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A Study of Learning in Youth Elite Footballers in Ireland

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A study of learning in youth elite footballers in Ireland

Andrew Myler

A dissertation submitted in partial fulfilment of the requirements of Dublin Institute of
Technology for the degree of
MA in Higher Education

December 2014

I certify that this dissertation which I now submit for examination for the award of MA in Higher Education, is entirely my own work and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text.

This dissertation was prepared according to the regulations for postgraduate study of the Dublin Institute of Technology and has not been submitted in whole or part for an award in any other Institute or University.

The work reported on in this dissertation conforms to the principles and requirements of the Institute's guidelines for ethics in research.

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Abstract

Elite youth soccer players in Ireland reach a significant point in their development when recruited to the national elite Under 19 (U19) League. At this point players have a two year period in which they aim to become proficient enough to earn a professional contract with their club of choice. They encounter a steep learning curve during this period in their sporting education with increased competition and additional physical and mental demands. This case study examines the type of learning that takes place within an U19 elite team, the learning theory driving the coaching practice and its influences on player development. Looking at how methods for facilitating learning have evolved, it also looks at the learning environment and its role in shaping learning outcomes.

Twenty elite youth players took part in the study. How and what players were learning was examined through interviews, observation of their performance and progress, and examination answers given via the survey. This data was used to build a picture of how players preferred to learn, where they felt they had learned and what they had learned. Analysing the feedback and assessing it against how what had been learned had been instructed, allowed opinion to form around how the players were learning and what was effective. A log of weekly updates was kept to monitor subjectivity and to assist in the data analysis process. Validity was attempted to be satisfied through triangulation, peer review, monitoring of bias, rich description and external audit.

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1. INTRODUCTION

Elite youth players in Ireland reach a critical point in their playing careers after under 17 level. At this point some players in this age bracket will have taken up employment with English and Scottish professional clubs. Those players of an elite standard who remain in Ireland will most probably move to the national U19 league with one of the professional or semi-professional clubs in the League of Ireland. The intention at this level of football is to facilitate “the best, playing against the best” (Football Association of Ireland, 2013). Most players recruited are eligible for two full seasons at this level. This is an important developmental stage for most players and will certainly impact on the rest of their football careers when they have moved through the cycle.

In many ways the situation these players find themselves in is similar to second level students transitioning to the first year of college. The players are similar ages and there will be the some who will struggle to cope with the transition. A different coaching approach with more personal responsibility placed on the player to learn mirrors the approach taken in many first year university programmes where self-direction becomes a priority over the previous experience of instructed learning. It can be daunting to leave the security of a group that you have been accustomed to. Parents will also have less of a hand in direct contact with coaches in much the same way as they would with a lecturer for a college student. When going to college, students often must leave, or give up, one group and then accommodate and learn about a new group. This is mirrored in schoolboy footballers transitioning to elite youth football. It can be stressful for players to analyse new social norms, learn a new set of behaviours, and consider adopting a particular identity and group affiliation in much the same way as it would be for a first year college student. The opportunities provided can be exciting but the increased demands on the individual can be challenging. Players, new to this level, can often doubt their ability to handle their new surroundings and playing at a different level and may be bothered by new and unexpected obstacles which can lead to a downward spiral. This again shows similarities to the transition made by first year students in college who can often struggle with the same facets of the college environment which may lead to them ultimately dropping out. Yorke and Longden (2008) cite the importance of the quality of the teaching provided, the ability of the individual in managing their social integration in a new group or groups and the heightened expectations that students will have of their teachers, and the teachers of them, as central to ensuring a positive first year experience.

This study takes place in a professional club in Dublin with the elite U19 players. It aims to examine the type of learning that takes place within an U19 elite team, the learning theory driving the coaching practice and its influences on player development. It looks at the methods used to facilitate learning and how players view their learning experience of the elite U19 level and if they feel they have been prepared for senior professional football with what they have learned at this level. It considers the learning that takes place individually and that which is part of a wider group or community of practice. It also looks at the structure of the learning environment with a view to peer learning, asking if it is conducive to optimising the learning process for players in this age group and at this level. Working as manager and coach, I have observed the group at close quarters during a normal season, July 2012 to April 2013. Interviews have been carried out with players individually and as a group. Confidential individual feedback has also been undertaken to try to ensure the efficacy of the feedback (Ong and Weiss, 2000). Informal interviews throughout the season with players and coaching staff have also taken place. Like all coaching positions in sport, observation of the activity taking place plays a large part in forming opinions on perceived outcomes. Regular group sessions were held to investigate what technical and tactical information were being assimilated by players in relation to their development towards a professional level. These sessions would generally take place following a training session or a game when such learning would be fresh in the minds of players and coaches in an attempt to reinforce the desired outcomes quickly. . I have undertaken to gather some primary data from players through individual feedback with regard to their opinions on their learning outcomes and teaching methods over the season. The players involved were at all times aware of the use of their feedback for this study and had provided informed consent.

The idea of the elite U19s league is to have the best elite young players playing against each other using the best facilities in the country. The league began in 2011 when the then new technical director of the Football Association of Ireland, Wim Koevoets, introduced the concept of an elite league at this age group to replace reserve team football. Players at the club studied are drawn from different schoolboy clubs, mainly in the Dublin area. As they have by and large not come through our professional club's underage structure from an early age they have different educational backgrounds in the game. Most professional clubs in Ireland have poorly developed underage structures that provide few players to the elite teams of the club. Each player's football education up to this point will contrast with what other team mates have learned or encountered. Players have come from similar levels of elite schoolboy football but the approaches to coaching and provision of facilities can differ greatly between schoolboy clubs. Their prior tactical learning will be much more important than their technical education,

which will be more or less set by the time players reach youth level. Senior football will demand an increased level of tactical awareness from players.

We can investigate how individual players learn via various practices and drills, but also through a wider collaboration with teammates (Gergen, 2009). Due to the group nature of team sports, the level of a player's development is affected by their ability to work and learn within a community of practice. All players will ultimately have to find a way of learning as part of a group in order to succeed. Lave and Wenger (1991) can be used as a framework to view the activities of a community of practice. Football being a team sport means that the group setting will have an importance to how individuals assimilate information. Meaning, community, identity, and learning are components that the group can enable for the individual. Through interaction with team mates individuals can make sense of more abstract ideas or add meaning to their role. By its central positioning in team sports the success of the community of practice will have a significant effect on learning outcomes for the individual. The community aspect of practice has three components - joint enterprise, mutual engagement and shared repertoire (Lave and Wenger, 1991). The components of community are interrelated. Mutual engagement supports the empowerment of joint enterprise, which in turn can enhance learning within the group. Identity evolves by the ways we participate (e.g. are we a hardworking team?, are we an attractive footballing team? etc.) and by the make-up of members in the group. Learning within a group can be difficult to quantify, as players will ultimately learn individually and untangling the importance of the community to this learning is complex. However Mitchell (2002) states that a well organised community of practice offers more learning opportunities than a disorganised grouping.

Vygotsky's teaching on the zone of proximal development is important in this setting as players develop the ability to not only work alone over time but also work more effectively within the group (Vygotsky, 1978). The zone of proximal development can be described as the distance between the developmental level determined by independent problem solving and the level of potential development as determined through problem solving under teacher/ coach guidance, or in collaboration with peers. This is important as the individual needs to develop the skills to ensure their efficacy within a group to be successful in team-sport situations. It can be difficult for individual players who are struggling to find a positive place within the group to fulfil their potential. Skills learned to work independently and also alongside teammates are vital and not mutually exclusive. It is vital at this stage of a player's development that they understand the importance of working within a group and the role that they can play in making the team successful. Team dynamics, from this point on, in a professional footballer's career

will usually become more pressurised so it is important that elite youth players are comfortable with their ability to operate within the team structure. Newin et al. (2008) describe the positive effect team building activities have on the individual and by extension the group. Players partaking in activities that cement bonds between individuals not only increase their learning opportunities but increase the effectiveness of the group.

It is vital that coaching staff can construct a positive environment for players to learn effectively (Hess, 2002). Probably the biggest emphasis of the coaching programme is to allow players at this level to become comfortable and efficient with the decision-making abilities required for professional football (Vestberg et al., 2012). Vestberg argues that professional football requires players to have an ability to make decisions quickly and correctly to be successful. This is one of the more difficult elements for coaches to truly affect with players at this level. A lot will depend here on players' previous coaching experience. If, for instance, they have always been allowed to make their own decisions and facilitated in exploring the validity of those decisions by coaches at a younger age, they are much more likely to have better decision-making abilities than counterparts whose initial coaching experience was to be directly instructed. For players not yet fully comfortable with the decision making needed during play, a lot of individual time is needed to talk through decisions taken and explore the appropriateness of their decisions. The Football Association of Ireland applies the concept of "Guided Discovery" to its coaching programmes whereby players are encouraged to find solutions to playing problems themselves, with the process being facilitated by the coach initially, but hopefully in time players will have "discovered" the answers and be able to operate independently in competitive situations (Football Association of Ireland, 2013). This philosophy is now being replicated throughout the developmental age groups (age 7 – 16) and will hopefully allow players develop the range of decisional skills required in elite football.

Many elements of training sessions display behaviourist tendencies in far as they consist of repetitive drills and practices designed to largely automate player responses in given situations. This, however, is supported by coaching time aimed at facilitating decision-making by players in situations when faced with different options. Historically, training or coaching has been largely focused on the physical side of the game emphasising fitness or strength. Coaches involved with the group described here, are ex professional players and indicated that less than 10% of their own development as players at this age group was taken up by technical and tactical aspects. Training consisted almost entirely of physical training components. There has been a significant shift in the coaching mind-set in the intervening 20 years. The physical

fitness emphasis that pertained has been replaced in more recent times by a focus on technical and tactical aspects within coaching programmes. This has been in many parts due to the increase in the number of Union of European Football Associations (UEFA) qualified coaches now working at the elite levels in the game in Ireland. This has brought an emphasis towards teaching and learning and player development along constructivist lines within the game and moved away from a more straightforward instructional design that had previously been the mainstay of professional football and was more rooted in behaviourism. The proliferation of information with regard to how player development and coaching is approached throughout the world has helped bring forward a change in approach here. Also the insistence in recent time by UEFA that all member associations must accredit their coaching programmes with them has led to an improvement in the coaching programmes offered and the associated output of qualified coaches. The club involved here insist on all teams playing in a specific 4-3-3 formation (4 defenders – 3 midfielders – 3 attackers) and the players being educated with regard to the tactical awareness needed to play within that framework. Coaching programmes are now largely designed to combine physical elements within technical or tactical sessions to ensure, firstly, a more holistic approach to training but also to ensure that coaching time is not lost to physical training. This ensures that the competitive match specificity of coaching sessions can be enhanced and training sessions mirror competitive situations as much as possible. Physical fitness has not lost any of its importance to professional football, in fact players are now fitter than at any previous juncture. However, the design of coaching programmes that combine fitness elements with tactical and technical elements is now commonplace.

Driscoll (1994) writes that we can accept learning as a persisting change in human performance or performance potential, and that we can observe the learning over the course of time. It is important that the learning here is observed over time to gauge how deeply the learning has been embedded. It can be the case that new skills or knowledge can be replicated close to the time they were first learned but over time and with a lack of recurring practice these skills can be shown to have not been rooted securely in the players' knowledge base. This will certainly be the experience of any coach who has re-introduced a drill or practice after a period of non-use. Some players will almost certainly show limited recall of the process, purpose or desired outcome of the drill or practice.

In this study I have been influenced by the approach taken by Christensen et al. in their 2011 paper with regard to elite youth football in Denmark. Their approach and use of communities of practice and social constructivism as tools to view development amongst players is one in

which I see a lot of merit. I think that the influence of the group on individual learning in team sports ensures that consideration has to be given to managing the group interaction to ensure individual learning outcomes are achieved in much the same way as any traditional classroom setting.

2. LITERATURE REVIEW

In looking at the literature for the case study I have decided to view the literature under four distinct headings: peer learning and mentoring, learning environment, feedback, and management and coaching practice. These areas are highlighted not only through my own experiences during the case study but also through feedback from participants.

