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Team teaching in languages: a scoping review of approaches and practices in higher education

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ABSTRACT

This paper aims at understanding the extent to which languages are taught collaboratively in higher education (HE), which team teaching (TT) models have been implemented, and what lessons were learnt from the experiences. Following the Arksey and O'Malley framework [2005. "Scoping Studies: Towards a Methodological Framework." *International Journal of Social Research Methodology* 8 (1): 19–32. <https://doi.org/10.1080/1364557032000119616>], a scoping review was conducted to map TT practices in HE language classrooms around the world. The review uses narrative analysis to describe those practices and provides an overview of the settings in which the studies were undertaken, the characteristics and models of TT applied, the outcomes and recommendations as well as the implications for practice in relation to language teaching and learning in HE. The results reveal that TT in this context is currently fluid, experimental, innovative and non-traditional, and therefore it is rather an ad-hoc strategy which is mostly practised to enrich teachers' professional development or to enhance students' language learning experience and cultural understanding. This study offers a comprehensive global picture of a collaborative experimental teaching practice in HE using a scoping review approach rare in the field of language teaching and learning but critical for identifying innovative practices.

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Team teaching; languages; language teaching; higher education; scoping review

Introduction

The focus of this paper is team teaching (TT) in languages in higher education (HE). The concept of languages will be used here as the proposed umbrella term for modern and foreign languages (Álvarez et al. 2018). In the field of languages, TT includes unique collaborative practices between a Native Speaker Teacher (NST) and a Non-Native Speaker Teacher (NNST) that might offer particular benefits to language learners (Sutherland 2012; Tajino and Tajino 2000), but there is scarce detailed consideration of its use in this context. To address this gap, in this paper, we will present the results of a scoping review that sought to identify global TT practices and outcomes from the small number of studies that have been conducted in this area. A scoping review methodology is in itself a novel approach to the discovery and qualitative synthesis of current knowledge in the field of languages, and as we will show, it can also be a powerful tool to stimulate debate on less reported or explored practices.

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Defining team teaching

Teacher collaboration and its positive impact on learners and teachers have been a subject of practice and research for many decades (e.g. Baeten and Simons 2014; Barahona 2017; Honigsfeld and Dove 2012, 2014; Nunan 1992; Park 2014; Vangrieken et al. 2015; Weinberg et al. 2020). Forms of collaborative teaching have been labelled as *team teaching* or *co-teaching* and described as involving ‘a group of instructors working purposefully, regularly, and cooperatively to help a group of students learn’ (Buckley 1999, 4). In this study, we use the term *team teaching* to refer to ‘two or more teachers engaged in the process of teaching, including preparation, planning, material design, actual teaching and assessment’ (Barahona 2017, 144).

The full integration of pedagogical content knowledge between two or more practitioners has been labelled by Cruz and Geist (2019, 4–5) as ‘true team teaching’. These authors suggest a framework with four levels of increased intensity leading to the total integration of all aspects of the teaching, starting with a stage of *co-teaching* where instructors teach independently of one another, moving onto *alternative teaching*, with practitioners teaching about different aspects of a topic, then to a form of *blended teaching* in which they collaborate and decide the content and management of a course, and ending in *true team teaching*, characterised by a total collaborative experimental partnership among teachers. While ascertaining levels of teaching integration could be useful, the choice of labels for the matrix proposed by Cruz and Geist (2019) could cause confusion in the educational literature, where these concepts have been assigned multiple meanings; for instance, ‘blended teaching’ also refers to teaching that involves a combination of teaching methods, or a combination of online and face to face instruction (Bonk et al. 2005). Instead, in this study, when discussing levels of intensity in TT practices, we will refer specifically to the typology of six approaches to TT that Friend et al. (2010) formulated in the context of special education schools and that has also been applied to HE (e.g. Buckingham, López-Hernández, and Strotmann 2021; Carpenter et al. 2007):

1. *One teach, one observe*. One (or more) teacher(s) instructing the class and an observer keeping records of student participation and progress to be used in follow-up discussions. Teachers may alternate between these roles.
2. *Station teaching*. Students rotate to be taught in groups by different teachers.
3. *Parallel teaching*. Several teachers teach (individually or with another teacher) the same material, following the same teaching arrangements with different student groups.
4. *Alternative teaching*. One teacher works with small group for specific purposes, the other teaches the rest of the class.
5. *Teaming*. Contrastive joint co-teaching to same group.
6. *One teach, one assist*. One teacher leads the teaching, while the other assists and offers support to students.

Regardless of the type, TT practices usually employ structured plans which include preparatory and follow-up activities as part of the collaboration. Co-planning involves team members collaboratively deciding teaching procedures, preparing the material, designing classroom activities, and choosing the evaluation methods. Co-teacher roles in cross-faculty and interdisciplinary TT experiences also require negotiation and consensus.

Collaborative teaching has been traditionally observed as a common practice in in-service and pre-service teacher education programmes (Dang 2013) because of its importance in teacher professional development (Steele, Cook, and Ok 2021), and its potential to enhance classroom collaboration, connections between theory and praxis, sociocultural interactions, and outcomes (Weinberg et al. 2020). It has also been associated with inclusive education (Honigsfeld and Dove 2012; King-Sears 2022; Nguyen, Nguyen, and Mui 2019; Weinberg et al. 2020) and with primary (Mackey et al. 2018) and secondary education (Takacs 2015), as well as in relation to content and language courses at pre-university level (Pavón et al. 2015). However, despite the reported

benefits of these experiences, including fostering lecturers' motivation and facilitating reflection on pedagogical practices, it has been highlighted that there is limited research carried out on TT practices at the tertiary level in relation to languages education (Doiz, Lasagabaster, and Pavón 2019, 153). Given that the discipline seems highly suitable for such an approach, it is important to further our understanding of TT in this context.

