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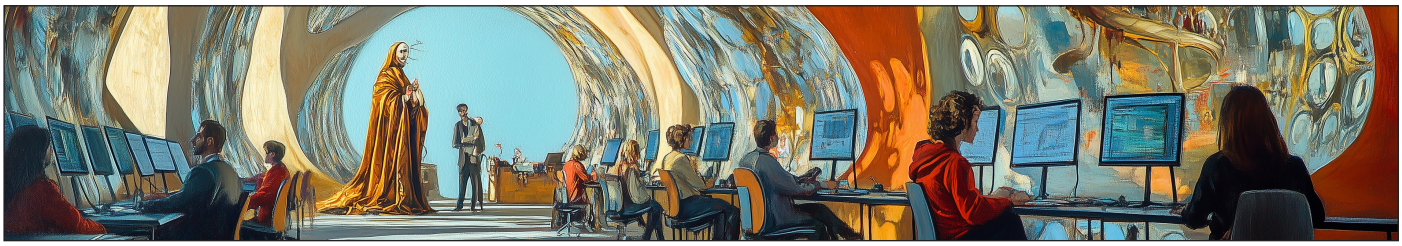

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Digital collaboration tools to support and enhance student belonging: A UK EAP perspective

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EAP; communities of practice; online collaboration tools; inclusive pedagogy

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Abstract

This study investigates, through the application of surveys and semi-structured interviews, how English for Academic Purposes (EAP) instructors in United Kingdom (UK) universities utilise a range of digital collaboration tools, such as virtual classrooms, platforms, forums and apps to enhance collaboration and engagement and ultimately engender a sense of belonging among linguistically and culturally diverse EAP student cohorts. The findings demonstrate how EAP teachers currently integrate these tools into their practice to meet specific academic and linguistic needs. A brief set of general recommendations for teachers is then offered to further enhance student belonging through the flexible integration of technology into everyday practice, focussing on the need for more training, the effective exploitation of existing technologies and brave experimentation with new technologies. This research not only advances the discourse on digital pedagogy within EAP but also provides actionable insights for educators in a wide range of fields who seek to create inclusive learning environments using institutionally mandated digital tools or those of their own choosing.

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1. Introduction

The global emergency caused by the Covid-19 pandemic of 2019-2022 necessitated the adoption of online, distance learning and thus the adoption of technology-enhanced curriculum delivery by teachers everywhere. University educators found themselves having to rapidly adapt to an influx of new, sometimes unfamiliar devices, platforms, programmes and apps.

This was no different in the field of English for Academic Purposes (EAP), described by Hamp-Lyons (2011, p. 89) as a sub-discipline of English for Specific Purposes (ESP), which "facilitates learners' study or research through the medium of English". EAP instructors, as with other university instructors, were obligated to incorporate technology in many forms into their daily practice. This ranged from a heavier emphasis on the importance of Virtual Learning Environments (VLEs) such as Moodle and Blackboard, to adopting new communication tools such as Zoom, often mandated by the constraints of their institution or course provision. Teachers also often saw fit to bring their own preferred tools, platforms and apps into their practice to enhance curriculum delivery and the student experience.

This sudden growth in technology use in teaching and learning also altered the way teachers maintained and developed teacher-student relationships. Teachers in all subject disciplines had to reconsider how to master the integration of students of different backgrounds, skill levels and learning preferences into a cohesive unit, or what Lave and Wenger (1991) term a "community of practice" (CoP), studying the same subject by dint of regular interaction and collaboration. In this changed environment, teachers have had to re-evaluate how to "take the class with them" ensuring a safe, inclusive learning environment in which students are empowered to produce their best work, always mindful of the fact that, as Freeman et al. (2007) state, those who feel that they belong perform better academically than those who do not.

In my own professional capacity as an EAP instructor, I have noticed the increasing use of technology in EAP and the increase in the prevalence of distance instruction in the field and have wondered how this might affect traditional classroom dynamics. As such, a focus on generating and maintaining cohesiveness and belonging using digital tools and online spaces felt like an area worthy of exploration and ultimately led to the formulation of the following research question:

1. How do EAP teachers in UK universities use online spaces and digital collaboration tools for learning to foster belonging in student communities of practice?

2. Theoretical framework

Communities of Practice (CoP) is practical manifestation of Lave and Wenger's 1991 Situated Learning Theory (SLT), which suggests that learning is an emergent phenomenon that occurs through community participation, identity development and the opportunity to build belonging (Handley et al., 2006). CoPs are described by Wenger simply as "groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly" (Wenger-Trayner, 2015, p. 1).

In the context of EAP, it is debatable to what extent students within the specific CoP of a class or cohort exhibit or share a "passion", but Eckert (1992, p. 35) has broadened the definition of CoP to centre around a shared common activity. She defines a CoP as "an aggregate of people coming together around a particular enterprise". In this sense, EAP student cohorts can be positioned as CoPs as they are drawn from a wide range of backgrounds and experiences and have come together with the express purpose of improving their academic English skills to be able to enter higher education in English speaking countries.

Smith et al. (2017) note that CoP theory has evolved to encompass a range of key concepts, including belonging, domain, community, practice, participation and reification among others. While each of these concepts is significant, the scope of this paper is limited to the specific concept of belonging in EAP CoPs.

