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# Teaching social studies: exploring the impact of a transdisciplinary approach towards initial teacher education in Scotland

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## ABSTRACT

This article considers the impact of a transdisciplinary approach towards social studies Initial Teacher Education (ITE) in Scotland. The organizational structure of Scottish secondary schools has changed in recent years with many now combining formerly discrete departments into faculties. In social studies, this means that geography, history and modern studies often form a faculty. Within these there has been a move towards a single-teacher model, with one teacher teaching all social studies subjects to a class.

So far, university-based teacher education for social studies had retained a traditional approach, with student teachers focusing on their discrete subject specialism. This study assesses the impact of a new programme which saw student teachers of these disciplines being educated together through an immersive approach with the aim of widening their knowledge and skills.

A deductive approach was taken to assess the outcomes of this initiative. Findings from an online questionnaire survey issued following the student teachers first practicum experience identified that the student teachers had positive perceptions of the initiative, valued it as an area of professional learning and that it prepared student teachers for their first practicum experience in combined faculty settings. This paper concludes with recommendations for future work in this area.

## ARTICLE HISTORY

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## KEYWORDS

Initial teacher education; student teacher; social studies; transdisciplinary; Scotland

## 1. Introduction

In Scotland, education is a devolved power, meaning that the Scottish Government has the authority and responsibility to legislate in relation to education independent of the Westminster Government. As such, the landscape of education at all levels in Scotland is unique in comparison to the rest of the United Kingdom. The Scottish national curriculum is known as the *Curriculum for Excellence* (CfE) and has two distinct phases; the *Broad General Education* (BGE) phase and the *Senior phase*. The BGE phase is the curriculum followed from early years education, during primary school and until the first 3 years of secondary school. The BGE phase consists of eight *Curriculum Areas*, one of which being Social Studies, and is organized into five levels (early, first, second, third and fourth), structured through a series of curricular *Experiences and Outcomes* (known as Es & Os) and progression through these Es & Os is assessed by using associated *Benchmarks*. The *Senior phase* refers to the fourth, fifth and sixth years of secondary school and is associated with national examinations. This paper

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specifically focuses on the *BGE* phase and how social studies is taught in the first 3 years of secondary school.

Scottish education has experienced significant change in recent years as the impact of curricular and political decisions felt at all levels within schools (Anderson & Nixon, 2010; Fenwick et al., 2013; Priestley & Philippou, 2018). Due to changes in curricular policy, the internal structure of a majority of Scottish secondary schools has been reconstructed, with many schools combining formerly discrete subject departments into faculties. In the case of social studies, this means that formerly discrete geography, history and modern studies departments often become a singular faculty and, in some cases, further incorporate religious and moral education or business studies. Within these large faculties, there has also been a move towards what is commonly referred to as 'single teacher delivery', where one teacher is responsible for teaching all three social studies subjects to a class regardless of their subject specialism (Anderson & Nixon, 2010; Priestley, 2011). University-based initial teacher education for social studies has generally retained a traditional approach, with student teachers focusing on their discrete subject specialism. This reflects the standards set by the General Teaching Council for Scotland (GTCS) which references explicit disciplinary by stating that during initial teacher education students should focus on 'the specific subject you are academically qualified to teach' (General Teaching Council (Scotland), n.d). As such, social studies student teachers normally qualify as a teacher of geography, history or modern studies once they gain provisional registration with the General Teaching Council. However, this approach is not universal, as science initial teacher education students qualify as teachers of a discrete science with an additional qualification of being able to teach general science at the *BGE* phase signified by the addition of 'with science', e.g. teacher of physics with science, to reflect the integrated teaching of the sciences during the *BGE* phase. Therefore, it can be suggested that there is a need for social studies initial teacher education to better reflect the changing school landscape, and for social studies student teachers to be knowledgeable of other subject areas beyond their own core undergraduate degree expertise. In this sense, a challenge is set for initial teacher education providers to create an appropriate model for social studies initial teacher education that both retains the subject expertise required in the Senior Phase of the national curriculum and prepares student teachers for the realities of teaching the *BGE*. This creates a tension within initial teacher education, one derived from a position where subject knowledge and expertise are valued in student teachers but a further expectation of content and skills beyond their main subject discipline is now also viewed as necessary.

The focus of this article is to consider the impact of a transdisciplinary approach towards the teaching of social studies within an initial teacher education programme in a Scottish university. The influence of this approach on the confidence level of student teachers when teaching social studies is discussed in addition to the impact that this approach had on their first school practicum experience in a Scottish secondary school. The researchers were interested in testing the anecdotal view that discrete subject-specific education during initial teacher education does not fully prepare student teachers for the contemporary reality of many Scottish schools. The researchers of this study, all of whom work as subject specific social studies Teaching Fellows in initial teacher education, developed and initiated an initiative that saw the geography, history and modern studies student teachers being educated together through an immersive approach over 3 days, with the intention of widening their knowledge and skills. This initiative was formally included in the timetable of the initial teacher education programme that the students were on, a Professional Graduate Diploma in Education (PGDE) which is an 1-year full-time postgraduate professional programme taken by those wishing to become teachers. In the context of this programme, the role of Teaching Fellow is a position that is held by an experienced educator that focuses on teaching and the scholarship of learning and teaching. They work closely with student teachers throughout the PGDE programme.

The impact of the initiative, known as the 'Social Studies Immersion Days' is discussed following an analysis of empirical evidence collected during the initiative. It is important to note that the intention of this paper is not to critique the changes that have taken place in Scottish secondary schools. Rather, the intention is to explore the role that a transdisciplinary

learning experience could play in supporting student teachers as they develop their professional and pedagogical skills during initial teacher education. In the following section, we provide an initial overview of the current curricular landscape within Scottish secondary schools before analysing a case study of curricular change, in the form of the Social Studies Immersion Days. By doing so, a valuable and unique insight is offered into the relationship between curricular change at both school level and in initial teacher education. In addition to this, an opportunity is presented to assess whether the tensions around generalism vs expertise that dwell in Scottish secondary schools are reflected within the provision of initial teacher education for future geography, history and modern studies teachers.

