Education for collaboration: the influence of the third space on professional boundaries

Laura Knight,1 Paul Crampton,2 Alex McKeown,3 Arun Arora,4 Charlotte Cliffe,5 Catherine O’Keeffe,1* Ann Griffin1

1 Research Department of Medical Education, UCL Medical School, UK
2 Health Professions Education Unit, Hull York Medical School, UK
3 Wellcome Centre for Ethics and Humanities, University of Oxford, UK
4 GP Trainee, Health Education England, London, UK
5 NIHR Academic Clinical Fellow ST4 General Adult Psychiatry, KCL, UK
* Correspondence: c.o’keeffe@ucl.ac.uk

Submission date: 12 July 2021; Acceptance date: 19 November 2021; Publication date: 19 January 2022

How to cite
Knight, L., Crampton, P., McKeown, A., Arora, A., Cliffe, C., O’Keeffe, C. and Griffin, A. (2022) ‘Education for collaboration: the influence of the third space on professional boundaries’. London Review of Education, 20 (1), 3. DOI: https://doi.org/10.14324/LRE.20.1.03.

Peer review
This article has been peer-reviewed through the journal’s standard double-blind peer review, where both the reviewers and authors are anonymised during review.

Copyright
2022, Laura Knight, Paul Crampton, Alex McKeown, Arun Arora, Charlotte Cliffe, Catherine O’Keeffe and Ann Griffin. This is an open-access article distributed under the terms of the Creative Commons Attribution Licence (CC BY) 4.0 https://creativecommons.org/licenses/by/4.0/, which permits unrestricted use, distribution and reproduction in any medium, provided the original author and source are credited • DOI: https://doi.org/10.14324/LRE.20.1.03.

Open access
London Review of Education is a peer-reviewed open-access journal.

Abstract
The delivery of integrated care requires the establishment of effective professional relationships that foster collaborative working across health systems. Evidence for how to prepare practitioners to work in those settings is limited. By exploring an innovative postgraduate Programme for Integrated Child Health (PICH) this article highlights the conditions by which effective collaboration can be encouraged. Our qualitative evaluation of PICH involved one-to-one semi-structured interviews with 23 postgraduate general practice and paediatric trainees and their mentors. We analysed the data using the concept of the ‘third space’, where multiple discourses between individuals with diverse professional backgrounds occur, enabling creative exploration of tensions inherent in
new ways of working in order to identify enablers and barriers to collaboration. Our analysis identified three themes that enabled collaboration: effective communication, boundary work and educational spaces; and four themes that were barriers: traditional hierarchical professional identities, curriculum design, financial systems and workplace spaces. PICH demonstrated the value of educational spaces and their role in enabling collaborative practice, as participants explored their professional identities and those of other disciplines. Structural factors in the workplace which inhibit collaborative practice were also evident. We conclude by proposing a model for collaborative learning in third spaces based upon the recognition that, while educational programmes alone will not lead to change, they have the potential to inform the development of productive workplace spaces that will be required if collaborative practice in healthcare is to become a reality.

**Keywords** postgraduate medical education; integrated care; intraprofessional education; interprofessional education; professional identities

---

**Introduction**

The Framework for Action from the World Health Organization (WHO, 2010) identifies collaboration as a key aspect of a global solution to address unmet health needs and to deal with increasingly complex health problems characterised by fragmented working, patient safety issues and concerns about the quality of care. The WHO (2010) suggest advocating for a ‘new’ kind of health worker, described as ‘collaborative-practice ready’. Therefore, the WHO framework serves as a mandate for policymakers to promote education for collaboration, committing healthcare systems to champion joint working and encourage health workers and health educators to take on the identities of interprofessional advocates. In this context, identities can be defined as an individual’s self-perception in relation to their ‘specific role/s within their profession’ (Floyd and Morrison, 2014: 14). The idea is that individuals purposefully interact with individuals having differing professional roles and approaches, enhancing mutual learning and understanding. It is thought that this approach to education enables individuals to develop the necessary skills and relationships and a willingness to practice collaboratively.

Floyd and Morrison (2014) argue that healthcare policies do not take into account how professional identities and workplace cultures facilitate or inhibit the implementation of collaboration, and they are consequently likely to fail. Professional identity informs practice, shaping professional behaviours and the performance of roles (Freidson, 1970; Wenger, 1998). It has a wide impact on working practices and, in clinical practice, it has been shown to influence teamwork, relationships with patients and colleagues, communication, engagement with professional development and moral, ethical and clinical decision-making (Gregg and Magilvy, 2001; Adams et al., 2006). Collaborative practice is considered to be an efficient, effective and satisfying way to offer health services (San Martín-Rodríguez et al., 2005). However, given the prestige that is enjoyed by the medical profession (where individuals are typically secure in their specialised clinical expertise and specific roles), there is potentially much at stake for some practitioners when adapting to new, less-bounded roles. Some of these new roles are within new National Health Service (NHS) structures, such as integrated care systems (Weisz, 2003). Thus, changing organisational structures, consistent with the call for better healthcare integration, need to provide opportunities for the safe, supportive reconfiguration of professional identities as a means to ensure success.