Much literature exists on the topics of peer learning, peer mentoring, learning environment, feedback and Management and coaching practice. The coverage of these topics from a sporting perspective is not on a hugely significant scale. One of the reasons for undertaking the case study in a sporting setting is to identify how learning theory and its associated literature, much of which is academically based, can be used to assess and describe an environment that has historically been viewed outside this paradigm. To this end, many examples in the literature review are drawn from non-sporting, academic disciplines with a view to explaining situations occurring within the case study that is rooted in a sporting setting.

2.1 Peer learning and mentoring

Given football's team setting peer learning is an important element of each teams' learning structure. Individuals' learning from and with each other underpins the learning strategy in most team sporting settings. The addition of peer learning as a mainstream educational method dates to the early 1990s (Topping, 2005). Driscoll (1994) accepts that learning means a change in performance or potential that we can observe over the course of time. Given that professional football teams are made up of peers of different age groups, educational backgrounds and experiences, they can provide the setting for both peer learning and mentoring to occur. Older players can play the role of mentor to younger counterparts passing on experiences and offering advice and opinion to add to the learning resource that coaches offer younger players.

Topping (2005, p.631) talks about peer learning "defined as the acquisition of knowledge and skill through active helping and supporting among status equals or matched companions. It involves people from similar social groupings who are not professional teachers helping each other to learn and learning themselves by so doing". The group of youth players used in this study suits the definition well. "Status equals" is apt due to the similarity in age and

background of the individuals within the group, who are learning by doing together and individually. Many times it is assistance provided by one team mate to another that ensures the relevant learning outcomes and pieces of knowledge are being disseminated widely within the group. The facilitation of this sharing by peers is important to the individual's and team's knowledge development.

Structured practices and drills play a large part in any coaching programme. These can sometimes be behaviourist in nature, given they are repetitive. We can, however, investigate how individuals learn via various practices and drills but also through a wider collaboration with others such as team mates (Gergen, 2009). Individual development is affected by someone's ability to work and learn within a community of practice. Wenger (1998) uses a framework to view the activities of a community of practice: meaning, community, identity, and learning, he argues, are components that the group can enable for the individual. Through interaction with others in the group, individuals can make sense of more abstract ideas or add meaning to their role. It is possible for coaches to observe players asking each other what they are supposed to do in a particular drill or circumstance. In many cases players may actually use a language or phraseology in explanation to a question that is easier for another player to comprehend than one the coach may use. The success of the community of practice will have a significant effect on learning outcomes for the individual. Wenger and Gergen's studies are particularly relevant to the study here as they recognise the journey of the individual player in becoming an active part of a learning community or team. Individual players are adding to, and learning from, the collective knowledge of the group.

Lave and Wenger (1991) speak about legitimate peripheral participation where previous experiences, whilst being taken into consideration, become less important in the group. A new group dynamic will therefore guide learning for the individual from this point. This is interesting to observe as a number of players who joined the group studied had previously belonged to the same junior teams. They have had different experiences before joining the current group but now take part in a merging process to form a new dynamic and learning environment. Coaches can affect the process by ensuring players are exposed to each other and do not just stay in the small groups of familiar individuals. Over time, individuals will form new bonds within the group which should further enhance group cohesion and learning if managed correctly.

The challenge of quantifying the learning that occurs within groups can be difficult. Individuals will ultimately learn individually, and untangling the importance of the community

to this learning is complex. Feedback, and an organised process to support it, will play a significant role in the quantification of any learning that has taken place within the group. Each team or group dynamic will differ within sport and it can be sometimes hard to fully articulate why certain groups of similar abilities will display different levels of knowledge attainment. It is argued that organised communities offer more learning opportunities than disorganised groupings (Mitchell, 2002). A sound organisational structure facilitating a learning environment that can react to player needs is key.

It can be difficult to ascertain if learning is occurring on a team or group level and not just on an isolated individual level. Coaches will need markers to allow them identify when this has occurred. A marker of team cognition is an aspect of performance that indicates the presence of team-level knowledge structures and cognitive or behavioural processes. This is vital for coaching staff in order to find out if topics covered in training have been sufficiently embedded in the collective knowledge of the team (Salas et al., 2007). There are various methods in the measurement that range from group discussion to coach observation during matches or training. Repetitive drills are used to try to automate team responses in certain game situations. The repetition of a certain set of actions to a specific trigger is designed to ensure recognition of the action needed in a game situation. There is almost an element of rote learning involved here in much the same way that “times tables” would be taught to schoolchildren.

Piaget’s writings on how we learn have an importance on learning within a team context. When it comes to the educational reflections of his theory, Piaget sees the student as “*continually interacting with the world around him/her solving problems that are presented by the environment*” and learning occurs through taking action to solve the problems (cited in Driscoll, 1994. P.36). The problem-solving aspect is particularly relevant to the learning experience encountered here. The tactical coaching focus involved in football in some ways could be distilled into two questions 1.) How do we score a goal? 2.) How do we stop a goal being scored against us? Answering these two questions will provide learning opportunities for players in coaching sessions and they will require problem solving capabilities to enable that. The coaching programme needed to address both questions will have many facets and individual drills and practices that will rely on players’ ability to problem solve and recognise solutions to tactical problems.

The team-based structure of elite football means there is an importance in linking knowledge and experiences throughout the learner base and throughout the various units of the team and

community to optimise learning for all (Hirsh et al., 2010). It is important for coaches to ensure that knowledge is being acquired across a broad base within the group rather than just isolated individuals. More experienced individuals acting as mentors to younger participants can help facilitate this and can work as an important developmental tool for both. Less experienced students or protégés tend to learn more when having an older mentor that they can look up to and learn from (Hezlett, 2005).

Bozeman and Feeney (2007, p.731) define mentoring as “a process for the informal transmission of knowledge, social capital, and the psychosocial support perceived by the recipient as relevant to work, career, or professional development; mentoring entails informal communication, usually face-to-face and during a sustained period of time, between a person who is perceived to have greater relevant knowledge, wisdom, or experience (the mentor) and a person who is perceived to have less (the protégé)”. This definition fits neatly into the system of mentoring envisaged by coaches that could be delivered, if not by themselves to youth players, then by older professionals at the club. The coaching staff are aware of the need to provide players with opportunities to access other sources of information throughout the season. They attempted to ensure that players were given the opportunity to train with the first team on as many occasions as could be facilitated. These opportunities provide the framework for knowledge transfer between a mentor and a protégé.

McLean (2004) states that mentees are far more likely to learn from mentors with a common prior experience to them. There are benefits to be gained for both parties. Younger players get to learn from more experienced peers or can be mentored by an experienced player who may play a similar team role. The mentor also cements some of their own learning during the mentoring process. There is an importance here to ensure that any pairings are conducive to a positive learning outcome. Certain players will be natural mentors and therefore offer more to younger players from a learning perspective. Some younger players need specialist support that may only come from an experienced coach and may not react positively to a mentoring relationship. It is important for coaches to appraise the mix of mentors and protégés to ensure that both sides develop from the process. Some risks arise from these arrangements also around dependencies for students such as over reliance on a mentor actually inhibiting learning for the student (Ashman and Colvin, 2010).

Kirschner, Sweller and Clarke (2006) argue against the effectiveness of minimal guidance in constructivist learning programmes. Their paper suggests that empirical evidence almost entirely promotes an instructional approach when controlled studies are taken into account.

They suggest the move towards a minimal guidance approach was led by curriculum such as science or medicine where it is thought that knowledge is transferred more easily if it can be facilitated through experience of procedures rather than instructed. They argue that this approach is not suitable for many other disciplines. However, recent experience suggests that national structures that have adopted a minimal guidance approach to coaching have been successful in producing top class successful football professionals in countries such as Spain, Germany, Sweden and Portugal (Relvas et al., 2010). In many ways our national structure is following their lead.

In skill learning, professional practitioners such as teachers, doctors, nurses, accountants, and lawyers experience a period of internship or mentoring as part of their training under the guidance of a coach. The coach draws attention to strategies the student already knows or can observe from fellow students and other available models. Gray (2005) states that the coach often shares personal experiences and encourages other learners to do the same to show the commonality of problems they experienced, and demonstrates alternative strategies to achieve the desired effects. The element of skill learning relevant to other professions is applicable to the sports setting. Professional footballers up to relatively recently (late 1990s) served an apprenticeship and would be teamed up with an experienced professional in an effort to create a mentoring relationship. It is normal for the coaching staff to be the predominant mentor or coach to the team's players. Therefore it is important that coaches are aware of not only their responsibilities as teachers but also the role they will play as mentors and the weight that players will place upon the expertise coaches are attempting to impart.

2.2 Learning environment

The learning environment is integral to any discussion on group learning. A positive and welcoming learning environment is key in enabling player success and ensuring player welfare needs are met. Hess (2002) stresses the importance of this environment in relation to law students and their psychological wellbeing and this importance is stressed in other settings such as physical education teaching (Koka, 2003). The idea of an environment that engenders group support is central to a situation that allows players to become comfortable and efficient with the decision-making abilities required for professional football (Vestberg et al., 2012). Vygotsky (1978) talks about the zone of proximal development being important here as people develop the ability to not only work alone over time but also to work more effectively within

the group. Football being group based means that players' development and ability to operate within groups will be key to their learning outcomes.

Environmental influences are also a factor in shaping students perception of their own learning. The size of groupings involved in learning can be directly linked to how much students feel they are learning. Christensen et al. (2011) argue that in many cases the inclusivity of smaller groupings can give participants a richer learning experience. Their study shows player responses that are largely positive towards working in smaller focused groupings. Certainly it would be the experience of coaches in this study that when the opportunity arose to work with players in small position-specific groupings (e.g. strikers working on movement in the attacking third of the pitch) that the learning could be observed in matches much more clearly than aspects worked on with bigger groups such as the full team shape. Players in our own study also indicated that smaller groups enabled them to learn more efficiently.

In this study many of the players are moving to a new learning environment. That differs significantly from what they have been used to up until this point. Baeten et al. (2013) point out the effect of different learning environment structures on the motivation of students in relation to learning and their achievement, indicating that students' motivation for learning can be influenced by their learning environment. The study looks at a strategy of moving to case-based learning from a lecture-based strategy in much the same way that players are asked to move from direct coach instruction to a self-problem solving approach in elite football. Baeten suggests that this is best achieved if the move in emphasis is gradual rather than immediate. The coaches in this study were cognisant of the need for leeway for certain players arriving at a level of comfort with the new environment. It was easily observable which players were initially struggling with the new demands and it was important for coaches to approach the players to make sure they were supported in making the transition. Efforts were made to introduce the more complex elements of the coaching programme slowly to ensure that as many players as possible were as comfortable as possible embracing the new topics.

Jonassen (1992) stresses the importance of focussing on real-world examples and multiple outcome possibilities to ensure that the learning environment is based in reality. He also speaks about experiential constructions that focus on the process of knowledge attainment rather than measuring the product of this attainment. This is very similar to the focus placed on individual and team performance (process) over results (product) in youth football. It also mirrors the idea of match specificity with regard to coaching sessions in football. The effectiveness of sessions is helped by ensuring that the environment replicates in as much as

possible the real world match environment. Our setting is particularly suitable to provide these opportunities. The developmental nature of the league allows coaches to prioritise player development and performance over team results, although there will most probably be a correlation between the two (improved performance usually equates to improved team results)

An environment that promotes learner initiative and activity is thought to be a constructive learning space for students. The cycle of learning sequence developed by Kolb et al. (1984) has the underlying premise that learners learn best when they are active, take responsibility for their own learning and can relate and apply it to their own context (Jaques, 2001). This mirrors the approach taken in this study whereby participants are actively engaged in the learning process and are asked to apply what they have learned in practical situations. Essentially the participants are engaged in experiential learning. Players are actively engaged in the learning process and are responsible for applying their own learning to solve problems presented by their current context.