## 2. Literature review

There have been significant policy changes within Scottish education since the inception of *CfE* in 2004. According to the original *CfE* document which outlined the core intentions of the new curriculum, *CfE* was due to facilitate a breadth of learning experiences that would 'require both subject-based studies and activities which span several disciplines' (Scottish Executive, 2004, p. 13). This indicates that, from its inception, the new curriculum supported the retention of subject specialist teachers that taught 'subject-based studies' while seeking greater connection across the curriculum. This intention reflects a global trend that advocates for higher levels of interdisciplinarity in national curricula (G. McPhail, 2018; Tonnetti & Lentillon-Kaestner, 2023; Whitty, 2010). Following the introduction of *CfE*, most Scottish secondary schools revised their organizational structures and amalgamated individual subject departments into faculties, with subject teachers teaching a range of subjects in the *BGE* phase beyond their own subject specialism (Anderson & Nixon, 2010; Fenwick et al., 2013). This restructuring generally reflected the *Curriculum Areas* established by *CfE* where, for example, geography, history and modern studies were grouped together as Social Studies (or social subjects) (Priestley, 2009). Within the *CfE Curriculum Areas* there are, however, remnants of discrete subject areas. The *Es & Os* for social studies, as an example, are divided into three different 'themes' and each can be seen as aligning with the educational outcomes of a particular subject discipline where 'people, past events and societies' connotes history, 'people, place and environment' connotes geography, and 'people in society, economy and business' largely relates to modern studies.

As Fenwick and colleagues observe, the creation of effective interdisciplinarity 'is dependent on a major cultural shift within schools' (2013, p. 455). It is questionable, however, to what extent this cultural shift has universally been enacted, with many teachers actively teaching a discrete subject where they have no expertise (e.g. instances of history teachers teaching first year geography classes) instead of adopting an approach where they proactively make connections to other subjects through their own teaching. The prevalence of this is arguably acknowledged through the current series of Education Scotland national consultations held with the intention of identifying the professional learning needs of social studies teachers. In their 2023 literature review of teaching interdisciplinarity, Tonnetti and Lentillon-Kaestner concluded that there are few examples within secondary education of effective and true interdisciplinary teaching and many schools are instead implementing a multidisciplinary approach. As such, it can be suggested that there is a gap in literature that can be used to inform and support professional learning for social studies teachers in Scotland wishing to fully implement *CfE* through their practice. With this considered, it becomes clear that there is a degree of obfuscation within Scottish curricular policy. The curriculum states that interdisciplinary learning is one of four key contexts, alongside the *Curriculum Areas* and subjects (Scottish Government, 2008). However, while each *Curriculum Area* is divided into *Es & Os* that express the knowledge and skills to be developed, the structures of secondary schools are seen by teachers as a barrier to working beyond their discrete subjects (Harvie, 2020; Hasni et al., 2015). Therefore, there is a need for those working in Scottish education to contribute to navigating a path that leads to effective learning and teaching of social studies in multidisciplinary social studies departments. It may be suggested that initial teacher education offers a means of paving this path.

Student teachers are often expected to be ready to teach not only their substantive subject but also more broadly across the social studies. Donaldson's (2011, p. 34) suggested that 'any expectation that initial teacher education will cover all that a new teacher needs to know and do is clearly unrealistic' is not always enacted in practice. Student teachers, for instance, are required to make connections across an ITE programme that spans both on campus and school-based learning, with a period of on campus learning occurring first (Mueller Worster & Rohde, 2020). From this on-campus element, schools often expect student teachers to be fully prepared to embrace all aspects of the curriculum, despite their novice status. In the Scottish example, *CfE* affords teachers a certain level of professional agency in how they engage with the *Es & Os* in order to deliver the curriculum (Education Scotland, 2024; Priestley, 2011; Priestley & Biesta, 2013; Priestley & Philippou, 2018) and this is viewed as an important dimension of a teacher's work (Priestley et al., 2013). However, the professional agency necessitated within the curriculum relies not only on an individual's capacity to engage with pedagogical theory and curricular knowledge but also on the context in which they work (Biesta & Tedder, 2006) and expertise gained over time. Anderson and Nixon (2010) observe that both student teachers and newly qualified teachers benefitted from the expertise offered in discrete departments whose sole focus was on one subject and Darian-Smith and McCarty (2016) stress that specialist knowledge and methods are far from obsolete. Whilst student teachers in Scotland lack agency in terms of where they work due to the current school placement allocation system, they are nonetheless able to develop collaborative skills that can support them in planning appropriate learning experiences that meet what is expected of them. It was shown by van der Heijden et al. (2015) that collaboration is fundamental in facilitating teacher agency. It underpins effective transdisciplinary working by creating avenues where disciplinary terms are shared and subsequently understood, the planning of effective learning and teaching is supported, and greater opportunities for the development of meaningful modes of assessment are facilitated (Tonnetti & Lentillon-Kaestner, 2023). Thus, there is a significance that can be attributed to the act of awarding time for teachers, whether they be student teachers or already in post, to collaborate and develop a shared understanding of the curriculum, particularly in the Scottish social studies context where it can be seen as an integral step towards moving beyond discrete subject teaching (Hasni et al., 2015; G. J. McPhail, 2016).

Unlike their primary counterparts where the curriculum is delivered through interdisciplinary themes or topics, Scottish secondary schools have traditionally taught discrete subjects (Harvie, 2020; Priestley, 2009). These discrete disciplines of knowledge found in secondary schools can be seen to mirror the evolution of realms of knowledge also seen in higher education (Siskin, 1994). However, a tension resides in the need for subject specialism in Scottish secondary schools, as required by the General Teaching Council for Scotland and initial teacher education providers, and the ability of teachers and learners to make meaningful connections between subjects, as expected by schools and *CfE*. Priestley contends that discrete subjects limit the ability for connections to be made across disciplinary divides (2009) and that pupils do not require subject specialists in the junior years of a high school education. Other authors, however, highlight a need for strong disciplinary knowledge and see it as a foundation on which further integration can be built (Barnes, 2011; Bell et al., 2011; Lenoir & Hasni, 2016; G. McPhail, 2018). There is recognition, however, that genuine integration is difficult to achieve when a teacher's strong subject identity presents a barrier in doing so (Locke, 2008). Despite this resistance being identified and indicating a need for professional development provision in this area to support teachers (Bell et al., 2011), it is observed by Tonnetti and Lentillon-Kaestner that 'few teachers receive interdisciplinary training in their pre-service or in-service training' (Tonnetti & Lentillon-Kaestner, 2023, p. 11) that guides them through the process of going deeper than what is perceived as a superficial understanding of what it means to work beyond their own discrete discipline (Hasni et al., 2015; G. McPhail, 2018). One may suggest that initial teacher education is an appropriate area for this professional development to occur. Doing so, however, would require a change in how initial teacher education in social studies is viewed. Fenwick and colleagues noted in 2013 that the majority of new Scottish teachers were qualified in a single

subject area, and at the time of publication this continues to be the case. This is a trend that is reinforced by the established routes into the teaching profession in Scotland. While initial teacher education is only delivered by higher level institutions in Scotland, entry requirements are regulated by the General Teaching Council (Scotland) (2024) and recruitment targets are set by the Scottish Government. University in-take targets are set annually but dual qualification, i.e. potential to become a qualified teacher in two subject areas, is not specified nor prioritized (Scottish Government, 2023). Despite this practical limitation, literature demonstrates a theoretical desire for teachers to have greater opportunities to be supported in how to work beyond discrete subject boundaries and engage with more transdisciplinary learning experiences (Hasni et al., 2015). Initial teacher education is a valid opportunity for where this can occur (2024)

Tonnetti and Lentillion-Kaestner observe that the term interdisciplinarity is frequently used as 'an umbrella term to represent all forms of interdisciplinarity ranging from multi-disciplinarity to transdisciplinarity' (2003, p. 2). While Priestley refers to the conceptualization of any form of integration as 'contested, or misleading' (2009, p. 2), the reality is that a range of models of integrated social studies has evolved within Scottish secondary schools with the term 'interdisciplinary' frequently being used to describe them. While the use of this term suggests a blurring between the discrete subjects (see Figure 1), the truth is that for many teachers this is a multidisciplinary scenario and the misappropriation of the word 'interdisciplinary' reflects the 'semantic confusion' identified by Lenoir and Hasni (2016), p. 2442).