According to Wenger (1998), belonging is developed within a CoP through the "dynamic combination" of three modes of identification:

- Engagement – doing things together, talking, producing artefacts.
- Imagination – reflecting, constructing an image of the practice and its members and seeing self as one of them.
- Alignment – following directions, aligning self with expectations/standards, coordinating actions towards a common goal.

In an EAP context, fostering engagement might include the physical, time-bound work performed in class and at home, such as brainstorming, seminar discussions and collaborative work in groups.

Developing imagination may consist of such activities as reflective writing, creative cross-cohort or disciplinary projects or creative work. Wenger (1998) posits that reflection is a key part of fostering imagination, as it allows participants to step back and understand their role within the CoP, understand how their own personal development aligns with the goals of the group, and think creatively about how they can apply their own skills for the benefit of the cohort.

Engendering alignment involves students identifying and then coordinating themselves with the rules, expectations and standards of the EAP cohort, or in many cases the institution to which they belong, in order that they assist in the collaborative aims of reaching a common goal, such as finishing a piece of work or successfully completing a course of study.

All three of these 'modes' must be fostered by teachers and then enacted by cohort members for a sense of belonging to prevail within the group. Indeed, Wenger (1998, p. 183) asks:

> Given a community, one might wonder what the possibilities for mutual engagement are, what material supports imagination, and how alignment is secured.

However, the advent of internet technologies, combined with the impact of the Covid-19 pandemic, has meant the traditional pathways to student belonging within EAP CoPs have evolved and changed, as the shared common practices of the typical EAP cohort, are, according to Kirschner and Lai (2007) these days increasingly likely to be conducted (at least in part) in a virtual space. Hoadley and Kilner (2005) remind us of the importance that technology now plays in supporting the development and operation of CoPs. It has been my experience that EAP teachers have now begun to understand the importance of technology and how it can be integrated into practice to the benefit of developing a sense of community amongst their cohorts.

Technology, too, may directly impact some of the concepts in CoP theory. For example, Lave and Wenger (1991) present what they refer to as "legitimate peripheral participation" (LPP) whereby new CoP members begin at the periphery of the group, watching and learning by undertaking small, low risk tasks. Over time, their participation, acceptance into the group, sense of belonging and thus learning increases. Technology such as social media apps, and Virtual Learning Environments (VLEs) may have the capacity to influence LPP, either speeding it up or in some cases, reshaping the dynamics and power structures within CoPs entirely.

The aim of this study is to investigate the practical question of how Wenger's modes of belonging are now being achieved using technology within EAP cohorts or classroom contexts.

3. Literature review

3.1 Inclusion criteria

The literature search for this study was undertaken using the following databases: Onesearch Lancaster database and Google Scholar. Several Boolean operators were developed from the keywords in the research question. These included "EAP teachers" AND "UK universities" AND "digital collaboration tools", "English for Academic Purposes" AND "digital tools" AND "fostering belonging", and "EAP" AND "digital collaboration" AND "student communities of practice" were applied to ensure databases were searched thoroughly. The searches returned 72 papers that were considered relevant by their titles. The abstracts of these papers were then read and those with a close bearing on the topic of the paper were assembled into a collection in an online reference management system. Only sources in English were consulted and no parameters in terms of publication date were applied as older research on belonging in education was also deemed generally relevant to this study. The final number of papers consulted for this study was 34.

3.2 Sense of belonging in educational settings

An initial emergent theme from the literature was the impact of sense of belonging on academic performance and achievement. As previously alluded to, a sense of belonging is a critical element that teachers must foster to maximise self-confidence, worth and ultimately learning within their student cohorts. This is supported by Bruce and Young (2011) who emphasise the importance of students feeling a sense of psychological closeness to better prepare them for active, online learning.

One potential barrier to connectedness and a prominent theme itself in the literature was the challenge in negotiating conflicts between participants' backgrounds and their new lives in UK academia. Typically, EAP cohorts are drawn from diverse international backgrounds and are often away from home for the first time, studying and meeting people in a strange place in their second or even third language. This diversity is undoubtedly a strength but can also lead to problems. Handley et al. (2006) point out that for a coherent sense of self to be achieved, individuals must negotiate and reconcile differences in their personal workplace, social and

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familial histories with where they may find themselves living and studying. For some, this negotiation and transition may be straightforward. However, others may encounter a range of barriers leading to conflict, both from within and from the system they find themselves in. Thompson (2022) points out that it is not uncommon for EAP students to view themselves as peripheral and endure a sense of marginalisation in comparison to home students or those already accepted onto full-time degree courses. Thompson goes on to point out that in some universities, the participants on EAP programmes are even forced to use separate academic and counselling services to other students, further exacerbating a sense of distance and separation. It has been my experience too, that students on EAP courses do not often view themselves as an integral part of the university or on 'real' courses, and are sometimes acutely aware of their own lack of proficiency in the host country's language of study and the barriers to success that lie before them.

Another hurdle which some EAP students may need to overcome is the sensation of isolation and alienation engendered by learning in online or blended settings compared to face-to-face learning. This feeling of distance and separation is likely felt by a wide swath of learners but may be felt more acutely by EAP students far from home, without a community 'on the ground'. Baxter (2012) reports on the feelings of loneliness and alienation EAP students experience in what can be an unfamiliar online learning space. Furthermore, students forced to work at home, alone, for example during the pandemic, or on blended modules, without immediate, on-hand support were in danger of succumbing to loneliness, lack of motivation and a range of other potential distractions to learning and developing a sense of belonging.

