

"It is like a little journey": Deaf international futsal players' and coaches' experiences in collaborative blended learning.

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25 **ABSTRACT**

26 The aim of this study was twofold, firstly, to explore the challenges and successes faced  
27 by deaf international futsal players when using a collaborative blended learning (CBL)  
28 approach in preparation for a major competition, and, secondly, to provide a discussion  
29 of key coaching lessons learned to inspire coaches to consider how to best develop their  
30 'little journeys'. Data were collected from 12 players via six semi-structured focus  
31 groups, along with 36 reflective diaries maintained by the two researchers (who held the  
32 role of 'Joint Head Coach' and 'Performance Analyst'), using a critical participatory  
33 action research (CPAR) methodological approach. Data collection and analysis were an  
34 on-going and cyclical process during the seven-month study. Four key themes were  
35 identified: 'a little journey: a connected approach to learning', 'ownership, collaboration  
36 and connection', 'communication barriers and fear of misinterpretation' and 'players'  
37 initial 'buy-in' to the constructivist approach to learning'. Key coaching lessons  
38 highlighted the need for a flexible and 'connected' approach to learning. Here, through  
39 our learning in-action and on-action, we often found ourselves as 'social' managers in  
40 trying to explore inter-relational complexities and support individuals to build trust, an  
41 aspect seen by players as crucial for actively developing CBL within the group.

42 **KEYWORDS: Collaborative learning; Blended Learning; Vygotsky; Sports**  
43 **Coaching; Performance analysis**

## 44 **Introduction**

45 Over the past decade, sports coaching discussions have focused on the pedagogical expertise  
46 of the coach (Vinson *et al.*, 2017; Cope and Partington, 2019) with several scholars paying  
47 attention to how various theories of learning have been used to inform coaching practice and  
48 subsequently enhance learning in able-bodied sporting populations (Nelson, Groom, & Potrac,  
49 2016; Roberts & Potrac, 2014). By adopting a holistic view of learning (and coaching), coaches  
50 can create an interactive learning environment whereby individuals can engage in exchanges  
51 of cooperation (Toner, Moran, & Gale, 2016). These cooperative activities promote moral,  
52 social and intellectual development, which have been found to encourage holistic development  
53 (Light & Harvey, 2017).

54 It is the role of the coach to acknowledge the variety of different ways an individual learns,  
55 whilst also understanding that learning is more than merely the accumulation of knowledge  
56 (Werthner & Trudel, 2006). This approach commonly aligns to a constructivist perspective of  
57 learning (Cassidy, Jones, & Potrac, 2016; Vinson, Brady, Moreland, & Judge, 2016), whereby  
58 through focusing on creating an active and interpretative process, the learner accrues and  
59 develops their knowledge and understanding through reflecting on past performances and  
60 engaging in interactions with others (Roberts & Potrac, 2014). This perspective of learning has  
61 become common currency within the field of sports coaching when attempting to make sense  
62 of current practice and how to promote player learning (Jones, Thomas, Nunes, & Filho, 2018).  
63 However, limited knowledge currently exists regarding how players with hearing impairment  
64 learn and whether a constructivist approach promotes learning in this population. This article,  
65 therefore, attempts to firstly, explore the challenges and successes faced by deaf international  
66 futsal players when using a collaborative blended learning approach (i.e., online and face-to-  
67 face group activities) in preparation for a major competition. Secondly, it aims to provide a

68 discussion of key coaching lessons learned in an attempt to inspire coaches to consider how to  
69 best develop their ‘little journeys’.

### 70 ***Constructivism, collaborative learning and collaborative blended learning***

71 Constructivist theories focus on how an individual ‘constructs’ knowledge and understanding  
72 through considering how their learning has been affected by new experiences and/or  
73 information gained as a result of participation and/or interactions with others. It is important to  
74 note that constructivism does not refer to a singular theoretical perspective, but a diverse and  
75 broad range of theories that attempt to aid understanding of how humans learn (Roberts &  
76 Potrac, 2014). Scholars from sports coaching have more recently made attempts to examine  
77 what Vygotsky’s theoretical perspective means for coaches and coaching practices (Hendricks  
78 et al., 2018).

79 The ‘Zone of Proximal Development’ (ZPD) is one of the most well-known concepts of  
80 Vygotsky’s idea of learning (Jones et al., 2018). It is defined by Vygotsky (1978) as “the  
81 distance between the actual development level as determined by independent problem solving  
82 and the level of potential development as determined through problem solving under adult  
83 guidance or in collaboration with more capable peers” (p. 86). The idea is that individuals learn  
84 best when working with others and, through such collaborative approach, learners master tasks  
85 that were once too difficult to attain on their own. Jones et al. (2018) highlighted there has been  
86 a tendency to focus on Vygotsky’s ZPD, which underplays the value of his principal ideas in  
87 aiding our understanding in the field of sports coaching. Vinson and Parker (2019) further  
88 support Jones et al.'s (2018) review, highlighting the value of Vygotsky’s other concepts,  
89 including a cultural-historical perspective, mediation, the more capable other and Perezhivanie,  
90 to inform and enhance collaborative approaches to learning.

91 To best understand Vygotsky's assumption of a cultural-historical perspective, he and  
92 colleagues deemed that humans behaviour and their learning can only be explained by their  
93 historical and social recourse (Morcom, 2017; Vygotsky, 1978). The concept of mediation  
94 referred to the use of language as a vehicle for creating meaning and measuring self-regulation  
95 through inner speech to facilitate higher psychological functions (Vinson & Parker, 2019;  
96 Vygotsky, 1987). Whilst the ZPD refers to the 'more capable other', according to Vygotsky  
97 (1987), this does not necessarily have to be an adult but could include a teammate or other  
98 individual, as they could equally hold knowledge or assist in generating new knowledge. Thus,  
99 the 'more capable other' provides 'scaffolding' to facilitate learning through context-bound  
100 interactions that assist the learner in understanding the concept/problem being explored  
101 (Cassidy et al., 2016). One of the most difficult concepts of Vygotsky's works to understand is  
102 *perezhivanie*; it refers to something that is found or learnt from outside the person through  
103 facing a difficult or critical situation (Michell, 2016). The exposure to external events causes  
104 internal transformation, which leads to the learner making meaning or sense of the context or  
105 situation. These additional concepts provide useful guidance for understanding how learning  
106 can occur when faced with a difficult or critical task (Vinson & Parker, 2019). In particular,  
107 Vygotsky's perspective can be applied to how coaches and support staff scaffold tactical  
108 problems in an attempt to aid learners' ability to problem solve different sporting scenarios  
109 when help is removed. Therefore, it underlines the connections between the supportive and  
110 assisted training environment, the unassisted competitive gameplay and the appreciation of  
111 cognition in enhancing learning, decision-making and performance.

112 According to Monteiro and Morrison (2014), Vygotsky's (1978) view of learning is strongly  
113 rooted in collaborative learning and collaborative blended learning (CBL), two techniques that  
114 have made strong claims to enhance learners' knowledge. Here, collaborative learning refers  
115 to an umbrella term which involves a joint intellectual effort by individuals to search for

116 meanings, solutions or understanding to a task or problem (Laal & Ghodsi, 2012). The process  
117 enables the collaborative construction and reconstruction of knowledge, which has been found  
118 to promote high performance, high-order thinking and positive interpersonal relationships  
119 (Monteiro & Morrison, 2014). Similarly, the use of CBL approaches, which combine face-to-  
120 face learning with online learning, is an effective and flexible solution for linking within and  
121 outside learning (Sun, Liu, Luo, Wu, & Shi, 2017). Doolan and Hilliard (2006) highlighted  
122 how CBL echoes Vygotsky's (1978) view of learning, by providing opportunities for learner-  
123 to-learner support through scaffolding. Also, CBL has been found to provide learners with an  
124 opportunity to exchange ideas, share views, develop constructive arguments and use previous  
125 knowledge and experiences to solve problems in team activities (Monteiro & Morrison, 2014).  
126 While recent discussions and movements towards embracing collaborative and blended  
127 approaches to learning align with the various forms of constructivism (e.g. psychological and  
128 social) and are welcomed, there remains a paucity of evidence and guidance addressing how  
129 coaches help players acquire, develop, and refine their sporting attributes, skills and  
130 understandings (Roberts & Potrac, 2014). Recently, Vinson et al. (2017) provided supporting  
131 evidence to highlight that aligning pedagogical features towards a constructivist lens can  
132 contribute to player learning and aspects of team culture and cohesion. In this context,  
133 performance analysis (PA) was utilised as an available learning tool to encourage collaborative  
134 learning.