Although they are considered to be social subjects, it may be problematic to assume that the three subjects under discussion originate from the same conceptual foundation. Each discipline has undergone its own distinct evolution and aligns, to varying degrees, with a transdisciplinary ideological framework. The background of these school subjects potentially affects the extent to which the curriculum and teachers are able to move from a siloed interpretation of how the curriculum can be taught to a transdisciplinary approach (Daneshpour & Kwegyir-Afful, 2022). Geography, as a broad and internally diverse field, encompasses physical, human, and environmental dimensions, necessitating that educators navigate a wide range of seemingly unrelated topics (Miles, 2023). The subject's methodological

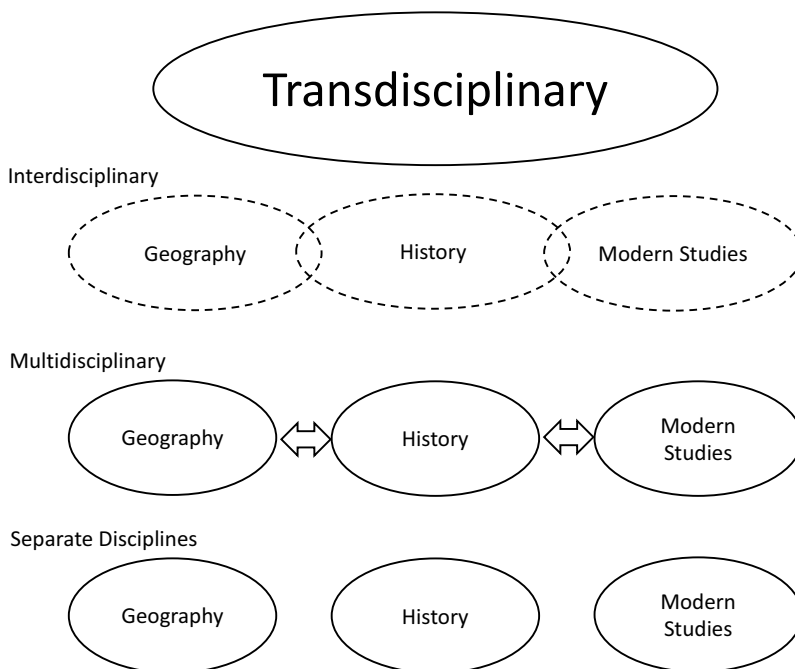


Figure 1. Transdisciplinarity within social subjects teaching (based on Darian-Smith & McCarty, 2016).

approaches further reflect this diversity, spanning from scientific inquiry to more socially oriented analyses. Modern Studies is explicitly transdisciplinary, integrating elements of politics, sociology, and international relations. Given the diverse academic backgrounds of its educators, there is an inherent need to expand their expertise—for instance, a teacher with a degree in politics may be required to teach a criminology module. This interdisciplinary exposure enables pupils to engage with multiple perspectives and develop the ability to make connections across disciplines (Kauffman, 2015). In contrast, history education in schools is often structured as a more singular discipline, with specialized skills and well-defined expectations that may not readily lend themselves to a transdisciplinary approach.

In an attempt to dispel any semantic confusion, the authors of this paper sought a taxonomy with the intention of providing a definition of interdisciplinarity, multidisciplinary and transdisciplinarity that would guide this research and subsequent writing in the field. For this purpose, the Dorian-Smith & McCarty model was applied to the teaching of the social studies (see [Figure 1](#)). It is important to note that the intention is not to view this model as a taxonomy to be used in order to meet any goal of ‘achieving’ transdisciplinarity. Instead, it is simply used to clearly illustrate various levels of integration between the subjects of geography, history and modern studies. Separate disciplines reflect discrete subjects with no integration. Whilst this remains the curricular model in a few local authorities it is now largely uncommon in Scottish schools. Multidisciplinary refers to an approach where distinct subjects are retained but some reference to other aspects of the curriculum is made. A multidisciplinary model often features one teacher being responsible for teaching all subjects. Interdisciplinary is used to describe an approach where the boundaries between discrete subjects are indistinct, represented here in [Figure 1](#) by a dashed border to represent the porosity of the separate elements. This move towards reflecting curricular intersectionality is further evidenced in the Senior Phase with the advent of subjects such as Travel & Tourism and Criminology. Finally, transdisciplinarity represents a teaching model where topics, often global in nature, are taught with no obvious distinction in the content (Piaget, 1972) such as anti-racist education, with the ‘potential to open up western scholarship to non-western modes of thinking’ (Dorian-Smith & McCarty, 2016, p. 1).

All these levels are useful and necessary in order to foster the development of well-prepared student teachers who are subject specialists able to see the benefits of making connections and, at times, relinquishing discrete disciplinary knowledge to foster trans-disciplinarity.

There is therefore a pressing need to support geography, history and modern studies student teachers by preparing them for the contemporary curricular landscape within Scottish secondary schools. For the majority, this is in the form of a Social Studies/Social Subjects Faculty where teaching and learning utilizes some thematic approaches, combined with subject-specific topics, all delivered by the same teacher, i.e. a multidisciplinary approach (see [Figure 1](#)). There is an opportunity, therefore, for initial teacher education institutions to continue to support student teachers in recognizing their subject expertise while also developing their understanding of the core knowledge and skills associated with other disciplines.

### 3. Methodology

This study aims to determine the extent to which a transdisciplinary approach towards educating student geography, history and modern studies teachers impacted their first practicum experience. Following a review of literature, the following set of research questions were developed:

- (1) What are the most prevalent curricula models adopted within Scottish secondary schools to teach social studies?
- (2) To what extent does a transdisciplinary approach towards social studies initial teacher education influence students’ knowledge and skills development in preparation for their first practicum experience?
- (3) To what extent does a transdisciplinary approach towards social studies initial teacher education influence students’ confidence in preparation for placement?



Following the planning and teaching of transdisciplinary learning experiences, one data gathering phase was implemented. This section will first outline what was involved in these transdisciplinary learning experiences and then summarize the data gathering process.

