our ability. Having visual feedback or information if what coaches want or don't want is helpful and makes sure everyone knows what's going on.

Video evidence of the team's style of play are a great way to fully understand how we want to play and the impact it has on the opposition.

Particularly when I think
I have had a poor game,
sometimes seeing the little
things that you did right can
help me to feel better about
ertain performances and take
positives from the game

Having visual feedback or information if what coaches want or don't want is helpful and makes sure everyone knows what's going on.

Not only do I see the good stuff, but I also see the stuff I have to work on that I didn't realise myself, like positioning and how my actions influence a play

Perspectives of male and female senior intercounty players in both codes on how PA informs their understanding of performance (Michael Byrnes, MSc project 2020, IT Carlow.)

When on the pitch it is often hard to see the team as a whole rather than individual performances, PA is an easy way to look at team structure.

When you are being coached to play a role, you may not fully understand the impact of that role and its benefits to the team until you see it.

I'm able to use the informatio to feedforward for future matches and what works in certain situation



2.

Six areas in which PA supports Coaches & Players

There are many ways in which performance analysis can be used to assist coaches and players to reach their potential - these have been divided into six categories:



I. Understanding Performance

A manager has a vision for what a team can achieve during a season and knows what kind of performance is required in order to realise that dream. Working alongside the performance analyst the coach can create a statistical and / or video or visual picture of what that ideal performance looks like. The coach can then work alongside the players to create a set of indicators which relate directly to how the team wants to play. Additionally, video clips can be used to model good examples of technical, tactical and team play. For most impact, clips should relate to the player as possible, ie: gender, age and use of local role-models.

PA can create opportunities for:

- Coaches to communicate their philosophy of play and game plan to the players in different ways to ensure it is understood
- Coaches and players to access and understand the elements of optimum performance and to apply this knowledge to a set of relevant targets
- The club/county to gather and archive performance information in a sustainable way for future use

EXAMPLE

Establishing what was the average score for and against for the previous winners of the league and/or championship that you are competing in. By having this, it allows you to set realistic targets in order to be successful.



II. Coaching & Monitoring Practice

Performance analysis should not be limited to just games. PA can be used during training to develop the team, the individual player and a learning environment. When PA is used to video or monitor training sessions, it can prove to be a valuable tool to help players to review and reflect on their individual displays. Additionally, PA can also help the coaching team to assess if their training sessions are creating game conditions for players.

PA can create opportunities for:

- Coaches to record and review training performance
- Players to review and reflect on their training performance

EXAMPLE

If shot location is a measurement within games, then this should be recorded as part of coaching sessions. This will allow for refinements of measurements, reinforce the importance, and allow players to interpret the information and put the learnings into practice immediately.



III. Pre-Game

Successful teams use numbers to track issues and to set benchmarks for the team and for individual performance. The output of a team and individual players can be assessed based on a comparison with their peers i.e. how do your numbers compare to the leading sides in the competition? How about the output of individual players?

PA can create opportunities for:

- Coaches to understand their own team profile and evaluate opposition strengths and weaknesses in that context
- Coaches to communicate, demonstrate and discuss team tactics and specific individual roles, and ensure they are understood by players
- Players to analyse and reflect on previous performance and contribute to strategy discussions

 $oldsymbol{9}$



EXAMPLE

We have established that the opposition team favour a bunch and break structure for their kick-out. In advance of the next game, we will establish the best system based on the players we have to negate this tactic.



IV. In-Game

It is of little practical value for the performance analyst to present the coaching team with a whole series of numbers in-game or during the half-time interval. Therefore, it is important for the analyst to present the coaching team with just the important information which will help them to make an impact on the game - the complete statistical record of the contest can be studied post game.

PA can create opportunities for:

- Coaches to receive performance insights as the match progresses
- The coaching team to receive a summary of performance at half-time

EXAMPLE

Outcome of puck-outs. During the game we are measuring the outcome of all puck-outs i.e., a shot, turnover or dead ball. This will inform the effectiveness of short, medium or long puck-outs and allow management and the players to make adjustments accordingly.



V. Post-Game

Following each game, the performance analyst can deliver a report which will identify how the team and the individual players performed. The positives associated with the performance can be highlighted via collective feedback, issues identified, and training tailored accordingly.

PA can create opportunities for:

- Coaches to work with the PA to interpret the performance data and plan for feedback
- Players to receive feedback in ways which promote reflection, understanding and learning

EXAMPLE

During the last game the number of times we were turned over in the tackle was higher than expected. Using the video, the coaching team have established that there was one main cause of this: players receiving passes standing still and having no momentum to break tackles. A 15-minute discussion is planned for the next training session, showing video clips of successful and unsuccessful instances of when breaking the tackle occurred which is followed by a pitch-based session of games and activities to address the issue.



VI. Point in Time Review

At agreed points during the season the coaching team can take some time to reflect on the performances of the team. Some simple questions can be asked: are we on track to realise our vision for the team? What action can we take to stay or get back on track? Additionally, can we use our performance analysis information better?

PA can facilitate opportunities for:

- The coaching team to review patterns in team performance after a block of competition
- The coaching team to review the effectiveness of PA provision and how well it supports the needs of the team; the quality, relevance and timeliness of the information, the levels of engagement and learning evident

EXAMPLE

The league has just finished and as a coaching team we are going to review the five key measurements that we have focused on so far. We need to establish if we are improving in each area and if we are improving in those areas are they having a positive impact on our performance. This exercise will lead to many more questions, but is an important place to start.

 $oldsymbol{0}$



3.

What does a Performance Analyst do?

The role of a performance analyst has two parts; creating performance knowledge and designing opportunities for that knowledge to be understood and used to inform decision making.

Creating Knowledge

The first part is to create knowledge about performance, based on what the coach needs to know. The lighthouse diagram (Figure I) shows the series of steps a performance analyst will go through to help a coach create knowledge.

The analyst and coaching team will work together to decide what is the most important information to collect, how much information they need and when they need it.

The information that you are collecting should be specifically relevant to the vision that the manager/coach has for the team.

The more an analyst is embedded and involved in the coaching team and set up, the better the chances of them understanding what PA supports are needed by coaches and players. They will be much clearer about the culture of the group, the language to use, and how best to communicate information in a given context. It is useful to define roles at this stage so everyone knows what their job is.