### 135 ***Performance analysis and collaborative blended learning***

136 PA has become an integral component within the coaching process, providing coaches, players  
137 and support staff with objective evidence to assist in recalling events and promoting learning  
138 (Bateman & Jones, 2019; Eaves, 2015; Groom & Nelson, 2013). Whilst it has been well  
139 documented that feedback provided to learners should be accurate, meaningful and suitably

140 pitched to the level of the learner (e.g. Laird & Waters, 2008; Ward & Williams, 2016), limited  
141 focus has explored PA's effectiveness in promoting player learning. Fernandez-Echeverria,  
142 Mesquita, Conejero, & Moreno (2019) discovered PA was viewed by elite volleyball players  
143 as an essential learning tool, contributing to helping inform aspects that need correcting,  
144 reinforcing aspects of positive play and helping to prepare for upcoming games. Within  
145 association football, Reeves & Roberts (2013) also found coaches and players shared similar  
146 views, highlighting PA as a key developmental tool in contributing to team and individual  
147 performance by aiding reflection. However, Bampouras, Cronin, & Miller (2012) discovered  
148 players can become sceptical to the use of PA if they are excluded from adopting an active role  
149 in the process. In agreement, Francis & Jones (2014) and Nelson, Potrac & Groom (2014)  
150 identified that players are wanting to play an active role in the PA process due to their  
151 awareness of the process in assisting their learning. However, the researchers provided little  
152 evidence as to how coaches, players and analysts should go about introducing a CBL  
153 environment.

154 When discussing a PA process with association football coaches, Groom, Cushion & Nelson  
155 (2011) highlighted the importance of acknowledging contextual factors that need to be  
156 considered when delivery a PA provision: social environment, presentation format, session  
157 design, coaching and delivery philosophy, delivery process and recipient qualities. The  
158 researchers stressed coaches need to be aware of each other's role and the acting of that role  
159 and how the integrations are negotiated to aid player learning when delivering PA. Vinson et  
160 al. (2017) found when coaches used an online PA platform these aspects were considered.  
161 Coaches used the platform to upload and share video from games or individually focused clips  
162 for players to view, comment on and discuss at a later time. The footage was uploaded either  
163 post-match or pre-training to inform the focus of upcoming sessions or games. Through this  
164 specific PA process, the coaches were able to use the online platform to complement their face-



165 to-face deliver, facilitate active involvement in the process of PA, develop a team culture and  
166 positive environment, and allow players to demonstrate their creativity through inputting into  
167 group activities. O'Donoghue & Mayes's (2013) previous work further support these findings,  
168 indicating the recent increase in other online platforms potentially provides a useful learning  
169 tool to facilitate video based feedback for players, support traditional face-to-face coaching and  
170 enhance team culture for performance sports teams and coaches operating outside a full-time  
171 professional setting.

### 172 *Learning within a deaf sport setting*

173 Despite recent attention within able-bodied populations, research is yet to adequately focus on  
174 sports coaches' and players' use of PA as a tool to promote collaborative learning within a deaf  
175 sport setting. Working in deaf sport can present its own unique sets of challenges, with barriers  
176 to developing an active, social and interpretive approach to learning, potentially surfacing  
177 (Mapepa & Magano, 2018). In particular, individuals who are deaf or hard of hearing have a  
178 'special culture' (Strnadová, 2001), sometimes electing to be solely part of a 'sociolinguistic  
179 community' (Scheetz, 2004). Typically, these individuals do not see themselves as people with  
180 disability, rejecting the associated label, instead, considering themselves as part of a cultural  
181 and linguistic minority who share pride in communicating through sign language (SL) (Obasi,  
182 2008). Thus, the communicative barriers associated with people who are deaf are the only  
183 distinguishing factors that separate them from other individuals (Kurková, Válková, & Scheetz,  
184 2011).

185 As stated above, people who are deaf have traditionally relied on SL to communicate amongst  
186 individuals who are deaf and those who can hear. However, developments in medical science  
187 (cochlear implants and hearing aids) and other technological tools have allowed deaf people to  
188 "hear" and achieve speech development (Geers, Mitchell, Warner-Czyz, Wang, & Eisenberg,

189 2017). A range of communication approaches have now been adopted by individuals who are  
190 deaf, from spoken language to SL to bilingualism, to aid effective communication in a variety  
191 of settings and for a variety of purposes (Tomaszewski, Krzysztofiak, & Moroń, 2019). These  
192 differences not only present challenges for deaf players to communicate using their preferred  
193 approach with one another, but for players and staff who cannot communicate in both spoken  
194 language and SL. Marschark & Knoors (2012) highlighted spoken language amongst the deaf  
195 community is becoming the first and primary language for a growing number of people.  
196 However, if individuals are unable to effectively communicate with each other, challenges may  
197 surface in social settings and subsequently, those individuals often find themselves isolated  
198 from collaborative activities (Kurková, 2005). As a result, this inability to effectively  
199 communicate has also been shown to adversely affect education and development success  
200 (Tomaszewski et al., 2019), key aspects that are required when competing in a high level sport.  
201 Thus, if adaptations to how deaf teams communicate with one another in face-to-face and distant  
202 coaching environments can be made, the ability for these players to learn is likely to increase  
203 (Kurková et al., 2011).

204 From the information presented above, there are many claims, but also potential challenges, as  
205 to why the use of PA within CBL approaches could be a positive tool to aid learning of futsal  
206 players with hearing impairments. The article reports an intervention that was designed over  
207 seven months to promote a CBL approach (i.e., online and face to face group activities) by both  
208 deaf women international futsal players and staff members when preparing for a major  
209 championship in 2018.

## 210 **Methods**

### 211 *Background*

212 The initial stimuli for undertaking this project came as we (the researchers) also had the role  
213 of ‘Joint Head Coach’ and ‘Performance Analyst’ within an International Deaf Women’s Futsal  
214 Team. To help the team achieve the success of getting out of the pool stage at the competition,  
215 we were required to reflect upon our current coaching and PA experiences as well as collating  
216 the views from the players to develop a suitable learning and performance environment.  
217 Luciana’s role within the team included the planning and delivery of coaching sessions, game  
218 management, player selection and performance review whilst working collaboratively with the  
219 other Joint Head Coach. She began working with the team 19 months before the beginning of  
220 the intervention which was when she first experienced coaching deaf players. On a personal  
221 level, Luciana grew up with a relative who was profoundly deaf and relied on sign language to  
222 communicate. Luciana had no hearing impairments and basic knowledge of sign language. She  
223 had over 15 years experience as a futsal player and coach at a national and international level,  
224 and held Union of European Football Associations B-licenses in Futsal and Football. John’s  
225 role as a performance analyst in the team was to assist the coaching staff and players by  
226 providing data and footage to aid reflection, decision-making, learning and preparation for  
227 future performance. John worked as a performance analyst for several international and  
228 national teams in a variety of sports over the past 10 years, and within the last three years, he  
229 has worked with a range of Para-Football teams for a national football association. Before the  
230 commencing of the study, John had been involved with the team for nine months but had no  
231 prior experience of working with deaf players and did not have a hearing impairment himself.  
232 Through working together, it was, therefore, our aim to improve our understanding and  
233 practices to support the team’s preparation in the run-up to the major competition and during

234 the 12-day competition. In addition to our joint roles and our limited experiences of working  
235 with deaf players, we relied on the communication skills of our interpreter to communicate  
236 with those who relied solely on sign language (only 2 players). He was a registered sign  
237 language interpreter, having over 20 years of experience working with deaf learners, and had  
238 worked within the deaf football/futsal environment for over 6 years.