Sherlock-Shangraw (2013) discusses the benefits that coaches can obtain from using flexible coaching methods when coaching youth groups. This involves not just traditional methods of instruction used in coaching sports, but includes the use of technology as an aid to learning. This study used a number of technologies as an aid to learning for players. Pre-match tactical presentations using Microsoft PowerPoint were used to embed tactical information needed for the specific game. A generic presentation was made available to players to show the basic patterns of play in the formation to be played during games. Social media was used to engage players, with a group set up on Facebook solely for players' and coaches' use. This was successful at engaging players of this age group as they were comfortable in its use. Videos of examples of good play and bad play from throughout professional football were uploaded for players to watch. Players were also encouraged to upload content of relevant examples. Coaches found this a valuable tool and it enabled a rough measurement of which players viewed relevant content away from the setting of the training ground. Coaches also used software as a feedback tool for players which allowed players to anonymously give feedback around the coaching programme and ensured that all players had a voice in the feedback process. The use of such non-traditional learning environments previously not really utilised in sports coaching is becoming more widespread. Martin et al. (2012) for example describes the use of an online learning management system for coaching sports. Many sports including football are turning to technology to direct their coaching programmes. This involves the use of GPS and heart rate monitoring systems to allow management to observe player workload in

training and games. The use of in-game data that can suggest any needed changes in personnel or tactics during a game is much used now in professional sports.

The football association of Ireland (FAI) state that elite youth players are now in the “training to win” stage of their developmental cycle, implying that the learning outcomes at this point are directed at a narrow purpose (Football Association of Ireland , 2013). This is true to a point in that the club’s purpose can differ slightly from that of the national association. In this setting the club may be happy to accept the result of games as secondary to the aim of developing players. However the process by which players need to go about winning (i.e. consistent performance) is primary. Performing consistently in a more pressurised environment is a challenge for coaches and players alike. The training to win phase places an additional emphasis on the result of the game and with it an additional pressure for the player.

2.3 Feedback

Feedback to participants plays a very important role in the development of young elite players. Group feedback plays a large part in how feedback on performance is communicated. Bergstrom et al. (2011) point out that group feedback sessions can lead to a number of more vocal members of a particular group driving the teaching/coaching agenda. Group think can prevent some team members voicing opinions, for fear of being marginalised within the group (Jordan, Carlile and Stack, 2008). It was noticeable throughout the season in group sessions that a small number of individuals give a disproportionate amount of the feedback. The coaches in as much as possible tried to garner feedback from individuals more likely to not engage in a group session by asking direct questions to them. A full spectrum of responses is important in contributing to the feedback process in order to get a full picture of the learning within the group (Michaelsen, 2002). To this end the group sessions are probably more effective at picking up threads of topics being discussed or debated amongst the wider group.

Lamm and Trommsdorff (1973) state that individual feedback may produce more suggestions for improvement, but group suggestions may be more focused or usable. This study indicates that subjects brainstorming individually produce more ideas than those in small groups. Their discussion considers the factors that may be responsible for this inferiority of groups. The role of social inhibition receives particular attention, and this is something observed within the realm of youth football. It is of importance to this study as group sessions play an important

role in recording feedback from players regarding learning outcomes. Certainly it would be the opinion of the coaches that some individuals are inhibited when it comes to voicing opinions or giving feedback in a group setting, however small. The conclusions of Lamm and Tramsdorff would suggest a move towards seeking individual feedback from players more regularly, if only to ensure the number of responses is appropriate and all players feel included. The accuracy and usefulness of individual versus group feedback in their study is not fully answered but the coach's use for this feedback is usually more general in nature than specific. Ultimately the manager/coach will decide where and how to use the feedback given, and the most important element of this type of feedback is that it covers as comprehensive a range of issues as possible.

Collecting feedback during the season provides information that can be used right away, and timely feedback provides a more informed basis for making decisions while you are still working with players (Angelo and Cross, 1993). Feedback collected at the time of interaction is likely to be more accurate, as recall at a later time with players can lead to inaccuracies in individuals' memories of the interaction with coaches. The splitting of the group in this study was vital to ensure that players were getting a regular chance to feedback to coaches with any issues they had or opinions, positive or negative, that they held in relation to the coaching programme or their own development. A constant contact with the players from a management perspective ensured that any problem issues are dealt with near the time of their inception rather than given time to develop. It also helps the coaching staff to react quickly if some element of the programme is proving problematic and needs additional attention.

Research has shown that anonymity can induce many more revelations as opposed to, for example, confidentiality where identity is known. (Ong and Weiss, 2000; Bergstrom et al., 2011). In most feedback situations for the group, anonymity is not a feature given the face to face nature of the discussions. For this study, however, anonymous feedback was facilitated to ensure that all players had a chance to have their opinion heard without judgement by their peers or coaches. It was also hoped that providing anonymity would allow players who had been reticent in making their opinion known the opportunity to express their views on their learning as they saw it. This was one of the most important learning outcomes from the process for the coaches. Players freely gave their opinions on the programme and what and how they felt they had learned during the season, as well as offering opinions on positive and negative aspects of the environment as they saw it.

Coaching in sport can sometimes have a focus on what should not be done in game situations. This can lead to a preponderance in negative feedback to players with regard to information they need to learn to improve. It was attempted to minimise the level of negative feedback given by coaches during the season but it certainly occurred on occasion throughout. Carpentier and Mageau (2013) see negative feedback serving two important functions: it can motivate sports people and guide them towards performance improvement. It could also have negative ramifications such as anxiety or a decrease in sports people's self-esteem and in the quality of the player- coach-relationship. Certainly it would be the coaching staffs' experience here that beyond a very limited point it is counter-productive and serves to alienate the player(s) from the coach and group

Conversely, positive feedback is thought to have a transformative influence on talented sports people. The coaches here tried to ensure that positivity in feedback was a default position even when needing to convey difficult news for players, such as non-selection for a game. Again in the coaches own experiences, positive feedback they had encountered in their own playing careers had played a formative role in their development as professionals. Mouratidis et al. (2008) investigated the motivating role of positive feedback on a sports persons' well-being, performance, and intention to participate. Whilst positive feedback did not have an immediate effect on performance, over time participant's performance levels and particularly their own personal motivation improved, given the provision of positive feedback regularly. Certainly the approach taken with the group involved in this study is weighted towards the provision of positive feedback. It was not expected that any approach would have significant immediate effects for individuals and that the approach taken could only be viewed realistically over time.

2.4 Management and coaching practice

In sport the coach can often also have a management responsibility for the group. This will differ slightly from a normal educational setting and adds a different dimension to the relationship with players. It is almost an accepted legend within soccer that a coach who isn't also the manager tends to have a more positive relationship with the players, as the manager has the additional problem of players being unhappy with them due to non-selection, disciplinary issues or other issues. The manager therefore has to ensure that the approach being taken with the players is drawing on appropriate methods to ensure the best outcomes for the team and individuals. The coaches involved in the study here have both already

experienced the roles of coach and manager at a more advanced professional level than the setting for the study.

Tsoukas (1994) accepts that management has a number of basic functions, including planning, organising, leading, and controlling. Managers are compelled to make a difference with their resources via the use of these functions.

Planning: Deciding what needs to happen in the future and producing plans on which to act.

Organising: Making sure the necessary resources are put into place both human and non-human and creating a coherent structure through which team goals can be realised.

Leading: Determining and deciding what must be done in a situation and motivating the people involved to carry it out.

Controlling: Checking team progress against plans laid out.

The basic roles to be carried by any manager will involve a skillset that require interpersonal, informational and decisional tasks. The interpersonal role involves coordination and interaction with players and staff. The informational role involves handling, sharing, and analysing information and the decisional role involves decision-making in a timely and effective manner. These are all relevant to a team sports setting. Communication and information transfer are vital in this setting, not just from an educational standpoint but from a management perspective. The communication style adopted by the manager will affect the receptiveness of individuals to the message being conveyed. It is also important to ensure that the communication channels used are appropriate and multiple. Individual players will learn in a different manner to each other and communicating using different mediums is important. The manager in this study used a mixture of verbal, visual and electronic tools to try to ensure as many learning types were accommodated. The analysis and sharing of information are a basic tenet of sports team. Ensuring that information is widely available to players to ensure learning outcomes is very important. The manager should encourage the sharing of information between players and staff. Timely, effective and efficient decision making ensure a group organisation that is easier to manage and more likely to produce positive experiences for both individuals and the group. Making decisions consistently, effectively and fairly will allow players gain trust in the manager. It was always attempted to fully explain decisions taken to the group as to why particular options were taken for the group and for individuals. The communication of decisions can ensure that trust is developed between the manager and the group as all individuals are in possession of the same information.

Karlö and Lövingsson (2005) suggests there are three different facets to management. The manager will need to be a coach, manager and strategist. The facets needed all directly relate to elements required from a manager of a sports team.

- The coach – motivating and leading people
- The controller – checking that the coaching programme is efficient and fit for purpose
- The strategist – taking decisions and acting in the present to ensure future success

The behaviour of the manager/coach in the leader's role can have an effect on the learning outcomes of the players. The personality characteristics of the manager (i.e. introvert, extrovert etc.) and the role they play within the group and directly with individual can have a differing effect with each participant (Huseinagić and Hodžić, 2009). There are two primary types of coaching style. These are Autonomy-supportive (Bartholomew et al., 2009) and Controlling (Isoard-Gauthier et al., 2012).

An autonomy-supportive coaching style is identified by coaches that offer explanations and justify their decisions to players and other coaches, whilst allowing the sense of autonomy over decisions that is encouraged in the guided-discovery approach to development. This coaching style is considered to be best suited to reducing pressure players have to cope with, irrespective if the pressure is internal or external in nature (Bartholomew et al., 2009; Hodge et al., 2011; Isoard-Gauthier et al., 2012). This style correlates with the approach used in this study whereby the manager is happy to explain decisions whilst also allowing a freedom around decision-making for players.

The controlling coaching style is in many ways the opposite of an autonomy-supportive style. Rather than allowing and encouraging players to take responsibility for their performance within training sessions or decision making, a controlling coach favours a more authoritarian approach. This approach, when coupled with a more directly coercive style, can result in players feeling less in control of their actions, almost becoming a 'puppet' for a manager or coach. A result of this can mean that players may feel an increase in pressure (Bartholomew et al., 2009; Isoard-Gauthier et al., 2012). This can mean that players don't accept responsibility for poor performance and are more likely to blame extrinsic conditions or others. If allowed to fester this can affect players' ability to self-analyse performance and skew development negatively.

Although the controlling coaching style can be viewed negatively, there is some evidence (Matosic et al., 2014) to suggest that it may improve the perception of competence in the short

term. Competence is one of the 3 key aspects of the Self-Determination Theory (SDT) at least in the short term (Ryan and Deci, 2000).

Ryan and Deci's theory is based upon the notion that a player's intrinsic motivation is the best driver for performance and psychological well-being, and as such should be promoted. Intrinsic motivation refers to the inherent desire of an individual to learn and, according to SDT has three elements: autonomy, competence and relatedness. Ryan and Deci suggested that to foster intrinsic motivation supportive conditions have to exist, something that can most often be absent from a controlling coaching style. This is supported by Matosic et al. (2014) who accepted that although a controlling style may improve perception of competence, in the long run the negatives can grow to outweigh any positive, resulting in the intrinsic motivation of players being undermined.

Hodge et al. (2011) note the importance of understanding and using a mixture of both coaching styles depending on the situational demands. They highlight how the supportive style, offering freer choice to the individual, may not always benefit the individual in the long term and may be counterproductive. As a result, at certain times it may be pertinent to employ a more controlling style, on the basis that the interests of the individual are being put first. It is essential to emphasise that the use of a controlling coaching style is only promoted when the individual's free choice may have a negative effect on either themselves or the team around them. On the whole, as evidenced already, the supportive coaching style is favoured for assisting in promoting positive attitudes. In October 2013, Alex Ferguson, former manager of Manchester United, in an interview with Anita Elberse for the *Harvard Business Review* commented that the 2 most important words in his management vocabulary were "well done". This shows the importance of positive feedback and a positive demeanour from the manager for individuals as witnessed by one of the most successful proponents of football management (Elberse, 2013). The use of the correct coaching style is exceptionally important when dealing with youth players as they are not yet fully matured as adults and can often need a greater level of support to maintain their development. Isoard-Gauthier et al. (2012), suggest that player burnout can be accelerated by an overbearing coaching style. They also suggest that a reason most individuals drop out of sport is due to poor motivation. They mention the requirement of autonomy in order to prevent burnout. Hodge et al. (2011) state that an autonomy-supportive style has a positive relationship with autonomous motivation. As a result it is important that the manager or coach adopts, in the main, a supportive role to optimise intrinsic motivation within players and attempt to decrease the level of burnout within the squad.