The next element is to agree on operational definitions with coaches and players, to define game events such as a tackle, turnover etc. as coaches and players will have their own ideas and opinions. It will help buy in if coaches and players agree on clear operational definitions for whatever you are measuring. The analyst will then design the best system to collect data for that team, depending on the resources and needs.

The analyst must make sure that all data collected (video and statistics) are checked for reliability. Reliability means information is accurate, unbiased, and based on the complete performance so it can be trusted by coaches.

Service Review & Evaluation

Learning Opportunities

UNDERSTANDING



IMPROVED JUDGEMENTS

CO-CREATE

Facilitation of Feedback

Report to Coaching Team

Analysis

Data Management

Data Collection & Reliability Checking

System Design

Needs Analysis
Service Planning

Establish Relationships
Define Roles

Professional Behaviours

Technical Expertise

PA & Sport Expertise

Building Relationships

Contextual Awareness

Figure I. A lighthouse diagram represents the aim of performance analysis to create knowledge and let it shine so others can see and understand it. The foundations of the lighthouse show the important expertise analysts need and the body of the lighthouse represents the steps analysts take to create knowledge and translate it effectively. From: Martin, O'Donoghue, Bradley and McGrath (2021). Developing a framework for professional practice in applied performance analysis. International Journal of Performance Analysis in Sport. DOI:10.1080/2474 8668.2021.1951490



Designing opportunities for knowledge to be understood and used

Reporting to the Coaching Team

Information and knowledge are only valuable if it is understood and used. It is vital that analysts invest time to ensure that the coaching team really understand any information provided. The performance analyst must make sure that information is relevant, simple and clear so the coach or coaching team completely understand it. Video is often much more powerful at landing this message with coaches than numbers. Numbers are good at raising questions, video helps to explain 'WHY' something is happening.

The top coaches spend time with their analyst to do a review. This review may be a quick phone call or a meeting, but it allows the coach and analyst to ask questions, debate and agree how to interpret what they have seen, for example – 'how did bringing out a third midfielder impact our shooting chances?' Some of the best coaches will design a strategy for training to address the issue without the need for a direct feedback session with players.

It is also important that everyone understands where the information came from and how it could be limited. For example – a team or player profile based on just one game could be very misleading. It may be useful, but it is limited, and we know that profiles over more games would give a more accurate picture.

If coaches wish to use 'In-game' analysis, it should be agreed in advance how this information will be communicated: how much information, from who, to who and how often. The purpose of in-game analysis is to add to decision making so information for coaches should be short, sharp and insightful.

Feedback to Players

Coaches will use the knowledge and insights from PA to make decisions on team selection and design training sessions. They will also want to give players an opportunity to learn from PA information. Performance analysis knowledge is like a lightbulb, it is only useful when it is switched on – we need to think about how we create 'light-bulb' moments for players. If you are using statistics with players, they will only buy in if they understand what they mean in context and how they help.

Recent research asked Gaelic Games players what they wanted from PA feedback, and they said:

- I. Players felt most engaged with PA when feedback came with instruction and explanation.
- 2. Players want to be involved in short and specific discussion sessions where they feel they can debate the information and get guidance on how to use it to improve (no long boring sessions)
- 3. Some players thought the best thing about PA was when the coach helped them see the positives also and gave them a different perspective about their game this was particularly female players and young players new to PA (Catch them doing it right human instinct is to look for negatives)

(Michael Byrnes, Masters Research, IT Carlow 2020)

it is vital for all coaches and analysts to think about how they give feedback to players based on their age and maturity, experience of PA and their ability to reflect on their performance. Using open questions to ask players what they think and helping them figure something out, is much more effective than telling them the answer.

By using these performance analysis principles of feedback coaches can create positive learning environments for players.

14 oxdots





Working effectively with a Performance Analyst

There are multiple ways in which teams and coaches will work with performance analysts. Some analysts may be beginners, learning on the job, others will be experienced, accredited analysts.

Regardless of the level of experience or expertise, taking time to create two agreements will help make the relationship between the analyst and everyone involved much more effective.

The two agreements are a role description and a support agreement. This section will explain what these are and how to set them up.

Role Descriptors

What you need from an analyst depends based on what stage of the Gaelic Games Pathway you are operating in, the readiness of your players to use PA and your resources.

A role description will outline what you expect from an analyst in terms of their training, experience and personal qualities and summarise what you need them to do.

The process of creating a role description is very powerful as it really makes the coach and administrators think about what type of person they want to have involved and who they will be answerable to. These are obviously useful if you want to recruit an analyst but are also used by established analysts to make sure everyone understands their role in the coaching team. It is important to note that any beginner analyst needs support and mentorship to do a good job. Where and how to get this support should be part of a discussion with a novice analyst. It is vital that one of the coaching team supports the analyst to filter information.

We have created four templates (in appendix), based on notional roles – please take these and change them to suit your context.

PA Support Agreements

PA support agreements are similar to role descriptions, but they go into a lot more detail on what exactly will be analysed by the analyst: why, how and when. This is similar to a service level agreement in business and is very important for clubs or county boards who are paying for PA support. It is vital to agree in advance what work will be done, how long that will take and how much it will cost.

PA is very time intensive and often this work is not seen, so it is really important to be clear about what exactly is expected from the analyst and how much time it will take to do each element of the analysis. An experienced analyst will normally begin this process and work with the coach to negotiate and refine exactly what is required in a final agreement. We have put together a template (see appendix P50) which you can modify for your own use with the following headings:

Timeframe

A PA support agreement should cover a specific period of time, usually in line with a competition. In Gaelic Games, the first target may be a league competition and PA agreement would be reviewed after this so it can be amended, if necessary, before the championship.

Aims for Delivery

Consider what you want the PA support to help do for your players and team. The overall aim may be to create an environment where players are comfortable and confident reviewing and analysing video. It may be to use video to ensure optimal learning opportunities at training sessions.

Whether simple or complex, keeping in mind the overall aim of why you are using PA is very helpful when you come to reflect and evaluate if it was beneficial or not.



PA Projects & Deadlines

A PA support agreement should itemise each PA project which will be done and when it will be delivered to the management team or players.

It may be useful to structure this along the six areas of support – what exactly do you expect the analyst to do pre-game, in-game and so on.