This research focuses on the perceptions of student geography, history and modern studies teachers that participated in three Social Studies Immersion Days. These Immersion Days equated to 15 h of class contact time on a PGDE in Secondary Education programme in a Scottish university. The content of these learning experiences was planned collaboratively by the researchers in their roles as Teaching Fellows and were delivered through a team-teaching approach on all 3 days. The topics covered during the Immersion Days included various structures of social studies/social subjects faculties in Scottish secondary schools, the social studies *Es & Os* and *Benchmarks* associated with the *BGE* phase of the national curriculum, common modes of teaching associated with social studies in Scottish secondary schools, anti-racist education, decolonizing the social studies curriculum, global citizenship education and climate education. It is important to note that prior to the introduction of the Immersion Days, this content was already delivered in respective subject specific silos.

The Immersion Days were timetabled to ensure that they took place around the student teachers' first school practicum. It was decided that two Immersion Days would take place in the weeks before this first practicum experience while the third day would take place afterwards. For these reasons, content related to the structure of schools and the curriculum took place in the first 2 days. The third day was utilized for content that required student teachers to be able to reflect upon their recently completed placement experience. The Immersion Days were timetabled in addition to, rather than in place of, individual subject-specific curriculum and pedagogy seminars. As such, it was ensured that the implementation of the initiative did not detract nor depreciate any pre-existing initial teacher education provision. During the Immersion Days, student teachers sat in mixed subject groups. This was by design with the intention of encouraging student teachers from across subject areas to share experiences and knowledge during group discussions and to create the foundation for professional networks that could act as a means of peer support during the Immersion Days themselves and during their practicum experience.

Data gathering took place during the third Immersion Day, which occurred in January 2024. An online questionnaire survey was issued via QR code to all student teachers in attendance. All responses were anonymous, and the completion of the questionnaire survey was not compulsory. The questionnaire survey consisted of 14 questions and was designed to collect data on student teachers' perceptions of the three Immersion Days, how much value they placed on the Immersion Days as an opportunity for professional learning, and the extent to which they believed that the initiative prepared them for their first practicum experience. In addition to this, the questionnaire survey also assessed how many of the participating student teachers taught outside of their subject specialism during their practicum, the mode of teaching of social studies they encountered, and whether their school mentor/supporter/key contact was of the same subject specialism as them. These latter questions were chosen to enable the researchers to gain a research informed understanding of the current landscape of social studies faculties in Scottish secondary schools.

As with all studies of this nature, a number of ethical issues were considered and addressed by the research team. All three researchers work on the PGDE programme, the programme in which the Immersion Days form a part. Therefore, the participants and researchers had a pre-existing relationship and power dynamic due to the dual roles of the teaching fellow/researcher and student teacher/participant. The researchers were mindful to reiterate on the participant information sheets and orally that participation in the study is voluntary. It was made very clear that the questionnaire survey was not part of any assessment on the programme and that their choice to participate or not participate would have no influence on their ability to meet the GTCs Standard for Provisional Registration. All students received a short presentation that explained the purpose of the study, their roles, and their ability to withdraw from the study at any time up until the point where data is anonymized, which was at the point of submission.



## 4. Findings

The questionnaire survey received 54 responses, which was a representative sample of the total population of social studies student teachers on the programme, allowing for a 95% confidence level. The questionnaire survey was 100% completed by all respondents.

The questionnaire survey included both open and closed questions which generated quantitative and qualitative data. A mixed methods descriptive analysis was used to process the gathered data. The closed questions generated quantitative responses, and for these a descriptive statistical analysis was used to summarize and interpret this numerical data. For the qualitative data generated through open questions featured in the questionnaire survey, a qualitative content analysis was taken. Word clouds were generated via Microsoft Forms using participant responses. This supported an inductive frequency analysis which allowed for recurring key words to be recognized. These key words were then grouped into broader thematic categories. Original responses were then revisited to understand how these words were used in context. Then, statements were coded, and from this our themes emerged.

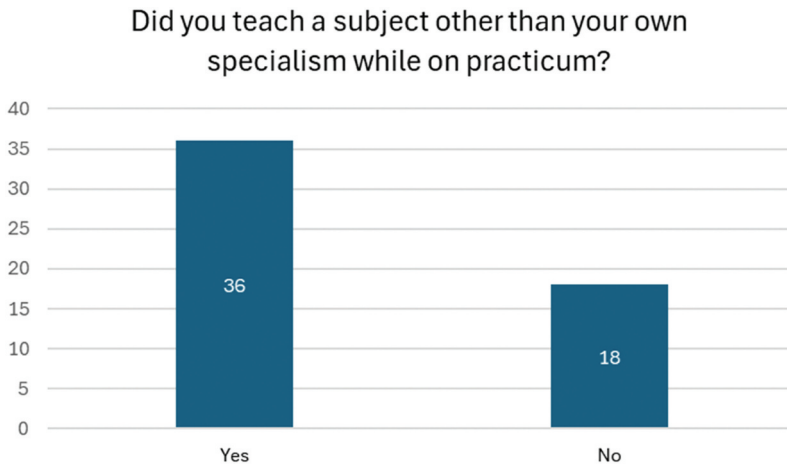
The findings of this study are broken into three sections. The first section presents findings that relate to the current landscape of social studies in Scottish secondary schools. The second contains findings on the role and structure of the Immersion Days as a professional learning experience. The third section details the extent to which the Immersion Days prepared student teachers for their first placement experience.

### ***4.1. Findings 1: what are the most prevalent curricula models adopted within Scottish secondary schools to teach social studies?***

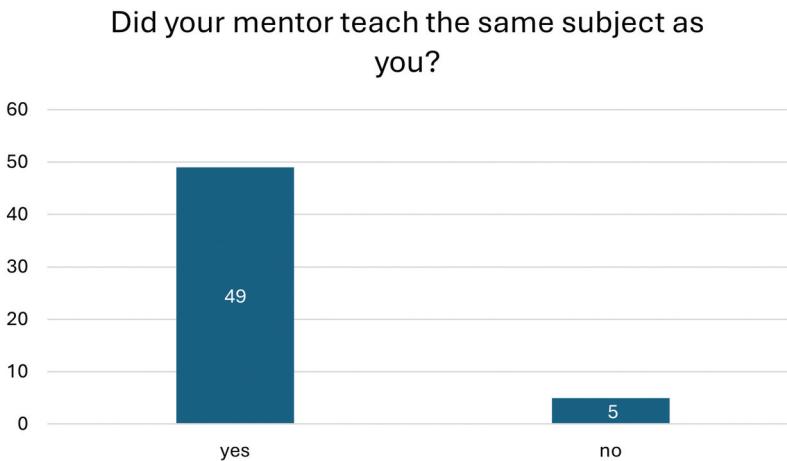
The literature review of this study shows that much of the literature written about social studies in Scottish secondary schools was published in the 2010s, corresponding with the introduction of CfE. Therefore, the authors identified a need to identify the current landscape of social studies to either support or counter their anecdotal experiences. In order to do so, this section reflects upon the social studies student teacher placement experience. Of the 54 responses to the questionnaire survey, 67% of respondents indicated that they were teaching a subject beyond their own subject specialism during their practicum. This identifies that a majority of the student teachers that participated in this study were engaging with a curriculum in their practicum setting that required them to teach beyond their own area of expertise. A follow-up question sought to find out how many periods on their timetable during their final week of practicum were of a subject other than their specialism, the results of which are shown in [Figure 2](#). Sixty-seven per cent of student teachers taught a subject other than their specialism. On average, the student teachers experienced teaching a subject other than their own for five periods a week, which equates to approximately 30% of their teaching time during their practicum week being allocated to a subject beyond their own subject specialism. The highest response provided by a student teacher was 21 periods, which is 3 periods short of their entire timetable during that final week.