Several studies presented solutions to these problems and commented on ways to overcome hurdles to integration and belonging. Bower et al. (2014, p. 267) posit that social and emotional connectedness and in turn, belonging "need to be actively encouraged and fostered, especially in a blend of learning environments" common to many modern institutions. This can be done by ensuring that positive connections and relationships with tutors exist (Cowan and Peacock, 2019). If these conditions are met, they go on, then academic, personal and professional goals are also more likely to be met. Granted, this may be difficult in context with large cohorts, where tutors struggle to carve out time to develop relationships with students over the span of a short course, however there are certainly things teachers can do it enhance positive connections in a holistic fashion. Cowan and Peacock (2019) list some useful, practical ways that teachers can actively foster belonging within student CoPs. These include but are not limited to: Emails/messages to students, forum posts, supportive videos, feedback/forward, prompting, scaffolding, anticipating needs before they arise, and commending good work. Bertacco (2020) points out that in her own personal experience, belonging and group sentiment was fostered both within and outside of the parameters of the classroom but that it was predominantly achieved by the teachers themselves endeavouring to create a welcoming classroom environment. The emphasis here seems to be on the teachers themselves to 'go the extra mile' to develop group belonging and sentiment.

3.3 Use of technology in EAP

3.3.1 Use of tech in the classroom

Much of the literature focussed on how EAP teachers are using and integrating technology into their practice. Most EAP instructors would now likely agree with Wang and Vasquez (2021), who point out that technology can be beneficial to EAP learning in a range of ways, from increasing exposure to English input to providing authentic interaction opportunities and student-controlled, self-paced learning. For example, Dhillon and Murray's 2021 study of technology in use by EAP teachers discovered that EAP instructors used both videos and VLEs to positively augment their practice. Darabi and Jin (2013), however, suggest that VLEs should be used with caution as their excessive use can overwhelm and confuse students, leading to them wasting time attempting to understand participation rules and requirements, rather than focusing on learning per se.

Collaboration tools also play a part in the technology use of EAP teachers and can offer significant advantages, such as helping EAP students write to a higher standard and feel more of a sense of community both in and out of the classroom Li (2018). Walsh (2017, p. 126) states "in tasks involving the collaborative quiz tool Kahoot!, engagement levels of students dramatically increased…and…the teacher was afforded instant feedback possibilities". Allison and Hudson (2020) focus on the usefulness of the business communication platform Microsoft Teams in their own practice, by stating that "MS Teams and its applications would become essential tools…which enabled me to quickly convert the classroom activities to interactive tasks that could be shared, discussed and managed in one place."

3.4 Attitudes and fears around technology

Dashestani (2019) highlights the lack of existing research that analyses EAP instructors' perspectives on the pros and cons of technology use on EAP courses. What literature does exist literature confirms that most EAP teachers in modern university settings understand the necessity and impact of integrating technology into practice and at least some of the benefits that it can bring. Lawrence et al. (2020) found that 95% of EAP teachers indicated that the use of technology can significantly enhance EAP programs in various ways, such as promoting student collaboration and interaction, increasing exposure to multimodal language use, and strengthening student engagement.

Despite this apparent willingness to adopt technology into practice, the literature also suggests that EAP teachers appear to be unsurprisingly judicious when it comes to selecting precisely the tools they use in class. This can sometimes be to the extent, as Love (2020, p. 1) states, that "teachers' incorporation of technology into English for academic purposes courses (EAP) courses is fraught with complexity" and can be greeted with an abundance of caution. This is supported by Kohnke and Zou (2012), who suggest that EAP teachers are generally conservative when it comes to selecting the tools they use, making sure the technology they use coincides with their perspectives and beliefs on effective teaching and learning. This may be because instructors wish to see technology used purposefully, in a goal-oriented manner. Indeed, Lawrence et al. (2020), point out that dissatisfaction amongst EAP professional arose from technology being employed without a clear purpose or objective, along with worries about its superficial or 'gimmicky' use.

A repeated theme from the literature was the fear among teachers that the use of screens, apps and devices removes the "personal" element from the classroom and serves to disrupt traditional models of student-teacher interaction and relationship building. Lawrence et al. (2020, p. 111) provide evidence from an EAP teacher who suggests that an overreliance on technology tends to place too much emphasis on reading and writing skills in favour of working on essential EAP skills such as listening and speaking. Vasilipolous (2022) agrees, explaining that a common sentiment amongst EAP teachers was that technology and online teaching could not adequately replace the fundamental element of face-to-face interaction crucial to language learning success. From this, we can infer that EAP teachers may initially, given the wrong training or opportunities to experiment with technology, view the use of technology in class as one-dimensional and lacking in the provision of oral language practice, student interaction and discussion.