Boundary work, defined as crossing from one context to another and developing a cross-cultural awareness (Evans and Fuller, 2006), is thought to be critical in (re)shaping these professional identities. Professionals who cross traditional community, organisational and structural divides are shown to build relationships, interconnections and interdependencies (Gilburt, 2016). Boundary working is thought to encourage a deeper understanding of alternative viewpoints, enabling the construction of new ways of working by breaking through the silos and exposing individuals to new experiences. Boundary work helps to reshape existing professional identities. Furthermore, it enhances the recognition of the value
of others and enables genuine exchange of views, perspectives and expertise. Indeed, understanding and appreciating professional roles and responsibilities, and communicating effectively, have emerged as the two perceived core competencies for patient-centred collaborative practice (Suter et al., 2009).

**Education for collaboration**

Given the importance of collaborative practice, it is important to ask whether educational strategies can overcome some of these barriers and promote boundary work. Empirical evidence informing how to effectively educate practitioners for collaboration is limited (Browne et al., 1995; Tresolini et al., 1995; Owen and Lewith, 2004; Zoberi et al., 2008; Cubic et al., 2012; Hall et al., 2015). Studies exploring intraprofessional and interprofessional education have all highlighted that there are similar barriers to teaching integrated care as there are to implementing it: professional hierarchies and a lack of motivation to form relationships often prevent meaningful learning from taking place (Marshall, 1998; Meijer et al., 2016). One explanation offered for this is that professional stereotypes are maintained and reinforced through this process (Lidskog et al., 2008), reflecting power and social status differentials which can impede collaboration (San Martín-Rodríguez et al., 2005; Griffin and O’Keeffe, 2020).

Furthermore, the existence of structural and systemic barriers that impede collaboration within education programmes and health services is well recognised (San Martín-Rodríguez et al., 2005). Paradis and Whitehead (2018: 1461) are sceptical that education alone will lead to change in workplaces, recognising the multiple and real barriers to collaborative practice: ‘There is often too much work, too many tasks, too many patients, too many noncollaborative senior clinicians, too little preparation, too little time, too little space, too little influence, and too few allies for truly collaborative care to happen.’

The recent impetus during the height of the COVID-19 pandemic for stakeholders within integrated care systems to collaborate suggests that progress is possible. However, concerns have been expressed that underlying systemic barriers are likely to persist, with the potential to reverse or inhibit further progress (Charles et al., 2021). Such barriers reflect significant sociocultural, political and professional obstacles that are poorly understood (San Martín-Rodríguez et al., 2005) and often beyond the immediate influence of educational programmes. Our study sought to explore ways in which the creation of educational spaces may enable boundary work between professional disciplines and work-based cultures to foster collaboration within integrated care services. While we recognise that structural and systemic factors present significant barriers to boundary work, better understanding of the potential for educational spaces to facilitate working across disciplinary boundaries may enable innovative approaches to strengthening the interface between educational and workplace-based spaces to be developed. Whitchurch’s (2009) concept of the ‘third space’ provides a useful lens through which to examine this interface within the context of an educational programme situated in integrated care.

**Conceptual lens: Whitchurch’s third space**

In order to explore how boundary work can foster collaboration within the Programme for Integrated Child Health (PICH), as an example of an integrated care education programme, we used the theoretical lens of Whitchurch’s third space to consider how such programmes could be repositioned. Whitchurch (2012) observed that changing professional roles in higher education can lead to the creation of spaces where boundaries between professional spheres of activity become blurred – a third space, enabling discourses between individuals exploring diversity and difference in professional practice. Third spaces are characterised by a sense of safety, whereby professionals from distinct disciplines are able to transcend traditional boundaries to engage creatively with ambiguity and complexity by questioning assumptions, contradictions and tensions inherent in new ways of working. Third spaces are associated with less boundaried forms of professional practice, and the capability to work across networks, creating new types of professional knowledge and legitimacy to foster innovation (Whitchurch, 2009). We used this theoretical lens to analyse the data for themes that aligned to the core concepts inherent in Whitchurch’s notion of the third space.
Methods

The Programme for Integrated Child Health context

Child health services in the UK continue to promote integrated approaches, defined as person-centred and coordinated (NCICS, 2013), across primary, secondary and tertiary care and between different clinical specialisms (NHS, 2014, 2017). Preparing professionals to work in these settings has therefore become increasingly important.