The literature generally favours a supportive style. However it is imperative to understand that there may be situations that need a controlling approach and this may be required for the benefit of the individual or team. On the whole the optimal coaching style may vary from person to person and situation to situation. Nonetheless it is important for a coach or manager to realise and fully accept that their behaviour and style and the role they assume within the group can have a direct impact on those they are coaching whether that is positive or negative.

Reflective practice has become an important element of professional expertise. Reflective practice, in this instance, refers to the ability of the manager/coach to analyse their own coaching practice and decisions, the use of problem-solving into learning by doing and the application of critical thinking to methods being used. These forms of reflective practice can raise a number of issues for sports managers, particularly in terms of the way they look at and evaluate their own performance (Edwards, 1999). Reflective practice in this study took the form of small group meetings between staff each week to ask what they felt had been positive or negative from the previous week's training programme. Reflections after games were helpful as it allowed the week's programme be viewed against the output of the game. Notes being kept after each game regarding performance that week allowed for a coherent string of reflections throughout the season. These reflections not only inform changes to the coaching programme but also management approaches to individuals or the team as a whole.

2.5 Summary

The literature reviewed here offers a broadly positive outlook on the area of peer learning and mentoring and would suggest support for use of the approach across a spectrum of disciplines. Encouraging a social constructivist approach to pedagogy, the literature suggests that enabling peer learning and peer mentoring can be successful in a wide set of academic settings and other associated learning environments such as the setting described here. It is certainly the approach favoured in most countries with regard to player development. This area of the literature is particularly relevant to developmental juncture that joins youth football to senior professional football. Providing the opportunity for younger peers to be influenced by more experienced counterparts is a supported approach in a number of disciplines such as medicine and law. The sporting context here can draw from such examples.

The advantages of a positive learning environment to encourage optimal learning outcomes are well documented. A review of learning environments concentrates on benefits to be gained by an individual, in a group setting, in a positive environment. A number of sports-based examples exist here which are particularly applicable to this case study. The idea that the learning environment should, in as much as possible, reflect real world setting matches much of the current thinking in sport. The idea that training/coaching should be largely match specific to ensure the application of what is learned during training/coaching sessions can be applied in a match situation is an approach held across most sporting situations, team or individual. Therefore it is vital that the learning environment constructed for players aims to reflect this. Whilst not always being easy to replicate real world situations in teaching situations this should be an aim to ensure learning outcomes for players are applicable in more pressurised situations.

Feedback plays a very important role in ensuring that what is being communicated by coaches is being assimilated in the correct fashion by players. Feedback is a two way communication (i.e. coach to player and player to coach). Differing slightly from the learning environment, it can be possible that a negative emphasis could have a positive outcome in some situations. There is some suggestion that negative feedback from coaches can have a positive individual performance effect. It would also be true to say that negative feedback from players, with regard to coaching practices, should lead to improvements in that regard also. Most of what is detailed in the literature review however suggests positive feedback in the main encourages improved learning outcomes. It would in many ways differ from coach to coach, given differing communication styles, but communicated enthusiasm and positivity are seen as the best methods to ensure that the coaching message is taken in by the group in an optimal manner. This approach also has the benefit of ensuring a positive environment to providing feedback to coaching staff by players.

The effect of the management approach taken is important to consider. Sport offers the dual role of coach and manager and the management aspect can be vitally important alongside the educational development of players. Many more basic management principles are being applied to successful sporting teams and therefore it is important to be cognisant of good management practice. Using the example of Alex Fergusons interview with the *Harvard Business Review*, the management principles required appear in most textbooks for management in any discipline. (It is interesting to note here as an aside that many successful sports managers have started their professional careers as teachers, including Arsene Wenger, Arsenal manager and Louis Van Gaal, Manchester United manager to name but two).

3. METHODOLOGY

The purpose of this study is to investigate how elite youth players are learning in the Irish environment. The participants are players who have already been playing at this level for one year or are new to this level of playing. The case study research method was chosen as the most appropriate way to answer such research questions. The methodology used allows both qualitative and quantitative elements be examined, and the design and the methods used are described in this chapter. The researcher was the only investigator and acted as an observer and interviewer.

Creating the best possible learning environment and experience for participants is the focus of the coaching plan in this study. The study aims to look at learning that has taken place within a group of players studied over the course of a season. The overall focus is qualitative in that it looks for indicators of success or improvement through the experiences and feedback of the participants (Glesne, 1999). Qualitative research looks at the participant in their natural setting and asks them to participate in the data collection process. Qualitative research methods can allow for researchers to combine their personal-self and their researcher-self in the research setting. The personal biases, values, and interests of the researcher are acknowledged and included in the reporting (Creswell, 2012; Glesne, 1999). Personal bias and values must be acknowledged when, as in this case, the researcher is actively involved in both the production process of the data and the collection of data from players subsequently.

It is important to acknowledge the number of different variables that will affect the development of young players and the team. It would be extremely difficult to look at all variables at play in the detail required to adequately explain each one. Qualitative research looks at the research setting as searching for a deep understanding rather than looking at the minutiae of different variables. The interest is in the experiences of people in their natural setting. This goes beyond what statistical analysis can infer when examining the story behind the numbers. This can include possible outliers, and the one participant who had a very different experience. Instead of trying to prove or disprove a hypothesis, qualitative research looks for themes, theories, and patterns to emerge from the data. Merriam (1988) states that qualitative research is hypothesis generating rather than serving to test a hypothesis.

The research questions sought to examine how players were learning in their existing setting. These are questions that may be better examined through qualitative methods than quantitative as there are no right and wrong answers. Using quantitative methods will allow a researcher to

view some empirical evidence regarding how much learning has occurred but such methods remove a significant aspect of deeper understanding of the issues at hand that is usually missing in a quantitative approach. For instance statistics in a game of football such as pass completion and possession are often implied as a measure of how well a team has performed. If after a number of sessions focussed on possession the statistics in a game situation recorded an increase in possession that can be used to imply learning has taken place. However, looking at those statistics alone and not taking into account the many qualitative aspects to be measured such as team tactics, players available, strength of opposition, weather conditions etc. mean that a qualitative approach is more suited to our setting here. Most elite team sports now use quantitative measures to augment the regular qualitative measurement of performance. Mahoney et al. (2002) argue that a practitioner administered case study approach to evaluation is needed to accommodate the constraints of a practice setting and fulfil the functional criteria for evaluating practice such as sporting activity.

Qualitative methods are an appropriate means to find answers to ‘why’ and ‘how’ questions. These can be augmented with quantitative methods to augment the observation by coaches and provide a support for the interpretation of the answers provided by participants. Examining the experiences and feedback of participants helps to illuminate what works from their perspective. It will also be much more beneficial when informing future coaching practice

3.1 Type of Design

Case study design and methods were used in this instance. The case study method and design fits well to this study because of its ability to answer the research questions appropriately. Yin (2003) believes that the case study is the preferred method for examining contemporary events when the relevant behaviours cannot be manipulated. The case study approach is appropriate in this particular setting due to its flexibility to examine a “full variety of evidence – documents, artefacts, interview, and observations” (Yin, 2003, p. 8). Merriam (1988) believes a case study to be more appropriate when description and explanation (rather than prediction based on cause and effect) is sought, and when it is not possible or wanted to manipulate the potential causes of behaviour. Yin’s (2003 p. 13-14) definition of a case study is:

...an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident...[It also] copes with the technically distinctive situation in which there will be many more variables of interest than data points, and as one result relies on multiple courses of

evidence, with data needing to converge in a triangulating fashion, and as another result benefits from the prior development of theoretical proposition to guide data collection and analysis.

Case studies allow for some flexibility in exploring the various contexts and situations from the point of view of individuals and larger groups (Atkins and Wallace, 2012). Bassey in *Case study research in educational settings*, quotes Cohen and Mannion (1989 p.24) “the case study researcher typically observes the characteristics of an individual unit – a child, a clique, a class, a school or a community. The purpose of such observation is to probe deeply and to analyse intensively the multifarious phenomena that constitute the life cycle of the unit with a view to establishing generalisations about the wider population to which that unit belongs.”

Case study allows us to look at the team unit and its effect on learning by players. Not only the overall team unit but individual defensive and offensive units within the team can be observed. Football and sport in general, due to the opinions and control of individual managers and coaches, can lead to subjective analysis of situations and individuals. Case study, in allowing the participants’ voice also have a role in shaping the study, can help support objectivity better than other more empirical forms of research. In some fields where hard and fast rules have not been validated to allow for generalisations (this would certainly be the case in sports) it may be necessary to build knowledge through case study over time on the subject with regard to informing practitioners in a particular field (Stake, 1978).

This study’s questions ask “how” and to some extent “why”. Yin’s (2003) approach to finding the best research strategy considers three conditions: the type of research question, how much control the investigator has over the events, and whether the event is contemporary or historical and to what extent. The research strategy best at answering “how” and “why” questions is the case study, which also focuses on contemporary events and does not require that the investigator have control over behavioural events. The participants initially set out goals for the year in a group setting including learning goals, and this was captured by the researcher. Participants were then asked how they would go about achieving these goals.

The investigator in this instance has control over the coaching plan and instruction but little if any control over the behaviour of participants. Because the events are happening in real time, specific variables or events have not been identified to investigate and cannot be easily separated from the context which makes case study design appropriate for this study.

Yin (2003) lists five research design components that are especially important to case studies:

- Research questions
- Any propositions
- Units of analysis
- Linking the data to the propositions; and
- Criteria for interpreting the findings

The research first asks how the participants are learning. Next, any propositions the research has are discussed, followed by a description of the units of analysis and how the data will be linked to the propositions. Finally, the criteria for interpreting the findings will be examined. The propositions direct attention to what was examined within the study. Sutton and Staw (1995) state that a theoretical proposition can be a “[hypothetical] story about why acts, events, structure, and thoughts occur” (p. 378). The propositions for this study are:

- Participants learn in the sporting environment in much the same way as any other educational setting
- Participants favour certain approaches to coaching that enables their learning over others
- There can be a learning environment and coaching plan developed that optimises the learning outcomes of players
- The experience of developing a coaching plan and receiving feedback from players can positively impact coaches

Analysis of the items identified by the players as affecting how they learn and what they find most effective can be used as the unit of analysis. Data can be linked to the propositions through analysis. Yin (2003) recommends pattern matching as an approach to consider here. Through analysis, similar patterns of response can be identified and linked back to the propositions, and new propositions based on relationships gleaned from the data can then be made.

3.2 Researcher's Role

The researcher is the sole investigator in this study. The researcher has twenty years' experience with professional football in Ireland, sixteen years as a player and four years as a coach/manager. The researcher feels comfortable working with younger players and his experience goes some way to providing capabilities needed to establish a sound working relationship with participants. There are two parts to the researcher's role – firstly as a

researcher and secondly as a learner. The researcher as researcher role will include all facets of data gathering such as interviews, reading, observation, and data analysis. Eisner (1991) states that a researcher's theoretical sensitivity comes from a number of sources, including literature, professional and personal experiences. The credibility of a qualitative research report can rely heavily on the confidence readers have in the researcher's ability to be sensitive to the data and to make appropriate decisions in the field. Lincoln and Guba (1985) identify the characteristics that make researchers a suitable fit for naturalistic inquiry as opposed to technology. People are responsive to environmental cues and can interact with the situation. They have the ability to collect information at multiple levels simultaneously and have the ability to perceive situations in the whole.