Team teaching in languages in higher education

In recent years, an increased popularity of TT in English as a Foreign Language (EFL) classes in Asian countries has been reported (Park 2014) and it has been suggested that this is because the collaboration between an NST and an NNST is still considered to be a motivating factor in developing English language skills (Heo and Mann 2015). Collaborative teaching between an NST and an NNST is, in fact, a distinctive feature of TT in the field of languages. However, TT between NST and NNST has not been the object of research 'either in the context of ESOL higher education or courses related to cultural issues' (Nguyen, Nguyen, and Mui 2019, 1388).

Cruz and Geist (2019) argue that while teaching partnerships for more integrated learning at the university level are particularly relevant to fostering interdisciplinarity and should be encouraged, these interventions can be challenging since they demand more effort from instructors and institutions. Weinberg and Symon (2017) mention financial constraints preventing TT in content and language courses as well as the need for institutional commitment. More recently, Steele, Cook, and Ok (2021) echo concerns that TT at the undergraduate level can be problematic due to a range of reasons such as poor coordination, tensions using TT strategies and time required for its implementation.

With a view to understand the extent to which languages are co-taught at the tertiary level, which co-teaching models have been implemented and what lessons were learnt from these experiences, this review of the literature aimed at answering the following two questions:

- (1) To what extent, how and why is TT conducted in the discipline of languages in HE around the world? The answer to this question will help to identify the reported extent of TT practices, the approaches adopted and their aims.
- (2) What are the reported outcomes of those TT experiences? This question aims at identifying the reported benefits and drawbacks for learners and teachers.

As we will see, in line with the nature of scoping reviews, this study seeks to give an overview of the innovative character of teacher collaboration in the context of TT interventions in language education as presented in the reviewed articles. It aims to inform educational training, novel pedagogies, and policies to support effective learning in languages.

Method

To address the questions posed above, we have conducted a scoping review that explores TT practices in languages education at universities and identifies knowledge gaps by reporting on empirical interventions around the world.

Scoping reviews provide a narration or description of published research (Arksey and O'Malley 2005). According to these authors, these reviews are fast-track means of exploring the literature on a given topic 'to include and disseminate findings from a range of different methods and study designs. Yet at the same time, the scoping study does not offer any clear means of synthesising findings from different kinds of study design' (Arksey and O'Malley 2005, 31). On this basis, we offer a description of the levels of use, the nature of interventions and the reported levels of success of TT activities in languages education, as well as recommendations for practice, following a review of the literature published during the first two decades of the twenty-first century (January 2000–December 2019). The intention was to capture studies of TT practices not affected by any

institutional and pedagogical changes and requirements brought by the Covid-19 pandemic. Future lines of research on this topic will be offered.

This study uses the five stages recommended by Arksey and O' Malley (2005) to conduct a scoping review: (1) identifying research questions (see these above); (2) identifying relevant studies; (3) selecting studies using inclusion and exclusion criteria; (4) charting the data according to themes; (5) collating, summarising, and reporting the results. The four stages of the process that follow establishing the research questions are explained below.

Identifying studies

Systematic searches were conducted in a selection of databases to identify relevant studies. Whereas it is possible to find indications on optimal database combinations for searchers in systematic reviews in other fields, such as health studies (Bramer et al. 2017), no specific guidance for language studies has been developed. Evidence from other areas suggests, though, that searches should not be limited to one or two databases when aiming at presenting a comprehensive unbiased review of the topic (Higgins et al. 2019; Lemeshow et al. 2005; Mamikutty, Aly, and Marhazlinda 2021). For these reasons twelve electronic databases were used: Academic Search Complete, CORE, Ebsco Ebooks, Education Abstracts, Education Research Complete, EThOS, NDLTD, Proquest Dissertation and Theses, Science Direct, Scopus, Web of Science, and ZETOC.

The search terms used were 'team teaching', 'collaborative teaching', 'co-teaching', AND 'university', 'higher education', AND 'language'. On that basis, inclusion and exclusion criteria grounded in the research questions were developed to ensure consistency (Table 1).

Selection of studies

Two authors independently carried out the charting and collation of the entire set of the selected articles. The process of article selection followed the *Preferred Reporting of Items for Systematic Reviews and Meta-Analyses* (PRISMA) statement (Moher et al. and The PRISMA Group, 2009) (Figure 1). Most papers discarded dealt with TT in contexts that were irrelevant for the aims of this study, such as pre-service teaching and primary and secondary school languages teaching. A total of 14 empirical studies were finally identified. No research was found before 2005.

Findings

To understand the scope of TT practices through this body of research, a consistent approach to summarising and reporting findings was applied, prioritising aspects which are relevant to the identified research questions.

Table 1. Inclusion and exclusion criteria.

Criteria	Inclusion criteria	Exclusion criteria
Period	Publication date: 2000–2019	Research outside this period
Language of publication	English	Publications in other languages
Type of research/report	Empirical studies (quantitative and qualitative) Institutional reports	Audiovisual documentation Theoretical papers
Content focus	Teaching additional languages Under/post-graduate teaching in HE Worldwide practices Teaching in Language Centres and University departments Language and language-related course content Online and face-to-face teaching Formal education In-service teacher training	Team/collaborative learning Single language teaching Collective materials development Pre-service teaching Academic writing Non-language related Primary and secondary education Further education Informal and non-formal education