The educational strategy adopted by PICH is to provide opportunities to develop relationships across and beyond professional hierarchies, fostering collaboration in practice. Qualified doctors on postgraduate training pathways in paediatrics or general practice (GP) volunteer to join a year-long educational programme. PICH promotes active participation in learning, provides access to formal teaching sessions for exploring integrated care concepts and opportunities to engage in clinical networks, promoting holistic care across service boundaries. Participants undertake a project within their clinical setting that aims to introduce an aspect of integrated care in their area of practice. They are supported by mentors who are experienced paediatricians or GPs, and they are encouraged to engage in peer learning. PICH aims to provide reflexive educational spaces that allow trainees to develop a better understanding of their own professional identity and how to engage in collaborative working in this context (Griffin et al., 2017).

Twenty-three trainees and mentors from Cohorts 1 and 2 of PICH were interviewed after giving written consent. Interviews were conducted between August 2016 and January 2017, and the average length of an interview was 30 minutes (ranging between 14 and 46 minutes). Interviews were audio recorded, transcribed professionally and subjected to thematic analysis. Participant demographics are detailed in Table 1.

| Participant No. | Trainee (T)/mentor (M) | Medical specialism: general practice (GP)/paediatrician (P) | Cohort number 1 = 1st year | 2 = 2nd year | Identifying number |
|-----------------|------------------------|-------------------------------------------------------------|-----------------------------|--------------|-------------------|
| 1               | Trainee GP             | Cohort 2                                                    | P1TGP2                      |
| 2               | Mentor GP              |                                                            | P2MGP                       |
| 3               | Trainee Paediatrician  | Cohort 1                                                    | P3TP1                       |
| 4               | Trainee Paediatrician  | Cohort 2                                                    | P4TP2                       |
| 5               | Mentor Paediatrician   |                                                            | P5MP                        |
| 6               | Trainee Paediatrician  | Cohort 2                                                    | P6TP2                       |
| 7               | Mentor Paediatrician   |                                                            | P7MP                        |
| 8               | Mentor Paediatrician   |                                                            | P8MP                        |
| 9               | Trainee Paediatrician  | Cohort 2                                                    | P9TP2                       |
| 10              | Trainee Paediatrician  | Cohort 1                                                    | P10TP1                      |
| 11              | Mentor Paediatrician   |                                                            | P11MP                       |
| 12              | Trainee Paediatrician  | Cohort 2                                                    | P12TP2                      |
| 13              | Trainee Paediatrician  | Cohort 2                                                    | P13TP2                      |
| 14              | Mentor GP              |                                                            | P14MGP                       |
| 15              | Trainee GP             | Cohort 2                                                    | P15TGP2                     |
| 16              | Mentor Paediatrician   |                                                            | P16MP                       |
| 17              | Trainee Paediatrician  | Cohort 2                                                    | P17TP2                      |
| 18              | Mentor Paediatrician   |                                                            | P18MP                       |
| 19              | Trainee GP             | Cohort 2                                                    | P19TGP2                     |
| 20              | Trainee Paediatrician  | Cohort 1                                                    | P20TP1                      |
| 21              | Trainee Paediatrician  | Cohort 1                                                    | P21TP2                      |
| 22              | Trainee Paediatrician  | Cohort 2                                                    | P22TP2                      |
| 23              | Trainee Paediatrician  | Cohort 2                                                    | P23TP2                      |

1 Participant identifier P1TGP2 = participant 1/trainee/general practitioner/cohort 2.
A coding scheme was developed, and interviews were independently coded by four team members (AG, CC, AA and AM) using QSR NVivo 11 (see also Griffin et al., 2017, 2019). Three researchers (AG, LK and PC) conducted a secondary analysis of the data and, with the input of an additional researcher (CO), interpreted the findings in relation to Whitchurch’s (2008) concept of the third space.

**Results**

**Demographics**

The breakdown of participant demographics (trainee/mentor; GP/paediatrician; Cohort 1/Cohort 2) are detailed in Table 1.

**Thematic analysis**

Three enabling themes for collaborative practice were identified: communication for collaboration; boundary work; and educational spaces. Barriers to collaborative practice emerged as themes focusing on: workplace spaces; traditional professional identities; curriculum design; and financial systems and structures as barriers (see Figure 1).

---

**Figure 1. Enablers and barriers to collaboration (Source: authors)**

**The role of PICH in enabling collaboration**

**Theme 1: communication for collaboration**

Participants described how PICH had raised their awareness of the importance of communicating effectively and how they intended to alter their communication practices with both patients and colleagues. This included revising their own communicative processes, becoming more inherently collaborative by being mindful of the recipient. Communication methods that were personal in nature, interactive and proactive, and which worked to break down barriers to developing relationships, were described as effective and key to establishing intraprofessional collaboration and improving patient care:

> Just having that personal relationship to be able to say, mm, what’s all this about … Um, you know, it kind of breaks down the barriers instead of saying, oh well I’ll just ask for their opinion.
and it’ll be six weeks until you’re seen in outpatients. You know you can be much more effective and efficient, so yes all good. (P2MGP)