### 239 ***Research design***

240 A critical participatory action research (CPAR) process (Kemmis, McTaggart, & Nixon, 2014)  
241 was adopted. The approach collectively positions research by bringing together academic  
242 researchers and members of a community to create or change practices (Kemmis et al., 2014).  
243 It creates conditions for researchers, practitioners and participants to understand and develop  
244 the ways in which practices are conducted by establishing conditions for individuals to engage  
245 in direct communication and debate (McTaggart, Nixon, & Kemmis, 2017). CPAR does not  
246 follow the usual research design steps in conventional scientific research, but through working  
247 collectively, the participants and researchers engage in a process of enquiry, action and  
248 reflection (Cammarota & Fine, 2007). Throughout the completion of the study, we collected  
249 ‘data’ from each other and the players to aid our understanding and plan for change. Therefore,  
250 adopting a CPAR approach would support changing ‘what is happening here’, rejecting the  
251 premise of objectivity and creating conditions for us and the players to be actively involved  
252 and have a voice in all aspects of the research process to inform the future direction the team  
253 took. In employing this research methodology, we were able to explore changes through  
254 multiple data collection moments, capturing the nuances of everyday practices “over a period  
255 encompassing a variety of learning experiences” (De Martin-Silva, Fonseca, Jones, Morgan, &  
256 Mesquita, 2015, p.672).

257

258 ***Participants***

259 Following Institutional Ethical approval, a total of 12 international deaf women futsal  
260 players (aged 18-27) were invited to take part in the study by the two researchers.  
261 Participants were selected through purposive sampling techniques (Bryman, 2016) to  
262 select all international deaf women futsal players who were part representing a specific  
263 European country in a major competition in 2018. All players reported a hearing loss of  
264 at least 55db in the better ear across 3-tone frequencies. The participants' experience of  
265 international futsal ranged from two-years to five-years, with nine players also having  
266 previously represented their nation in 11-a-side deaf football. Out of the 12 players, two  
267 relied solely on SL to communicate, one relied solely on verbal communication and nine  
268 could communicate in both SL and verbally with varying levels of fluency. Each  
269 participant was made aware that their participation in the study was not compulsory and  
270 that there were no links to the support provision they received nor selection for the  
271 upcoming competition. During the initial formulating of the research project's idea,  
272 players were involved and informed that the research would directly assist them in  
273 working towards their overall goal. The relationship that had been built between the  
274 players and the two researchers, during the period they were working together prior to  
275 commencing the project, assisted in gaining trust and rapport. Before the project started,  
276 voluntary informed consent was obtained from all individuals per the Declaration of  
277 Helsinki and repeatedly checked throughout the project duration to ensure consent was  
278 maintained throughout the study.

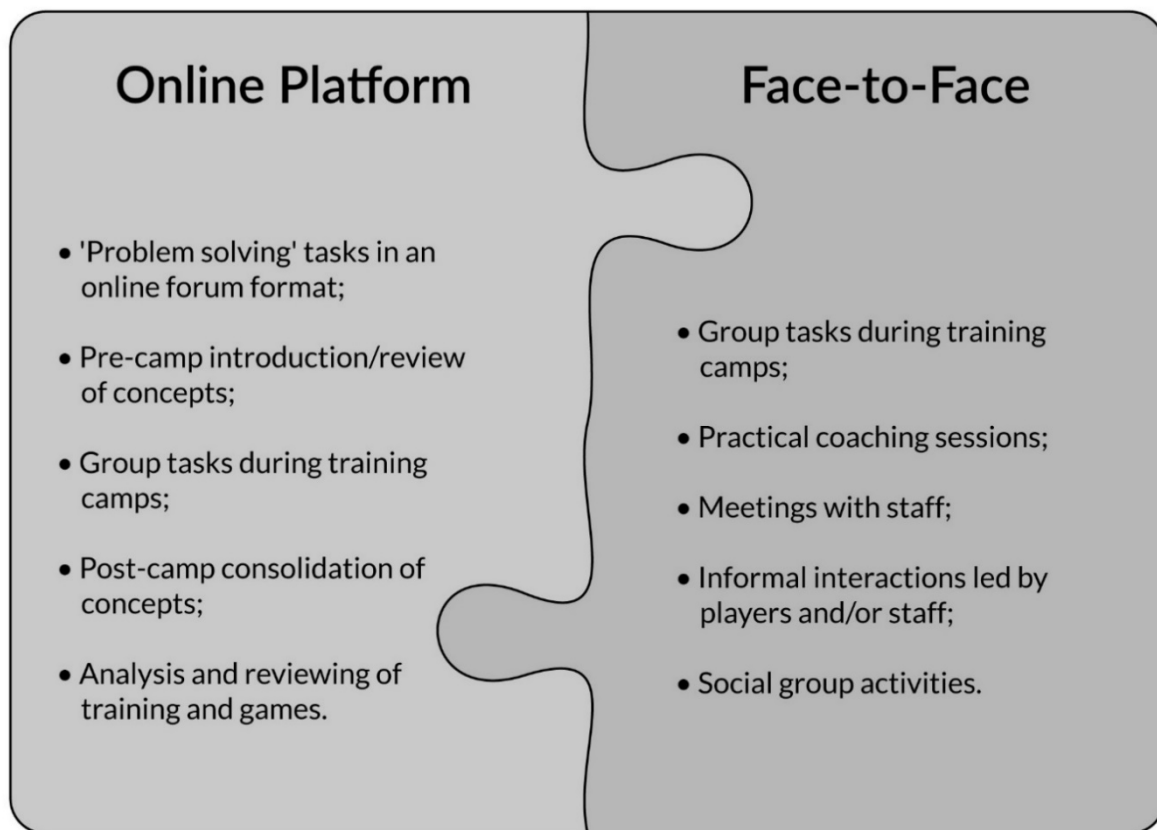
279

280 ***Research process***

281 A key challenge identified by the staff team was how to cater for individual needs (e.g.,  
282 different levels of playing ability combined with specific communication support

283 required due to different hearing levels) when leading a team to the major competition.  
284 Despite being with most of the 12 players for the previous season, another key challenge  
285 was the integration of new players into the squad seven months before the competition.  
286 During that time, players had a total of five training camp weekends and spent an extra  
287 12 days together during the major competition. To make the most of the final preparations  
288 for the competition, we decided that we should invest in creating a learning platform that  
289 encouraged learning to take place in and away from training camps. In this context,  
290 getting to know players and the best way to support their learning in and away from camp  
291 weekends was crucial. After meetings between staff members (of whom we were two),  
292 it was agreed that providing a CBL approach could be beneficial to player learning. More  
293 specifically, the CBL design was used to ‘connect the dots’, pre-, during and post-training  
294 camps, through utilising the online platform as well as traditional face-to-face coaching  
295 to facilitate learning. The focus here was on technical, tactical and social elements  
296 associated with being part of the team (see Figure 1).

297



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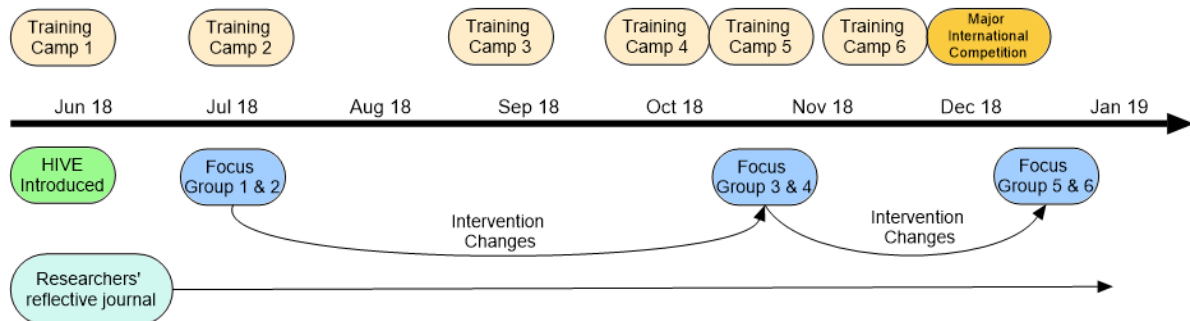
Figure 1: Examples of CBL activities undertaken throughout the study.