[Figure 3](#) shows that, while less common, it was also found that student teachers were allocated mentors/supporters from another social subject during their experience, e.g. a history student teacher has a mentor/supporter that was a geography or modern studies teacher. Of those that responded to the question, 9% of students experienced this. This indicates that, in some settings, there is already a high level of interdisciplinary collaboration taking place within social studies departments and that student teachers may not be prepared for via a solely subject specific approach during initial teacher education programmes.

While not necessarily representative of the context present across the entirety of Scotland, it was found that a variety of different models of social studies teaching were present in the schools that hosted social studies student teachers for their practicum, with some schools utilizing hybrid approaches which applied different models for different year groups. [Figure 4](#) shows that the most common mode of teaching was 'single teacher delivery' where one teacher teaches all three



**Figure 2.** Bar chart showing answers to the question 'did you teach a subject other than your own specialism while on placement?'.

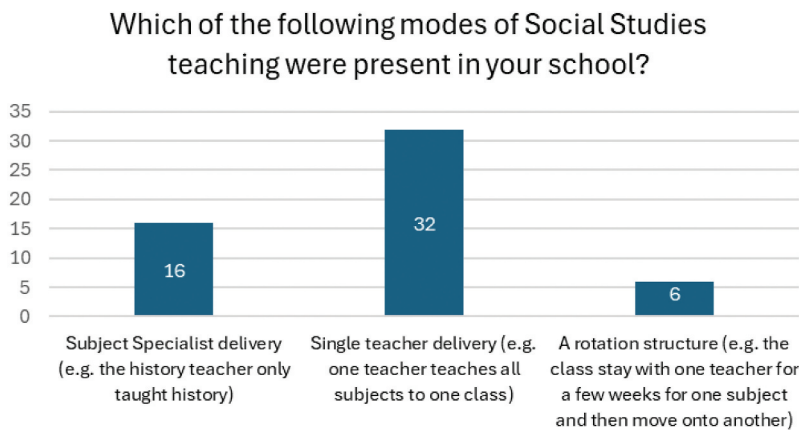


**Figure 3.** Bar chart showing answers to the question 'Did your mentor teach the same subject as you?'.

social subjects to one class. Fifty-nine per cent of students experienced this model while on placement. A subject specialist model, where the modern studies teacher only teaches modern studies, etc., was experienced by 30% of students. The remaining student teachers experienced a 'rotation structure' where a class stayed with a teacher for a number of weeks to cover one subject and then rotated to another teacher for input on a different subject area. As such, this study found that there is not a definitive model of social studies teaching in Scottish secondary schools.

#### ***4.2. Findings 2: to what extent does a transdisciplinary approach towards social studies initial teacher education influence students' knowledge and skills development in preparation for their first practicum experience?***

Considering the research informed understanding of the current landscape of social studies teaching in Scotland that was derived through Research Question 1, the researchers were interested in finding out to what extent the Immersion Days supported student teachers in preparing for their placement

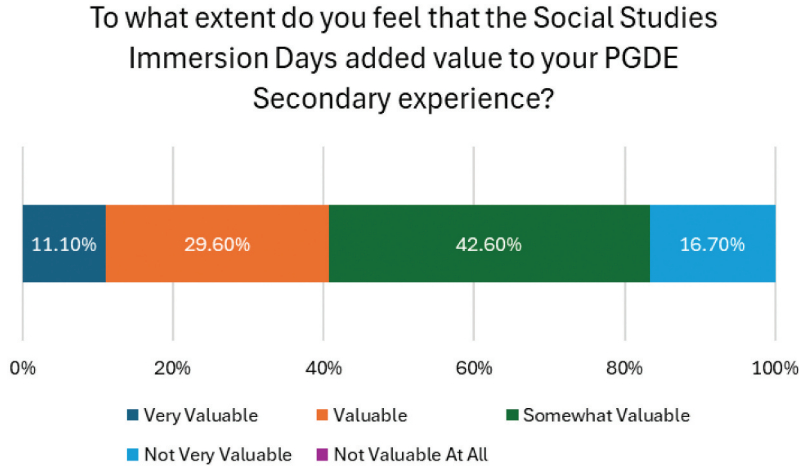


**Figure 4.** Bar chart showing answers to the question ‘which of the following modes of social studies teaching were present in your school? Please tick all that apply’.

experiences. It was believed to be important to consider student attendance in order to account for levels of engagement in the initiative. In total, 91% of respondents attended all three Social Studies Immersion days, with the remainder having attended two sessions. No student teacher that responded had only attended 1 day. Of the three Immersion Days, Day 3 was the highest attended by the respondents, but this is certainly due to the questionnaire survey being conducted on this day.

The extent to which participants valued the Immersion Days is presented in [Figure 5](#). Of the total number of responses to the questionnaire survey, 83.3% felt that the Immersion Days added value to their PGDE experience. As part of the questionnaire survey, respondents were given the opportunity to provide a response to an open question which asked which element of the Immersion Days were particularly successful. While the length of responses varied, 42.5% of respondents made clear reference to the geography provision that was provided. Revisiting full responses as part of a thematic analysis found that specific reference was frequently made to the practical tasks and activities that formed part of this input as a particular strength.

A further theme identified in responses to this open question was reference to seating arrangements, with 16% of respondents making explicit reference to the benefit of sitting in mixed subject groups:



**Figure 5.** Stacked bar chart showing answers to the question ‘to what extent do you feel that the social studies immersion days added value to your PGDE secondary experience?’



**Figure 6.** Word cloud which features common answers the question ‘where there any elements of the Social Studies Immersion days that you felt were particularly successful that should be retained in future planning?’.

it was good to work with other students from other courses and learn from each other

Student A

mixing all three subject groups together was a good idea

Student B

The word cloud in [Figure 6](#), generated through Microsoft Forms serves to visually display the common words and phrases included in these responses that allowed for these themes to be initially identified.