Coaches need to discuss the level of detail they want from analysis, for example team or individual clips, so that an analyst can make a realistic estimation of how long it will take and how soon they can have it ready. This is important, not only for analysts who are getting paid, but for volunteer analysts who often have other jobs which will take priority.

EXAMPLE

As a guide, we estimate that an in-depth team analysis of a match would take 4 to 5 hours. An In-game analysis should allow for travel time and for the analyst to be at the venue at least 1hr before throw in.

Archiving and data management should be written into every PA support agreement as the club or county should have access to all the information generated by the analyst at the end of the year.

Evaluation

Make sure to give some thought to how the PA support will be evaluated and who will do this. If there are clear aims and deliverable work projects, then this process will be a lot easier.

Sign off

The PA support agreement is usually negotiated with the coach and head analyst, but it is also important to include someone from the club / county board as a signatory from the outset.

5.

How could your team/club benefit from the use of PA

This section is for those who are new to PA and are unsure of how to begin to use PA practice in their club environment or who want to develop how they use PA.

From a club perspective, the appropriate use of performance analysis across the youth and adult sections can have a significant influence on the development and performance of players. When performance analysis is used correctly, it can facilitate a culture of self-improvement by developing reflective players whose ability to think and problem solve not only benefit them as a player but also as a person.

The first step in the process is to give some thought to why you think your team/club would benefit from using PA.

When we look at it from an individual team perspective the questions and examples below may give some guidance on the most appropriate starting point.

Rationale: Why do we need PA?

Be clear about the purpose of PA and share this with players and management

EXAMPLE

Senior team: How well did the team deliver the game plan? Without video this would be a matter of opinion

 ${\bf 16}$



How could PA fit into your coaching philosophy?

If you want to empower and educate players, use PA to create discussion and debate

EXAMPLE

U13s, share a short clip of a prominent player scoring a goal/point with the team in advance of training. Ask them about the roles of the different players involved in the sequence i.e off the ball runs to create space for others.

What do you want to achieve with PA?

Set clear goals as to what you want from PA support

It's important to note the performance analyst must be supported and integrated into the team. The role of the Performance analyst is to simply inform and support the management team and players. Performance analysis is there to help make coaches make better informed decisions. Empower coaches to empower players.

EXAMPLE

u17s Aim - Players are comfortable watching and reviewing personal performance [within team game plan] guided by constructive questions and feedback from coaches.

Circumstances:

How much experience have players with PA, what is their readiness [their PA Age]?

Not every individual will be comfortable with watching and reviewing their game to begin with. These broad approaches will assist in creating that positive learning environment

- Be positive when using video particularly at younger ages keep it positive 'Catch them doing it right'
- Lead with open questions this ensures you probe the game understanding of the each player and you search for a response as opposed to making someone feel uncomfortable – what did you think of your game / defending / attacking runs? Would you do anything differently?
- Create a culture where there are no wrong answers, just chances to learn and understand where players / coaches are coming from.

How much time can management / players commit to PA?

A clear coaching message will require a lot of thought, time and discussion with the coaching team and lead players

EXAMPLE

Senior team: Does the team have clear tactics and game plan? Or an overall playing philosophy?

If the game plan is not clear, it is very hard to review how well the team did in carrying it out – how do you measure success

Time needs to be invested in distilling the game plan and coming up with ways to ensure the whole team understand how it works in practice.

Ways to do this are through walk-throughs of scenarios on the pitch – who should be where, when; by using tactics boards or other visuals to show the players what you are looking for; video examples of other teams using these tactics and ideally, in time, video or your team doing it well.



Reviewing Performance

EXAMPLE

ul 7's/Youths – Players and coaches may not be available for a full review of performance

Record the game and show short summary (2-3 mins) to prompt review and discussion within the squad.

Keep it positive to increase engagement with all players and find a balance to include all players across the season i.e. scores created, defensive examples, team phases of play.

No Video available

EXAMPLE

ul 5's - Share content of passages of play from THE senior team through an online platform i.e. private YouTube channel. Using more local practical examples might resonate better with the group.

What resources have the team to commit to expertise and equipment for PA?

Time is the one resource that is very precious within Gaelic Games. One of the key questions all teams must ask themselves is what time can they commit to utilising performance analysis to assist in improving performance.

EXAMPLE

Resources doesn't always have to cost €€, the successful inclusion of PA will most importantly require time from the coaching team to confirm team game plan, coaching philosophy, put a structure in place to review performance.

What resources have the team to commit to expertise and equipment for PA?

EXAMPLE

Equipment will never be the barrier to effectively using performance analysis. Equipment can allow you to add additional value and do more in less time, but if the fundamentals are not correct and the right people in place expensive equipment can actually add more confusion. When sourcing equipment, firstly indemnify your needs and then source the equipment based on the need.

How can you recruit someone with the expertise and time to provide PA support?

Experience and knowhow

 An accreditation system exists within the GAA which will point your club in the direction of a skilled analyst in the surrounding area – https://learning.gaa.ie/accreditedanalysts.

Tips for starting with an analyst

- Be clear about what the analyst's role will be, what you expect and when. The analysis post game can take time dependent on the depth required.
- Integrate the analyst with coaching team they need to understand what your plan is i.e. include them in coaches meetings.
- Video is the starting point build from there, get the playing group comfortable watching and review their performance in a positive way with clear guidance.
- Spend time discussing how to define the different measures you want to collect this is important for consistency across the season.
- Keep feedback meeting short and concise (<20mins) No more than 3 key messages per session.
- THINK LONG TERM It will take Time to build a robust and integrated PA system will take time i.e a number of seasons. Consider at the end of each season what can be improved upon and built upon the following year.





6.

A Guide for Practice for using PA in Gaelic Games

This guide for practice is designed around the 6 key areas detailed earlier in the document and is directly aligned to the Gaelic Games Player Pathway.

What is the Gaelic Games Player Pathway?

Entitled 'The Gaelic Games Player Pathway', our Player Pathway attempts to provide the GAA, LGFA and the Camogie players with the right support at the right time so that they are individually empowered to engage with the many challenges they will face along their player pathway journey. As a pathway, it is very much based on the FTEM athlete development framework, empirical evidence and international best practice. This framework has been adapted specifically to fit our unique context and we believe that it will provide our stakeholders with the clarity they sought in relation to how best to support our players.

For more and up to date information on the Gaelic Games Player Pathway please visit - https://learning.gaa.ie/playerpathway.