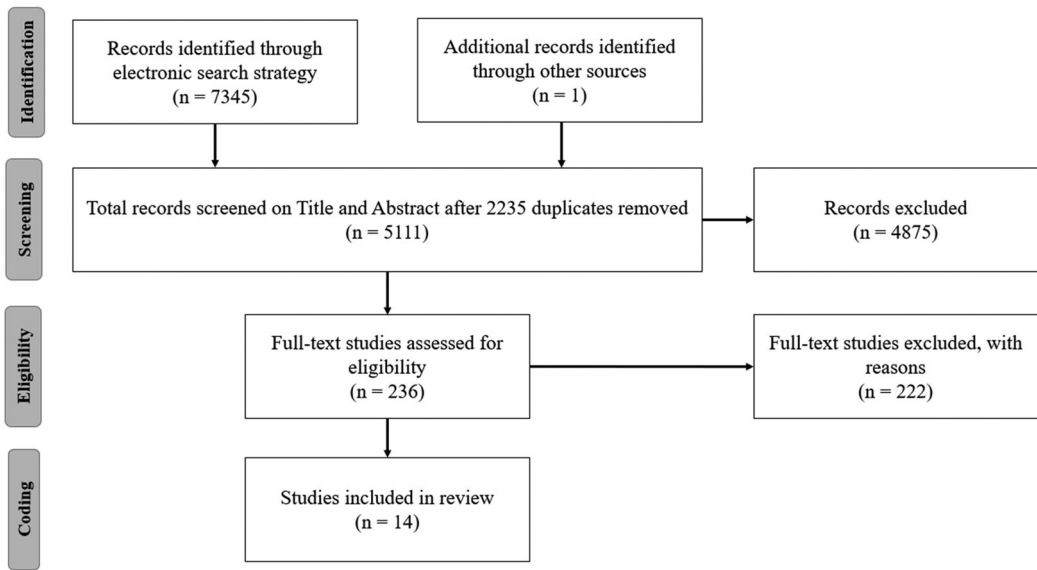


Figure 1. PRISMA flowchart showing the process of article selection.

Some of the studies give little information about the rationale for TT activities, but their description of the TT process and the outcomes and recommendations (see [Table 3](#) below) offer useful insights into the innovative character and validity of the implemented interventions.

Characteristics of TT practices in languages in HE

To address our first research question regarding to what extent, how and why TT is conducted in languages, we analysed the characteristics of the TT interventions in the reviewed studies. [Table 2](#) summarises the characteristics of the studies found.

Educational context and level

Most interventions, apart from Bekzhanova and Rysaldy (2015) and Anwar (2015) who focus on post-graduate courses, were associated with undergraduate programmes and were coordinated by language centres or language departments in conjunction with other academic departments as part of cross-faculty collaboration, resulting in language practitioners working alongside their counterparts in other subjects. In two of these cases, TT practices received administrative support by academic institutions (Neill et al. 2017; Perry and Stewart 2005).

These findings reinforce the idea that, although TT does not appear to be a standardised practice in language education, it seems to be considered a valid pedagogical strategy across the world in interdisciplinary contexts. There is very little evidence of the extent of the support received at institutional level.

Aims of TT interventions

Teacher professional development and learner and programme support underpin TT interventions in the analysed studies. Therefore, two principal categories can be established among TT practices with regards to their aims. Firstly, interventions that aim to influence teacher development, including trainee teachers (Jiang and Zhao 2009; Neill et al. 2017; Nguyen, Nguyen, and Mui 2019; Perry and Stewart 2005; Rives-East and Lima 2013; Taşdemir and Yıldırım 2017; Zanolà 2019). Secondly, interventions that aim to influence learning outcomes in response to a given teaching approach

Table 2. Characteristics of TT interventions in reviewed studies.

Authors & date	Aim	Location	Educational context & level	Language(s) & discipline(s)	Group size	Frequency & duration	TT approaches
Abosnan (2016)	To trial interactive teaching & learning reading models.	Libya	<i>Dept. of Languages. BA EFL students</i>	English (EFL)	12–20	2 sessions 55–65 min. each	2 teachers One teach, one observe
Anwar (2015)	To increase students' motivation for learning research concepts.	Indonesia	<i>Dept. of Languages. EFL Trainee teachers</i>	English (EFL)	20	4 sessions Not specified	4 lecturers One teach, three observe
Bekzhanova and Ryssaldy (2015)	To develop language and linguacultural skills through binary 'contrastive' lessons.	Kazakhstan	<i>Dept. of Languages. Master students</i>	English & Linguistics	42 in two groups of 21 each	Not specified 7 weeks	2 lecturers Teaming
Deyi (2010)	To facilitate conceptual and technical learning through a multilingual interdisciplinary teaching approach. To support English academic literacy.	South Africa	<i>Dept. of Engineering. Undergraduates</i>	English (L2), IsiXhosa (L1) & Mechanics	Not specified	Not specified 1 semester	1 subject lecturer, 1 language practitioner, 1 adviser One teach, one assist
Jiang and Zhao (2009)	To apply different models of collaborative pedagogy.	China	<i>School of Foreign Languages. Undergraduates</i>	English (EFL)	30	Stage 1: 16 periods Stage 2: 1 term Stage 3: 2 years 3-hour planning per week	3 teachers, 3 post-graduates One teach, one assist
King (2018)	To apply an Initiation-Response-Feedback approach to linguistics through collaborative teaching.	USA	<i>Linguistics department. Undergraduates</i>	English & Linguistics	24	2 sessions 3 h	2 post-graduate teachers Teaming One teach, one assist
Neill et al. (2017)	To understand collaborative teaching practices in multi-disciplinary Culture and Society course.	New Zealand	<i>School of Language and Culture. Undergraduates</i>	English (L2) Maori (L1) & Culture and Society	Between 200–300 each semester	Weekly 2 years (4 semesters)	Between 6–8 different teachers each semester. 4 'core' interdisciplinary teaching staff, other sporadic teachers. Teaming One teach, one assist
Nguyen, Nguyen, and Mui (2019)	To understand <i>NEST</i> teaching practices. To facilitate a shared learning opportunity for teachers.	Vietnam	<i>School of Foreign Languages. Undergraduates</i>	English (L2) & Intercultural Communication	100 third-year English majors	Second term Not specified	5 NNST teachers, 1 NST (<i>NEST</i>) TESOL teacher One teach, one observe One teach, one assist Parallel teaching
Perry and Stewart (2005)	To understand how partnerships work in interdisciplinary team teaching.	Japan	<i>Liberal Arts College. Undergraduates</i>	English (L2), Japanese (L1) & Social Sciences	Not specified	Scheduled teaching Not specified	14 team teaching teams: 23 content teachers, 20 language teachers (2 Japanese specialists) Teaming One teach, one assist Station teaching