In a similar manner, the student teachers were asked whether there were any elements of the Immersion Days that they felt were not successful and should be changed or removed in future sessions. While it is clear from the previous question that students benefitted from the opportunity to work with student teachers of other subject areas and receive support from these students when covering their discipline, student teachers did not see much value in attending the session on their own subject area. This theme was dominant in participant responses:

I did not feel like going to the immersion day of my own subject

Student C

‘history people shouldn’t have to attend history immersion day’

Student D

Responses such as those above exemplify this position. In association with this, a further theme related to a desire for less repetition between content covered in subject specific seminars and the Immersion Days —‘for your own subject day it’s quite repetitive’. Other than this, the remaining responses related to a third theme. Participants made reference to additions that could be made to the initiative to enhance the learning experience such as the creation of an online forum to ask questions during each day in confidence, an online shared drive to upload and share resources, more time on the first Immersion Day to get to know new colleagues and more interactive content and activities. The relationship between these themes will be further explored in the discussion.

#### 4.3. Findings 3: to what extent does a transdisciplinary approach towards social studies initial teacher education influence students' confidence in preparation for placement?

The extent to which student teachers were comfortable with teaching a social subject other than their own subject specialism during their practicum (e.g. a geography student teacher being timetabled to teach history lessons) was of interest to the research team. As part of the questionnaire survey, respondents were asked to indicate their level of confidence with teaching different social subjects both prior and after the Immersion Days using a Likert scale. Student teachers did not give responses based on their own subject specialisms, e.g. history students only indicated their confidence with teaching geography and modern studies. The findings pertaining to this question are shared in Figure 7.

Out of the three social studies subjects, geography was identified as the subject that student teachers were the most confident in teaching prior to the Immersion Days. One hundred per cent of the history and modern studies students that responded to the questionnaire survey indicated that they were confident in teaching geography during their practicum, with 38.9% of those stating that they were 'very confident' which was the highest level of confidence available on the scale. In contrast, the thought of teaching history during their practicum evoked the least confidence, with 3.24% of respondents indicating that they were 'not very confident at all' with teaching this subject. The number of responses indicating a lack of confidence with teaching history is evenly split between geography and modern studies respondents. However, it is important to note that due to the different sizes of their cohorts, it should be stated that one-third of the geography student teacher sample was not confident with teaching history while approximately one-fifth of the modern studies student cohort gave this response. In addition to this, only one respondent, a geographer, indicated that they were not confident with teaching modern studies.

Students were asked to share whether their levels of confidence changed as a result of participating in the Immersion Days. This study found that reported levels of confidence in teaching subjects beyond your own specialism changed following the three Immersion Days. These findings are also

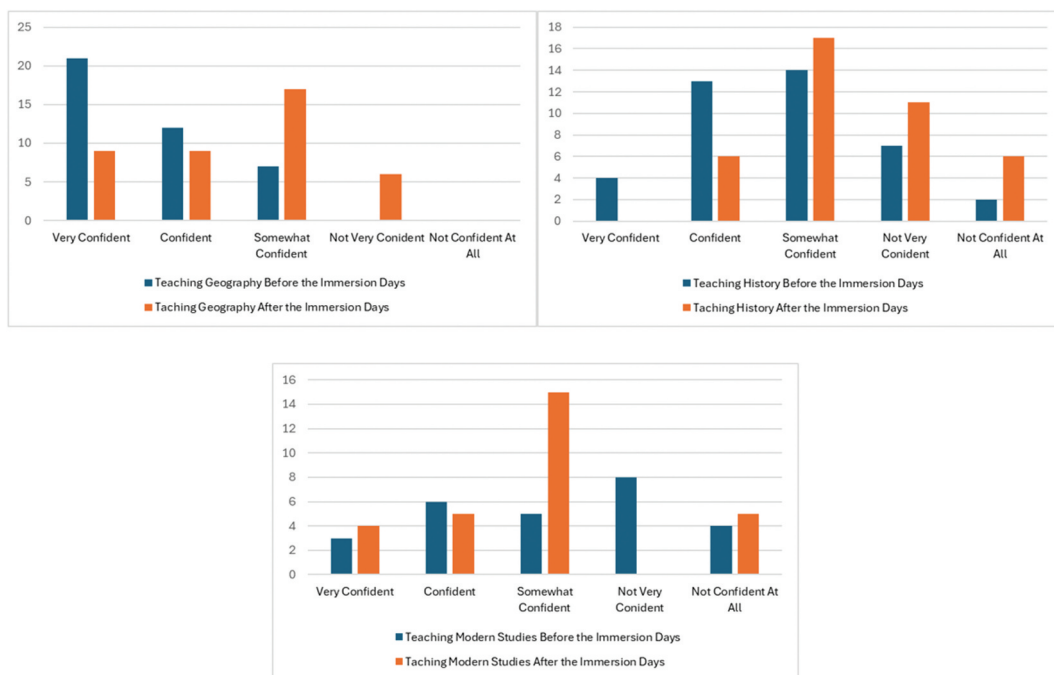
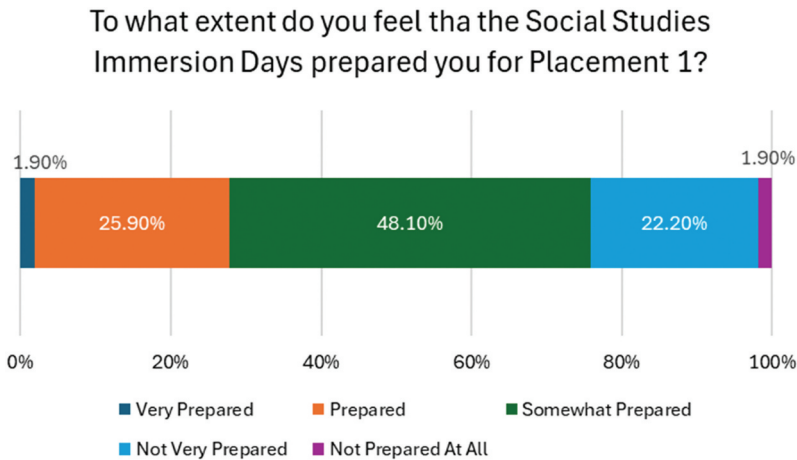


Figure 7. Bar chart showing levels of confidence of teaching each subject before and after the Immersion days.



**Figure 8.** Stacked bar chart showing answers to the question 'to what extent do you feel that the Social Studies Immersion days prepared you for placement 1?'

represented in [Figure 7](#), above. First, an increased number of respondents indicated that they were not confident with teaching geography, indicating that confidence in teaching the subject decreased as a result of the Immersion Days. This change in confidence was found in the responses of both the modern studies and history cohorts equally. Likewise, confidence in teaching history decreased following the Immersion Days with 47.2% of respondents expressing this response—a difference of 8.3%. Confidence in teaching modern studies also decreased where 36.4% of respondents now believed themselves to no longer have confidence in their abilities to teach the subject during their practicum.