I think integration means more efficiency and a smoother path ultimately, because people just communicate. And if you know somebody and you see them, or you’re in contact with them regularly, you’re more likely to ask for help or say, oh well actually you know what are your thoughts on this, cos you’ve built up that relationship. (P1TGP2)

**Theme 2: boundary work**

In particular, effective communication was seen as giving rise to, and sustaining, altered perceptions of professional boundaries and working partnerships. Several participants pointed out that improving care was not just reliant on better communication between doctors, but also on meaningful engagement with allied health professionals, patients and carers, because all stakeholders had ‘a little bit of the jigsaw’ (P2MGP). Joint working could, it seems, permit a distinctive identity, as well as an emergent one – for example, PICH participants talked about being able to work in the community without becoming a GP. There was a recognition that the dominant singular professional identity was changing and becoming outmoded:

> The professions now are actually getting weaker. So the concept of strong single professionals … single professions … I think is actually a rather old nineteenth-century concept now, and that we actually share a lot of competencies, a lot of skills, between professions. (P16MP)

There was a distinct sense that to fully implement integrated care in the NHS, it is imperative that these rigid boundaries and negative stereotypes are overcome. There was a noted difference between **boundaries** and **barriers**:

> I think integrated care is a good example of making sure that boundaries don’t become barriers. … The porosity becomes extremely important, and this [PICH] is a great example of trying to put some holes into the boundary to try and get people flowing across the boundary. … I don’t think you can eliminate them completely, and I’m not sure it’s desirable for a number of reasons. I think people don’t … when they go into a healthcare situation they are learning the skills of a particular professional group … and I think that’s very important to retain that, but also to recognise its limitations. (P14MGP)

While the role of boundaries in supporting professional practice was recognised as having value, flexibility in how boundaries are interpreted, and possibly crossed, was seen to be important for ensuring efficient patient-centred care and for building communities that were able to access specialist knowledges.

Participants reflected on the development of positive intraprofessional relationships from taking part in PICH, making it easier for them to have open conversations about challenging situations, to find out the views of others involved in care, and to feel more confident in asking for help. These positive relationships were recognised as fostering effective collaboration and improving patient outcomes: ‘I’ve learnt how by really persisting in developing relationships with primary care you can really change the way you deliver care for the individual patient’ (P3TP1).

Extending this idea further, some trainees highlighted the central role of strong patient–clinician collaborative partnerships and how important they were in truly working around barriers: ‘When there’s chaos all around you, the one thing that sustains and is very central to patient care, is the quality of the relationships between the patient, the primary and the secondary care provider, and tertiary’ (P16MP).

Participants appeared to posit partnerships as the definition of integrated care. Thus, for trainees, it is collaborative working relationships that need to be fostered and sustained in both educational and workplace spaces.

**Theme 3: educational spaces**

Two forms of professional spaces were identified in the data as sites where boundaries between professional spheres were blurred, such that they came to constitute a ‘third space’ (Whitchurch, 2008).
The first was the *educational space* of PICH (the site where integrated care is learned) and the second was the *workplace space* (see Theme 4) inhabited by participants (the site where integrated care is performed).

Participants valued the opportunity that the *educational space* of PICH gave for the two specialties to come together, meet and hear each other's perspectives. We found that the PICH-enabled dialogue and sharing of stories facilitated the breakdown of professional barriers. Participants noted that such experiences transformed attitudes towards the provision of care and created a willingness to adopt collaborative care practices and to form intraprofessional networks:

"It's [PICH] good because it forms a network, it breaks down that barrier between paediatricians and GPs ... because primary and secondary care is very separate, but actually, for the patient, it's a continuum isn't it? ... So in order to have the continuum of care, the primary and secondary care doctors need to have an understanding of what we both do." (P13TP2)

By creating a space specifically for intraprofessional communication, PICH offered participants the unique opportunity to hear and reflect on the other's professional perspectives. This encouraged a critical review of the practices and processes which supported or undermined patient care. Furthermore, understanding other professional practices was reported to 'plant the seeds' (P20TP1) for how doctors could work together more constructively in the future. Participants reported a desire to extend the reach of their professional working to include learning from more established colleagues and in the community.

An important quality of the ‘educational space’ of PICH is its professional territorial neutrality. We found that here, regardless of specialty or level of seniority, everyone assumed the role of ‘trainee’ and gained new knowledge and insights that were translated into their specific professional knowledge context:

"we’re looking at the same thing, maybe child health or a particular piece of it, but we’re coming at it through different lenses … some more experienced lenses or some fresh eye lenses, you know some people go ‘senior’ and ‘junior’. Well maybe, sometimes junior provides wonderful fresh eyes to things that some of us who’ve been around longer don’t. The primary care, you know, the GP aspect, public health aspect … so that’s been … that’s been really, really important." (P4TP2)

However, and as was noted by participants, the ‘real world’ of general practice and paediatrics does not offer the same type of space.