300

301 The study was introduced to the players during one of the training camps (June) and individual  
 302 accounts to an online learning platform called 'HIVE' (Hive Learning Limited, 2018) were  
 303 created for each participant. We created a 'folder' specific for the study and invited players and  
 304 staff to join via email. The system was utilised to upload documents, videos and other content  
 305 by the participants (players and staff) over the study period. Players were asked to contribute  
 306 to the variety of learning activities prior, during and following attendance to five training camps  
 307 weekends (one in July, one in August, one in October and two in November) leading up to the  
 308 major competition in December 2018 (see Figure 2). Although initially designing a potential  
 309 schedule for the activities, we concluded that it was key that participants' needs drove the  
 310 process of when, how, why and by whom data would be added. In this sense, a flexible design

311 was crucial to take into account the possibility of different events, situations and learning  
312 unfolding when data were collected.

313



314

315 Figure 2: Timeline of research process demonstrating training camps, competition date and  
316 data collection periods.

### 317 *Data Collection*

318 The data were collected through focus groups with players and we maintained reflective  
319 journals throughout the study. Throughout the seven months, each participant interacted with  
320 both researchers (via text messages, email or private message through the platform). If similar  
321 ideas or challenges regarding the interventions arose in these conversations, permission was  
322 gained to formulate questions that could be used during focus group discussions to delve deeper  
323 and find solutions or explore why current ideas/practices were deemed effective.

### 324 *Focus group interviews*

325 Players' perceptions of the benefits and challenges associated with their CBL experience were  
326 explored during focus groups throughout the study to better understand their experience and  
327 guide future practice. Following the introduction of the online learning platform (June), six  
328 focus groups took place at three different points during the study, more specifically two in July,



329 two in October and two in December (see Figure 2). Players were divided into two small groups  
330 of between four and six participants, dependent on hearing impairment.

331 The focus groups took place in a quiet and convenient meeting room during training camps or  
332 competition periods, working around the players' and the interpreter's schedules (e.g., medical  
333 clinic; monitoring), which also dictated the selection of participants for each group. The focus  
334 group interviews were semi-structured offering a framework of questions and the freedom to  
335 probe participants further, allowing for clarification and elaboration (Bryman, 2016). The  
336 interviews were based upon the project's aim as well as the unfolding HIVE platform, our  
337 reflective diaries and conversations (Phillippi & Lauderdale, 2018) (see Appendix 1). The  
338 small group size allowed in-depth perspectives for each individual to be captured (Tausch &  
339 Menold, 2016) as well as factoring in the additional time required for the interpreter to  
340 communicate the participants' thoughts effectively to both SL and non-SL individuals. The  
341 interpreter attended all of the focus groups and acted as a mediator for the flow of information  
342 between SL and non-SL users. All focus groups were recorded on a Dictaphone and a camera  
343 and lasted for 60 minutes on average. The recordings were transcribed verbatim, and if any  
344 audio or signing needed further interpretation, the footage was revisited with the researchers  
345 and the interpreter.

#### 346 *Reflective journals*

347 We (both members of staff) maintained reflective journals throughout the seven-month  
348 duration of the study, recording key events and thoughts that we felt were important for the  
349 research. A total of 36 reflective journal entries were made, at approximately a page in length.  
350 Each researcher made an entry a week prior to a camp, during the camp and a week after a  
351 camp/tournament had finished. In this sense, content in the reflective journal included thoughts  
352 and feelings based on conversations and experiences only possible in our roles as staff

353 members. The journal entries were used as a tool to foster self-awareness and the notes enabled  
354 us to understand the emerging situation and modify action if required (McTaggart et al., 2017).  
355 Despite not adopting a ‘complete participant’ observer role as such (Sparkes and Smith, 2014),  
356 the experiences lived by us (the researchers), including the sense we made of players’  
357 interactions, served to impact our views on how successful (or not) the activities were in  
358 contributing for an effective learning environment. Here, despite participating fully in the lives  
359 of the participants (as per Sparkes and Smith’s description for a complete participant role) we  
360 did not aim to register those observations as a method of data collection, but as an informal  
361 experience to trigger further discussions during research conversations and focus group  
362 interviews.

### 363 *Data analysis and credibility*

364 As recommended by CPAR researchers, the data collection and analysis were an on-going and  
365 cyclical process that continued throughout the study (MacDonald, 2012). Charmaz’s (2006)  
366 process for inductive analyses (Initial coding, focused coding and theoretical coding) was  
367 adopted in this study to analyse the focus groups transcripts and the notes within the reflective  
368 journals. In the first stage (initial coding), there was special attention to creating codes from  
369 interpreting the data rather than “forcing the data to fit them” (Charmaz, 2006, p.49). The  
370 second stage (focused coding) consisted of returning to the data and recognising similar codes  
371 across the answers provided by the participants. The next stage was the theoretical analysis,  
372 whereby we adopted a strategy to narrow our focus on emerging categories and as a technique  
373 to develop and refine these categories further. The themes were analysed and rearranged if and  
374 when appropriate. We agreed on the themes together as an accurate representation of the  
375 participant’s experiences. The narrative and data extracts from the participants’ focus groups  
376 and our reflective journals were woven together into a coherent and persuasive story that

377 captured the perceptions of the participants' and our learning experiences in preparation for a  
378 major competition.

379 The process of CPAR and the almost 'complete participant' roles we fulfilled inherently  
380 encouraged credibility by being deliberate and self-reflexive (Cahill, 2015; Elo et al., 2014) as  
381 well as generating rapport and trust between the participants and us (Lennie, 2006). The  
382 cyclical processes of CPAR is consistent with guidelines proposed by Sparkes & Smith (2009,  
383 2014) and helped guide our work. Through adopting the guidelines we aimed to (a) ensure we  
384 understood the player's experiences of CBL, (b) demonstrate that we cared about the player's  
385 experiences, (c) provide a narrative that advances knowledge, (d) provide a narrative that others  
386 can relate to, (e) uncover our assumptions, (f) provide information that readers of this project  
387 can resonate with, and (g) provide information for coaches and support staff to use to inform  
388 their own practice.

## 389 **Results**

390 The results are divided into two sections, more specifically the (a) successes and (b) the  
391 challenges faced by deaf international futsal players when using a CBL approach. Data analysis  
392 processes produced four main themes: 'a little journey: a connected approach to learning',  
393 'ownership, collaboration and connection', 'communication barriers and fear of  
394 misinterpretation', and 'players' initial 'buy-in' to the constructivist approach to learning'.  
395 Each is now presented in turn.

396 *The successes faced by deaf international futsal players when using a CBL approach*

397 *'A little journey': A connected approach to learning*

398 Players referred to their CBL experience as a 'little journey'. This included opportunities to  
399 learn pre, during and post-training camps. As explained by Natasha:

400 Natasha: It's like a little journey. **Pre-task** which occurs before the camp, where we have  
401 a little insight into what focus and the content is going to be... **During the camp**, we then  
402 attempt to apply the messages learnt before the camp and make suitable adjustments. And  
403 also reflect on the activities and the games... Then **following the camp** we get another  
404 opportunity to explore our performances in line with the aims and objectives of the camp  
405 and the team goal... Those different bits of information given to us **over time** really helps  
406 us. (Focus group 3, October 2018)

407 Such a structure included the use of HIVE for face-to-face group tasks as well as practical  
408 application on court followed by debriefs and follow up tasks linked to the topic covered during  
409 the training camp. This not only allowed for what players perceived to be a connected approach  
410 to learning but ensured increased levels of engagement in CBL, as demonstrated in the extract  
411 below:

412 Sarah: I was able to go away after the camp and watch the bits of footage of myself and  
413 my teammates, I was able to discuss things with other players and then I was able to come  
414 to the next camp feeling much much better and perform much better. (Focus group 3,  
415 October 2018)