Rao and Yu (2019)	To enhance students' English proficiency by co-teaching between NST and NNST.	China	<i>Foreign Languages College. Undergraduates</i>	English (EFL)	120 (in 4 classes)	Not specified 32 weeks	2 teachers (1 NNST, 1 NST) Teaming One teach, one assist
Rives-East and Lima (2013)	To support teaching interdisciplinary courses.	USA	<i>Dept. of Science & Humanities. Undergraduates</i>	English & Psychology	Not specified	Not specified Not specified	22 academics: 12 Language (English), 10 Soc. Sciences (Psychology) Not specified
Sundarsingh (2015)	To facilitate the acquisition of language skills in large classrooms.	India	<i>Dept. of Languages. Undergraduates</i>	English (L2) & Engineering	12 sections of students with 66 in each section	4 contact hours per week per section 1 semester	12 teachers (different teaching experience) Parallel teaching Teaming
Taşdemir and Yıldırım (2017)	To understand the complexities of collaboration in EFL teaching.	Turkey	<i>HE Vocational School. Undergraduates</i>	English (EFL)	Not specified	Not specified 1 semester	4 instructors Parallel teaching
Zanola (2019)	To explore the dynamics of balanced collaboration between NST and NNST.	Italy	<i>University Language Centre. Undergraduates</i>	Italian and French (FLE)	2 groups of students: 72 (at a B1 level) and 43 (at a B2 level)	Not specified Not specified	10 teachers (NST/NNST) Parallel teaching

Table 3. Reported outcomes and recommendations of TT interventions.

Authors and date	Outcomes: Benefits for students	Outcomes: Benefits for teachers	Outcomes: Drawbacks for students and teachers	Recommendations
Abosnan (2016)	Students began to change their approach to reading texts, using linguistic strategies; reading for meaning.	Not mentioned	Students' FL difficulties and use of the first language.	Teacher training and CPD
Anwar (2015)	Increased motivation and engagement in individual and group activities. Negotiation of knowledge.	Not mentioned	Not mentioned	None relevant to TT
Bekzhanova and Ryssaldy (2015)	Increased participation in lessons. Better understanding of materials. Better grades.	Not mentioned	Hard to shift attention between teachers. Stressful for students to have contrasting ideas. Time consuming for teachers.	Use lecturers who have previously taught the group. Introduce debates gradually. Conduct binary courses regularly.
Deyi (2010)	Better understanding of ideas. Internalisation, self-esteem and confidence. Independent learning. Affirmation of students' identities as learners. Enjoyment. Improved academic and technical English.	Not mentioned	Not mentioned	Consideration of other factors impacting on student performance.
Jiang and Zhao (2009)	Model with students for collaborative learning	Increases collegiality, trust and respect. Positive for professional development including reflection on own practice.	Planning lessons is an extra effort.	Planning is needed. Reflection after observation, interaction and learning. Leadership issues need to be discussed.
King (2018)	Enhances the learning environment. Identifies learners' understanding problems. Robust and pedagogically sound feedback.	Facilitates individualised instruction. Enables instructors to combine the benefits of different tactics.	Not mentioned	Crucial that co-teachers listen to and try to adapt to each other during the activity. Division of tasks impacts on learners.
Neill et al. (2017)	Not mentioned	Greater professional learning. Less time for individual teaching preparation. Team more culturally responsive in their practices. Collective critical reflexivity.	A more time and labour-intensive way of working. Effort to communicate and share. Tensions between disciplines.	Co-teachers must actively work at and take responsibility for their part in the collaboration through a shared sense of purpose, understanding and commitment to the work. Shared leadership.

(Continued)

Table 3. Continued.

Authors and date	Outcomes: Benefits for students	Outcomes: Benefits for teachers	Outcomes: Drawbacks for students and teachers	Recommendations
Nguyen, Nguyen, and Mui (2019)	Improved learning experience due to increased support, enjoyment and variety.	<i>Learn from each other and bridge knowledge gaps.</i> <i>Enhance language ability and improve cultural understanding.</i> <i>Professional growth.</i>	English teachers' lack of awareness of Vietnamese cultures. Differences in timetables and personalities. Students' competence led to misunderstandings at times.	Professional training workshops on co-teaching issues. Autonomy for teachers to create activities and alternative forms of assessment that encourages active learning.
Perry and Stewart (2005)	TT class activities perceived at the same level as Study Abroad.	Can energise teachers and their institutions as teachers begin helping, observing, and talking to each other. A successful partnership is the ultimate situation for reflective practitioners.	Assumptions about the process may differ widely between co-teachers and result in "ineffective" partnerships. Time-consuming.	Experience, personality and working style and beliefs on learning impact upon TT partnerships. Institutional commitment to TT will encourage academics to become more reflective practitioners.
Rao and Yu (2019)	Gains in English proficiency. Numerous opportunities to practice language learning skills in classroom.	Not mentioned	Not mentioned	Institutions should: – organise meetings for NST and NNST to exchange experiences and ideas. – encourage classroom observations – offer cultural training.
Rives-East and Lima (2013)	Students developed new approaches to problem-solving.	<i>Valuable professional development for staff.</i>	Substantial effort to integrate disciplines due to incompatibilities, contradictions, and misunderstandings. Student resistance to synthetic thinking. Teachers' reservations in the initial stages. Lack of skills to teach in an interesting way.	Teachers should: – make no assumptions – be flexible with objectives and planning – be sensitive – borrow elements from both disciplines. Potential for teaching large classes.
Sundarsingh (2015)	Increased classroom participation and motivation.	Serves for peer support. Enables complementing teaching skills, helping and supporting one another, supervising learning more closely.	Relationship problems between teachers and students and among teachers due to differences in experience, beliefs and background.	Partners should be flexible, open to communication, tolerant, respectful, honest, energetic, supportive, and willing to cooperate to create a positive atmosphere for collaboration. Collaborative practice should be strengthened by having more meetings, assigning different skills to different instructors, benefiting from more experienced colleagues.
Taşdemir and Yıldırım (2017)	Emotional and personal positive impact.	Emotional and personal positive impact. Reduced workload. Helped teachers to learn from their colleagues to design better lessons.	Relationship problems between teachers and students and among teachers due to differences in experience, beliefs and background.	Partners should be flexible, open to communication, tolerant, respectful, honest, energetic, supportive, and willing to cooperate to create a positive atmosphere for collaboration. Collaborative practice should be strengthened by having more meetings, assigning different skills to different instructors, benefiting from more experienced colleagues.
Zanola (2019)	Students prefer a teacher-team with NSTs and NNSTs.	The collaboration between NSTs and NNSTs was beneficial.	Not mentioned	Need to overcome differences related to teachers' origins to focus on teaching.