3.5 The importance of training

It has been my own experience that EAP teachers often cite a lack of training as a reason to not implement new technologies into their practice. Lawrence et al. (2020) also suggest that some EAP instructors cite a lack of time and familiarity for their reluctance and lack of "vision" in how to integrate technology into the classroom and how to use technology to the benefit of their student cohorts. Hudson (2023, p. 1) points out that "as reported in many studies… gaining appropriate training is crucial as it enables teachers to gain confidence in using new technology, familiarity with the new software and skills to incorporate these digital tools into their lessons." It is true that while training on certain technological platforms or software can be of benefit, it is also undoubtedly the case that EAP teachers can often be more proactive in their own adoption of new technology and its possible applications in their classroom practice.

The literature outlines the fact that fostering a sense of belonging through inclusivity and positive relationships is essential for the academic success and well-being of EAP students, who face cultural and linguistic differences, isolation in online learning environments, and separation from mainstream academic services. To achieve this, technology must be properly integrated into EAP settings, as it offers significant benefits such as promoting collaboration, interaction, and multimodal language exposure.

4. Research design

4.1 Positionality

The key philosophical assumption which guides this study is constructivist and aligns with Merriam (1998, p. 6) who states that "reality is constructed by individuals interacting with their social worlds". It follows that in terms of the author's epistemological view, the paper is written from an interpretivist perspective, with the belief that individuals assign meaning based on the specific context they find themselves in. The author is concerned with understanding the context in question through the perspective of the participants and the meanings and understandings they apply to their own situations.

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4.2 Methodology

A case study design for this study was selected for the rich and detailed perspective it can provide on a given context. As Merriam suggests, case studies are an excellent design choice as they are:

1. Particularistic, focusing on a particular situation, event, program, or phenomenon.
2. Descriptive, yielding a rich, thick description of the phenomenon under study and
3. Heuristic, illuminating the reader's understanding of phenomenon under study.

This study deployed both semi-structured interviews and surveys, which enabled me to glean deeper insight into my research questions from a wider variety of participants. As regards multiple data sources, Yin (2009, p. 156) states, "no single source has a complete advantage over all the others. In fact, the various sources are highly complementary, and a good case study will therefore want to rely on as many sources as possible". Collection of data from multiple sources also allows triangulation of findings, which Merriam and Tisdell (2016) state increase both validity and reliability of the case study.

4.3 Data collection and participants

To recruit survey participants, I posted on the British Association of Lecturers in English for Academic Purposes (BALEAP) discussion forum, which resulted in 33 survey responses from EAP professionals across various UK higher education institutions (Table 1).

Respondents were surveyed on 20 questions (see Appendix A) which gathered both demographic data, as well as answers to several open-ended questions pertaining to EAP instructors' use of technology in the classroom and their views on fostering a sense of belonging amongst student groups. For example, respondents were asked how they "encourage EAP students to contribute to online discussions and collaborate online with their peers". The responses were provided in long form and selected answers are reproduced in the 'findings' section of this paper. The final survey question asked whether respondents would be open to being interviewed in the following stage of the data gathering process. All participant data was managed as per standard ethical practices and codes of conduct. Participants were required to sign a form consenting to the use of their data beforehand and this data remained confidential throughout the process.

Of those who consented to be interviewed, four respondents were chosen as interview participants, where a new set of questions (see Appendix B) was posed to draw out further detail on what was included in the survey. Ultimately, only three candidates were interviewed due to scheduling issues with candidate four (Table 2).

The interviews took place online via Zoom at a mutually convenient time and lasted between 30-40 minutes each, taking place over the course of a week. They were first recorded on Zoom and then directly transcribed using Zoom's transcription function to ensure the process was as smooth and simple as possible (see Appendix C). For the purposes of this paper, "respondents" will be used to refer to responses from the survey, while "participants" will be used to refer to interview responses from teachers directly interviewed.

4.4 Data analysis

The data, once transcribed, underwent manual thematic analysis to uncover key commonalities and approaches to respondents' application of technology in their classroom practice. It was felt that, for the relatively limited quantity of data gathered and for the fact that the context of the study is highly familiar, manual coding was the best approach to get a better 'feel' of fellow professionals' responses. As Saldana (2021) suggests, "there is something about…manual coding…that gives you more control over and ownership of the work".

Once the response data was analysed and codes were assigned, such as 'feedback', 'group work', 'assessment', 'personalisation', 'creativity' and 'multiple platforms', I took the three modes suggested by Wenger's 1998 framework pertaining to belonging; engagement, alignment and imagination and underwent a process of mapping the emerging codes onto whichever of Wenger's modes was most applicable.

For example, themes around 'group work' in the data have been classified as pertaining to 'alignment' (coordinating actions towards a common goal), while 'creativity' and the reflective activities outlined by respondents was positioned under 'imagination'. The overarching aim was to understand how actual EAP practice aligns with Wenger's framework.