416 In this sense, players used the online learning environment as a platform to support further  
417 discussions and consolidation of learning. They also developed their own ways of sharing  
418 resources and inviting feedback between camps and even during the in-camp sessions:

419 Ellie: Using our emails we can send clips and watch each other matches and start picking  
420 out each other's strengths and weaknesses and that's another opportunity to receive  
421 feedback from other people and that's what we've been doing. (Focus group 3, October  
422 2018)

423 As the study developed, players started to attribute the use of the CBL approach as a principal  
424 factor towards increased success. In particular, the use of videos pre, during and post-camp to  
425 provide a framework for discussions was a highly valued aspect. In the words of Ellie:

426 Ellie: The past two months we have been uploading video onto HIVE and I can see a  
427 massive improvement in our performances. Not just myself but every single player in the  
428 team (Focus group 3, October 2018)

429 John found the adopted approach to be effective as a platform to complement the messages that  
430 were delivered in camp sessions and the friendly games and supplement previous methods he  
431 had used to deliver objective evidence to players:

432 John: Since using HIVE over the last couple of months, I have found the ability to upload  
433 various bits of content extremely valuable. We initially just started with small video clips  
434 of best-practice aspects of other teams. However, as we went from camp to camp we were  
435 able to input more specific content around the playing style that the coaches built around  
436 the players skill level and potential level. Following a suggestion from a player, we began  
437 uploading specific aspects of each individual's performance to reflect on and considered  
438 the framing of some of the questions that we asked. I saw the platform as a really useful  
439 resource for every player and every member of staff to see what we were wanting to work  
440 towards and welcomed the feedback and suggestions as a sign of working towards our  
441 overall goal (Reflective Journal. Entry: October 2018).

442 *Ownership, collaboration and connection*

443 As the major competition approached, players evidenced a greater sense of being part of a team,  
444 which coincided with greater collaboration and connection in their learning journey. The CBL  
445 approach was seen as a positive aspect of contributing to a positive culture. In particular, it  
446 helped bring the players and staff together to build an effective supportive relationship for the  
447 group to achieve their aims.

448 Sarah: I feel because of the videos 100% prepared for the match...I also feel much more  
449 connected with the staff and really appreciate their time going through everything. For  
450 example, when we are confused the coaches check that everything's going in I know. We  
451 respect the staff and we know that they respect us back, important for me and developing  
452 that culture. Overall, the team and the culture is really important.

453

454 Kayleigh: It's really important for us to see the staff getting on together well...when we  
455 are sat together as a team, at meals or the team activities, for example, we feel all as one.  
456 It is more relaxed and is brilliant, it's good for us to see that as players.

457 (Focus group 6, December 2018)

458 Here, the accessibility of content, as well as people, encouraged players to drive some of the  
459 team activities. In the words of Ellie and Emilia:

460 Ellie: One of the players said we are putting this game on, come in my room if you want  
461 to watch it. Everyone just came into her room and we just started to watch it.

462

463 Emilia: We didn't plan it or anything, I didn't expect the whole team to be in there but it  
464 was great.

465

466 Ellie: It wasn't just about watching stuff we got together as a team. That is another good  
467 thing about it. Even though we were watching it, we just chilled as a team and just had a  
468 general chat as well. It was just a nice thing to do. (Focus group 5, December 2018)

469 Evidence of ownership was also shown in other encounters as shared in the reflective journal  
470 entry below:

471 Luciana: During breakfast this morning, Sarah started sharing her learning experiences  
472 with me. It was fantastic listening to her and finding out what was going on behind the  
473 scenes. Sarah and Laura had spent the evening looking at the content on HIVE and creating  
474 their own drawings whilst discussing their understanding regarding team tactics and  
475 individual roles as players. Sarah seemed so confident in her own ability now, which was  
476 great as she was the last player to join the team. She explained how she and Laura were  
477 keen to improve their knowledge of the game and decided to get together to support each  
478 other. Here, she mentioned that having the visual resources available on HIVE (i.e.,  
479 pictures, text, discussions, diagrams, videos) provided a platform for learning where they  
480 shared ideas and thoughts in terms of what they should do in different contexts (Reflective  
481 Journal. Entry: December 2018).

482 The ability to access content in an environment that was suitable for the players needs not only  
483 aided their learning and understanding of performance but also enabled the team to come  
484 together, discuss aspects unrelated to futsal and broke up the long training and competition  
485 days.

486 Laura: Sometimes when you're away for a long period of time people can become quite  
487 down, so having those [social] activities helps us come together as a team and raises  
488 morale. When we come together as a team we're all laughing and we all get on really well

489 and it's perfect so that we can then transfer that into the game because we're all in it  
490 together. (Focus group 6, December 2018)

491 An exciting part of this learning journey is that it encouraged players to engage with previously  
492 unknown ways of learning. For example, Sarah, who used to see herself as someone who would  
493 absorb information from others, found a 'new' way of learning very beneficial:

494 Sarah: I didn't know that having that ability to share ideas is really important for me. (Focus  
495 group 6, December 2018)

#### 496 ***The challenges faced by deaf international futsal players when using a CBL approach***

##### 497 *Communication barriers and fear of misinterpretation*

498 Despite many benefits in the players' views, the use of a CBL approach to learning was not  
499 without its challenges. Here, the level of collaboration when away from camps was something  
500 that players found hard; (Ellie: "When we are all at work and on all different schedules it's  
501 hard"). In this sense, the live interaction proved to be a key contributor to players' perceptions  
502 of confidence, team cohesion and positive culture. Similarly, communication, despite its  
503 significant development, was still a barrier especially for those who relied on SL:

504 Naomi: I think because of using sign it's difficult to put everything in words. Because SL  
505 is our first language it's hard to change it into written words.

506

507 Laura: I prefer to use SL and then get it out there but I don't know how to change that into  
508 a common written format. (Focus group 6, December 2018)



509 When discussing similar aspects to Naomi and Laura, Bryony aided our understanding  
510 regarding why at times players may have felt reluctant to post or why the posted messages were  
511 sometimes difficult to understand.

512 Bryony: I'm sure you might have noticed through other people's messages that sometimes  
513 ...grammatically it may be incorrect and a little bit of a mess but that's because SL and it  
514 is slightly backwards to common spoken language. So when you put that down it looks a  
515 little bit muddled up, so then when we put it into our language they almost need to then  
516 translate it. That's why face to face interaction is much better for us to ensure that we  
517 understand the message, save text messages and emails as well. (Focus group 5, December  
518 2018)

519 In this sense, there was a fear of misinterpretation as alluded to by Emilia:

520 Emilia: It's like there are so many different ways to say the same thing and some people  
521 can take that in a different way because of how they have interpreted it from written words  
522 into SL. I didn't mean it that way I meant it like this, it gets a bit confusing sometimes and  
523 then I'm left feeling like err...we don't want discussions to be misinterpreted (Focus group  
524 4, November 2018)

525 Despite the progress made during camps and at the competition, the process of transferring  
526 thoughts, perceptions and ideas down in written format by those who used SL as their first  
527 language was still a challenge that needed to be addressed in terms of promoting learning away  
528 from camps. This was a key aspect discussed in our encounters as we reflected during and post-  
529 camp and evidenced in our reflective logs:

530 Luciana: Ellie asked to have a chat with me after breakfast today. She just wanted to let  
531 me know that she is finding it hard to write her contributions on our online platform. Ellie

532 is one of the players in the squad who is able to communicate verbally and in sign language  
533 but acknowledged that her writing skills are not as developed as she wished for. She  
534 mentioned that she asked someone else to write her comments for her in previous  
535 contributions, as she was not confident to do so. She is really committed to the programme  
536 and I really appreciate her views to inform what we do next in our coaching practice. This  
537 episode made me aware that a lack of contribution is not necessarily a lack of commitment  
538 or understanding. It also showed how Ellie was going above and beyond on creating her  
539 own ways to use the platform to benefit her own learning. Moving forward, we really need  
540 to keep developing the platform with the help of players to ensure their needs are catered  
541 for. Allowing players to upload different types of files needs to be reinforced as well as  
542 the support available via our interpreter (Reflective Journal. Entry: November 2018)