or strategy (Abosnan 2016; Anwar 2015; Bekzhanova and Ryssaldy 2015; Deyi 2010; Sundarsingh 2015). However, these two categories cannot be understood separately from each other. As teaching and learning are intrinsically part of the same process, many interventions have a dual aim of influencing both teachers' practices and students' learning. This is particularly perceptible in King (2018), Nguyen, Nguyen, and Mui (2019), Perry and Stewart (2005), Rao and Yu (2019), Taşdemir and Yıldırım (2017), Sundarsingh (2015) and Zanola (2019).

Disciplinary practices

Interdisciplinary TT interventions involving Languages and Humanities, Social Sciences and Science subjects characterise the collaborative approach in two thirds of the studies. There is no default model for combining disciplines (Rives-East and Lima 2013). Interdisciplinarity can come from a combination of what Bekzhanova and Ryssaldy (2015) label as 'relative subjects', i.e. disciplines whose object of study and approaches are traditionally considered closely related (e.g. linguistics and languages) or 'non-relative subjects' (e.g. languages and engineering, psychology). Interventions applying same subject or 'relative subjects' approaches to TT (Abosnan 2016; Anwar 2015; Jiang and Zhao 2009; Rao and Yu 2019; Taşdemir and Yıldırım 2017; Zanola 2019) mainly focus on contrasting language teaching and learning strategies and methods with a view to improve language learning. They might also include collaboration between an NST, and an NNST (Nguyen, Nguyen, and Mui 2019; Rao and Yu 2019; Zanola 2019), illustrating that native-speakerism ideologies (Holliday 2006) are still present in languages education, particularly EFL. Non-relative subjects interventions (Bekzhanova and Ryssaldy 2015; Deyi 2010; King 2018; Neill et al. 2017; Nguyen, Nguyen, and Mui 2019; Perry and Stewart 2005; Rives-East and Lima 2013; Sundarsingh 2015) focus on improving learning through optimised integration of a language in the teaching of a discipline. Studies such as those conducted by Taşdemir and Yıldırım (2017) and Sundarsingh (2015) confirm the potential of an interdisciplinary teaching approach to support language learning in large classrooms, while others point out the value of cross-disciplinary work in elucidating language problems and exposing 'the cultural differences across disciplines' (Rives-East and Lima 2013, 103). The analysed studies reveal that TT might be the key to ease the challenges that integrating content and language present, including striking a balance between both and raising content teachers' awareness about the role that language plays in delivering their subject.

At this point, it is important to mention that collaborative teaching practices go hand in hand with the globalisation of English language learning and the fact that instruction in English is a global phenomenon in HE (Brown 2017). With one exception that refers to French and Italian (Zanola 2019), English is involved in all other interventions analysed, either as principal or as additional language of instruction, and has an instrumental purpose: to reinforce conceptual subject learning, or as the subject of instruction. The use of English as a medium of instruction is spread all over the world, 'even in countries where the majority of the population does not have English as L1' (Macaro 2018, 19), for example, in South Africa (Deyi 2010), and, in some cases, TT is performed by an English language teacher and a subject teacher who teaches in the learners' mother tongue, e.g. IsiXhosa in South Africa (Deyi 2010), Maori in New Zealand (Neill et al. 2017), and Japanese in Japan (Perry and Stewart 2005). It is also relevant to note that in a third of the selected studies, TT was practised in an immersion context, i.e. in a context where the language of instruction is either an official or co-official language, although not necessarily the learners' first language (Deyi 2010; King 2018; Neill et al. 2017; Perry and Stewart 2005; Rives-East and Lima 2013; Sundarsingh 2015).

Size, frequency and duration of interventions

Four of the studies reviewed did not report the number of participants in the interventions and two did not give any details on a time frame. A closer look at the studies reveals large variations in group size (from 10 to more than 300 participants) and in the duration of TT interventions (from one hour to two years). The frequency also varies, with some TT practices consisting of ad-hoc or a few sporadic

sessions, while others taking place over a few weeks, one semester or an entire academic year. These variations are part of the broader differing approaches that characterise the organisation and practice of TT in the reported global scenarios, which are also perceptible in the models adopted and their interpretation and delivery of established TT approaches.

Approaches to TT

The selected studies show a diversity of classroom-based TT patterns relative to the number of co-teachers and their role, the level of collaboration and hierarchical engagement, and the specific collaborative approach performed. Some studies base their interventions on previously known models (Buckley 1999; Honigsfeld and Dove 2014; Park 2014; Perry and Stewart 2005), although their interpretation and adaptations result in hybrid or new types of configurations to suit the needs of individual cases. As stated by Jiang and Zhao (2009), '[t]here is no single model or template for using team teaching in a course' (827), and this could be seen as an opportunity for creativity and pedagogical innovation. Only one study (Rives-East and Lima 2013) does not specify the approach.