Table 1. Respondent Demographic Data

Respondent	Age	Gender	Qualification	Role	EAP Experience
1	45-54	Female	MA	EAP Course Leader	1-5 years
2	35-44	Male	PhD	Lecturer	6-10 years
3	45-54	Male	MA	Humanities tutor	6-10 years
4	55-64	Female	MA	EAP Course Leader	16 years' +
5	25-34	Female	BA/BSC	English Teacher	1-5 years
6	65 +	Male	MA	Teacher	16 years' +
7	35-44	Male	MA	EFL tutor	6-10 years
8	55-64	Female	MA	Student Achievement Tutor	6-10 years
9	45-54	Male	Diploma	EAP tutor	6-10 years
10	25-34	Female	MA	EAP Tutor	1-5 years
11	55-64	Female	MA	Senior Language Tutor	1-5 years
12	45-54	Female	MA	Programme Leader	16 years' +
13	45-54	Male	MA	Teaching Fellow in ESOL	6-10 years
14	35-44	Female	MA	Hourly Paid EAP Lecturer	16 years' +
15	35-44	Female	BA/BSC	EAP Tutor	1-5 years
16	35-44	Male	MA	Senior Lecturer	6-10 years
17	55-64	N/A	MA	E teaching fellow	16 years' +
18	45-54	Male	BA/BSC	Associate Lecturer	1-5 years
19	55-64	Female	PhD	EAP tutor	16 years' +
20	35-44	Female	MA	Lecturer	6-10 years
21	55-64	Female	PhD	Part-time lecturer	11-15 years
22	55-64	Female	PhD	EAP Lecturer and Examiner	16 years' +
23	35-44	Male	MA	Programme Leader English	1-5 years
24	55-64	Female	MA	Lecturer	1-5 years
25	45-54	Female	MA	E-Learning Coordinator	6-10 years
26	45-54	Female	MA	EAP tutor	6-10 years
27	35-44	Female	PhD	Head of International College	11-15 years
28	45-54	Male	PhD	EAP tutor	6-10 years
29	45-54	Female	MA	Teaching Fellow	16 years' +
30	35-44	Female	MEd	EAP Tutor	6-10 years
31	45-54	Female	MA	EAP and Study Skills Tutor	6-10 years
32	35-44	Female	MA	EAP lecturer	6-10 years
33	55-64	Male	BA/BSC	Pre-sessional Teaching Fellow	6-10 years

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Table 2. Interview Participants

Interview Participant	Role	EAP Experience	Male/Female
1	EAP Teacher	1-5 years	F
2	EAP Tutor	1-5 years	F
3	EAP Course Leader	16+ years	F

5. Findings

5.1 General technology use in class

The survey demonstrates that, despite some of the reservations outlined in the literature review of this paper, respondents appear to be both willing adopters of new technology as well as proponents of the positive impacts it can make in classroom settings. 60% of respondents use technology in every class session and 34% use it in most lessons. The extent to which respondents believe the adoption of technology in the classroom to be important is borne out by the statistic that 65% of those surveyed explicitly set aside either class time or time after class to train students in the use of collaboration and networking tools.

5.2 Collaboration tools

Survey data indicates that Microsoft Teams is the most widely used collaboration tool amongst respondents, with over 85% having used Teams in their teaching for varied purposes. One survey respondent indicated that they "use Teams for group writing and live feedback (from Teacher or Peer Review)." Zoom is also used by respondents for synchronous group discussions which can then lead to peer or teacher feedback sessions.

The collaborative web platform Padlet and game-based learning platform Kahoot! were the second most commonly used applications for collaboration according to survey data. Just over 70% of respondents stated that they had used either Padlet or Kahoot! in their teaching and suggested that these tools had both pedagogical benefits as well as entertainment value. Multiple responses indicate the benefits of Padlet for simultaneous collaboration, including brainstorming and group writing activities. Kahoot! is most often deployed by EAP teachers for its main purpose - quizzes. Other collaborative tools employed by respondents included MS Forms, trivia site Quizit and messaging app WhatsApp which was used for group work and collaboration. VLEs, such as Moodle and Blackboard are sometimes used for collaborative purposes according to those surveyed, with teachers asking students to write responses to posts or videos posted on the VLE.

5.3 Social and networking tools

Overall, the use of social media apps and networking tools was fairly limited amongst respondents. Only 5% of those surveyed used WhatsApp with their students, and the prevalence of other apps was even lower, with only 1% of respondents using Facebook and LinkedIn in their sessions. Several respondents did use the Chinese instant messaging app WeChat to tap into existing channels of communication between students on their often-majority Chinese cohorts. Some respondents acknowledged however, that this may have been to the detriment of students from other backgrounds who do not use WeChat.

Analysis of long form survey answers suggests that YouTube was a common website used in classes for showing videos and highlighting or helping to explain certain concepts. It was also used for entertainment or ice-breaking purposes in several instances. Some teachers also integrated it into group tasks and required their cohorts to view YouTube videos at home, sometimes embedding them into their VLEs.

5.4 VLEs

Both Blackboard and Moodle featured heavily in both survey and interview responses with most institutions employing one or the other. This was mainly done, according to one respondent, to "make announcements and inform students about the activities of the upcoming week" and to preserve the formality of the course by maintaining a central location for both students and teachers to access key course documents and guidelines.

Participants explained how they used Blackboard to share links with students to create a sense of consistency and to try to engender habitual checking of work and instructions on

the VLE. Students required some specific tutelage in the use of VLEs once they had joined their EAP courses and one respondent took the chance to repeatedly explain the workings of their particular VLE for the benefit of the students. In several cases, respondents made it clear that students did not check the class VLE on a regular basis and so resorted to email as the most effective direct channel to students.

6. Discussion

It is clear that UK EAP professionals employ a wide range of technologies. The discussion section will now focus on illuminating how these collaborative technologies are harnessed to enact Wenger's modes of belonging in everyday teaching practice.