543 Additionally, some of the players were returning to the squad without having previously met  
544 the current players. In this environment, developing trust in their relationship was something  
545 players saw as crucial for actively developing CBL within the group. In the words of Naomi:

546 Naomi: ...especially when we have new players coming into the squad and other players  
547 returning. So it is still new and we're still getting or still going through that process of  
548 developing trust. (Focus group 4, November 2018)

549 The importance of trust/relationship in developing the process was a crucial aspect that  
550 informed further interventions. Here, there was an increased focus on social elements in  
551 continuing to develop a positive high performing culture. Among those were the focus on  
552 developing more effective communication skills that allowed SL and non-SL individuals  
553 (players and staff) to spend more time together and get to know each other better. In the words  
554 of Luciana:

555 Luciana: With the increasing focus on the social aspects of coaching and developing trust,  
556 we agreed that informal encounters should be encouraged further within the team  
557 (including players and staff). Mealtimes were seen as a perfect opportunity to get to know  
558 each other better and engage with players' preferred language (e.g., SL; verbal). This  
559 meant staff and players who were not fluent in SL sitting by those who were in order to  
560 learn it. It was certainly a very enjoyable experience that brought a whole new dimension  
561 to the team. It was a unique opportunity to further develop a 'caring' environment  
562 (Reflective Journal, November 2018).

563 *Players' initial 'buy-in' to the constructivist approach to learning*

564 Players' 'buy-in' to the constructivist approach to learning did not take place instantly. More  
565 specifically, despite recognising the potential benefits of a CBL approach to learning, at the  
566 initial stages of the project, players argued that it was "too early to say" (Kayleigh) how  
567 successful the approach would be in supporting their learning, due to only being introduced the  
568 previous month. Alongside the potential benefits, players recognised that it would require time  
569 for them to get used to and actively engage in the discussions and activities using the online  
570 platform. For example, despite being informed about the CBL approach, some of the players  
571 initially saw the platform as a repository of information. In the words of Steph:

572 Steph: I thought it was going to be where you can show our tactics, our defending style,  
573 our attacking style and our set pieces, just things that we can look over all of the time to  
574 help us learn and understand the game better. (Focus group 2, July 2018)

575 At this initial stage, there was clear evidence to suggest players' engagement with the platform  
576 was often disjointed in the sense that they would represent 'one-off' contributions that would  
577 stand on their own rather than contributing to a 'team' discussion. In the words of one:

578 Bryony: I think at the moment there is not any actual discussion. I put my hand up, I wrote  
579 the comment and then left it thinking job done!" (Focus group 1, July 2018)

580 Such lack of collaboration was often caused by a focus on content knowledge rather than on  
581 the discussion of different perspectives. In this sense, players seemed to think that once what  
582 they perceived to be the right answer was mentioned, they would have been left with nothing  
583 to contribute:

584 Kayleigh: The other players had already made the points that I wanted to make. (Focus  
585 group 1, July 2018)

586 Another barrier faced by players was their 'fear' of being wrong. Here, there was a concern  
587 about what others would think of them:

588 Kayleigh: It is more to do with commenting and not wanting to be wrong... I believe that  
589 some players lack confidence in writing or commenting on a video.

590

591 Rosie: I would say that as well. I would see that as being an issue.

592 (Focus group 1, July 2018)

593 These initial findings guided further interventions intending to encourage collaboration  
594 amongst the players, with players volunteering to aid each other's learning journeys. Among  
595 those was the greater attention given to providing a more cohesive experience with clear links  
596 between pre, during and post-camp tasks. Additionally, there was an ongoing development of  
597 content according to participants' needs and the explicit statement that there was more than  
598 one 'right' answer. Different ways to pose questions were introduced to allow for a more  
599 flexible and broader approach to the tasks, one that did not focus solely on the content, as  
600 reflected by John:

601 John: The structured questions that I thought would help the players facilitate their own  
602 questioning and learning actually acted as a barrier. The players felt restricted discussing  
603 and commenting on their own thoughts due to the perceived rigidness of the questions.  
604 The players were also struggling at times to understand the relevance to the content that  
605 was being uploaded. In an attempt to signpost the players to the specific content and  
606 whether it was for preparing the player for an upcoming session or reviewing a previous  
607 session, we decided to add keywords in the title and provided further detail in the descriptor  
608 box to add clarity. These appeared to help following the uploading of the content of the  
609 previous camp, as engagement in the number of views and comments left increased.  
610 (Reflective Journal Entry: July 2018)

611 Further thoughts are provided by the Joint Head Coach to show the complexity of working with  
612 a group who requires different levels of support:

613 Luciana: For those who are not familiar with coaching deaf players, there may be an  
614 assumption that they are a group of players with similar needs and backgrounds. This is  
615 very far from our experience. Indeed, John and I have been discussing individual players  
616 during each camp and the support we need to provide them with, in order to overcome  
617 some of the challenges that they face when communicating both during training camps and  
618 online. As with any other groups, identifying each player's needs and involving them in  
619 coming up with suggestions to best cater for their needs is something that we found very  
620 useful in our practice. For example, when on court, some players found it hard and felt  
621 completely lost after taking their hearing aids off during the session (which is a requirement  
622 during official competitions). For others (those who were profoundly deaf), this was  
623 something that they were used to and, therefore, did not have any issues with. In  
624 discussions with players, we decided to take a gradual approach in training sessions and  
625 allow players to wear their hearing aids, especially when focusing on tactical team

626 concepts. As for our online approach and after discussions with the team's interpreter, it  
627 was made clear that players could contact him as a way to enter either a written log or  
628 video contribution to the online platform. It was important that we had both formats  
629 whenever possible to cater for the SL and non-SL players (Reflective Log. Entry: July  
630 2018).

## 631 **Discussion**

632 Our findings showed players to be increasingly more engaged in a CBL approach during the  
633 seven months of the study, resulting in learning as participation and, in some cases,  
634 transformation (Taylor, 2017). As our findings showed, among the key contributors to the  
635 changes were, firstly, the flexible approach adopted in the study, with the players and us co-  
636 constructing the learning environment. Secondly, there was a clear focus on providing a  
637 'connected' learning experience. Thirdly, there was a focus on building trust amongst the  
638 group, an aspect identified as key for a successful learning experience. Therefore, valuable  
639 insights into the challenges and successes faced by using a CBL approach to promote an active,  
640 social and collaborative approach to learning for deaf international futsal players were gained.  
641 Below, we discuss our findings whilst exploring how they could be utilised to underpin and  
642 guide coaches' pedagogical practices.

### 643 ***Coaching lesson 1 - Flexibility is key when creating a learning environment***

644 Of crucial importance in creating a flexible learning environment was the clear focus on  
645 noticing the nuances of the environment and engaging in conversations with players and other  
646 members of staff to guide future interventions (Jones, Bailey, & Thompson, 2013). This was  
647 key in trying to understand what motivated and facilitated players' engagement in the CBL  
648 process (Diep et al., 2019). For example, we truly believed that we were posing questions that

649 created ‘opportunities for discussion, debate, dialogue and reflection’ among players as  
650 suggested by Harvey, Cope & Jones (2016, p.34). In this sense, we were trying to avoid “lower-  
651 order or ‘fact seeking’ enquiries” (Cope, Partington, Cushion, & Harvey, 2016, p. 380).  
652 However, after significant reflection and learning in and on-action (Thorpe et al., 2016), we  
653 recognised that players’ perceptions did not match our expectations which made us revisit our  
654 learning platform and focus on asking fewer questions in a more exploratory fashion. In this  
655 sense, it was an opportunity for us to also develop our own questioning practice, something  
656 that we felt we were experts at until we recognised that no question is good enough until tested  
657 with players and their contexts. We also started to consider the need to elaborate further on  
658 what we meant by CBL instead of assuming that players would have an appropriate and  
659 consistent understanding of the term. Here, we borrowed the definition provided by Laal &  
660 Ghodsi (2012), that is, “an educational approach to teaching and learning that involves groups  
661 of learners working together to solve a problem, complete a task, or create a product” (p. 486).  
662 In this sense, we made it clear to players that our focus was on “working together cooperatively  
663 to accomplish shared learning goals” (Laal & Ghodsi, 2012, p.486) being those on or off-court,  
664 pre, during or post-training camps.