Following the typology of approaches by Friend et al. (2010), we did not find any forms of *alternative teaching*, i.e. when one teacher works with a small group of students on remediation. The *one teach, one observe* model features in studies aiming at improving reading, learners' motivation and facilitation of shared learning between teachers (Abosnan 2016; Anwar 2015; Nguyen, Nguyen, and Mui 2019) and there is also evidence of *parallel teaching* (Taşdemir and Yıldırım 2017; Zanola 2019). In instances of teaching individually, collaboration takes place in the form of co-planning (planning and preparation stages) as well as in the follow-up discussion after testing students. With respect to *teaming*, an approach in which both co-teachers share the teaching, we found it was practised by itself or in combination with other approaches. For instance, Bekzhanova and Rysaldy (2015) experimented with two content instructors, each one presenting the material from a different angle. The *one teach, one assist* approach was the most frequent TT model of interventions in which co-teaching roles are performed by an NST and an NNST (Jiang and Zhao 2009; Rao and Yu 2019), and in interdisciplinary multilingual interventions in which one teacher leads the teaching, while the other(s) assists and offers support to students (Deyi 2010; King 2018; Perry and Stewart 2005). By contrast, only one study referred to *station teaching* where both teachers circulated around the class to help students with their work (Perry and Stewart 2005).

Interestingly, in half of the studies, different combinations of approaches were apparent. So, for instance, we found a combination of *teaming* with *parallel teaching* in an intervention with various groups taught by three co-teachers each (Sundarsingh 2015). Teachers in each group had different roles: one teacher introduced the lesson, another delivered the contents, and a third one assisted with the presentation and technology. Also, in interdisciplinary interventions such as Neill et al. (2017) *teaming* was mixed with *one teach, one assist* where teachers alternated weekly between teaching and assisting and follow-up discussion and co-planning of strategies to consolidate student learning were led by 'core' teachers who also had responsibility for coordination and support. Finally, two studies used a mixture of three TT approaches (Nguyen, Nguyen, and Mui 2019; Perry and Stewart 2005) with a focus on successful pedagogical approaches.

The emphasis on the different aspects of collaboration varies according to what is relevant to specific scenarios. For example, the tasks involved in the preparation stages associated with co-planning and co-curating (e.g. teaching objectives and materials, co-teaching activities and classroom arrangement) are highly important in some interventions as they become fundamental in pedagogical sequencing (Perry and Stewart 2005), establishing responsibilities (Taşdemir and Yıldırım 2017) and developing reflective practice:

They [the co-teachers] took this opportunity to reflect on their teaching experience, exchange ideas on teaching methods, and compare their cultural and educational differences so as to gain a mutual understanding (Rao and Yu 2019, 8).

Furthermore, co-planning activities were reported not only as crucial for co-teachers but also for helping maintain students' interest (Jiang and Zhao 2009). Not surprisingly, in the new millennium, the work between co-teachers also takes place online (Abosnan 2016; Neill et al. 2017; Nguyen, Nguyen, and Mui 2019) and is reviewed at post-intervention reflective follow-up discussions and meetings, either after each TT practice (Abosnan 2016; Anwar 2015; Neill et al. 2017) and/or at the end of the academic year (Abosnan 2016). End-of year debates with students to gather feedback are also included in one instance as part of the follow-up activities (Bekzhanova and Ryssaldy 2015). However, co-teaching partnerships in the interventions display a range of TT designs and arrangements which not always refer explicitly to the integration of additional pre- or post-teaching activities in the co-teaching process. As Bekzhanova and Ryssaldy (2015) explain: 'Instructors understand the meaning of TT in their own ways to meet the requirements of their individual teaching styles and lesson objectives' (431).

In some cases, the arrangements are based on teachers' mutual agreement (Perry and Stewart, 2005) following their professional and disciplinary strengths, so 'every team member identified that they felt one role was for them to be a 'voice' for their discipline in the course' (Neill et al., 2017 144). But in others, roles might be subject to administrative regulations and requirements 'that may or may not include faculty choice' (Perry and Stewart 2005, 565). In some contexts, co-teacher roles also involve student-teacher trainees (Abosnan 2016) and post-graduates (Anwar 2015; Jiang and Zhao 2009; King 2018), and TT becomes intertwined with 'team learning' (Tajino et al. 2015) or 'constructive teaching' (Anwar 2015). The reciprocal learning opportunity offered by the inter-relation of these two aspects is highlighted by Zanola (2019), who explains the mutual learning opportunity for teachers and students as a result of exchanging ideas and cultural values in the language classroom.

Outcomes and recommendations of TT interventions

To address our second research question regarding the reported outcomes of TT, we analysed the benefits and drawbacks for both students and teachers in the reviewed studies and the suggested recommendations for practitioners (Table 3).

Overall, current research presents a positive impact of TT on learners against more challenging results for teachers. All of the studies, except for one, commented on the benefits for learners with only four studies mentioning some potential drawbacks. In contrast, only five studies suggested benefits for teachers and eight of the studies mentioned drawbacks for them.

Outcomes for learners

Reported benefits of interventions for learners coincide on how the teaching practices contributed to enhancing the learning environment while promoting independent learning and developing students' identity as learners. More specifically, studies report improvement in areas such as class participation and course results, increased understanding of learning materials, motivation and confidence as a result of more robust teacher's feedback and effective support:

Co-teaching can enhance the learning environment for students ... When multiple student responses occur simultaneously, joint feedback allows the instructors to manage multiple competing voices in their classroom, which in turn potentially increases the sense of one-on-one attention for the students receiving the feedback (King 2018, 13)

Fewer studies, however, report on specific language learning outcomes of the performed interventions. Those who do maintain that TT arrangements provided more opportunities for the acquisition of vocabulary and for practising a variety of language skills in the classroom, as a result of students being exposed to co-teachers diversified language expertise (Rao and Yu 2019), and also developed students' linguistic competence in areas such as reading skills (Abosnan 2016), oral skills (Perry and Stewart 2005), and academic and technical use of English (Deyi 2010). Deyi's

study (2010) also highlights the importance of multilingual interventions to provide opportunities for learners to ‘express, discuss and explain the concepts in the languages available in the classroom’ (263), thus recognising the role that learners’ first language can also play in the teaching process.