The researcher-as-learner role includes having a sense of self from the beginning of the study. The researcher must become a good listener to learn from participants, instead of approaching the interviews as an expert. It is vital that the researcher believes there is something to learn from the interaction. Being a researcher-as-learner allows the investigator to be in a position to be constantly open to new thoughts and ways of looking at the data. The researcher will need to reside in the researcher-as-learner role in order to create and maintain open communication with the participants. Additionally, Glesne (1999) points out that in considering validity issues, it is important not only to recognise the researcher's expertise in regards to the study, but also the subjective relationship they have with the research topic. This is something that I was aware of during the study. Subjectivity is acknowledged as a potential pitfall for coaches when assessing team performance and attribution bias for good or poor performance can be normal. Active awareness of potential subjectivity should give rise to a reasoned observation.

One of the ways a researcher can control subjectivity is via consistent recording of observations, findings etc. during the course of the study. The researcher's expertise and experience in the field will allow them to gather the data and analyse it to find patterns and themes that emerge. The researcher's monitoring and use of their subjectivity can allow them to tell the story in a meaningful way (Glesne, 1999). This was managed throughout the study with the keeping of weekly notes as well as the provision of weekly debriefs with coaching staff to ensure an opinion informed by more than one individual's observations.

3.3 Participant Selection

Participants were part of the team managed and coached by the researcher. Other participants were first team players at the same club who had recently moved from being part of the elite youth structure to the first team squad. The participants were aware that they were the focus of the study and their consent was sought and received in advance. Outside participants who were asked informally to participate (this participation may not always have been entered into with the intention of informing this study) were individuals such as other qualified coaches from rival teams, other qualified coaches from within our own club and tutors from the national association, FAI.

3.4 Data Collection Procedures

Yin (2003) and Stake (1995) list various sources of evidence that can be collected during the course of a case study, including physical artefacts, archival records, interviews, documentation, direct observation, and participant-observation. This study used three of these sources: interviews, observations, and participant observation. Interviews with individual participants were conducted informally before and after coaching sessions and games throughout the season. Observation was carried out on an ongoing basis throughout the season. Observation typically involved watching coaching sessions and games as well as observing interaction during team meetings and discussions. Weekly notes around observations for that period, usually following a competitive game, were compiled to ensure a record was kept of what was worked on and what the observed outcome was. Feedback from participants was consistently requested throughout the study to ensure their observations were brought to the attention of coaches. Additionally the views of outside opinion observing the group regularly, such as the first team manager, were sought to see if outside opinion differed greatly from the internal group perspective. Processes for data collection for case studies can be complex in comparison to other research strategies. Yin (2003 p. 106) recommends following certain “formal procedures to ensure quality control during the data collection process”. He described three principles of data collection that help in this process: (1.) multiple sources of evidence, (2.) creating a case study database, and, (3.) maintaining a chain of evidence. The reliability of the study is increased through the process of triangulation, where converging lines of inquiry are developed from the evidence. Glesne (1999 p. 32) adds that triangulation is a measure of validity through the “use of multiple data-collection methods, multiple sources, multiple investigators, and/or multiple theoretical perspectives”.

Triangulation in this study involved the examination of multiple sources of opinion, interviews, group feedback and observation.

Participants were asked to take part in a survey around coaching practices and their own learning in an attempt to answer ‘how’ and ‘why’ questions. These surveys were conducted using an online software package and it resulted in a 95% response rate to questions. Players were asked to respond to quizzes at selected intervals and after specific training sessions to gauge responses to techniques and practices used during training. Feedback can also be attained in this manner as to what relationship exists between the units (defence, midfield and attack) and how players view each other’s roles, which is vital to team formation. This may allow us to identify some markers of team cognition. A marker of team cognition is an aspect of performance that indicates the presence of team-level knowledge structures and cognitive or behavioural processes (Salas et al., 2007). This is vital for coaching staff in order to find out if topics covered in training have been sufficiently embedded in the collective knowledge of the team.

In addition, running through the entire season, were regular (at least weekly) group feedback sessions, at which participants were encouraged to say what they had learned, what they had liked/disliked and to offer any suggestions for change to a particular approach taken by coaches. These sessions would form part of the weekly write up by coaches in their observations of that particular week. Conversations with individuals from outside the group were informal and also fed into the weekly observation. Interviews were held face to face with the younger first team members in order to ensure that they were aware their answers were important to the study and to explain the context of the research taking place.

3.5 Data Analysis Procedures

Yin (2003) says that data analysis involves organising what a researcher has seen, heard, and read in order to make sense of it. Working with data, the researcher will describe, create explanations, hypothesise, develop theories, and attempt to connect the case study to previous research. Data collected from the interviews and observations and were stored electronically. There being no fixed approach for qualitative data analysis a lot depends on the investigator’s way of thinking about the data, along with consideration of alternative interpretations and presentation of evidence (Yin, 2003). Data analysis allows for themes and patterns to emerge from the multiple sources of evidence. Observation notes were read alongside participant responses to get a holistic view of the data. During this process the researcher attempted to

identify themes and trends in the responses from participants and match them to observations that had been made by coaches during the season.

The observations and responses were put into an Excel spreadsheet to allow ease of consideration. Yin (2003) talks about four principles that support high quality analysis: (1) attend to all of the evidence, including considering all alternative interpretations and rival hypotheses, thus leaving no loose ends; (2) address all major rival interpretations; (3) focus on the most important issue in the study; and (4) the researcher should use his/her own prior, expert knowledge in the analysis. Glesne (1999) recommends that the investigator should keep a reflective field log to begin the analysis process. The reflective log can capture thoughts, questions and ideas when they occur. It can also capture titles, themes, issues, coding schemes, and bouts of subjectivity that can be used throughout and in the final reporting of the study. I kept weekly logs as a way to review the work done, the progress made, and plans to overcome or solve any problems. These logs were discussed amongst coaches to ensure input other than the researchers.

3.6 Validity of the Study

Glesne (1999) summarises Creswell's eight verification procedures that are often used in qualitative research, noting that not all of these procedures need to be used in one study, but consideration of as many as apply is necessary to increase the trustworthiness of the study. For this study, five of the eight procedures had elements included: triangulation; peer review and debriefing; clarification of researcher bias; rich description; and external audit. Triangulation was accomplished through the use of multiple sources of evidence; the investigator's constant dialogue with other coaching staff provided a mechanism for peer review and debriefing; the weekly reports helped clarify researcher bias; in depth description facilitated the descriptive and explanatory nature of this study; and the researcher invited points of view from external subject-matter experts to provide the external audit of the research study.

4. A SEASON OF LEARNING IN REVIEW- RESULTS AND DISCUSSION

The elite U19 season begins in August, and pre-season each year begins in late June. Pre-season is a six-week period of intensive training leading into the season. Players are expected to have a high level of physical fitness entering into pre-season which allows coaching staff to concentrate by and large on technical and tactical aspects of training. The season runs from August to March, with a two-week break at Christmas. The group consists of 20 players, but a maximum squad of 22 players is permissible by the league. The decision was taken to try to use a smaller group to enable as much game time for players as possible. Seven players are in their second and final year at this level and thirteen are in their first season. The group is coached by two UEFA A licenced coaches, myself and one other ex-professional player, assisted by a goalkeeping coach and a physiotherapist.

Players typically train four times a week in pre-season. Typically sessions are 1.5 hours long with non-live coaching instruction (group talks etc.) from coaches taking about one hour in total during each week. Players are introduced to the programme for the season via an initial 1.5 hour group meeting. Players are also spoken to individually by coaches regularly to point out position-specific detail required for the season. In-season training consists of two training sessions per week and a game. Most players in the squad are also taking part in school teams, college scholarship teams etc. at this stage of the year which is why the training schedule is lightened to try to guard against fatigue and injury.

The information collected through feedback from players was largely collected through questionnaires provided to the playing squad via a smartphone application, Socrative. The main reason for seeking feedback in this manner was that it allowed players to provide feedback anonymously whilst also providing them with time to think about their answers, as opposed to being put on the spot at a group feedback session, and thereby going some way to avoiding groupthink. Using anonymous feedback is discussed by Ong and Weiss (2000) and Bergstrom et al. (2011) as a method of increasing efficacy of the feedback received. The quotations by players cited below were provided through answers to questionnaires using the smartphone application. Quotations by younger professional players at the club were in response to individual interviews. Feedback was also regularly sought, on a weekly basis,

from the players via a group meeting with regard to the coaching approach for covering certain topics. Players were also spoken to individually throughout the year to hear their thoughts on how they felt they were progressing or learning and also to allow them hear where coaching staff felt they were positioned at that time.

At the group's first meeting at the beginning of pre-season training a discussion took place, for about 35 minutes, around goals for the coming season. Two questions were posed (1.) What do you want to achieve this season? (2.) How will you achieve it? The players found it easy to verbalise what their goals where and a list was made of their responses. Most of the items raised you would expect to see on any team's list of goals:

- Win the league
- Win matches
- Become a better player
- Increase skill levels
- Get fitter
- Become a professional
- Get into the first team
- Make money
- Perform to my best
- Be the best player
- Be a good team

The group struggled with the question of how we would go about achieving these. They looked to coaching staff to provide the guidance here and seemed to think that there were right and wrong answers here, or simply they had no answers.

- Play well
- Train hard
- Listen to coaches
- Practise skills
- Train on your own
- Be consistent
- Listen to each other
- Communicate

Beyond ones which suggested playing well and training hard, the answers took some prompting here, particularly the need for communication and organisation within the group for it to be successful. This was interesting from the coaching staff's perspective as it showed the players had ambition and drive but lacked insight as to how they could channel their work and talents into achieving their goals. They looked to coaches to provide that insight as mentors to the group. The definition of mentoring proposed by Bozeman and Feeney (2007, p.731) is relevant here, as they see mentoring as "a process for the informal transmission of knowledge", and occurring "between a person who is perceived to have greater relevant knowledge, wisdom, or experience (the mentor) and a person who is perceived to have less (the protégé)"

4.1 Player feedback

A concept worked on by the coaches early on was the idea of the "group" being more important than the individual. This concept seems to have been adopted by players quickly. When asked, at the end of the season to point out the most important thing they had learned during the season a number of players pointed to the importance of the group which would indicate the awareness of a common interest and endeavour amongst the group and its benefits. Player 1 commented – "*Perform as a team, win as a team and encourage players around you*". Player 6 said- "*that it's very important to communicate on the pitch and to demand the best from your teammates.*" Player 10 – "*To be patient. Keep working hard as a team*". Wenger (1998) outlines the importance, placed by the individual, on the meaning and identity of the group, to each individual's learning.

At regular intervals throughout the season, players were asked if they would change any particular items of the coaching programme. They were also asked to reflect on this question at the end of the season. The vast majority indicated that they would like to see no change, and a large number indicated that they enjoyed the programme. Player 2 - "*No I think the training sessions are of a high standard, and it would be very hard to make it any better*". Some players indicated instances where they would like to see more of some of particular practices and drills. Player 10 - "*Maybe more shooting*". It was important to give players the opportunity to feedback on coaching content. This allowed coaches to reflect on practices carried out up to that point and make changes as necessary. Edwards (1999) states the importance of reflective practice in teaching/coaching as a model for continuous improvement. As the majority of the group was playing at this level for the first time, the team struggled early in the season with the increased demands of the coaches and team-mates. When asked about the difference between

their previous level of football and elite U19 football Player 3 commented – “*Huge. We’re treated as men now rather than boys. The standard is far higher and everyone is trying to compete to make it to the next level of first team football*”. This indicates that learning is occurring in a pressurised, competitive atmosphere where motivation has not only internal but external drivers.