Question 6 in the questionnaire survey posed the question 'to what extent do you feel that the Social Studies Immersion Days prepared you for placement 1?'. The responses are shown in [Figure 8](#). In total, 75.9% of respondents declared that the Immersion Days prepared them for their practicum to varying degrees, with 1.9% feeling very prepared, 25.9% feeling prepared and 48.1% feeling somewhat prepared, respectively. The remaining respondents indicated that the felt not very prepared or not prepared at all.

Overall, the Immersion Days were found to have a varying influence on student teachers' confidence in preparation for placement. The impact of this will be discussed in the next section.

## 5. Discussion

This article aimed to determine the extent to which a transdisciplinary approach towards educating student geography, history and modern studies teachers impacted their first practicum experience. Following the co-delivery of three Social Studies Immersion Days as a transdisciplinary learning experience, an online questionnaire survey yielded responses that identified the current landscape of social studies in Scottish secondary schools, and the extent to which a transdisciplinary approach influenced student teachers' knowledge and skills development and confidence levels in preparation for their practicum.

The findings of this study echo the work of Anderson and Nixon (2010) and Priestley (2011) by confirming that single teacher delivery, an approach whereby a single teacher delivers lessons on all three social studies subjects, is the most commonplace teaching method utilized by schools. This finding is significant as it provides an updated perspective of social studies in Scottish secondary schools and confirms that movements towards a more integrated approach have remained over time. As such, it is therefore expected that student teachers undergoing practicum in these settings

would be expected to potentially teach a subject other than their own specialism. This indeed turned out to be the case for the participants of this study, where over two-thirds of student teachers had timetables that featured at least two social subjects. In light of this, it is important to note that this does not mean that these students were not fulfilling the requirements to meet the Standard for Provisional Registration in their own subjects. While the terms 'geography', 'history' and 'modern studies' are ubiquitous in Scottish education, these subjects technically do not exist in the *BGE* phase of the *CfE*. Instead, the characteristics of these disciplines are to be found under the umbrella curricular area of 'Social Studies' and, therefore, in a sense, all teachers of geography, history and modern studies are also teachers of social studies. Thus, a timetable consisting of *BGE* social studies content, whatever the title, is appropriate for these students. Nonetheless, this finding suggests that it is common for student teachers to find themselves in situations where they are teaching across the social studies spectrum. Therefore, this finding should bear influence on initial teacher education in Scotland as it can be deemed necessary for student teachers in Scotland to gain the opportunity to receive some input on their initial teacher education programme that reflects their potential practicum environment in order to support a successful practicum experience. The Social Studies Immersion Days initiative which formed the basis of this study can be one such way that this opportunity can be granted.

However, while the Immersion Days initiative proved successful in preparing students for their placement experiences by supporting networking across disciplines, new disciplinary knowledge and skills acquisition, and by coaching student teachers to engage with topics such as anti-racism, decolonizing the curriculum, and the climate crisis through a transdisciplinary lens, this paper does not advocate for any movement towards a fully integrated version of initial teacher education for social studies student teachers. Doing so would likely result in a severe limitation of *CfE*'s ability to fulfil its purpose, as outlined in the Four Capacities (Education Scotland, [n.d.](#)). In the case of geography, Hammond and colleagues (Hammond et al., [2024](#)) identify the place of geography in the *BGE* as a current area of tension within the discipline, outlining that a dissolution of the subject area would have negative consequences on a learner's ability to engage in interdisciplinary thinking across their learning and limit their ability to engage with complex global issues. In addition to this, it would hinder how learners consider their ability to shape the future for themselves and their communities. As such, a lack of geography specialists in Scottish schools would debilitate the development of 'effective contributors' in Scottish society. In addition to this, the social and environmental aspects of the discipline have a significant role to play in instilling the knowledge, skills and capacities required by young people to address future sustainable development challenges and, as such, the subject forms a basis for national policies such as the Scottish Government's Learning for Sustainability Action Plan ([2023](#)).

Modern studies, being first introduced in the 1960s, is a subject area unique to the Scottish curriculum that has been recognized as developing high levels of political literacy in Scotland's young people (Maitles, [2000](#)). The subject can be seen as contributing to the positive global citizenship outcomes achieved by Scottish young people in PISA's assessment of pupils' ability to thrive in an interconnected world (OECD, [2020](#)). We argue that removing this specialism in initial teacher education in favour of a fully integrated approach would run the risk of negatively impacting the worldviews of Scottish learners and limit the development of their political literacy in relation to both local and international spheres. In this instance, a dissolution of modern studies as an area of specialism would, in turn, create barriers to fulfilling the Scottish curriculum's aim of creating 'responsible citizens', the results of which would easily be quantifiable and represented in future PISA assessments on global citizenship. The analytical skills developed through history wherein young people learn to understand the processes of change, the nature of evidence, and make judgements in light of this (Hillis, [2010](#)) can be seen as necessary competencies in the development of 'confident individuals' that can think critically when navigating contemporary mediascapes as they develop their own beliefs and views of the world. As such, all three subject disciplines have a unique offering that contributes to the success of the national curriculum, a contribution that can



easily be diluted through a poorly considered 'tick box' approach that hinders the strengths of each subject area.

This study found that 75.9% of student teachers found that the Social Studies Immersion Days prepared them for their practicum experience. While this figure initially may suggest that the initiative did not successfully enhance the preparation of a large number of students, contextualizing this figure with other findings strongly suggests the opposite. This research found that 67% of student teachers had a practicum experience that required them to teach social subjects other than their own. As the initiative aimed to prepare student teachers for a multidisciplinary experience during their practicum, an indicator of success for the Immersion Days would have seen 67% of students feeling prepared. Considering that 75.9% exceed this figure, the researchers can suggest that the Immersion days did not only successfully prepare student teachers for the experiences they encountered during practicum but also provided support for those that had solely subject specific experiences. A number of characteristics associated with the Immersion Days can be seen as contributing to this success. Collaboration is identified as the foundation of successful and effective curricular integration (Lenoir & Hasni, 2016). This study found that student teachers enjoyed the opportunity to work in mixed seating plans with students of other disciplines and learn from their knowledge and experiences. This suggests that a pedagogical approach based upon the principles of social constructivism is most beneficial in this case, and adopting this approach from the outset is seen as a strength of this initiative. The fact that student teachers recommended adding more teambuilding and group activities to support them in building stronger bonds with their peers is noteworthy and highlights that they too acknowledge the importance of collaboration in this sense. However, some student teachers indicated that they did not receive much benefit from attending the sessions that focused on their own subject discipline which suggests that they did not fully appreciate the reciprocal nature of group working and collaboration—students found it beneficial to learn from their peers from other subject disciplines but did not readily see themselves as also fulfilling that role at different points of the initiative. Perhaps more time spent working in groups, as recommended, ahead of each session would have prepared student teachers for the symbiotic nature of group working.