In addition, outcomes of co-teaching practices by NS and NNS identify increased learners’ overall proficiency in English, with improvements in areas such as vocabulary and comprehension (Rao and Yu 2019). They also mention learners felt better supported developing language skills, which in turn resulted in students being able to participate in more classroom activities (Nguyen, Nguyen, and Mui 2019). The effectiveness of co-teaching by an NST and an NNST was described as impacting on students’ ability ‘to communicate in the target culture ... and their ability to train them to argue and negotiate in professional situations’ (Zanola 2019, 323). This aspect of cultural learning is also captured in Nguyen, Nguyen, and Mui (2019) who claimed that including an NST was beneficial because they ‘provided a great deal of fresh and original information, which might not be available on the Internet’ (1392). This type of intervention introduce an international and intercultural dimension into the curriculum because ‘NSTs often serve as key agents in the broader processes of knowledge, culture, politics and economics mobilisation’ (Zanola 2019, 316). However, students’ less positive perceptions and reactions regarding cultural differences among NNST and NST are also mentioned in connection to the challenges that different teaching pedagogical styles might bring with them (Rao and Yu 2019).

Outcomes for teachers

Reported outcomes of collaborative interventions for practitioners include a number of positive impacts. It has been suggested that teachers benefit professionally from their mutual feedback (Jiang and Zhao 2009; Nguyen, Nguyen, and Mui 2019) and their complementary strengths (King 2018), such as when NST and NNST co-teach (Zanola 2019). It is also reported that TT supports lecturers in increasing their discipline knowledge (Nguyen, Nguyen, and Mui 2019), in trying new teaching approaches including culturally responsive practices (Neill et al. 2017; Nguyen, Nguyen, and Mui 2019; Sundarsingh 2015) and in reflection on their own practice (Jiang and Zhao 2009; Neill et al. 2017; Perry and Stewart 2005). Furthermore, co-teaching interventions were presented as helping participants in developing their professional values, such as collegiality and peer support (Jiang and Zhao 2009; Neill et al. 2017; Sundarsingh 2015).

Drawbacks

Nonetheless, TT interventions are not exempt from difficulties, particularly for teachers. Potential drawbacks such as ‘personality and philosophical clashes’ (Nguyen, Nguyen, and Mui 2019, 1391) due to differences in levels of experience, educational background and beliefs (Taşdemir and Yıldırım 2017), lack of training, limited resources, and lack of planning time and, additional effort are some of the problem areas reported for team teachers (Perry and Stewart 2005). As explained by Jiang and Zhao (2009): ‘planning team taught lessons needs much extra effort, which is an obvious disadvantage of it in view of teachers’ already-heavy workloads’ (829). Extra time and effort are issues reported in the wider TT literature (e.g. Plank 2011).

Obstacles related to students’ stress and confusion are also reported to affect some interdisciplinary interventions in the context of English as the medium of instruction. Various reasons were explained which included lack of coordination between instructors, but also higher cognitive demands on students (Rives-East and Lima 2013), and subjects being ‘interpreted differently in native (Kazakh and Russian) and foreign (European and American) linguistics’ (Bekzhanova and Rysaldy 2015, 432).

To sum up, there is consistent evidence across the studies of multiple benefits of TT practices for language teachers and learners. However, while TT is reported to have few drawbacks for learners, more challenges were pointed out for teachers. This could be due to the fact that 60% of the research was focusing on the implications of TT for practitioners which is also reflected in the recommendations made as a result of these interventions, and which we will consider next.

Recommendations from the studies

Recommendations for future practice focus on giving advice to teaching teams and institutions on implementing strategic generic pedagogical aspects of TT, rather than subject-specific ones, and addressing potential areas of difficulty with the aim to improve collaborative practices which, in turn, will impact on learners' progress.

Several studies mention planning as crucial to implementing TT effectively; in particular, leadership needs to be discussed beforehand (Jiang and Zhao, 2009) as the division of tasks will impact on learners (King 2018). This requires the identification of teachers' linguistic and pedagogical skills prior deciding on teaching responsibilities (Sundarsingh 2015). It also requires a clear role definition and empowerment for each member of the teaching team (Neill et al. 2017). Allocated time before and after classes also needs to be planned in (Nguyen, Nguyen, and Mui 2019). Teachers should be supported through regular meetings, guided by more experienced colleagues, and they should be assigned different tasks depending on their experience (Taşdemir and Yıldırım 2017). On a more basic level, as in a non-TT context, preparing the required material before the class is essential to achieve a good teaching and learning experience (Sundarsingh 2015). Also, there is a recommendation for co-teachers to remain with their group for the entire TT process (Bekzhanova and Ryssaldy 2015).

Other recommendations refer to the principles and values that should guide the interaction between co-teachers. Constant communication and professionalism are important to create 'a transparent and cohesive working environment for all' (Nguyen, Nguyen, and Mui 2019, 1389). TT members should make an effort to adapt to each other during their co-teaching (King 2018; Perry and Stewart 2005). Also, they should take responsibility for their part in the collaboration process (Neill et al. 2017) as 'sharing a common pedagogical philosophy and an understanding of roles and expectations was a key element of effective collaboration' (Perry and Stewart, 2005, 572). An element of 'collective critical reflexivity' (Neill et al. 2017, 148) via the process of observation, interaction and learning is also highlighted as essential (Jiang and Zhao 2009).