**Barriers to collaborative practice**

**Theme 4: workplace spaces**

Participants felt that workplace spaces *inhibit* integrated care. It was frequently noted that the provision of healthcare services varied between the professions (including how services were set up and funded) and that this plays a role in defining workplace spaces in terms of resourcing, which was described as a ‘postcode lottery’. Interestingly, it was noted that sharing workplace spaces (for example, paediatricians moving into community settings to provide care) might provoke territorial disputes and conflict over funding. Participants also reported how current sociopolitical influences impact on their working environments and the drive for efficiency, and how changes to the NHS necessitate collaboration – a new challenge, considering that NHS structures perhaps inhibit it: ‘So we … have to think differently. And I think by thinking differently, it leads to integration because you’ve got to share knowledge, you’ve got to share time resources and all that kind of stuff to cope with the changes that we’re going to face’ (P19TGP2).

These circumstances reify, rather than dismantle, problematic professional silos, irrespective of the need (and willingness) to implement a more integrated approach to care.

**Theme 5: traditional professional identities**

Participants felt that traditional, more rigid, professional identities were rife within the NHS. It was felt that some practitioners saw themselves as working in very specific, bounded, fixed, professional silos,
with very specific, bounded, fixed, professional identities: ‘think lots of people are very stuck in their ways. They feel threatened either way … Older paediatricians think what am I going to, why am I going to waste my time going there? And GPs think, I’m fine, I don’t need their help’ (P8MP).

Participants noted a ‘natural alignment’ between paediatricians and GPs. However, the quotation below illustrates that traditional professional identities are often ingrained, which can support negative stereotyping:

I think what would be interesting is to try and do exactly the same thing in orthopaedic surgery … if somebody said there’s some way of delivering MSK [musculoskeletal medicine] outside of the hospital, you know with GPs, so you didn’t have so much … trivia coming to your clinic … It would be interesting if they were just enthusiastic, and whether this is in fact a phenomenon of paediatrics and a phenomenon of the sort of people that go into children’s medicine, who are naturally keen to not play the classical consultant role … I don’t know. (P7M)

Participants also recognised that professional hierarchies maintained rigid professional boundaries: ‘When it comes to barriers [to working together] I think firstly the attitude … So there’s a hierarchy in the clinical working place – that itself can create barriers to working’ (P4TP).

Negative stereotypes about specialities (highlighted in participants’ assumptions about other professionals) also act as boundaries:

Some hospital paediatricians are quite negative, they have quite negative opinions of GPs and their ability to care for children … I think that lots of paediatricians don’t think GPs do a good job with childcare, they don’t think they really understand what actually happens in general practice. (P13TP)

The continued influence of traditional models of professionalism characterised by siloed working, professional hierarchies and stereotypes appears to be a significant barrier to effective communication and collaborative practice.

Theme 6: curriculum design

Participants suggested that there were a number of factors underpinning bounded identities which were preventing change. One structural factor facilitating these distinct identity positions was believed to be the separate training agendas between specialties and undergraduate education. Such divisions, exemplified by a lack of undergraduate and postgraduate exposure to collaborative working, reflect intraprofessional boundaries and were thought to reinforce siloed working practices. Similarly, participants recognised the potential value of paediatricians gaining experience of working in general practice as part of their training, and vice versa. However, curriculum restrictions were likely to prevent this in practice.

Recent developments in training were also thought to reinforce siloed working, rather than to promote collaboration, as training curricula are still thought to promote divisions and difference, without enabling the flexibility required to work collaboratively across specialist boundaries.

Theme 7: financial systems

Participants identified financial issues that could impede collaboration by limiting opportunities to work jointly or cooperatively, and by creating tensions in resource-limited systems, which are associated with a tendency to revert to working in silos. Discrete, separate funding streams in primary and secondary care, and the perception of financial managers and others, such as Clinical Commissioning Groups, that joint clinics between GPs and paediatric consultants are too expensive, were thought to reinforce siloed working.

Competition between structures within the NHS was recognised to add an additional layer of complexity when resources are limited, further inhibiting potential opportunities for collaboration:

I think the financial barriers are massive, the way things are paid for … they’re trying to set up clinics in primary care for the paediatricians to do, and they just can’t make the money work, because the lost revenue to the hospital is not paying for those appointments. (P8MP)

The complexity of funding within organisations and across health systems was seen to be a major barrier to collaborative working because it creates competition for limited resources.
**Discussion**

Using the lens of Whitchurch’s (2008) third space to explore boundary working has highlighted how PICH has enabled participants to engage in two types of spaces that could either facilitate or inhibit the development of intraprofessional collaborative practice. Educational spaces provided within PICH enabled collaboration, creating opportunities for partnership working and networking from a position of ‘professional neutrality’. Such educational spaces were thought by participants to foster collaboration through the development of ‘porous’ professional boundaries. One of the most influential aspects of the programme was that rigid boundaries were clearly overcome within the programme, and boundary work was desired by participants. As such, PICH constituted a third space for participants to talk about their approaches to, and experience of, providing care. These narratives became fuller and more nuanced as the diversity of the participants increased, and this provided the means for participants to develop collaborative relationships. In the third space of PICH, participants began thinking critically about how professional boundaries interlock and/or cross over between paediatrics and general practice, and how professional roles can become more blended, and demonstrated the characteristics of ‘blended professionals’ (Whitchurch, 2008).