When asked how they preferred learning, 60% of players responded that they preferred to learn during coaching sessions. Player 9 - “*Coaching sessions and talks in between sessions (when play is stopped in training)*”. Of the other players, 30% mentioned that their first preference was to learn by playing games: Player 2 - “*Probably playing games is the best way to learn. Television also helps especially to watch how top players around the world play and try get tips from them*”. This surprised me as, from personal experience, players would generally far prefer to play games than partake in training/coaching sessions. The responses here also indicated that the time spent by coaching staff on tactical presentations for pre-match instruction or post-match analysis had a much lower impact than expected. Players are shown a PowerPoint presentation before each competitive game outlining tactical information for the game. The use of technologies to aid information flow, such as coach presentations, is supported by Martin et al. (2012). Only two players mentioned “Coach talks” alongside their first preference but were under-prescriptive if these were talks that took place after training sessions or before games etc. This also suggests that almost half the players feel that carrying out the task (i.e. playing games) presents them with the best opportunity to learn. Coaches generally have the least control during game time as the opportunity to control the flow of information and explanation is limited to breaks in play and the half-time break. Coaching sessions are much more structured learning environments where coaches can control the pace of instruction and are at liberty to stop proceedings to instruct or explain. The remaining 10% of players had identified learning experiences outside coaching sessions and games. Player 6 - “*I learned from watching matches but specifically watching the player in my position. Also I learned when the manager told me exactly what he expected from me.*” This would suggest that coaches need to be mindful that some players will prefer an autonomy supportive approach as detailed by Bartholomew et al. (2009) suits these players best as they learn most on their own during matches whilst others will need a more controlling approach as discussed by Kirschner et al. (2006).

The coaching programme has tactical and technical components. Players are encouraged to practise technique, and poor technique is corrected during coaching practice. Much of the

tactical information is new to players at this level. Responses indicated that both technical and tactical learning had taken place, as is instanced by Player 2 – *“I learned different movements to get the ball. When I don't have the ball I must create an angle to receive the ball. Also I learned to check over my shoulder when the ball is being passed to me and scan the area around me for the next option.”* Player 14 *“Yes, better positional sense and ball retention/passing techniques”*. Player 5 indicates that new learning was primarily tactical – *“A lot of things, how to play the 4-3-3 formation the right way and my awareness of what's going on in the game improved a lot”*, as does Player 6 *“I learned a lot about positioning and how to read the game better.”*

When dealing with what players felt they had learned from coaching sessions, responses indicated that tactical information and instruction around professional standards had been learned over technical instruction. Players felt they had learned something of a tactical nature or something that made them a better team player. When coaching staff were asked the same question about what they felt players had taken on from sessions they indicated similar feelings on the learning that had taken place. Players were observed to be more tactically aware and certainly more team-oriented than when the season had begun.

Coaching sessions in the main part followed the design of warm up – passing drill – possession drill – small-sided game or phase of play. Players by and large felt that they had learned new information during the more behaviourist repetitive exercises of passing drills and possession drills. Coaching staff would generally see these practices for base level learning and that higher learning would occur during small-sided games and phases-of-play exercises. The passing and possession drills are functional practices designed to re-enforce certain technical and tactical cornerstones. It may be linked to the age of the players that they feel they are learning as much here as in the higher end exercises. It may also suggest support for Kirschner et al. (2006) in their hypothesis that a minimal guidance approach is not best suited to skills acquisition. Conversely younger professional players at the club felt that the teaching element of a coaching session didn't start until these drills had finished.

In the area of peer learning, very few of the group felt that they had learned anything significant from team mates. The vast majority of responses indicated that coaching staff alone had made an impact on individual learning. (Player 4 - *“Coaching staff as they know more and are qualified”*). Only four players felt that they had learned from teammates and amongst these three had found coaches and teammates equally beneficial and only one had found teammates as the driving influence in the learning experience. When these responses

are viewed against the responses from young professional players, there seems to be a disconnect with regard to peer learning. Young professionals viewed the learning experience as very much a shared dynamic between coaching staff and team mates in keeping with the benefits of peer mentoring as discussed by Ashman and Colvin (2010) . All in this group indicated the importance of more experienced peers to their learning. One commented *“I’ve learned a lot in a short time from other players in the first team. Positional sense and little tricks that help you during a game”*. Another commented *“coaching staff tell us how they want us to play and it’s well explained and it’s important you take it on board but I’ve also learned a lot from team mates who have experience of situations before”*. This would seem to point to U19 players missing out on a valuable learning opportunity by being exposed only to peers at a similar developmental stage as opposed to the younger professionals who feel that peers influence learning in a positive fashion. This is most probably down to the recent change in the structure for elite youth players in Ireland. Up to 2012, players at this level would have played their competitive football with and against players of differing ages and experience levels. Coaching staff from within the club and from other clubs when asked also wholly agreed that they felt the pace of learning for players in the U19 age group had slowed since the opportunity to have closer contact with more experienced peers had been removed. In fact only one player in the group identified a potential benefit to training with the first team when asked if they would change anything about the coaching programme. (Player 15 - *“maybe the under 19s and the first team training together could benefit either side”*).

4.2 Coach feedback

It was important throughout the season to keep a track of staff appraisal of how individuals and the group were performing. A lot of conversations in this setting take place between staff on the training ground or in the dressing room and are therefore not recorded at the time but captured in notes at a later stage. A weekly log was kept of how each week had progressed in relation to the team with regard to training, matches and player development.

As mentioned previously it was immediately apparent to the coaching staff that the players were ambitious and eager whilst also looking to the coaching staff for instruction on most aspects of their play. Due to the number of players, the manager and the coaches split the group in an attempt to ensure that players within the group got enough individual attention. Each player received individual mentoring on aspects of their performance, training and off the field responsibilities. The players were split into groups based on their roles. Goalkeepers were attended to by the goalkeeping coach, defenders were attended to by the coach and I, as

manager, took the attackers. The coach and I switched groups at the midway point of the season to ensure that all players had the benefit of all available expertise. The staff member's responsibility was to ensure that they spoke to the players in their group at least once on their own during each week to encourage them and point out improvements that could be made or things that they did well. This approach is broadly in line with the methods outlined in the study by Christensen et al. (2011). This approach seemed to work well with the players who were happy that the coaching staff had adequate time to talk to them about their own performance (Player 10-*"the coaches always had time to answer questions or give advice."* Player 3 - *"I spoke to a coach nearly every session about my position and it helped improve my awareness"*). This worked well throughout the year although in some instances, where there was a player who was struggling with a particular concept or skill, it was apparent that the more an issue was highlighted the more a player retreated from engagement with staff. In one incident a player when asked about an error he made during a game despite it being pointed out on numerous other occasions said *"I keep worrying about making the mistake because I know you're going to say it to me"*. This showed that in some cases the fear of having mistakes pointed out was having a detrimental effect on the player's decision making. It was decided from that point on with that player to not directly point out a negative, the approach was used to engage the player around the topic and allow them to speak about it but not to say "you did that wrong". It seemed to work as time went on and the errors declined and the players' observed general demeanour improved. It also indicated why the use of positive reinforcement is important where players are actively engaging with coaches' instruction and feedback to them (Mouratidis et al., 2011). It is important for players to hear a positive message and for coaches to recognise good performance and acknowledge it.

That one example, showed how an element of trial and error in a coaches dealing with each individual, can take place in arriving at the optimal method of providing learning opportunities for each player. Reflection on the approaches being used is important at all times (Edwards, 1999). As coaches got to know players more as individuals and their background stories it led to a more effective transfer of information and communications process between both sides. The various idiosyncrasies of players are discussed amongst the staff who are dealing with them most often. When reviewing the season as a whole what was noticeable was the change in the approach being used with individuals. Players who it was initially considered would react well to a softer, less direct approach were now being approached in a much more direct fashion and vice versa.

The area of feedback provided the coaching staff with one of their key observations in how players were learning and how they liked to receive feedback. When giving the players feedback about their technical skills, coaches could either tell them what they had seen (descriptive feedback) or tell them what they thought they needed to do based on what had been observed (prescriptive feedback). For example it was noticed, by the coaches, early on in the season that they were not being descriptive enough in their feedback with players. The coaches background in professional football sometimes lead to them using truncated explanations of actions needed by players when carrying out a skill. An example here might be telling an experienced professional to “drop off” when an opposition team are attacking. Younger players will require an explanation of what is meant by certain terms and when exactly they should carry the action out. Therefore it was important, when making players aware of the types of corrections they need to make to improve their performance, that coaches provide them with an appropriate amount of prescriptive feedback. In order for the coaches to provide players with useful prescriptive feedback, they need to be able to see the errors in a player’s performance and offer possible solutions for the problem. Certainly in the initial stages of the season the amount of prescriptive feedback required was high as players acquainted themselves with the increased complexity of the elite level requirements. This argued for a more controlling style of feedback required. As the season progressed however the need for prescriptive feedback reduced in most cases and description of a problem was what players needed to solve it themselves. Players tended to respond more positively to an autonomous supportive style as discussed by Carpentier and Mageau (2013).

As long as players are realising intrinsically the improvement that is required, they don’t need (or usually don’t want) additional feedback from the coaching staff. Coaches would look to say as little as possible when players are self-correcting. Hodge and Lonsdale (2011) have indicated that players will profit more from feedback when they ask for it than when a coach or manager decides they need it. Interestingly, some studies such as Bartholomew et al. (2009) also argue that learners are able to improve their skills with relatively little extrinsic feedback. This is certainly an observation of the coaches involved here. A number of players can have an intrinsic awareness of the improvements required and will work towards them. It was also apparent to coaches as the season progressed that the reliance of some players on the instruction of coaches diminished. The coaching staff involved noticed that where players had taken part in actively practising elements of the game themselves it seemed to have a more lasting effect on their performance. It suggested that coaches should look to avoid providing assistance as much as possible and instead allow players to practise their skills on their own.

Players also didn't like to have their own negative opinion of their actions reaffirmed by coaches. If a player had realised a mistake it was pointless a coach to point out the same issue. Rather, it was observed that players reacted positively to the negative being explored as a means to a deeper learning as coaches and player worked to find explanations and solutions to such issues. The coach's goal was to provide feedback only when players are unable to identify a problem on their own. This would support the benefits outlined in studies that suggest an autonomous supportive approach is a more positive learning experience (Isoard-Gauthier et al., 2012; Carpentier and Mageau, 2013) The relationships built with players helped coaches identify more easily the need for feedback and the type required. The ability to self-analyse varied from player to player and the support required from coaches differed accordingly. Since the learning of players in football usually involves some sort of problem solving, the feedback provided by coaches should point players toward accessing sources of intrinsic feedback. A number of drills were used to enhance the skill levels of players in certain positions at certain times in the game. An example here would be a ball striking and finishing drill used with the strikers in the group. Coaches explain the technique and thought process required of strikers when looking to score from inside the box. The detailed explanation allows the players become aware of the requirements to complete the task properly. They can from that point intrinsically feedback about errors or improvements needed with little input from the coaches. Feedback is still important at the beginning stage of technical-skill practice such as finishing when the players involved are still getting used to the process. Once the basics of the technique have been mastered the feedback from coaches should become more sparse and nuanced. Players should be left as much as possible to master the skill on their own (Franks, 1997).