665 Noticing also allowed us to identify how ‘real-life’ challenges could interfere with the project  
666 and, consequently player engagement in their learning, especially when away from training  
667 camps. Although the players appreciated our research goal, they stated clearly that their  
668 participation in the project emerged from their desire to become the best players that they could  
669 become in the time that was available to them. The players sought to take advantage and  
670 attempted to implement a variety of strategies and activities within their CBL contributions.  
671 However, they were constrained by the part-time nature of the programme, balancing  
672 educational, work and other day-to-day commitments. This was, therefore, a key aspect that  
673 guided how much we required players to do away from training camps. The focus was on the

674 quality of their engagement rather than quantity. Cosh & Tully (2015) supported this notion,  
675 highlighting that when working with part-time athletes who are balancing several commitments  
676 it is imperative to develop a supportive environment that focuses on engagement. Of crucial  
677 importance here, were the individual coaching meetings that were arranged with players which  
678 allowed us to understand individual contexts and discuss the most appropriate ways to support  
679 players to achieve at least the minimum expectations set for the squad (e.g., fitness training  
680 away from camp). Through the support offered, coaching staff were then able to contribute to  
681 satisfaction and adaptive forms of motivation that led to the positive athlete and team outcomes  
682 (Occhino, Mallett, Rynne, & Carlisle, 2014).

683 The flexibility in our approach to the study was also apparent in the way we coached and  
684 analysed performance both on-court and in the classroom. We wanted players to try different  
685 approaches and express themselves without fear of being wrong. It is important to highlight,  
686 however, that we are not claiming that content knowledge and ‘social agreements’ regarding  
687 key components of play is not needed. Within futsal, the actions players perform are not only  
688 influenced by the cooperation of teammates but the organisation of opponents, highlighting the  
689 need for players to learn and understand the complex, dynamic, and sometimes less predictable  
690 challenges surrounding space and time, information and organisation (Travassos, Araújo,  
691 Vilar, & McGarry, 2011). In this sense, we worked with Sfard’s (1998) metaphors of  
692 acquisition and participation simultaneously, focusing on key concepts (instead of rigid  
693 structures) that required players to engage in constant decision making on the court and in  
694 discussions around the reasons behind their decisions/choices off the court. It very much  
695 emphasised and supported the plan we mutually agreed and adopted (Bampouras et al., 2012),  
696 moving away from the traditional linear approach of coaching towards a non-linear style  
697 (Vinson & Parker, 2019). Through this approach, the players were able to explore new ways  
698 of solving problems during the preparation stages and apply in-game tactical decisions based



699 on situations they faced in the competition regarding player injury/substitutions, quality of  
700 opposition and current match (Jayal, McRobert, Oatley, & O'Donoghue, 2018).

701

702 *Coaching lesson 2 - Connecting the dots and challenging players in a supportive*  
703 *environment is key for learning*

704 As a result of assessing our environment via player and staff feedback, we continued to move  
705 forward in our build-up to the major competition and connect the dots pre, during and post-  
706 training camps learning experiences (referred to by players as a 'little journey'). In our project,  
707 CBL was seen by players as meaningful practice, aligning with previous findings by  
708 Hardcastle, Tye, Glassey and Hagger (2015). In particular, it allowed for the development of  
709 background knowledge (Sfard, 1998) pre-training camp and, as a result, players felt they were  
710 more prepared to engage in meaningful discussions during and post-camp. In this context,  
711 groups were carefully arranged during tasks, often allowing new members of the squad to learn  
712 with 'more capable others' (Vygotsky, 1987). This approach encouraged players to draw on  
713 each other's resources and previous knowledge (Shaked, Schechter, & Michalsky, 2018) whilst  
714 focusing on the quality of social interaction during collaboration, an aspect that is key for  
715 effective collaborative learning (Sangin, Molinari, Nüssli, & Dillenbourg, 2011). Underpinned  
716 by Vygotsky's (1987) concept of Zone of Proximal Development, scaffolding, mediation and  
717 Perezhivanie, staff aimed to set players with challenging tasks in a supportive environment.  
718 Here, players were required to draw on their lived experiences and sharing these with other  
719 players and staff in 'problem-solving' activities to find or suggest solutions. In this sense, we  
720 aimed to create an environment where collaborative work was needed to complete the tasks,  
721 especially when in training camps. We focused on the two conditions highlighted by Wass and  
722 Golding (2014) as key for scaffolding practice: "(1) students are assisted to do something they

723 could not do on their own; and (2) this assistance enables them eventually to learn to complete  
724 the task independently” (p. 677). Here, players and staff members acted as ‘more capable  
725 others’, a term used by Vygotsky to define those who have more knowledge or expertise in a  
726 particular topic area (Potrac, Nelson, & Groom, 2016). In addition, the situations and tasks  
727 presented were meant to resemble a difficult or critical situation, allowing for conscious  
728 development of the players and transformation through a process of internalization and  
729 reflecting on previous experiences (Jones et al., 2018). This scaffolding process and application  
730 of *Perezhivanie* involved listening carefully to the conversations (sometimes via the interpreter)  
731 to decide when/if further support was needed.

732 As argued by Potrac et al. (2016), “the zone of proximal development is not a clearly  
733 demarcated space” (p. 105). In this sense, we acknowledge that our efforts to negotiate  
734 understandings with the players via group and individual encounters, as well as noticing the  
735 nature of the interactions and relationships within the group, certainly allowed us to try our  
736 best in identifying the level at which they should be challenged. Another contributing factor  
737 here was the relationship developed among staff members whose input was key in guiding  
738 practice. We faced challenges especially at the start of the project in trying to implement what  
739 for some players was a previously inaccessible way of learning and thinking (Meyer & Land,  
740 2005). This was especially the case for those who had experienced being coached more  
741 traditionally during previous playing years and at different teams, creating a greater reliance  
742 on the coach as the one they should acquire the knowledge from. As a response, we continued  
743 with our approach after reflecting on players’ wants and needs. This in-action and on action  
744 approach (Thorpe et al., 2016) led us to a clear focus on supporting the players through  
745 challenging situations rather than restructuring tasks in a way that those problems would be  
746 removed (Wass & Golding, 2014). In this sense, we accepted that a temporary level of

747 uncertainty regarding a certain task was indeed beneficial to learning (De Martin-Silva,  
748 Fonseca, Jones, Morgan & Mesquita, 2015).

749 Results from the current project revealed the CBL approach worked as a catalyst for developing  
750 what Entwistle (2000) defined as a deep approach to learning (i.e., a commitment to  
751 understanding the content being introduced). For example, the players argued that pre-camp  
752 tasks and the discussions they had with other players allowed them to ‘make sense’ of their  
753 understandings, especially when they were confronted with previously inaccessible ways of  
754 thinking (Meyer & Land, 2005). This deep approach to learning, therefore, although initially  
755 mediated by staff members eventually resulted in players seeking to learn from each other,  
756 having the initiative to ask questions and develop their understanding supported by others. In  
757 doing so, we are not claiming that players became ‘independent learners’, a term often misused  
758 in the teaching literature. Instead, players still operated within an environment where the  
759 learning framework existed but became more creative and less dependent on staff members  
760 when co-creating and using those resources. Examples were apparent especially towards the  
761 second half of the project. These included players inviting the team to watch a game together  
762 and share their views; players who decided to meet and discuss their knowledge of the game  
763 whilst asking questions to each other to support their understanding; players who swapped their  
764 individual videos and provided feedback to each other; players who missed a training camp  
765 and met up with another player at their own time to review key concepts on HIVE. In all  
766 examples above, staff were not aware of players’ initiative until after it happened. In this sense,  
767 there was no input in planning or conducting the activities described. A significant input,  
768 however, was the learning platform that was provided in accordance with players’ needs. This  
769 focus on the relevance of learning activities was, to a certain extent, a catalyst for increased  
770 engagement in their learning journey (Karpov, 2014).