PICH also afforded participants opportunities to engage in workspaces or real-world experiences within integrated care systems through the project work. By reflecting on experiences within these workspaces, participants identified structural factors which inhibit or reduce opportunities for collaboration. Participants identified a range of determinants inhibiting collaboration, including financial drivers, curriculum design and priorities. The influence of pervasive professional projects was particularly apparent, most notably the continuing influence of traditional professional hierarchies and stereotypes, which can perpetuate distinct professional identities despite the increasing influence of drivers requiring more flexible, adaptable ways of working (Griffin and O’Keeffe, 2020). San Martín-Rodríguez et al. (2005) argue that such factors fundamentally challenge collaborative practice and require further investigation to more fully understand their influence and how to mitigate their impact. Our findings therefore support claims made by Paradis and Whitehead (2018) that attempts to foster collaboration through education alone are likely to be unsuccessful, as collaborative relationships formed within educational interventions are typically unable to translate into practice. It should be noted, however, that the study took place in the context of doctors who were early adopters of collaborative practice. While the findings are therefore limited, they offer insights that raise important questions for practice, policy and research.

For educators and clinicians, our research questions the extent to which the knowledge, insight, attitudes and beliefs needed for collaboration that are developed in an educational space can be transferred into the workplace. Our analysis, however, suggests that it is crucial to recognise that an educational third space can facilitate boundary work and collaboration through communication; specifically, via discussion and sharing perspectives. Currently, workplace spaces inhibit such communication, and structural changes are clearly needed before boundary work can occur, supporting collaboration, and thus the provision of integrated care. It is necessary to transform workplace spaces into an unbounded space, which often poses a dilemma for educationalists as to how this can be achieved. Our research suggests that intraprofessional communication would be key, as it was clear that, for participants, ineffective communication between all involved in the delivery of care prevented the formation of new working relationships.

While the approach adopted by PICH has demonstrated that intraprofessional communication can be developed within unbounded educational spaces, participants clearly identified the structural factors inherent in workspaces that act as barriers to collaborative working. San San Martín-Rodríguez et al. (2005) called for professionals, managers and decision-makers to recognise the inhibiting influence of social, political and cultural factors on collaborative practice within health systems. But what if education programmes such as PICH were seen to be active partners in shaping how services develop through the process of preparing collaborative-ready health workers (WHO, 2010) to respond to such challenges? Postgraduate doctors in training are highly educated professionals who, when provided with educational spaces such as those developed by PICH, can identify issues that need to be addressed by the wider system for integration and collaboration to be feasible. As early career professionals, they have a vested interest in shaping service development. Repositioning educational programmes as initiatives that have the potential to inform service development could enable health system leaders to harness insights from early career professionals, ensuring that transformative work focuses on identifying and understanding structural barriers to collaborative practice and exploring ways to address such barriers.
including building educational third spaces within integrated care systems, enabling flexible adaptive professional identities to be developed.

**Third spaces: a model for collaborative learning**

Paradis and Whitehead (2018) argue that education alone cannot lead to sustained change. Our analysis of PICH suggests, however, that joint working between educators, programme participants and health system leaders could provide new insights that may help reduce barriers to the creation of unbounded workspaces, with educational processes exemplified by PICH beginning to broker boundaries so that learning and collaboration can be further enhanced. To conceptualise how the findings from our study could be applied in practice to facilitate boundary work in broader contexts, we have proposed a model for collaborative learning in third spaces (see Figure 2).

**Figure 2. Model for collaborative learning in third spaces (Source: authors)**

Our model is based on educational facilitators identified in our study. The findings from our study suggest that communication is central to boundary working. Our participants recognised the value of workplace-based learning with other disciplines in integrated care settings. Participants emphasised the importance of opportunities to develop personal relationships across disciplines, facilitating discussion of complex issues. Through these relationships, participants were able to gain better understanding of roles, professional identities and ways of improving practice, as well as potential constraints.