UEFA's and the FAI's coaching philosophy (Football Association of Ireland, 2013) suggests that coaching programmes should be game-specific. The elements of the programmes should allow players take their learning within practice drills into a game situation. The game specific approach to training allowed coaches to observe that players needed to be given the opportunity to develop their skills and knowledge in an independent fashion and engage in problem solving on their own with as little interference from coaches as was necessary. Only when players appeared to be lost in looking for suitable solutions to a game problem was it necessary for coaches to stop a session and offer feedback. The observed benefit of this approach was that it allowed coaches to reach players at an instance when they most needed help and were probably most motivated to hear what a coach was saying and therefore more likely to take on board the information offered. The amount of feedback required was also noticeably different between players. By and large it was observed that the higher performing a

player was within the group the less coach feedback was required. Coaches however have got to be careful in relation to being seen to be giving too much feedback to individual players. It can lead to some players feeling left out even though the reason for them not receiving as much feedback is their superior performance. It can also lead to a negative view of the player receiving the feedback within the group if they are viewed to be struggling and requiring too much assistance from coaches. A mechanism used to address this but to also increase the amount of feedback that coaches could provide without overloading players with information was to use summary group feedback after a training session or game. Group feedback allowed coaches to tell players how they performed during training sessions and games as a group while also allowing coaches the chance to identify best practice amongst players. The positive effect on most players of being identified and praised for performing well was noticeable shortly after the instance (Mouratidis et al., 2008)

It was noticeable to coaches during the season that certain players were more reliant on their feedback than others. This could be measured by straightforward requests for the feedback from the player or sometimes from coaches observing the demeanour and performance of players when no feedback or negative feedback had been given. Another observable phenomenon was for certain players to carry out the last instruction received from coaches even if they are confronted with a situation for which applying the instruction was unsuitable. This identified the reliance some players placed on coach instruction and mirrored the answers in the players' own survey with regard to who they looked to when learning. This over-reliance for some players may be a natural occurrence in any group but is counterproductive for player learning. Coaches were continually searching for the appropriate communication style that suited each player. It is normal for coaches to attempt different approaches with a player in an attempt to arrive at an approach that best suits the individual. The coaches did experiment on some occasions in games and in training with different styles of player instruction. In some games they looked to provide a constant stream of player instructions and in others provided practically no instruction. Coaches noticed that by providing a constant stream of player instructions and corrections, the players reacted negatively and visibly looked more under pressure. Although the teams, and sometimes individual performance, could appear to be improving with the constant instruction, it was clear that the players' learning was not being enhanced in any meaningful way. When the constant instruction was removed, the players and more generally team performance was likely to disimprove as players struggled to solve problems on their own. The approach suggested to coaches that player learning was best facilitated by a more minimal approach to instruction as supported in Christensen et al. (2011).

Much consideration was given before the season to the sequencing of the coaching programme. This sequencing was also required within coaching sessions individually. Coaches observed that sessions ran more smoothly, and were better received by players, when the difficulty of each task progressed from low to high, within coaching sessions, and more generally within the coaching programme with sessions increasing in complexity over time. For simple drills and tactical information, coaches could undertake these tasks at the start of each session. However, for more complex topics, players struggled when confronted with them early in a training session and had a negative bearing on the effectiveness of the session. A number of elements had to be removed from sessions early on as players displayed unreadiness for the complexity involved. A defensive drill introduced during pre-season had to be abandoned due to players being confused and unable to grasp the interconnection between the various elements and brought back during the season at which stage the players were more ready for its challenges.

Despite the programme being structured throughout the season it is necessary for staff to react to situations they feel may not be working. In an effort to address issues that arise it may be necessary to try different approaches to what might be normally prescribed in the coaching approach. It is normal after games for players as a group to be given feedback and debriefed on the game just gone. Initially the feedback from players after games was weak and could be overly affected by the result. It was noticed that delaying feedback had some benefits with regard to player learning. Sending players home after a game with a question to think about brought back what seemed to coaches a much richer learning displayed in the feedback of players. After a game the players might not receive feedback but instead be posed a question and asked to consider it before meeting again. An example of a question might be something like – *“How did we defend today. What was good? What was bad? For you and for the team?”* The aim of this approach was to encourage the development of players who are capable of functioning independently. This approach was used to help players and encourage them to evaluate their own performance before coaches offered feedback to them. It gave players the time to think about what they did themselves and how that affected the result. By challenging players to evaluate their own errors and come up with possible solutions before giving them direct feedback it seemed that they embedded more learning from the experience and the coaches noticed a difference in the group engagement to feedback around their learning. The lag in time for the players to consider and answer had led to more engaging in the process and actively thinking about their own learning. Since the quality of feedback is more important than the quantity, the coaches involved agreed that not only the content but the

timing of coach feedback to the group was important to derive the maximum benefit for embedding knowledge.

Another important factor to consider when given to staff reviewing team performance throughout the season is to remember to not view it only through the prism of results gained in games. Performance levels should be the barometer for team and individual success and staff need to be as realistic as they can possibly be when setting goals for performance levels. In as much as possible a cold assessment should be made of individuals' and the teams' capabilities relative to the competition, overall and in any given game. Other measurements outside results also play an important part in measuring the effectiveness of developing players within the coaching programme. The staff met at the start of this season and set out the goals for which it wanted to be judged: to see a visible improvement in 90% of the squad (it was felt that a small number will almost always disimprove given the jump required and a lack of game time). It is important to seek outside judgement regarding the assessment of player improvement and to be as honest in your own appraisals on this topic. The staff suggested that providing at least two players to the first team squad would be an indication of a successful programme along with finishing in the top four in the league. These goals were discussed in conjunction with the first team manager who has overall responsibility for player development at the club.

A subjective player assessment by each coach, following the season's end, appraised the players based on if they felt that the player had improved sufficiently during the season. In this situation coaches will differ in their opinion on each player. In an effort to negate some of the subjectivity all of the coaches have an input to at least ensure multiple points of view are considered. Player improvement was based on a holistic mark as to whether the player's tactical and technical awareness and capability had been observed to have improved over the course of the season. The coaches assessed 80% of the players as having improved during the season. This is set against 100% of players feeling as if they had improved at some level.

4.3 Summary of findings

A number of findings are apparent from responses and observations during the study. Players by and large learn most effectively by doing, and also prefer to learn in this way. To reinforce this finding, time spent on tactical and technical descriptive elements by coaches were not recognised in responses in relation to the amount of time spent on them during the season. For learning to be facilitated optimally within the group it will be necessary to vary the approach used by coaches for different players. A mix of autonomous and controlling supportive

coaching approaches will need to be used within the group to ensure players who react differently to both methods are enabled to learn most effectively. The opportunity and benefits of peer learning as identified by young professionals in the first team is not readily available to U19 players in the current structure. Players appreciated the team ethos and value of the group involved in sports but recognised the benefits and identified a preference for working in smaller groups for positional coaching. The coaches need for reflective practice is very evident in allowing timely amendments to rectify elements of the coaching programme that are not working or require change. The ability for players to have easy feedback channels to inform the coaches reflective practice is also key. Feedback from coaches to players has an important role in player learning. Coaches need to be mindful of the amount, content and timing of feedback to players to make the best use of it.

4.4 Conclusion

The team finished in joint fourth position in the league. Four players were successful in progression to the first team squad which points to a success for the programme. However, it is also necessary to consider the role the coaches' play with players who have entered the group already displaying a significant level of proficiency in the attributes necessary to be successful for progression to the first team. With this in mind coaching staff felt that perhaps in only two of the cases that the players improvement to the level required for progressions had been witnessed based on the coaching provided during the season. Suggesting a specific coach or coaching programme as the basis for individual player improvement does not adequately consider the individual players own capabilities or intrinsic motivations.

5. RECOMMENDATIONS AND CONCLUSION

With any group it can often be difficult to assess the different level of learning that has taken place after a set educational programme. Elite youth footballers are no different to any other educational communities of practice in this regard, and whilst case study doesn't allow us to deal in absolutes it does allow us to critically assess the learning of a group centred around a common theme. Individual's capacity for learning will differ, and care must be taken not to make inferences about the level of learning in any group study. Sport is by its very nature subjective and coaching pedagogy will span the spectrum from behaviourist to constructivist. Taking a constructivist approach means that it can be difficult to be quantitative and most likely any feedback will be qualitative in nature due to differences in participants' prior learning, experiences, motivations etc. As a tool to view a sporting community of practice it was therefore decided that case study was an appropriate method.

The creation of a positive community of practice and learning environment for participants is vital for the learning process to be successful. Students need to feel comfortable in their surroundings to view the learning process positively and to ensure they get the most from it. The players in this study responded to the positive atmosphere created by coaches with reflected positivity to taking on new information and learning. It can be dangerous however to draw too much from a conclusion of player enjoyment of the programme and player learning. At elite level it is important to balance the enjoyment of sport with the learning required for players to attain the professionalism needed to pursue a career in the game. It is eminently possible for players to enjoy many elements of a coaching programme with limited long term knowledge gained. The coaching programme therefore should ensure learning outcomes are achieved and coaches should attempt to measure them through any of the methods available.

The players' perception of the coaching approach was one which led all participants to say they had improved during the season, with almost all pointing to the coach as the significant conduit for learning. Whilst something of a compliment for the coaches involved it is perhaps necessary to wonder is there an inherent flaw in the current player-development system. In much the same way as colleges and universities have encouraged the idea of self-directed learning to be introduced at secondary level to smooth the transition for students to third level, players at elite level need to be challenged at an earlier stage in their development to learn the tools to develop a more autonomous style of learning. This will lead to a greater ability to problem solve without the aid of coaches and have the aimed benefit of increasing the likelihood of player success.

Feedback both from players and coaches will form a significant part of any successful coaching environment. Allowing the group an opportunity to provide various forms of feedback is important. This can allow coaches assess what learning is taking place and if any significant issues or barriers exist to learning taking place. Anonymous feedback in this study was vital to ensure that information received from players on how they view the coaching pedagogy and their own learning outcomes is an accurate and honest account for each individual. In order to direct the coaching programme in the most beneficial manner to players it is vital that respondents have the opportunity to be honest in their answers and this is facilitated best when they can remain unknown to the questioner. One-on-one and group sessions also have a role to play and should not be forfeited as a combination of approaches can provide a fuller picture of learning outcomes. Certainly the individual anonymous responses allowed certain players to voice ideas that would most probably be representative of the group, and group Q and A's often provided valuable insight into what players in general saw as problems or issues.

The individual relationships fostered with players also had a significant role to play in the efficacy of player feedback. As relationships grew and players and coaches became more comfortable with each other, the richness and depth of the feedback with regard to player learning and perceptions of the coaching methods used became more honest and useful.

The differences in responses to the idea of peer learning and how it was viewed within the group and alternatively by the group of young professionals points towards a potentially beneficial developmental tool being wasted. The elite youth group having not been immersed in the activity almost entirely overlooked peer learning as a potential source of knowledge to help them improve. The younger professionals all identified it as a positive learning resource. It should be encouraged at this level due to the enhanced learning outcomes it offers younger players. Learning by doing alongside more experienced peers offers a fantastic opportunity for elite youth players to enhance their learning outcomes in a very focused fashion. There is much written on the topic of peer learning as an aid in the development of skills learning and the current structure for elite youth development means that this is not being harnessed optimally. Regular exposure to more experienced peers should be a benefit to elite youth players and ways to enable this should be explored in order to ensure that a more complete range of learning opportunities are available to players. The opposing stances of elite youth players and young first team squad members on who were the leading influences on their

learning show that peer learning can have a significant influence when addressing player development. This is missing in the main at elite youth level.

One of the researcher biases challenged during the study was that players saw themselves learning during the behaviourist elements of the coaching programme. Possession drills and passing drills are seen by coaches at this level as extended warm ups or functional practices to re-enforce learning. There may be an over-estimation as to how much prior learning has occurred if responses are indicating new learning in these areas. Players and coaches seemed to be at odds here as to the level of learning that was occurring during these elements of the programme. The coaching programme may have to be tailored for any new intake to include more drill based functions early on if this has not been adequately covered prior to entry in the group.

Isoard-Gauthier et al. (2012) argued that a controlling style of coaching that can result in a non-self-determined form of motivation for an individual might expose the young players at the elite standard to higher risks of burnout or poor performance. Inversely, an autonomy supportive coaching style might lead young players at elite level to improving performance and lowering their risk of burnout. This supports the idea that providing players with an environment that encourages self-determination with regard to problem solving and decision making may provide a useful conceptual framework for designing a supportive coaching programme aimed at providing a “guided discovery” approach for players. The studies also imply that the coaches involved in the training of elite youth players might play a key role in the development of self-determination strategies for the players and the associated performance levels within their group. Further research on the efficacy of the autonomy supportive style in relation to player improvement would be of benefit to the area.