6.1 Engagement

6.1.1 Collaboration

While Lawrence et al. (2020) suggest teachers are wary of what could potentially be viewed as 'gimmicky' technologies, a great emphasis was put by participants on the use of interactive apps and programmes to foster collaboration. This could be viewed as a response to the fears outlined in the literature of screens, apps and devices removing the "personal" element from learning. As previously mentioned, tools such as Zoom, Google collaboration applications like Jamboard, MS Teams, and others are utilised for their intended purposes—group work and collaboration. One practice mentioned by a respondent involved "asking students to write summaries of their working process and then comment on each group's process as a way of developing the students' ability to work in groups." This highly reflective activity promotes critical thinking and enhances collaborative skills among students.

Another respondent explained how they managed collaboration across a large cohort of students using Teams by creating a "collaborative doc on Teams…allowing 240 students across four sessions to access the doc and compare answers within five disciplinary programmes." This highlights the usefulness of applications such as Teams in providing shared spaces for students from varied disciplines to contribute from a distance and has the added benefit of allowing students to feel belonging to part of something bigger than just their own cohort. This practice transcends temporal boundaries, and contrasts with the typically temporary nature of most technological tools.

Despite Cowan and Peacock (2019)'s assertion in the literature that VLEs can be used to practically enhance student belonging through the use of forum posts, supportive videos and providing feedback, VLEs were not used frequently by respondents for collaborative purposes, as they were deemed "overly formal" and insufficiently agile and easy to access for quick, shared collaborative activities. Teachers seemingly chose apps and platforms with which they were familiar and then decided how best to apply them to their classroom practice.

6.1.2 Feedback and assessment

The use of Microsoft Teams as a method of providing live feedback on presentations and group work tallies closely with what Walsh (2017) asserts in the literature about the power of Teams to provide immediate feedback and the potential of this to increase student engagement. Furthermore, the interactive nature of Kahoot! quizzes, framed as both a learning check and self-assessment tool, adds an element of engagement and enjoyment, promoting active student participation. One survey respondent explained how they used often used Kahoot! in class to "check for learning and for self-assessment."

The apparent preference for tools like Padlet and Microsoft Teams over institutional VLEs such as Moodle and Blackboard suggests that less formal, more flexible, and student-oriented platforms are deemed more effective in fostering a vibrant community of practice within the EAP context, particularly when providing ongoing, informal assessment and feedback that is not considered 'high stakes'. One respondent pointed out that it was important to ensure that clear boundaries were preserved to ensure peer feedback on electronic platforms remained supportive.

6.2 Imagination

The use of social media and related apps by respondents highlights their effectiveness in fostering imagination and creativity. Various respondents shared their experiences of using these tools to enhance the reflective practices of students, which, according to Wenger (1998) is a key component of fostering belonging through imagination.

Several respondents discussed their use of Padlet for creative assignments, with one stating that "I've used Padlet for reflective work, where reflections were in both written and video format." Another respondent highlighted the value of writing apps, stating, "students use these spaces to share text and to reflect." This use of digital spaces for creating, sharing and reflecting suggests that these tools

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not only facilitate collaborative learning but also support students in developing their reflective abilities. Participant 2 suggested that adapting her approach to meet students' own experience of using technology, such as Tik Tok and YouTube for content consumption and creation was important. She assigned a variety of tasks to students, such as finding a person on YouTube from their home country who shares their L1 (first language) but speaks English to a high level. Students were then encouraged to share the video link and say what they like about how the person speaks. Participant 2 also designed a task to help students learn citation skills: "Instead of doing a presentation, they're doing it like a social media video. Because I know when I watch TikTok I see people discussing academics. And they will cite things by having like a screen capture of the article…so, it's basically citing something. So, I'm getting them to make that instead."

One participant highlighted how blogs were used to foster imagination through reflection, describing a structured reflection activity whereby "students have to write a reflective blog post and they have to read the posts of others in order to complete later tasks in later weeks of the programme (which ultimately contribute to assessment even though they are not themselves assessed items)." This iterative approach provides ample time for student reflection, aids in learning and ultimately helps them understand and appreciate their positions within the cohort and the broader institutional context.

6.3 Alignment

Wenger's mode of alignment signifies an understanding of norms and guidelines and a willingness to adapt behaviours to align oneself with the values of the group. Two distinct forms of alignment emerged from the findings; peer alignment, in which technology was used to encourage group cohesion between student members of the cohort and institutional alignment, whereby technologies were used to secure adherence to institutional norms and regulations.

6.3.1 Peer alignment

To secure peer alignment, multiple respondents allowed students to use their own apps such as the Chinese messaging service WeChat. It was clearly felt by some respondents that, as students were already familiar with the app and had formed working groups, mandating a new app for students to use would be counterproductive and time consuming. This approach allows students to address the issue that Handley et al. (2006) raise about negotiating and transitioning from their home lives to their new ones abroad. It also allows students from the outset to "see themselves as part of a community". The use of familiar collaborative messaging platforms aids in the "legitimate peripheral participation" (Lave and Wenger, 1991) of the students as they moved from the boundary of the CoP to the centre more quickly than they would have done if forced to use new, unfamiliar technology with the cultural and linguistic support of those from their own background.