For communication and relationship building to occur, joint working and reflections on such experiences in a place of professional territorial neutrality is needed. In PICH, educational spaces provided neutrality, enabling GPs and paediatricians to develop networks and to begin to break down barriers between primary and secondary care. In this way, the educational spaces in PICH enabled boundaries to become ‘porous’, so that participants could engage collaboratively across integrated care systems. In a systematic review of studies of interprofessional collaboration in healthcare over the past two decades, Schot et al. (2020) found considerable evidence for the success of such modes of working. Two phenomena they report are of particular relevance to our purpose: the negotiation of overlaps in roles and responsibilities; and the creation of new spaces in which this can happen.

Our participants also identified significant barriers to boundary work: traditional inflexible professional identities remain, and they continue to be reinforced by siloed working; curricula continue to limit exposure to collaborative working; and inflexible financial systems, led by managers and commissioners, do not value the creation of opportunities for collaborative working, such as joint clinics. Recent research evaluating pilot integrated care programmes identified similar barriers to collaboration, including difficulty breaking down professional and organisational constraints, poor communication and financial challenges (Kozlowska et al., 2018; Lewis et al., 2021), as well as the need to enable systems leadership through engagement with professionals within integrated care services to promote change (Charles et al., 2021; Lewis et al., 2021).
In our model for third space learning, we propose that health system managers and leaders are invited into educational spaces characterised by professional territorial neutrality and shared workplace learning. In this way, our model could be a useful conceptual tool to inform the implementation of a fourth wave of education for collaboration, as proposed by Paradis and Whitehead (2018). By broadening educational spaces to include managers and health system leaders, boundary work could be extended and relationships built with those who could potentially influence barriers, as well as support participants to promote collaboration when they return to their own practice settings.

Lessons for practice

Our research suggests that: educational third spaces, where professionals from diverse backgrounds explore tensions, barriers and enablers through boundary work, can facilitate collaborative practice; effective intraprofessional communication is an essential prerequisite for the formation of new professional relationships required for integrated care; and repositioning educational programmes as initiatives that have the potential to inform service development could foster the formation of flexible adaptive professional identities that are required for collaborative working. We therefore suggest that our model for collaborative learning in third spaces could be a useful conceptual tool to apply in other practice settings and disciplines.

Funding

This research was funded by Health Education England.

Declarations and conflicts of interest

Research ethics statement

Ethical approval was provided by UCL Joint Research Office 8949/001.

Consent for publication statement

The authors declare that research participants’ informed consent to publication of findings – including photos, videos and any personal or identifiable information – was secured prior to publication.

Conflicts of interest statement

In a previous role at Health Education England, Catherine O’Keeffe was responsible for authorising the funding for this research, but did not have further involvement. For the remaining authors, there were no conflicts of interest. All efforts to sufficiently blind the authors during peer review of this article have been made.

References

Adams, K., Hean, S., Sturgis, P. and Macleod Clark, J. (2006) ‘Investigating the factors influencing professional identity of first-year health and social care students’. Learning in Health and Social Care, 5 (2), 55–68. [CrossRef]

Browne, A., Carpenter, C., Cooledge, C., Drover, G., Ericksen, J., Fielding, D., Hill, D., Johnston, J., Segal, S. and Silver, J. (1995) ‘Bridging the professions: An integrated and interdisciplinary approach to teaching health care ethics’. Academic Medicine, 70 (11), 1002–5. [CrossRef] [PubMed]

Charles, A., Naylor, C. and Murray, R. (2021) Integrated Care Systems in London: Challenges and opportunities ahead. London: The King's Fund.

Cubic, B., Mance, J., Turgesen, J.N. and Lamanna, J.D. (2012) ‘Interprofessional education: Preparing psychologists for success in integrated primary care’. Journal of Clinical Psychology in Medical Settings, 19 (1), 84–92. [CrossRef] [PubMed]