Why do we need a Guide for Practice?

The amount and level of detailed information coaches need will vary depending on which part of the Gaelic Games Pathway they are operating in. Coaches at the early stages of the pathway will probably rely on their own observation. As the pathway progresses, coaches may have someone video games so they can look in more detail and maybe use a notation template or software to help them structure how they watch the game.

At the higher levels of the Gaelic Games Pathway, coaches, managers and players tend to look for more and more feedback on performance. The time required to prepare this properly is often beyond a coach and they ask a performance analyst to support their role.

This guide for practice provides simple advice for coaches on how to use performance analysis (PA) effectively in their coaching in three ways:

- 1. Strategies to do your own PA
- 2. How to get the best from a performance analyst
- 3. How to find the right performance analyst for your team

Context is everything in coaching and PA. This section is a guide to help coaches and analysts make decisions about what is appropriate for their players and teams at any point in time.

Looking at who would use PA, we divided the Gaelic Games Player Pathway into three groupings – Youths (ages 12-17; F3,T1,T2), Adults (T3/T4/F3 Adult) and Elite (E1).

Considering the six areas in where PA can be used (Understanding performance, Training & Monitoring, Pre Game, In Game, Post Game and a Point in Time review), we have suggested what might be delivered at each stage based on the context and resources available.



Figure 2. Gaelic Games Player Pathway



Principles for PA Delivery

Just as you as a coach have a style in which you conduct training sessions and no doubt have a way you would like to see the team play, your coaching philosophy. An analyst will also work off similar guiding principles which will assist them in maximising the effectiveness of their time and effort. These can be individual but as a starting point might include:

1. Trust is Everything

Trust in the integrity of information, trust in the analyst, trust in the positive intention of the process.

2. Clarity of Purpose - The what, why, when, how, where & who

Ensure that you are capturing the info/data that matters, not just that which is easy to collect.

3. Awareness of context/relevance

Be aware of the operating reality of those around you, what matters may change.

4. Create light Bulb Moments

Help to create an environment where players have time to reflect and are facilitated to problem solve, creating learning opportunities by probing/leading with open questions.

5. Catch them doing it right

Players are more likely to positively engage and change behaviours when feedback is framed in a positive way.

Particularly at underage level, set the foundations for future years.

6. Allow time to reflect

Strive to continually evolve how you operate by giving yourself the time to evaluate your input potentially after a session or at the end of the season. Ensure we learn from our experiences and strive to continuously evolve and adapt to the operating environment.

Guide for Practice

Analysis Tier	Tier 1 of Analysis	Tier 2 PA	"Tier 3 PA
Stage	F3/T1/T2 Youth	T3/T4/F3 Adult	E1
	12-17	ADULT	Elite Representation
Timespend	Unseen background work: 3-4 hours Delivery to players Total Exposure- up to 15mins	Unseen background work: 10 hours per week Delivery to players Total Exposure- up to 30 mins	Unseen background work: 20 hours per week Delivery to players Total Exposure- up to 60 mins

Understanding Performance - Training & Monitoring

Stage		F3/T1/T2 Youth	T3/T4/F3 Adult	E1
		12-17	ADULT	Elite Representation
1.Understanding Performance	What does good like • The Player • The Game	"Coaches - Breaking down a skill -key teaching points, common errors, slow motion (skill acquisition). Players- Using information that improves technical and tactical knowledge, decision making and confidence. (Clips of Skill execution & Principles, Styles of Play, Really good decision Making)"	"Coaches - How do you want the game to be played - PRINCIPLES OF PLAY). Players - How good are we? - Team benchmarks. What it takes to Win -What does good look like Role Clarity - demands and clarity of positions	"Coaches - Roles and Responsibilities - Defined roles and responsibilities in the analyst team that supports the overall player and management teams. KPI's & Definitions - Ensure that the key terms/definitions are defined clearly. Data - Have a strategy around data, video library and analysis process (GDPR Included) Players - How good are we? - Team benchmarks. What it takes to Win -What does good look like Role Clarity - demands and clarity of positions "
2. Training & Monitoring	How to use analysis to plan, do and review your coaching sessions	"Training - Previous games analysis can help you plan, do and review coaching sessions. Monitoring - Setting targets at training eg. 5 turnovers in a small sided game. Modifying small sided games to focus on outcome you want to achieve. "	"Training - Previous games analysis can help you plan, do and review coaching sessions. Presentation of video before training to help set the aims of the session. Monitoring - Capture of specific elements during training that cancommunicated to Players. Multi-discipline Integration"	"Training - Previous games analysis can help you plan, do and review coaching sessions. Presentation of video before training to help set the aims of the session. Video training sessions, provided to the coaching team post session to review and understand if players are understanding what is being delivered. Important also here to measure what is being targeted to work on. Monitoring - Capture of specific elements during training that cancommunicated to Players. Multi-discipline Integration - Track the training load of players across all grades/teams to ensure that players are under the optimal load - stored centrally "



Pre-Game & In Game Analysis

Stage		F3/T1/T2 Youth	T3/T4/F3 Adult	E1
		12-17	ADULT	Elite Representation
3.Pre-Game	Pre-match preparation - Feedforward	"Tactical profiling - of how we are playing Assist with Team selections - PA can assist coaching the selection of the team by reviewing pervious performances. Goal setting- New targets for the upcoming match. "	Tactical profiling - Of ourselves and opposition. Assist with Team selections - PA can assist coaching the selection of the team by reviewing pervious performances Opposition Analysis - Prepare opposition clips and clips on certain opposition players - main factors that feed in to opposition analysis and circulate to players.	Tactical Profiling - Ensuring the coaches are provided with information (in visual, numerical, video formats) to help understanding of upcoming game Effective Preparation - Holding pre training session with players, deliver message, train, video the training session and then review the video of the session to measure if players understood the message. Opposition Analysis - Prepare opposition clips and clips on certain opposition players - main factors that feed in to opposition analysis and circulate to players. Game Preparation - As an analyst, meet with the management and agree what should be prioritized for measurement during the upcoming game
4.In-Game	In game analysis – Insight to action	"Inform coaching decisions on line. Simple Insights that can be used that players can understand during the match and at half time. "	Real & lapsed time Feedback – Using PA tools to answer - Is our plan working?? An effective Half time - Facilitate an effective half time by providing the coaching staff with relevant and accurate data and insights.	Real & lapsed time feedback - Coding during a game can be notional, via an iPad(s) or with a laptop. Responsibility of the lead analyst to provide real time feedback to the management team The information provided should measure the plan for the game (devised from pregame) and should concentrate on factors that correlate with winning An effective half time - explain message from coaches where appropriate in the environment e.g., video, KPl's, KPl board in the dressing room, unit debriefs Post game analysis PREP - best to have the game videoed from as many camera angles as possible with priority on close view, wide view and end view