Leigh (2015, p.6) highlights how active Chinese students already are on WeChat and QQ (a similar Chinese messaging app) before they arrive in the UK and talks about how "some of the students mentioned that, through QQ, they had already connected with some of their Chinese classmates before arriving to the UK; helping them to deal with some of the pre-arrival anxieties such as how to find their accommodation and how to travel from the airport."

6.3.2 Institutional alignment

Institutional alignment is promoted predominantly using official university-mandated channels such as Moodle, Blackboard and email. To ensure what Wenger calls "constructive alignment", defined by Biggs (2003) as a clear statement of intent on the behalf of teachers before teaching commences, regarding what students should learn, how they should express their learning, how they can optimise their chances of successful learning and how they will be assessed, VLEs and official channels such as forums are used as a 'first port of call' or a 'jumping off point' by teachers. Here, they lay out course rules, policies, expectations and outlines. These then act as an anchor point during the course, to which students can be referred if necessary. Participant 3 stated that they "would generally for the first few weeks start every class and every module by going to the Blackboard page and just reminding students of what's on there and showing them the different tabs and where to find the assessment dates and where to find the class materials and that kind of thing." Another respondent explained that they found that learner training on "how to use forums effectively and collaboratively and respectfully and being clear about the intended learning outcomes" was required.

What is clear, though, is that some students appear to struggle with both the concept and use of VLEs, particularly if they are from backgrounds where the use of these is not common. This aligns with Darabi and Jin's (2013) findings on the use of VLEs being in some instances detrimental to learning and the classroom dynamic. To remedy this issue, teachers have been forced to conduct in-person, whole cohort training on the use of VLEs and in some cases, conduct one-to-one explanations of their use. Participant 3 recounts how "we had an induction week and at the end of

the induction week the head of centre would lead a session where he showed them how to access their timetables and then just talk them through the basics of blackboard." Alternative forms of formal communication included emails and a blend of digital and face to face transmission of course rules and expectations which some respondents felt to be more effective in securing attention and buy-in from students.

7. Conclusion and recommendations

Respondents use a range of collaboration tools such as Microsoft Teams, Padlet and Kahoot! to facilitate group activities, give feedback and create shared spaces for collaborative learning opportunities to take place. It is apparent that many respondents choose to utilise less formal and more flexible and familiar applications over traditional, mandated VLEs for creative collaboration and engagement purposes. This, I believe, highlights a shift towards a more student-centred approach to technology use in the EAP classroom that ties in with a more natural and informal approach to community building and belonging making. The use of social media apps such as WeChat and WhatsApp underscores the importance of using familiar channels to build legitimate peripheral participation and allow students to move to the 'centre' of the CoP should they so choose. Using such apps also allows students to stay on the edge of the CoP, providing opportunities for involvement in the CoP from distance and in an asynchronous manner. The fact that students' existing use of technology is acknowledged and accommodated, especially that of a subsection of international students (Chinese) further contributes to students being able to feel part of the CoP, right from the beginning of the course or even before arriving to the UK. In terms of institutional alignment, VLEs are still seen to be pivotal in creating alignment with courses and institutions and disseminating rules and expectations to students rather than tools to be used creatively in the classroom.

While there were several limitations to this study, including the relatively modest number of participants interviewed, I believe the data provides enough scope to provide some concrete recommendations to enhance how UK EAP instructors (and teachers in other fields) can enhance belonging amongst their students:

1. Embrace and Experiment with Technology

It is recommended that teachers experiment with technology more to maximise its collaborative benefits. The wide variety of available apps and programs now available offers significant potential for fostering a sense of community. Teachers are encouraged to try new apps and websites, particularly tools that enhance speaking and listening. Such engagement can help create more interactive and inclusive classroom environments and is crucial for helping students feel connected and supported.

2. Incorporate Reflective Activities

Reflective activities should be integrated more frequently into wider teaching practice. Although some respondents already use reflective teaching methods, incorporating these activities more broadly can provide students with the opportunity to understand their own learning journeys. This reflection not only aids academic development but also fosters a deeper connection to the learning community, promoting a stronger sense of belonging as students come to terms with their roles in the CoP.

3. Utilise Virtual Learning Environments (VLEs) Effectively

VLEs are often underutilised by teachers, who primarily see them as administrative tools. However, VLEs can be powerful instruments for building a supportive and interactive online community. Creative use of VLEs can help mitigate feelings of isolation and alienation among students. By leveraging the full potential of VLEs, teachers can create more cohesive and engaging virtual classrooms that enhance student belonging.

4. Training is Critical

Despite some assertions that young people are 'digital natives' and have a better grasp of technology than older generations, the research suggests that EAP students still often strongly benefit from being shown how to use VLEs and other classroom technologies correctly. Teachers should make sure, preferably early on in a course or semester that students are on board with whichever VLE, apps and programmes the teacher wishes to use and are given ample opportunity to experiment and become competent users.

The transition to digitally enhanced learning is irreversible. There is no going back. EAP teachers have, for the most part, accepted this transition and come to embrace the use of technolgy in the classroom. Students themselves expect to encounter apps and devices in their studies, their use carrying over from their every day lives. It would be an unusual modern learning space indeed if these were not being used in some capacity by learner and instructor alike. By focusing on the recommendations outlined in this paper, EAP teachers can go some way towards creating more inclusive, supportive, and engaging learning environments that significantly enhance students' sense of belonging and community within their academic setting.