Evans, K. and Fuller, A. (2006) Improving Workplace Learning. London: Routledge.
Floyd, A. and Morrison, A. (2014) ‘Exploring identities and cultures in inter-professional education and collaborative practice’. Studies in Continuing Education, 36 (1), 38–53. [CrossRef]
Freidson, E. (1970) Professional Dominance: The social structure of medical care. New York: Atherton Press.
Gilbert, H. (2016) Supporting Integration Through New Roles and Working Across Professional Boundaries. London: The King’s Fund.
Gregg, G. and Magilvy, J. (2001) ‘Professional identity of Japanese nurses: Bonding into nursing’. Nursing & Health Sciences, 3 (1), 47–55. [CrossRef]
Griffin, A., Knight, L., McKeown, A., Cliffe, C., Arora, A. and Crampton, P. (2019) ‘A postgraduate curriculum for integrated care: A qualitative exploration of trainee paediatricians and general practitioners’ experiences’. BMC Medical Education, 19 (1), 8. [CrossRef]
Griffin, A., McKeown, A., Cliffe, C., Arora, A. and Page, M. (2017) Evaluation of the Programme for Integrated Child Health. London: RDME UCL Medical School.
Griffin, A. and O’Keeffe, C. (2020) ‘Learning to collaborate: Boundary work and contemporary approaches in interprofessional education’. In S. Alhuwalia, J. Spicer and K. Storey (eds), Collaborative Practice in Primary and Community Care. London: Routledge, 43–54.
Hall, J., Cohen, J.D., Davis, M., Gunn, R., Blount, A., Pollack, D.A., Miller, W.L., Smith, C., Valentine, N. and Miller, B.F. (2015) ‘Preparing the workforce for behavioral health and primary care integration’. The Journal of the American Board of Family Medicine, 28 (Suppl. 1), S41–S51. [CrossRef]
Kozlowska, O., Lumb, A., Tan, G. and Rea, R. (2018) ‘Barriers and facilitators to integrating primary and specialist healthcare in the UK: A narrative review’. Future Healthcare Journal, 5 (1), 64–80. [CrossRef]
Lewis, R., Checkland, K., Durand, M.A., Ling, T., Mays, N. and Smith, J.A. (2021) ‘Integrated care in England – What can we learn from a decade of national pilot programmes?’. International Journal of Integrated Care, 21 (4), 5. [CrossRef]
Lidskog, M., Lofmark, A. and Ahlstrom, G. (2008) ‘Learning about each other: Students’ conceptions before and after interprofessional education on a training ward’. Journal of Interprofessional Care, 22 (5), 521–33. [CrossRef]
Marshall, M. (1998) ‘Qualitative study of educational interaction between general practitioners and specialists’. BMJ, 316, 442–5. [CrossRef] [PubMed]
Meijer, L., de Groot, E., Blauw-Westerlaken, M. and Damoiseaux, R. (2016) ‘Interprofessional collaboration and learning between specialists and general practitioners during training: A qualitative study’. BMC Health Services Research, 16, 376. [CrossRef]
NCICS (National Collaboration for Integrated Care and Support). (2013) Integrated Care and Support: Our shared commitment. London: Department of Health.
NHS (National Health Service). (2014) NHS Five Year Forward View. London: Department of Health.
NHS (National Health Service). (2017) The Future of the NHS: Delivering the Five Year Forward View and next steps for policy. London: Department of Health.
Owen, D. and Lewith, G.T. (2004) ‘Teaching integrated care: CAM familiarisation courses’. Medical Journal of Australia, 181 (5), 276–81. [CrossRef]
Paradis, E. and Whitehead, C.R. (2018) ‘Beyond the lamppost: A proposal for a fourth wave of education for collaboration’. Academic Medicine, 93 (10), 1457–63. [CrossRef] [PubMed]
San Martín-Rodriguez, L., Beaulieu, M.D., D’Amour, D. and Ferrada-Videla, M. (2005) ‘The determinants of successful collaboration: A review of theoretical and empirical studies’. Journal of Interprofessional Care, 19 (Suppl. 1), 132–47. [CrossRef]
Schot, E., Timmers, L. and Noordegraaf, M. (2020) ‘Working on working together: A systematic review on how healthcare professionals contribute to interprofessional collaboration’. Journal of Interprofessional Care, 34 (3), 332–42. [CrossRef] [PubMed]
Suter, E., Arndt, J., Arthur, N., Parboosingh, J., Taylor, E. and Deutschlander, S. (2009) ‘Role understanding and effective communication as core competencies for collaborative practice’. Journal of Interprofessional Care, 23 (1), 41–51. [CrossRef]
Tresolini, C.P., Shugars, D.A. and Lee, L.S. (1995) ‘Teaching an integrated approach to health care: Lessons from five schools’. Academic Medicine, 70 (8), 665–70. [CrossRef]
Weisz, G. (2003) ‘The emergence of medical specialization in the nineteenth century’. Bulletin of the History of Medicine, 77 (3), 536–75. [CrossRef] [PubMed]
Wenger, E. (1998) Communities of Practice: Learning, meaning, and identity. Cambridge: Cambridge University Press.
Whitchurch, C. (2008) ‘Shifting identities and blurring boundaries: The emergence of third space professionals in UK higher education’. Higher Education Quarterly, 62 (4), 377–96. [CrossRef]
Whitchurch, C. (2009) ‘The rise of the blended professional in higher education: A comparison between the United Kingdom, Australia and the United States’. Higher Education, 58 (3), 407–18. [CrossRef]
Whitchurch, C. (2012) Reconstructing Identities in Higher Education: The rise of ‘third space’ professionals. Hoboken, NJ: Taylor and Francis.
WHO (World Health Organization). (2010) Framework for Action on Interprofessional Education and Collaborative Practice. Geneva: WHO.
Zoberi, K., Niemiec, R.M. and Margolis, R.B. (2008) ‘Teaching integrated behavioral health in a primary care clerkship’. Medical Teacher, 30 (7), e218–e223. [CrossRef] [PubMed]