Post-Game & Point in Time Review

Stage		F3/T1/T2 Youth	T3/T4/F3 Adult	E1
		12-17	ADULT	Elite Representation
5.Post Game	Post-Match Review - Feedback	"Reporting - What went right/wrong, What are we going to work on for next game. Education - show some video clips to emphasise learnings shown to players in group setting. Questions - Plan the questions that you might ask the players. Consider Age when designing"	Reporting - What aspects need to be addressed in the future. Feedback: Team/In Groups/1v1/ Player led Timing/Length - before next training. How long will this take (MAX 15-20 mins) Where and How? Do you have a suitable location to conduct your feedback. What others tools do you need.	"Test your analysis - ensure that it undergoes a reliability and validation test Player lead analysis - Motivate players to carry out their own analysis by setting rewards. When delivering feedback, get to the point quickly and avoid long video sessions and ensure that feedback is balanced in favour o positives and negatives Have a room at the county grounds (training base) with equipment for players to review the analysis (on their own or with coaches) analysis room Reporting - Have a database built up with data from past games etc. so can be referenced and compared to.
6.Point in Time Review	Reviewing Performance Analysis process and workflows	Review - Review the current process and from previous seasons	"Review - Review the current process and from previous seasons Refine - Establish if the key areas of focus reflect what is measured and how/why its measured"	"Review - Review the current process of PA 2 to 3 times per year Refine - Establish if the key areas of focus reflect what is measured and how its measured"



7.

How to find a Quality Assured Gaelic Games Performance Analyst

Background to the Gaelic Games Accreditation Programme

PA as a discipline has been embraced by Gaelic Games coaches since the early 2000s, however in 2016, several issues were identified as posing problems for coaches, administrators and PA practitioners such as:

- I. Lack of certification in PA was making it very difficult for coaches and administrators to make judgements about who should work with their teams.
- 2. There was no range of certifications at various levels which could be recognised and mapped to a framework of levels eg. in Nutrition or Physiotherapy.
- 3. There were limited education opportunities for volunteers to up-skill and currently no pathway for aspiring analysts to follow. Many PA practitioners were self-taught, particularly the volunteers.

It was decided that an accreditation process to verify Quality Assured PA Practitioners could address some of these key issues and begin to create an environment for the sustainable integration of PA into Gaelic Games coaching.

The framework recognised the various models of PA delivery which exist within Gaelic Games, and aimed to support, in particular, analysts working voluntarily, with opportunities to recognise and develop their skills. Since 2016, nearly 200 Gaelic Games analysts have put the effort in to become accredited. Please seek out and use their expertise, you can find the list HERE

Aim and Objectives of the Accreditation Programme

Key Aim:

To foster a philosophy of practice within the Gaelic Games performance analyst community which compliments and enhances the player pathway principles and values.

Objectives of Developing a Quality Assurance System

- To ensure players receive age appropriate high-quality analysis support empowering their holistic development.
- To provide a quality assured register of Gaelic Games analysts to coaches and administrators.
- To support the development of a community of practice for Gaelic Games analysts in line with the ethos of the associations.

The Accreditation Programme and Process

Once a year, applications are invited for performance analysts to become accredited at Levels I-4. All applicants must complete an accreditation workshop designed to develop their philosophy of practice and application of PA in line with the holistic Gaelic Games Player Pathway Principles. Applicants must also sign a Code of Conduct.

Their applications are then assessed based on:

PA Competence

This is the level of PA training and expertise they bring based on their completion of PA courses and experiential learning.

All applicants state their training and must complete tasks to demonstrate their practice. Level 4 applicants must complete an additional 2000-word submission showing how they operate effectively at the elite level in Gaelic Games.

PA Experience

This is the level of PA training and expertise they bring based on their completion of PA courses and experiential learning.

The amount of experience an analyst has delivering in a particular role is very important in aligning then to the level of accreditation. Minimum requirements for a Level 4 analyst are 4 full seasons delivering and leading PA at senior intercounty, and the requirements differ for each level. Applicants are required to provide a reference to verify their experience.



Finding an Accredited Gaelic Games Analyst

Details of the accreditation programme can be found at https://learning.gaa.ie/accredited analysts and links at the bottom of the page list all the analysts who have been accredited by Level and county.





8.

Opportunities to Learn about PA

In recent years, more opportunities have become available for people to learn about PA. Performance Analysis is a core part of some Gaelic Games coaching awards, but there are also stand-alone opportunities to learn about PA and how to use it. This section will guide you in what to look for in a PA course.

Introduction to Performance Analysis

An introduction to PA course should cover the following key areas:

- I. How to establish what is needed from PA by the coach and players.
- 2. How to design a system of observation which will collect the data needed so it is accurate, reliable and valid.
- 3. How to interpret data and report trends to the coaching team to co-create knowledge.
- 4. How to design and deliver appropriate feedback and learning opportunities for players.
- 5. How to reflect and evaluate the effectiveness of each of the above steps in the PA process.

The course should give you the opportunity to collect some data, analyse and present it to tutors for feedback.

 \mathbf{z}



PA Courses

Gaelic Games Introduction to PA

There is a Gaelic Games specific Introduction to PA which is delivered in four online sessions. It is designed for coaches and analysts.

Registration for this course is via the GAA's E-portal and several courses runs between September and April annually.

Other Education Providers

Some of the Irish Universities run short Intro to PA courses and many of the analysis software companies also have offerings to upskill in PA. While it is great to learn how to use software, it is also very important to cover the key principles of PA outlined about.

Other places to learn about PA

Informal learning opportunities – webinars / twitter / conferences / shadowing / mentorship etc



9.

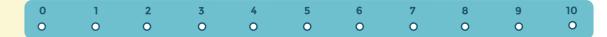
How well are you using Performance Analysis?