The data indicated that participating in the Immersion Days eroded confidence in teaching other subject disciplines. However, we advocate that this does not suggest that the intervention was unsuccessful and, indeed, the levels of increased 'preparedness' identified through the questionnaire survey suggest that the Immersion Days fulfilled their purpose of preparing student teachers for their practicum experiences. In addition to this, while the prospect of teaching geography featured the largest reduction in confidence, it is necessary to note that many participant responses indicated that they identified the geography input as a strength of the Immersion Days. Therefore, we can say with confidence that the input did not have an adverse effect. Instead, we posit that engagement with a subject specialist Teaching Fellow and collaboration with peers from other subject areas dismantled preconceptions of each subject area and revealed them to be the rich and varied disciplines that they are to the participants. It is through this process that gaps in student teacher knowledge may have been highlighted and, through this, these doubts of confidence may have been born. In the words of one respondent: 'I just felt I had more to learn'. This may be the explanation for the large decrease in confidence in teaching geography. It can be suggested that student history and modern studies teachers have backgrounds in undergraduate degree disciplines that are human and social in nature and may have become unsettled when being introduced to the physical and natural geographical content shared during the Immersion Days. Likewise, geographers with degree disciplines based in geology and earth sciences may have equally been unsettled when engaging with the historical, social and political content associated with the other subject disciplines. This finding reflects those by Locke (2008), and we too suggest that the strong identities that derive from a student's undergraduate degree discipline that, in turn, inform how they define themselves as a teacher may pose a barrier to them embracing the thought of teaching other subject disciplines. The prospect of undertaking a review of the nature of student undergraduate degrees is beyond the scope of this study but

presents a logical next step in order to create an enhanced programme that reflects student need. With this being said, it is a rather unsatisfying conclusion for the research team to know that while student teachers feel prepared to teach social studies, they do not feel fully confident in doing so. We recommend that Immersion Days, as an initiative, can be enhanced as a professional learning tool by including a self-reflection exercise of some kind which grants students the opportunity to identify current areas of strength and development. Once complete, student teachers can then be signposted to professional associations, groups, resources, courses and other means of professional learning related to each subject area. Doing so would provide agency to students to engage in further professional learning that supports their development in the areas they have identified.

This study largely relates to the Scottish context; however, the authors believe that this work does hold significance beyond Scotland. The literature review of this study identifies that the move towards interdisciplinarity in Scotland is reflective of a global trend that endorses higher levels of interdisciplinarity in national curricula (G. McPhail, 2018; Tonnetti & Lentillon-Kaestner, 2023; Whitty, 2010). Therefore, initiatives developed in Scotland that work towards supporting the teaching of an interdisciplinary national curriculum can make a significant impact elsewhere, particularly in settings where a tension between subject specialism and generalism exists. Overall, we found that a transdisciplinary initial education experience was valued by student teachers and had a positive impact in preparing them to engage with a variety of disciplinary, interdisciplinary and transdisciplinary teaching models during their practicum. In this sense, we envision that our approach can be used to support student teachers and their supporters in similar contexts in international settings and, in turn, support the effective delivery of their respective curricula during practicum. It can also be drawn upon to support teacher education in primary settings, where the curriculum is often thought thematically. With this in mind, this paper showcases an example of how a subject-specific approach can be blended with a competency-based approach, and we perceive that our model should be used to engage student teachers in a variety of cross-cutting themes that do not belong to an individual subject discipline such as education for sustainable development and global citizenship. In this sense, our approach can be used as a steppingstone for other initial teacher education institutions wishing to engage with such themes within traditional teacher education structures without suffering the consequence of abandoning disciplinary knowledge.

### 5.1. Limitations

There are a number of limitations to this study that ought to be acknowledged and accounted for in future research in this area. First, while the participant sample was representative of the student social studies teachers on one initial teacher education programme, it should be highlighted that it is not representative of social studies initial teacher education more broadly. Each initial teacher education institution works with their own set of local authority partners to allocate practicum places so, therefore, the findings of this study are localized primarily to one region of Scotland. In addition to this, the contexts of this study are Scotland specific and would be difficult to replicate elsewhere. Another point worth highlighting is that due to this study's focus on the *BGE* phase there are potential aspects of a student teacher's practicum experience that we did not consider, such as: other subject areas that may be found in social studies faculties such as religious, moral and ethical (RME) education, psychology or business studies, National Progression Awards and Skills for Work awards and wider achievement classes. It would be interesting to further learn of the extent to which these subject areas or experiences are integrated into social studies in practice.

## 6. Conclusion

In conclusion, this work can be seen to provide an updated insight into social studies education in Scottish secondary schools, a topic where a majority of literature in the field was published over 10 years ago. This study confirmed that multidisciplinary social studies faculties are a reality in Scotland and

student geography, history and modern studies teachers are likely to experience practicum in a setting where they are required to teach a subject that is not of their own specialism and potentially work with a supporter/mentor of a different subject specialism. Therefore, there is a need for geography, history and modern studies student teachers to be prepared for multidisciplinary practicum experiences. The findings of this study show that transdisciplinary Social Studies Immersion Days are a successful approach towards preparing students for a multidisciplinary practicum experience that retains subject expertise to a large degree. The Immersion Days are also proven to support the act of collaboration, which literature identifies as the cornerstone of successful interdisciplinary and multidisciplinary teaching and learning. However, steps need to be taken to ensure that student teachers are aware that their participation in such an initiative involves making contributions to the learning of others just as much as it involves addressing their own learning needs. In this respect, this study found that the Immersion Days work to present geography, history and modern studies as multifaceted disciplines and, while this is shown to erode confidence in teaching these subjects by highlighting that there is 'more to learn', there is value in the act of highlighting areas for development and gaps in knowledge at this stage of one's professional career. It is necessary, however, for opportunities to be made available for student teachers to act upon these areas and gaps. With certain amendments, the transdisciplinary Social Studies Immersion Day model can be used as a catalyst that supports and encourages a culture of professional learning that, over time, will support effective teaching and learning in multidisciplinary social studies departments in secondary schools in Scotland and further afield

## Disclosure statement

No potential conflict of interest was reported by the author(s).

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## Ethics statement

This study was granted ethical approval by the Strathclyde Institute of Education Ethics Committee, The University of Strathclyde.

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## Relationships

William Quirke, Kathryn McCrorie and Sarah Proctor report a relationship with University of Strathclyde that includes employment

## Patents and intellectual property

There are no patents to disclose

## Other activities

There are no additional activities to disclose

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