771

772 *Coaching lesson 3 – Focus on developing social and communication skills can have a*  
773 *positive impact on engagement and learning*

774 Our study also served to show that a focus on so-called ‘social skills’ was key in developing  
775 an effective learning environment. Indeed, there was a clear effort ‘behind the scenes’ to  
776 ‘orchestrate’ such an environment. Orchestration, here as argued by Jones et al., (2013, p.280)  
777 “should not be seen as underhand, Machiavellian scheming, but the acting out of considered  
778 strategies designed to make social interactions and related contexts work.” It also provided a  
779 space for discussions and alternative actions based on trying to manage a complex learning  
780 environment. In our experience, the focus of orchestration was developed mainly from players’  
781 feedback via the focus groups, informal interactions and the act of ‘noticing’. For example,  
782 findings from the focus groups pointed out for the need to focus on building a social foundation  
783 where players were able to trust each other and collaborate. This is in line with Baturay and  
784 Toker (2019), who claim “trust can motivate individuals to complete a task as a group while a  
785 lack of trust can have the opposite effect” (p. 154). To consolidate a CBL environment, we  
786 often found ourselves as ‘social’ managers (Jones et al., 2013, p.280) in trying to explore inter-  
787 relational complexities and how to support individuals to build trust. To do so, we looked  
788 ‘beyond the immediate’, trying to focus on the nourishing earth beneath the blooming flowers  
789 “which has a secret and richness of its own” (Lefebvre, 1991, p.87).

790 During the initial stages of the project, the SL and non-SL individuals congregated in different  
791 groups, forming a clear divide in the group. Kurková et al. (2011) inferred that this divide was  
792 not uncommon within the deaf community, but connecting these two groups together could  
793 play an important role in integrating deaf athletes into mainstream society. Among our  
794 interventions were the focus on developing more effective communication skills that allowed  
795 SL and non-SL individuals (players and staff) to spend more time together and get to know

796 each other better. The intention was that those informal interventions were not forced but very  
797 flexible. Based on feedback from players, we noticed a clear preference for face-to-face contact  
798 to avoid misunderstandings and allow for players with a variety of communication levels (e.g.,  
799 fluent SL, non-SL, verbal) to make sense of the messages being communicated. This was in  
800 contrast to research completed by Bishop, Taylor & Froy (2000) who found only 17% of the  
801 deaf participants favoured face-to-face communication over computer-mediated  
802 communication. The reasons for the low percentage preference may be due to the quality of  
803 the relationship developed between the researchers and the participants. In our case, due to the  
804 closeness, commitment and cooperation of staff to listen and make changes (Jowett, 2007,  
805 2017), our relationships and understanding of the players and deaf culture increased overtime.  
806 Some of our interventions, for example, simply involved providing players with a two-hour  
807 ‘social activity’ slot instead of what used to be another team meeting in the evening. Players  
808 dictated what they would like to do in that slot, as long as it was within the team’s professional  
809 standards, strengthening the feelings of trust and respect amongst the group. Another example  
810 was to change our habitual practices of having staff members and players sitting at separate  
811 tables during meal times. Instead, we started to take advantage of informal interactions to  
812 communicate with players and get to know each other better. For some, this was the first  
813 attempt to communicate with a player who relied on SL without the help of an interpreter.  
814 Players’ perceptions showed how those initiatives were key in contributing to building trust  
815 amongst themselves and with staff members. In their words, this originated from a feeling that  
816 the staff cared and were catering for their needs, important aspects highlighted by Rhind and  
817 Jowett (2010) for building and maintaining relationships. As a result, there was a sense of more  
818 fluid power relationships with players choosing to invite staff members to some of their social  
819 time to engage with activities that they had created.

820 Of crucial importance in this study was not only the learning experienced by players but the  
821 relationship developed among staff members, who, likewise advanced their practice and trust  
822 as the study progressed. Here, among the contributing factors were the opportunities created to  
823 discuss our practices in a non-judgemental environment. Ensuring that each staff member had  
824 a key contributing role in the journey to the competition was crucial in making us feel like a  
825 team (Sinotte, Bloom, & Caron, 2015). Through the development of the staff-joint-head coach  
826 relationship, the importance of developing an open relationship underpinned by honesty and  
827 being able to provide an opinion was encouraged, allowing for individuals to have autonomy  
828 in their role and bring new ideas to the table to successfully support the coaches practices and  
829 teams goal. More importantly, as some staff members were doing most of their work behind  
830 the scenes, there was a clear effort by the Joint Head Coaches to acknowledge their contribution  
831 in the process. This is in line with the work of Cruickshank & Collins (2013, p.9) who remind  
832 us of the importance of engaging with support staffing “reflecting the numerous and wide-  
833 ranging disciplines which now aid performance delivery”.

#### 834 **Conclusion**

835 Our intention in this paper was, firstly, to explore the challenges and successes faced by deaf  
836 international futsal players when using a collaborative blended learning approach in  
837 preparation for a major competition and, secondly, to provide a discussion of key coaching  
838 lessons learned. Our findings showed the successes to be the development of a connected  
839 approach to learning, which was referred to by players as ‘a little journey’ and the ‘ownership,  
840 collaboration and connection’ that were involved in the CBL approach. The challenges faced  
841 evolved around ‘communication barriers and fear of misinterpretation’ and ‘players’ initial  
842 ‘buy-in’ to the constructivist approach to learning’. As the findings have highlighted,  
843 facilitating player learning is not a straightforward activity, however, over time the use of CBL

844 aided not only in performance improvements through increased tactical decision making but  
845 also the personal growth of players and staff.

846 The feedback provided by players and the staff team as well as our constant reflections in-  
847 action and on-action were crucial in guiding the development of our CBL environment. As  
848 such, coaches must seek to constantly reflect on their practices to ensure a flexible approach to  
849 learning, providing an environment that is meaningful and accessible to players. As we grapple  
850 with the complexities of coaching practice, it is also key that we position it as a social activity  
851 and, therefore, place social skills at the forefront of our practices. Here, recognising learners as  
852 active participants and learning as a process of ‘being in the world’ is an important step if  
853 coaching is to move beyond prescriptive practices.

854 Finally, we hope that the experiences shared in this project inspire coaches to consider how to  
855 best develop their ‘little journeys’, something that will undoubtedly have its challenges and  
856 uncertainties. Not to engage with coaching as a contextualised and ever-changing environment,  
857 by holding a view that it can be unproblematically planned in spite of participants’ needs, does  
858 coaches a continuing disservice.

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- 1108

1109 **Appendix 1: Semi-structured focus group guide**

1110 **Understanding and Expectations**

- 1111 • What do you understand by a collaborative blended learning approach?

1112 - *What does it mean to you?*

1113 - What do you see as the expectations regarding your contributions?

1114 - Why do you think we have adopted this approach?

1115 **Successes**

- 1116 • What are the benefits (if any) that you have found so far when taking part in the  
1117 approach?

1118 - *Build upon answers exploring each benefit ('x') that was highlighted with further  
1119 questions such as:*

1120 - *Can you tell me a bit more about x?*

1121 - *Can you give me an example of how and when it happened?*

1122 - *Why do you think it was beneficial?*

1123 **Challenges**

- 1124 • What are the challenges (if any) that you have experienced so far?

1125 - *Build upon answers exploring each challenge ('y') that was highlighted with further  
1126 questions such as:*

1127 - *Can you tell me a bit more about 'y'?*

1128 - *Can you give me an example of how and when it happened?*

1129 - *Why do you think it was a challenge?*

1130 **Suggestions – implications for coaching practice**

1131 • What suggestions would you make to ensure that we cater for your individual needs?

1132 How can we better structure our CBL approach to make sure it is meaningful and

1133 accessible to you?

1134 - *Build upon answers exploring each suggestion ('z') that was highlighted with*

1135 *further questions such as:*

1136 - *Can you tell me a bit more about 'z'?*

1137 - *Can you give me an example of how it could be implemented?*

1138 - *How do you think it would support your development? Why?*

1139 **Ending**

1140 • Is there anything else that you would like to mention?

1141