If you have some experience of involvement with an analyst, these questions will assist to guide a review of current practice. If you answer No to any of the questions, there is probably room to improve how you are using PA.

Remember, it will take a number of seasons to build a robust performance analysis system within any club or intercounty structure.

Understanding Performance

I. Can you clearly explain your philosophy / vision of how you want the game to be played?



2. Can you measure what good looks like – what numbers / metrics will indicate your vision / system is working?

0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0

3. Have you defined those metrics / performance indicators – and tested the definitions to make sure you and the analyst agree on a series of video clips? Do the players clearly understand what is being measured?



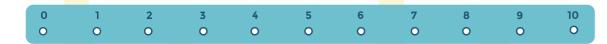
4. Are you happy that the information you have requested will allow you to make the best coaching decisions during matches and for program/session planning?

0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0

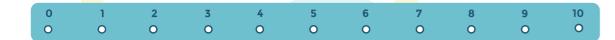


Training & Monitoring

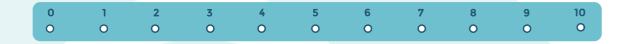
5. Do you use performance data to inform planning for training and games?



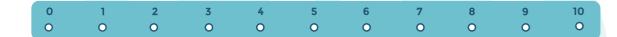
6. Is the timing / method of feedback designed with flexibility to accommodate player's lifestyles and maximise player development? Are the players aware of its purpose?



7. Do you deliver clear, short (20 mins) briefs / debriefs containing a maximum of three messages, accompanied by video where appropriate to illustrate your message?



8. Is there a clear link between the feedback messages and the design of your training sessions to address these issues? Do you explain this to the players?



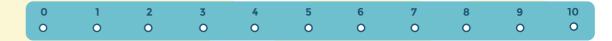
Pre Game

9. Does your analyst clearly understand the team goals and share the team philosophy? Pre Game

0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0

10. Has the analyst adequate support to deliver a quality job?

- Access to team game plan information, team dynamics
- Access to effective communication facilities with the coaching team
- Access to pitches / gantries elevation to film / space to take stats
- If inexperienced, has the analyst a mentor or anyone to learn from?



In Game

II. Is it clear which member/s of the coaching team will liaise with the analyst for planning and at critical times such as during the game and at half time?

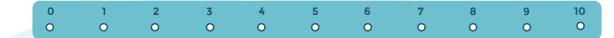
									9	
0	0	0	0	0	0	0	0	0	0	0

Post Game

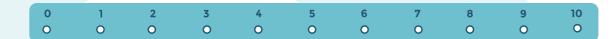
12. Is the statistical feedback clearly presented and easy to understand with the key points highlighted?



13. Do you or another coach make time to review, filter and decide on the key coaching points arising with the analyst?



14. Are you comfortable with the quality and consistency of video footage being delivered? Is it available from an elevated position? Have you access to more than one camera angle?

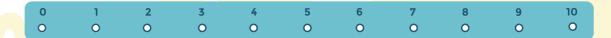


15. Is it easy for you to access and view match footage? Can you get fast access to a specific event or a player's involvements?



Point in Time Review

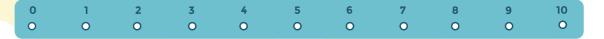
16. Do you feel confident to sit down with a player and discuss the strengths and weaknesses of their individual performance at various stages in the season?



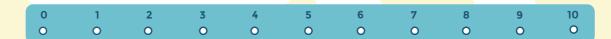
17. Do you feel you own the analysis process and are driving it in line with your coaching philosophy?



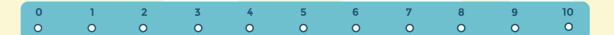
18. Do you feel you get maximum value from PA for the time, effort and resources invested?



19. Do you feel the players fully understand the messages you are delivering through PA?



20. Do you sense that the players are starting to act on the new knowledge about their performance?

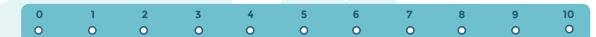




21. Do you feel confident to sit down with a player and discuss the strengths and weaknesses of their individual performance at various stages in the season?



22. Diagnosing issues with your own or opposition teams — Are you sure the trends are stable — can you make assumptions about how a person or team will play from one or two games? Are the players are starting to act on the new knowledge about their performance?





APPENDIX

Assistant Analyst (practicing at any level): Role Descriptor Template

Role Summary

The analyst works to support and assist the lead analyst with systematic and objective data collection and processing.

They may or may not be embedded in the coaching team.

Qualifications/Experience

A typical candidate for this role would be an analyst looking for experience in delivering PA (possibly a PA, sports science or coaching student or Transition Year Future Leaders student)

They will have completed the GAA Introduction to PA or similar training in PA principles and show a commitment to learning in this discipline.

Role Requirements

Understanding Performance	 -Assist in benchmarking performance. Find out average scores needed to win the competition. -Assist with clips of skills performed well (Catch them doing it right) Videos of county players or senior players in club of same gender for youth players.
Coaching & Monitoring Practice	-Record data from training accurately and reliably. This may be by hand notation E.g. Turnovers, tackles and area where they are occurring.
Pre-Game Analysis	-Assist analyst looking at opposition.
In-Game Analysis	-Assist in gathering key insights that can be used by coaches and players.
Post-Game Analysis	-Assist with reviewing performance.
Point in Time Review	-Engage with the review process with lead analyst and team management and players.

 $oldsymbol{0}$



Personal Qualities

Set High Standards	Self Aware
-Takes care and pride in their workFulfils responsibilities and operates with integrity.	-Invests time to build relationships with those around themAwareness to know their role and remain within those 'boundaries.'
Adaptable	Consistently Creative
-Possesses an ability to work on their ownMixes their current understanding of the sport with requirements of coaching team.	-Has passion & energy for performance sport environmentApplies new learning to meet team goals.

Code of Conduct

The analyst should have signed up to the Gaelic Games PA Code of Conduct.

Club Analyst Lead: Role Descriptor Template

Role Summary

The analyst is embedded in the club coaching team and will collect objective performance information based on their needs.

The analyst will provide timely, clear, relevant, and understandable information to coaches and players.

He or she will work closely with the coaching team to design positive learning opportunities for players based on their readiness to engage with feedback.

Qualifications/Experience

A typical candidate for this role would be an analyst with at least I full season of delivering PA as an assistant.