The use of technology to support player development and learning are an interesting area of which perhaps more research would be of benefit. The use of social media with the group certainly was of benefit to the management and organisation of the group which left more scope with players to concentrate on elements of the coaching programme rather than wasting time with items of housekeeping. The players also embraced this as an information sharing and learning tool and would regularly use and upload content. It also has its more immediate purpose of being a social media and bringing players together in a virtual space and as such acting as a conduit for team bonding and enhancing the effectiveness of the community of practice. Despite not referencing it in anonymous responses to questions on their learning, it was referenced on numerous group settings and in face to face meetings with players by

coaching staff. It is also used by numerous GAA inter-county set ups and other sports teams for a similar purpose. The use of PowerPoint presentations before games by coaches to outline tactical information and players' individual roles had initial positive comment from players but this seemed to lose effectiveness quickly and players commented on the similarity of each presentation as being a negative for the approach. Consideration should be given here to the need for variety in approaches in providing players with information that is intended to embed learning. The use of technology to enable anonymous feedback has been identified elsewhere here as a benefit in ensuring all players voices are heard in assessing the learning taking place. It would be the opinion here that this opportunity should be provided on a more regular basis for players to allow them regularly contribute and ensure that opinions held at particular points are mapped throughout a season.

Some steps have been taken to improve the development of elite youth players in Ireland. The insistence that coaches be qualified to UEFA A level to work at this level is a step in the right direction. This helps provide a consistency, an increased standard of information and learning opportunities for players. A national league for the age group itself is a progressive idea which does ensure that the best players in that age group get to compete against each other. This is the first age group and level that competes nationally in a league situation. This, in part, identifies a built-in issue with the structure, as elite players up to this point are located throughout the country, with differing access to appropriate facilities and competition. Thought must be given to the learning environments provided not just at U19 elite level but at the age groups below that to ensure that elite players have access to the best learning environments and are challenged appropriately. However despite the improvements in coaching standards and competition, the structure is missing out on an important development opportunity for young elite players, namely peer learning and mentoring. Other jurisdictions, such as England with their elite U21 structure, allow the involvement of a limited number of over-age first team players in competitive games, and this can help provide a more rounded education for younger players who get the opportunity to learn from more experienced peers. The players' over-reliance on coaches is something that should be guarded against and providing other avenues of learning and support, such as peer learning opportunities, is important to ensuring this addressed. If the ultimate aim for this age group of players is to facilitate the progression to professional football, there is a responsibility for clubs, coaches and national bodies to ensure that the overall structures and club environments provided for players allow them the best opportunity to make that progression.

6. REFERENCES

- Angelo, T. A., & Cross, K. P. (1993). Classroom assessment techniques. San Francisco: Jossey-Bass.
- Ashman, M., & Colvin, J. W. (2010). Roles, Risks, and Benefits of Peer Mentoring Relationships in Higher Education. *Mentoring & Tutoring: Partnership in Learning* 18(2), 121-134.
- Atkins, L., & Wallace, S. (2012). *Qualitative Research in Education*. London: SAGE Publications Ltd.
- Baeten, M., Dochy, F., & Struyven, K. (2013). The effects of different learning environments on students' motivation for learning and their achievement. *British Journal Of Educational Psychology*, 83(3), 484-501.
- Bartholomew, K. J., Ntoumanis, N. & Thogersen-Ntoumani, C. (2009). A review of controlling motivational strategies from a self-determination theory perspective: implications for sports coaches. *International Review of Sport and Exercise Psychology*, 2, 215-233.
- Bassey, M. (1999). *Case Study research in Educational settings*. London: Open University Press.
- Bergstrom, T., Harris, A., & Karahalios, K. (2011). Encouraging Initiative in the Classroom with Anonymous Feedback. *Human-Computer Interaction-INTERACT*, 627-642.
- Bozeman, B., & Feeney, M. K. (2007). Toward a useful theory of mentoring a conceptual analysis and critique. *Administration & Society*, 39(6), 719-739.
- Carpenter, M. A., Bauer, T., & Erdogan, B. (2009). Principles of management. *Flat World Knowledge*. p115
- Carpentier, J., & Mageau, G. A. (2013). When change-oriented feedback enhances motivation, well-being and performance: A look at autonomy-supportive feedback in sport. *Psychology Of Sport & Exercise*, 14(3), 423-435.
- Christensen, M. K., Laursen, D. N., & Sorensen, J. K. (2011). Situated Learning in Youth Elite Football - a Danish case study among talented male under 18 football players. *Physical Education & Sports Pedagogy*, 16(2), 163-178.
- Creswell, J. W. (2012). *Qualitative inquiry and research design: Choosing among five approaches*. London: SAGE Publications Ltd.
- Driscoll, M. P. (1994). *Psychology of Learning for Instruction*. Boston: Allyn & Bacon.
- Edwards, A. (1999). Reflective practice in sport management. *Sport Management Review*, 2(1), 67-81.
- Eisner, E. W. (1991). *The enlightened eye: Qualitative inquiry and the enhancement of educational practice*. New York: Macmillan.
- Elberse, Anita (2013). Fergusons formula: *Harvard Business Review*, 91 (10), 116-125.
- Football Association of Ireland. (2013, January 30). Football Association of Ireland. Retrieved January 2, 2013, from Football Association of Ireland: <http://www.fai.ie/player-development/player-pathway/training-to-win-phase.html>
- Franks, I. M. (1997). *Science and football III: Use of feedback by coaches and players*. New York: Taylor and Francis.
- Gergen, K. J. (2009). *An invitation to Social Construction - second edition*. London: SAGE publications Ltd.

- Glesne, C. (1999). *Becoming Qualitative Researchers*. New York: Longman.
- Gray, D. E. (2005). Executive coaching – towards a dynamic alliance of psychotherapy and transformative learning processes. *Management Learning*, 37(4), 475-497.
- Hess, G. F. (2002). Heads and Hearts: The teaching and learning environment in law school. *Journal of Legal Education*, 52(1 & 2) 75-111.
- Hezlett, S. A. (2005). Protégés' Learning in Mentoring Relationships: A Review of the Literature and an Exploratory Case Study. *Advances in Developing Human Resources* 7(4), 505-526.
- Hirsh, D. A., Ogur, B., Thibault, G. E., & Cox, M. M. (2010). "Continuity" as an Organizing Principle for Clinical Education Reform. *The New England Journal of Medicine* 356(8), 858-866
- Hodge, K. & Lonsdale, C. (2011). Prosocial and antisocial behaviour in sport: The role of coaching style, autonomous vs. controlled motivation, and moral disengagement. *Journal of Sport & Exercise Psychology*, 33(4), 527-547.
- Huseinagić, E., & Hodžić, A. (2009). Behaviour of the coach in leaders role. *Sport Scientific & Practical Aspects*, 6(2), 50-54.
- Isoard-Gauthier, S., Guillet-Descas, E. & Lemyre, P. (2012). A prospective study of the influence of perceived coaching style on burnout propensity in high level young athletes: Using a self-determination theory perspective. *The Sport Psychologist*, 26, 282-298.
- Jaques, D. (2001). *Learning in groups*; P57. London: Kogan Page.
- Jonassen, D. H. (1992). Evaluating constructivistic learning. *Constructivism and the technology of instruction: A conversation*, 137-148.
- Jordan, A., Carlile, O., & Stack, A. (2008). *Approaches to Learning*. Maidenhead: Open University Press.
- Karlö, B., & Lövingsson, F. (2005). *A To Z Of Management Concepts & Models*. London: Thorogood publishing.
- Kirschner, P. A., Sweller, J., & Clarke, R. E. (2006). Why Minimal Guidance During Instruction Does Not Work: An Analysis of the Failure of Constructivist, Discovery, Problem-Based, Experiential, and Inquiry-Based Teaching. *Educational Psychologist*, 41(2), 78-86.
- Koka, A., & Hein, V. (2003). Perceptions of teacher's feedback and learning environment as predictors of intrinsic motivation in physical education. *Psychology of Sport and Exercise*, 4(4), 333-346.
- Kolb, D. A., Boyatzis, R. E., & Mainemelis, C. (2001). Experiential learning theory: Previous research and new directions. *Perspectives on thinking, learning, and cognitive styles*, 1, 227-247.
- Lamm, H., & Trommsdorff, G. (1973). Group versus individual performance on tasks requiring ideational proficiency (brainstorming): A review. *European journal of social psychology*, 3(4), 361-388.
- Lave & Wenger, J. L. (1991). *Situated Learning - legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications Inc.
- Mahoney, C., Anderson, A. G., Miles, A., & Robinson, P. (2002). Evaluating the effectiveness of applied sport psychology practice: Making the case for a case study approach. *Sport Psychologist*, 16(4), 433-454.

- Martin, M., Balderson, D., & Morris, M. (2012). Using an Online Learning-Management System for Coaching. *JOPERD: The Journal Of Physical Education, Recreation & Dance*, 83(4), 50-56.
- Matosic, D., Cox, A. E. & Amorose, A. J. (2014). Scholarship status, controlling coaching behaviour, and intrinsic motivation in collegiate swimmers: A test of cognitive evaluation theory. *Sport, Exercise and Performance Psychology*, 3, 1-12.
- McLean, M. (2004). Does the curriculum matter in peer mentoring? From mentee to mentor in problem-based learning: a unique case study. *Mentoring & Tutoring: Partnership in Learning*, 12(2), 173-186.
- Merriam, S. B. (1988). Case study research in education: A qualitative approach. San Francisco: Jossey-Bass.
- Michaelsen, L. K. (2002). Getting Started with Team Learning. Greenwood: Westport CT.
- Mitchell, J. (2002). The potential for Communities of Practice to underpin the National Training Framework. Melbourne: Australian National Training Authority.
- Mouratidis, A., Vansteenkiste, M., Lens, W., & Sideridis, G. (2008). The Motivating Role of Positive Feedback in Sport and Physical Education: Evidence for a Motivational Model. *Journal Of Sport & Exercise Psychology*, 30(2), 240-268.
- Newin, J., Bloom, G. A., & Loughead, T. M. (2008). Youth ice hockey coaches' perceptions of a team-building intervention program. *Sport Psychologist*, 22(1), 54.
- Ong, A. D., & Weiss, D. J. (2000). The Impact of Anonymity on Responses to Sensitive Questions. *Journal of Applied Social Psychology*, 30(8), 1691-1708.
- Relvas, H., Littlewood, M., Nesti, M., Gilbourne, D., & Richardson, D. (2010). Organizational structures and working practices in elite European professional football clubs: Understanding the relationship between youth and professional domains. *European Sport Management Quarterly*, 10(2), 165-187.
- Ryan, R. M. & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development and well-being. *American Psychologist*, 55(1), 68-78.
- Salas, E., Rosen, M. A., Burke, C. S., Nicholson, D., & Howse, W. R. (2007). Markers for enhancing team cognition in complex environments: The power of team performance diagnosis. *Aviation, space, and environmental medicine*, 78(Supplement 1), B77-B85.
- Sherlock-Shangraw, R. (2013). Creating Inclusive Youth Sport Environments with the Universal Design for Learning. *The Journal Of Physical Education, Recreation & Dance*, 84(2), 40-46.
- Stake, R. E. (1978). The case study method in social enquiry. *Educational Researcher*, 7(2), 5-8.
- Sutton, R. I., & Staw, B. M. (1995). What theory is not. *Administrative science quarterly*, 371-384.
- Topping, K. J. (2005). Trends in peer learning. *Educational Psychology*, 25(6), 631-645.
- Tsoukas, H. (1994). What is management? An outline of a metatheory. *British Journal of Management*, 5(4), 289-301.
- Vestberg, T., Gustafson, R., Maurex, L., Ingvar, M., & Petrovic, P. (2012). Executive functions predict the success of top-soccer players. *PloS one*, 7(4), e34731.
- Vygotsky, L. (1978). Mind in Society - The Development of Higher Psychological Processes. Cambridge: Harvard University Press.

Wenger, E. (1998). *Communities of Practice - Learning, Meaning and Identity*. Cambridge: Cambridge University Press.

Yin, R. K.(2003). *Case study research: Design and methods*. London: Sage Publications.

Yorke, M., & Longden, B. (2008). *The first-year experience of higher education in the UK*. Higher Education Academy. <http://www.heacademy.ac> .