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Nick is also a PhD candidate at Lancaster University in the field of E-Research and Technology Enhanced Learning, exploring, among other things, how to design and implement online English exam preparation courses for learners in developing countries. He has an MA in Applied Linguistics from the University of Birmingham and a DELTA from the University of Cambridge, which have equipped him with the theoretical and practical knowledge of language teaching and assessment. In his spare time, he enjoys reading historical fiction, playing drums, and spending time with his two young children.

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Appendix A: Survey questions

1. Age
2. Gender
3. Ethnicity
4. Nationality
5. Highest educational qualification
6. What is your current job title?
7. Please provide the name of the UK university where you teach/have taught EAP

   What is your EAP teaching experience? Years of EAP teaching experience (1 pre-sessional = 1 year)
8. How often do you use technology in the delivery of your lesson content?
9. Which devices do you use in the EAP classroom?
10. Which collaboration tools below do you use/have you used with your students? Please give an example of how you employ/have employed at least one of these online collaboration tools in your EAP classes.
11. Which tools for networking, image sharing and blogging do you use/have you used with your EAP students? Please give an example of how you have employed at least one of these networking/image sharing/blogging tools in your EAP classes.
12. Do you explicitly teach/train your EAP students in how to use online collaboration tools/networking tools in your classes?
13. Jackson, Cashmore and Scott (2010) state that "the need for belonging is one of the most important needs for all students to function well in all types of learning environment". Do you agree that fostering a sense of belonging in class is important? If so, how?
14. How do you encourage EAP students to contribute to online discussions/collaborate online with their peers?
15. How do you encourage EAP students to trust you and the technologies you have chosen to employ in your classes?
16. How do you provide one-to-one individual support for students who are struggling to use technology in their learning?

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Appendix B: Open-ended interview questions

1. What technology (platforms, programmes, apps) do you use in your everyday practice?
2. Which of these are mandated by your institution?
3. Do you use any of your own digital tools (Kahoot!, Padlet etc.) in teaching?
4. Do you think a sense of belonging can be fostered among students in distance education or blended learning environments?
5. Do you think a sense of belonging is essential to successful learning?
6. Does technology (as described above) help or hinder this?
7. Which technology (if any) that you have used fosters group engagement?
8. Which technology (if any that you have used fosters imagination (in the sense of students reflecting and imagining themselves as part of the group)?
9. Which technology (if any) that you have used fosters group alignment as regards rules, norms and accepted behaviours?
10. How could belonging to an online EAP community of practice be better achieved for students?

Appendix C: Zoom interview sample transcription

Figure 1. Sample transcription

SPK_2
Because I always forget the first record. So yeah, luckily I remembered. OK, great. So I'm going to just ask some questions. Hopefully it won't take very long, like maybe 30 minutes or something.

SPK_2
Is that OK?

SPK_1
Yeah, sure.

SPK_2
So first question is what yeah, like technology in terms of platforms, programs and apps and stuff, do you use in your everyday practice teaching?

SPK_1
OK. So on daily basis like we use Google jam boards and Google Classroom. So Google jam boards for in class collaboration. Google Classroom is where I post material homework. And stuff like that.

SPK_1
We also use Telegram, we have a channel for us. This is a requirement by the institution I work for, like to send reminders, they can send questions over there and so on.

SPK_2
Is Telegram a popular app where you are? Yes, OK, because it's not really used. And WhatsApp usually are very popular here. OK, do you find one is better than the other? Or I mean, do they do the same kind of thing or they're slightly different?

SPK_1
I think people rather Telegram because sometimes they don't want to share their phone number with others, but I think in in WhatsApp, the new channel system. We can cover, we can hide the phone number. However, it's still not not deployed for our territory.

SPK_2
And so do you use any kind of apps and stuff which you work which you're not told to use? It's not which you're not mandated by your institution like ones that you actually prefer yourself.

SPK_1
Yeah. Well, yeah. Jam boards is when they do brainstorming and I can send them a link like if you would like. I can show you some of the stuff though.

SPK_2
Yeah, I mean, if you if you could, yeah, I mean, yeah, maybe after the interview or maybe you could send, I don't know, like a screenshot like later on or something. That would be great.

SPK_1
Sure. Yeah, cool. Also, since these people are tech guys, we use Figma a lot. So for example when I want to teach prepositions of place, because for people who are graphic designers or front end programmers, they talk about the elements that exist on the web screen and to to really understand what the client is trying to say, they really need to understand prepositions of place. So when we do that I.

SPK_1
Put prepositions of place in the context of web elements and we use one of the tools, the wireframing tools. Wireframe are tools that you can drag and drop elements like a search bar, drop down menu, a map or whatever and create a web page so they do that as pairs so each one of them prepare their web. Page on their own and then they describe it to their partner without them seeing the page. So they have to use the the web elements as well as the prepositions of place.

SPK_2
And that's how I use other tools like, yeah, yeah, right. Are all of all of your classes online or are some of them face to face? Most of them are online like we do, only one or two face to face, right? Right. So are all of your students in the same place or are they in separate location?