The candidate should hold the Gaelic Games PA Accreditation at minimum Level I. They will have completed the Gaelic Games Introduction to PA or similar training in PA principles and show a commitment to learning in this discipline.

Role Requirements

Understanding Performance	-Benchmarking Performance from previous seasonsConduct a needs analysis of coaching team and playersNegotiate a PA support agreement with coaching team at the beginning of seasonHave a clear understanding of the teams principles of play.
Coaching & Monitoring Practice	 -Record data from training accurately and reliably. Include some video clips to set focus of session. -Capture of specific elements during training- Multi discipline integration eg GPS if available.
Pre-Game Analysis	-Design a system to capture, analyse and feedback appropriate information based on agreed performance indicatorsTactical Profiling and team selection.
In-Game Analysis	-Design and apply notational analysis templates and Coding templatesRecord data from match performanceCode key events in software or apps objectively & reliablyFacilitate an effective half time by providing accurate and relevant insights.
Post-Game Analysis	-Assist with reviewing performance -Process and refine data into an understandable and accessible format for in depth analysis by coaches. -Facilitate the coach led delivery of appropriate feedback to participants in multiple formats.
Point in Time Review	-Review processes on an ongoing basis.

Personal Qualities

Set High Standards -Takes care and pride in their workFulfils responsibilities and operates with integrity.	Self Aware Displays empathy and understanding. -Invests time to build and foster relationships with those around them. -Awareness to know their role and remain within those 'boundaries'.
Adaptable -Mixes their current understanding of the sport with requirements of coaching team. -Tailors behaviour, approach and messaging appropriately to varying situations. -Possesses an ability to work on their own.	Consistently Creative -Has passion & energy for the performance sport environment. -Challenges their own ability. -Applies new learning to achieve results.

Role Requirements

The analyst should have signed up to the Gaelic Games PA Code of Conduct.

 $oldsymbol{2}$



Underage Intercounty Analyst Lead: Role Descriptor Template

Role Summary

The analyst is embedded in the coaching team and will collect objective performance information based on their needs.

The analyst will provide timely, clear, relevant, and understandable information to coaches and players.

He or she will work closely with the coaching team to design positive learning opportunities for players based on their readiness to engage with feedback.

Qualifications/Experience

A typical candidate for this role would be an analyst with at least 2 full seasons of delivering PA, ideally at least 1 season in a leading role.

The candidate should hold the Gaelic Games PA Accreditation at minimum Level 2. They will have completed the Gaelic Games Introduction to PA or similar training in PA principles and show a commitment to learning in this discipline



Role Requirements

Lludoueten din a Doufeumen ee	Conduct a comprehensive analysis of the needs of the coach team
Understanding Performance	 -Conduct a comprehensive analysis of the needs of the coach, team, individuals and support staff for the season. -Design and apply systems for optimal use of computer-based sports analysis systems which facilitate data collection in games, training and post-match. -Have a strategy around data, video library and analysis process (GDPR). -Select appropriate game based key performance indicators for measurement.
Coaching & Monitoring Practice	-Design and apply notational analysis templates and Coding templates for trainings. -Record video and data of trainings. -Record notational analysis data accurately & reliably. -Code key events of training in software or apps objectively & reliably.
Pre-Game Analysis	-Collaborate with coaching staff to analyse, process and refine video and information. -Design and apply notational analysis templates and Coding templates for trainings. -Videoing training sessions. -Opposition analysis- Prepare opposition clips team and individual. -Compile highlight packages/Montages to review. -Agree what should be prioritised for measurement during the next match.
In-Game Analysis	-Record video and data of matchesRecord notational analysis data accurately & reliablyCode key events of matches in software or apps objectively & reliably.
Post-Game Analysis	 -Collaborate with coaching staff to analysis, process and refine video and information. -Building Database with data from past games so can be referenced and compared. -Process and refine data into an understandable and accessible format for in depth analysis by coaches. -Facilitate the coach led delivery of appropriate feedback to participants in multiple formats. -Compile highlight packages/Montages to review.
Point in Time Review	-Oversee the dissemination of feedback, monitoring its uptake and impactCritically appraise the impact and effectiveness of the system.



Personal Qualities

Set High Standards

-Takes care and pride in their work.
-Fulfils responsibilities and operates with integrity.
-Remains focused on personal task and wider team goals concurrently.

Self Aware

-Displays empathy and understanding.
-Invests time to build and foster relationships with those around them.

-Reflective, always open and seeking feedback from others.
-Awareness to know their role and remain within those 'boundaries.'

Adaptable

 -Mixes their current understanding of the sport with requirements of coaching team.
 -Tailors behaviour, approach and messaging appropriately to varying situations.
 -Possesses an ability to work on their own.

Consistently Creative

-Has passion & energy for the performance sport environment.
 -Constantly curious and consistently exploring creative ways of delivering role.
 -Challenges their own ability.
 -Applies new learning to achieve results.

Code of Conduct

The analyst should have signed up to the Gaelic Games PA Code of Conduct.



Senior Intercounty Analyst - Lead: Role Descriptor Template

Role Summary

The analyst is embedded in the coaching team and will collect objective performance information based on their needs.

The analyst will provide timely, clear, relevant, and understandable information to coaches and players.

He or she will work closely with the coaching team to design positive learning opportunities for players based on their readiness to engage with feedback. The analyst may lead and manage a team of analysts to support the needs of players and the coaching team.

Qualifications/Experience

A typical candidate for this role would be an analyst with at least 4 full seasons of delivering PA, ideally 1-2 seasons of this would be with an intercounty adult team in a leading role.

The candidate should hold the Gaelic Games PA Accreditation at minimum Level 3. They will have completed the Gaelic Games Introduction to PA or similar training in PA principles and show a commitment to learning in this discipline.