Crucially, the role of institutions is also mentioned among the recommendations. Innovative practices need to be supported by institutions (Neill et al. 2017), as an institutional commitment to TT will encourage teachers to develop their practices by becoming more reflective practitioners (Perry and Stewart 2005). To support this aim, professional training workshops or guides on TT issues with suggested class activities, different co-teaching methods, and classroom management could be introduced (Nguyen, Nguyen, and Mui 2019). Also 'autonomy for the teachers to create activities and alternative forms of assessment that allow for more active learning' should be encouraged (Nguyen, Nguyen, and Mui 2019, 1391). Institutional awareness of the challenges that teachers encounter in interdisciplinary courses and strategies for supporting them are also needed (Rives-East and Lima 2013).

Various studies include recommendations acknowledging the interdisciplinary and, on occasion, the multilingual nature of the TT interventions. And, again, institutional support and training are pointed out as the way forwards. For example, Rao and Yu (2019) indicate that centres should organise meetings for NST and NNST to exchange teaching experiences and ideas. Training sessions and mutual observations should be encouraged, as teacher collaboration across disciplines requires 'the development of inter-cultural interaction and understanding' (Neill et al. 2017, 141).

Discussion and implications for practice

The findings of this study reveal that the TT interventions found in language education follow structured plans which involve a great deal of co-planning and co-curating preparations, as well as training, to develop effective collaboration, something crucial for the full integration and realisation of 'true team teaching' (Cruz and Geist 2019). This, in turn, impacts positively on language and content learning and professional growth (Buckingham, López-Hernández, and Strotmann 2021). In fact, preliminary and on-going communication within the teaching team is emphasised to

minimise challenges and provide support and guidance. This is especially important in multilingual interdisciplinary interventions, which, although elaborate, are feasible when careful planning and collaboration take place, as demonstrated in some of these studies.

Within the landscape of TT practices reported in language education, approaches regarding the number of teachers involved, their expertise and experience is quite varied, thus illustrating the multiple ways in which TT could be potentially activated. Combining NST and NNST is one of the distinct forms in which TT was reported in the three most recent studies from 2019, however, it is possible that it was also the case in some of the interdisciplinary practices conducted previously but not explicitly mentioned. Therefore, the full extent of this TT combination is uncertain within the evidence found.

The internationalisation of HE, which is resulting in the increased use of English as a language of instruction, requires teachers and learners to actively engage with complex multilingual processes. In these cases, the aim of the collaborative multilingual practices is not only subject knowledge, but also developing skills in processing information in at least two languages. Effective collaboration between another subject (e.g. engineering) and language specialists in the delivery of content lessons through English as an additional language becomes more crucial, because of the implications of teaching academic content to students whose command of English might be limited. This and the diversity factor implicit in multilingual TT activities can cause stress and confusion to both students and teachers and bring forward the role that TT can play as intercultural practice. Similarly, an analysis of the challenges and changes to their practice that co-teachers might face when engaging in TT through an online medium, as opposed to or in conjunction with face-to-face environment, is a key area worth examining in the light of the current move in HE towards online courses (O'Flaherty and Phillips 2015) and the impact that the Covid-19 pandemic has had on educational practices across all levels.

As revealed in the studies discussed, despite being a global phenomenon, TT does not enjoy a systematic integration in HE language policies and therefore lacks institutional support, including training in collaborative practices for lecturers.

The review of the cases presented in the studies shows that engagement with TT can have a positive impact on teachers' emotional support, as well as on their professional development. This is due to the reflective and self-evaluation aspects embedded in the process of collaboration, which are central to teacher development. In addition, these studies advocate TT for its potential to reinforce language learning because of its role in building up learners' motivation and confidence which in turn enhances class participation and improved course results. This is particularly important in the case of some educational contexts in which languages are taught in large classrooms. At the same time, the research evidence points to some challenges, mostly for teachers, which could interfere with the success of future practices. Also, it is worth pointing out that a detailed examination of the impact of interventions on student language learning would be needed in future studies.

Finally, recommendations based on self-evaluation feature in most reviewed studies. These are aimed at teachers and TT programme designers and coordinators. However, not much information appears on institutional support to implement TT in mainstream language courses in higher education departments. Institutions' preferred support for research activity rather than teaching quality (Buckingham, López-Hernández, and Strotmann 2021) results in TT practices being ad hoc initiatives delivered by individual faculties and teaching staff, but not part of bigger educational plans supported by relevant policies.

Conclusions

This scoping review represents a contribution to the growing field of research on TT and teacher collaboration in general. The review not only unveils the recurrent and untapped approaches to classroom-based TT between language teachers and teachers from other disciplines in the context of HE language(s) and content programmes, but it also identifies effective 'true team teaching' features of

the interventions. Most significantly, it makes apparent that TT practices are creative and fluid, as shown in the approaches to TT described. In addition, it identifies the predominance of these TT practices at the tertiary level from the second decade of this century with a focus on English language teaching, and confirms occurrence in all continents suggesting a pedagogical interest regardless of the cultural context. However, it is important to acknowledge that having focused on publications in English this review may have missed pertinent practices as reported in studies published in other languages.

In the overview of the practices, it becomes apparent that TT in this field is considered and described as experimental, innovative, non-traditional and unconventional teaching. It is not a mainstream standardised teaching approach, but rather an ad-hoc strategy which is organised and carried out with an aim to enrich teachers' professional development and/or to enhance students' language learning experience and cultural understanding. Co-teachers are conscious of the guiding principles regarding various models of collaboration, but hybridity characterises the design and delivery of the interventions in which the language of instruction and the teachers' linguistic provenance (NST, NNST) play an important role in the success of the activity. Reflection and self-evaluation guide the recommendations for future practice which, in addition to training and institutional support, highlight the importance of planning, clarification of roles and ongoing communication and discussion within teaching teams to ensure successful 'true team teaching' experiences. Finally, future research in languages should consider, on the one hand, benefiting from qualitative research synthesis to help uncover innovation in the discipline, and on the other hand, it should conduct a broader analysis of those areas identified in the discussion of the findings, as well as TT experiences reported in other languages.

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