 $oldsymbol{47}$



Role Requirements

_	
Understanding Performance	 -Leads and manages an analyst support team. -Participate fully in coaching team planning and review processes. -Design an appropriate and systematic programme of PA and feedback which monitors various aspects of performance in collaboration with a multi-disciplinary team. -Conduct a comprehensive analysis of the needs of the coach, team, individuals and support staff for the season.
Coaching & Monitoring Practice	-Build a performance data archive which can be mined and referenced. -Design and apply notational analysis templates and Coding templates for trainings. -Record video and data of trainings. -Record notational analysis data accurately & reliably. -Code key events of training in software or apps objectively & reliably.
Pre-Game Analysis	-Benchmark performances against team/individual norms and expected outcomes. -Collaborate with coaching staff to analyse, process and refine video and information. -Design and apply notational analysis templates and Coding templates for trainings. -Compile highlight packages/Montages to review.
In-Game Analysis	-Record video and data of matchesRecord notational analysis data accurately & reliablyCode key events of matches in software or apps objectively & reliably.
Post-Game Analysis	-Collaborate with coaching staff to analysis, process and refine video and information. -Process and refine data into an understandable and accessible format for in depth analysis by coaches. -Facilitate the coach led delivery of appropriate feedback to participants in multiple formats. -Compile highlight packages/Montages to review.
Point in Time Review	 -Evaluating if feedback interventions to coaches and players meet their stated aims. -Collaborate with coaching staff to review analysis, process and refine video and information. -Critically reflects on the decision-making process employed at each judgement point. -Oversee the dissemination of feedback, monitoring its uptake and impact. -Critically appraise the impact and effectiveness of the system.

Personal Qualities

Set High Standards -Takes care and pride in their workFulfils responsibilities and operates with integrityRemains focused on personal task and wider team goals concurrentlyProvides leadership and appropriate development of wider PA team.	Self Aware -Displays empathy and understandingInvests time to build and foster relationships with those around themReflective, always open and seeking feedback from othersAwareness to know their role and remain within those 'boundaries'.
Adaptable -Mixes their current understanding of the sport with requirements of coaching team. -Tailors behaviour, approach and messaging appropriately to varying situations. -Possesses an ability to work on their own.	Consistently Creative -Has passion & energy for the performance sport environment. -Constantly curious and consistently exploring creative ways of delivering role. -Challenges their own ability. -Applies new learning to achieve results.

Code of Conduct

The analyst should have signed up to the Gaelic Games PA Code of Conduct.

 $oldsymbol{\mathsf{B}}$



Analyst:

Gaelic Games PA Support Agreement EXAMPLE

, , , , , , , , , , , , , , , , , , ,				
Assistants:				
Team				
Coach / es: XXX				
Time Frame:				
Key Competition Target:				
Key Aims for Delivery:				
•				
•				
PA Projects:				
Project	Details	Estimated Days		
Understanding Performance				
Training & Monitoring				
Pre-Game Analysis				
Team / Individual				
In Game Analysis				
Post-Game Analysis				
Point in Time Review				
Archiving / Data Management				
	Total Estimated Days			
Evaluation: Describe how the PA support will be evaluated and by whom				
Agreed By:		Date:		
Coach / Manager:	Analyst:	Club		

Code of Practice for Applied Performance Analysis Practitioners in Gaelic Games

- All analysts working with Gaelic Games teams should be prepared to sign and abide by the following code of conduct.
- All accredited analysts have signed up to this code
- This document can be customised and used by clubs or counties to ensure that novice or unaccredited analysts sign up and understand the behaviours expected of them

As a Gaelic Games performance analyst, I agree to:

- I. Act in the best interests of the player/s at all times aiming to create positive learning environments
- II. Act with integrity in respecting and honouring the trust placed in me by teams, players and coaches
- III. Observe the rules and ethos of the Gaelic Games Associations in my practice and never to act in a way which would bring a player, myself or my team into disrepute
- IV. Collect, process, share, store and destroy data in accordance with current General Data Protection Regulations
- V. Ensure appropriate child protection guidelines are followed when collecting data relating to underage players or vulnerable adults
- VI. Be aware of, implement and advocate best practice in the applied performance analysis discipline
- VII.Act within the limits of my expertise, not to mis-represent my qualifications or carry out work beyond my level of competence.
- VIII. Seek advice where I may lack the competence or experience to deal with a matter



How to check the reliability of your data

What is reliability?

It is critical to ensure that coaches are provided with accurate and valid data to inform their decision making.

In performance analysis we say data are reliable when they are an accurate and valid reflection of what happened in a game.

Accurate = Everything which should have been recorded was recorded, based on the agreed definition

Valid = The measures used are a true reflection of the thing we are measuring. For some variables finding a valid measure is easy, like shot efficiency, which is how many scores / shots taken. Others are harder. For example: what is a valid measure of work rate?

- Is it possession won?
- Tackles made what about pressure?
- Is it hard runs made, or supporting runs?

Different teams and coaches will have different approaches to measuring workrate based on their philosophy of play. The most important thing is to come up with a measure which everyone agrees (players / coaches) is a valid reflection of workrate and define this.

3 Sources of Error (Adapted from James, Taylor & Stanley, 2007)

Operational error:

The analyst uses the wrong code to label a match event or outcome, for example giving a point instead of a goal.

How to Avoid this:

- I. Design simple, clear templates for data collection (pen/paper or on software)
- II. Use colour when designing the template to guide your eye for data collection: using the colours of the teams competing is helpful
- III. Design a template which matches your PA experience: begin simple, add more as you are confident in your ability to collect data accurately
- IV. Lots of practice with the template will decrease your chances of notating events in the wrong place

Observational error:

The analyst misses an event, records it twice, or mistakes the player involved in a particular event.

How to avoid this:

• For real time data collection, it is useful to record events in pairs where one person calls the events as they happen and the other person enters data

The only way to know if you have missed an event or recorded it incorrectly is to recheck your data against the video by doing a reliability test.

If there is no video, numbers CANNOT be verified.



Definitional errors:

• The analyst records a variable based on their definition of that variable, but others within the team define it differently, for example.

How to avoid this:

- I. Write out the definitions for each variable to be measured (examples of definitions can be found in academic papers).
- II. Ensure the definitions to be used are agreed by the coaching team and players so everyone is on the same page using video clips to show what you mean is very helpful.
- III. Definitions should be tested for accuracy pre-season by engaging with another person (ideally the coach) to code the same video as the analyst and comparing results (interanalyst reliability test).
- IV. Where there are multiple analysts in a team, testing and refining definitions pre-season is essential.

Reliability Tests

Intra-analyst test

 One person codes the same game twice, with a gap period between both and compare the results.

Inter-analyst test

• Two people code the same game independently and compare results.

How accurate does it need to be?

 In coding post match from a video, analysts should aim for 95-100% accuracy in each variable or +/- I event. For realtime analysis, the level accuracy is reduced, especially if analysts are trying to collect too much information.









