education sciences

MDPI

Article

A Quantitative Exploration of Reported Curriculum Dialogues Between Secondary Teachers in Wales at a Time of Curriculum Reform

Mary Woolley [1,*], Thomas Breeze [2], Katie Clemmey [1], Vivienne John [2], Emily Sayers [1] and Robert A. Bowie [1]

[1] School of Social Work, Education and Teacher Education, Canterbury Christ Church University, Canterbury CT1 1QU, UK
[2] School of Education and Social Policy, Cardiff Metropolitan University, Cardiff CF5 2YB, UK; tbreeze@cardiffmet.ac.uk (T.B.)
* Correspondence: mary.woolley@canterbury.ac.uk

Abstract

As the 2022 Curriculum for Wales becomes embedded in schools, this paper shares findings of a self-report survey from over 300 secondary school teachers on the nature, content and frequency of their curriculum conversations with other teachers. This new curriculum framework, grouping subjects together into Areas of Learning and Experience [AoLEs] enables disciplinary, interdisciplinary and multidisciplinary learning. Teachers reported on perceived factors affecting the quality of their dialogues and perceived opportunities for deepening interdisciplinary dialogue. Descriptive analysis shows teachers reported more conversations with other teachers in the same subject, more conversations about content taught rather than the purpose of teaching it and fewer conversations about how their subject relates to other subjects. Crucially, surface-level conversations were reported as more common than deeper conversations. The findings reveal processes and possibilities of curriculum policy enactment at the level of teacher professional discourse. Teacher–teacher dialogue, as a way of becoming aware of the purpose of other subjects and becoming more articulate in describing the purpose of one's own, is highlighted as a necessary phase before teachers engage in collaboration. Deeper dialogue is proposed as a necessary precondition of deep and meaningful interdisciplinary collaboration.

Keywords: teacher professional discourse; dialogue; interdisciplinarity; curriculum reform; connection; Curriculum for Wales

Check for updates

Academic Editors: Meredith Marko Harrigan and Emi Kanemoto

Received: 17 April 2026
Revised: 2 May 2026
Accepted: 6 May 2026
Published: 10 May 2026

Copyright: © 2026 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license.

1. Introduction

Teachers' curriculum dialogues are an essential site of professional learning, more so during times of curriculum policy reform. Such conversations become even more significant when the official curriculum shifts from a traditional disciplinary approach to a disciplinary, interdisciplinary and multidisciplinary framework (Welsh Government, 2022). Teachers tend to be sole practitioners, conversing primarily with students and perhaps support staff. Teachers' professional dialogue is therefore something that tends to happen outside formal lessons, in the breaks or before and after the school day, occasionally in formalised meetings or through continuing professional development sessions. The nature and quality of such dialogues are affected by circumstance, proximity or the architecture and design of the school buildings, often relegated to in-between times and spaces. Nonetheless, teachers'

curriculum conversations can play a vital role in influencing or changing practice (Ke et al., 2023; Penlington, 2007; Finch et al., 2021).

This paper reports on a recent survey of secondary school teachers in Wales, exploring reported curriculum dialogues between teachers at a time of intensive curriculum reform. We argue that interdisciplinary dialogues between teachers of different subjects need to be valued as an essential part of curriculum development in jurisdictions such as Wales where connections across subject boundaries are encouraged. The survey reported here forms the first part of a larger, multi-methods project where qualitative analysis of teachers' curriculum dialogues over time is the primary form of data collection. At the outset of the project, however, the survey provides a snapshot of teachers' experiences of curriculum dialogues, hoping to reveal a hidden aspect of teachers' lived experiences of curriculum reform. Influenced by the work of Admiraal and Lockhorst (2012) who designed the Sense of Community in School Scale and Boyd and Glazier (2017) who created a continuum of teacher dialogue, a survey was designed to explore the nature and frequency of conversations between different groups of teachers. The second part of the survey explored teachers' reported perceptions of the quality of their curriculum conversations and the third explored their reported perceptions of various opportunities for deeper curriculum conversations. This methodological approach, using a descriptive survey to explore the qualitative phenomenon of dialogue, was intended to reveal the internal process of curriculum reform, examining how a shift in national policy played out in teachers' lived experiences.

Previous work, using Barbour's (1966) taxonomy, showed dialogue between teachers is a necessary, but overlooked step, before collaboration (Woolley et al., 2023). While Saks et al. (2025) have explored different forms of collaboration between teachers, we argue that it is necessary to shine a spotlight on dialogue between teachers as a separate phenomenon as without meaningful and frequent dialogue, collaboration is likely to be shallow. The term 'curriculum conversations' was used in the survey, intended to be accessible and meaningful to teacher participants. Slightly different phrases are used in the rather sporadic literature on this important area, from teacher–teacher dialogue to teacher-to-teacher dialogue, to teacher professional discourse or curriculum conversation (Lefstein et al., 2020). While Myatt and Tomsett (2021) have recently raised the profile of the term curriculum conversations in England, we were primarily interested in the conversations teachers reported with their peers, promoting teacher agency, rather than conversations between senior leaders and teachers about the curriculum.

We argue that professional dialogue between teachers of different subjects needs to be valued as an essential part of curriculum development in jurisdictions which encourage teachers to make connections across subject boundaries, such as Wales, but also Finland, Scotland and other countries across Europe. School leaders and policy makers cannot assume that teachers are familiar with the content taught in other subjects or even the purpose of other subjects. If teachers are to engage in the sort of deeper dialogue (Spencer & Waite, 2022) that may result in meaningful collaboration between subjects, with impact on the futures of young people, they will likely need support in terms of knowledge, dialogic confidence and time. The alternative could be simplistic, artificial, shallow connections between subjects which carry little long-term meaning for students, while perhaps technically meeting the demands of the new curriculum policy.

The significance of this research lies in shining a spotlight, through a descriptive survey, on a previously overlooked, but critically important area: teacher professional discourse as a site of curriculum reform. This paper provides a background context of Curriculum for Wales, justifies a focus on teacher–teacher dialogue, then explains the research design and choice of survey items. Highlights of the survey findings relating to

the frequency and nature of teacher–teacher dialogue are shared before a discussion that explores the need for teachers to talk about purpose over content, and the essential role of subject communities and professional associations in supporting deeper dialogue between teachers. This paper argues for a shift in teacher talk towards purpose and prioritisation of strategies to enable deeper rather than surface-level conversations between teachers.

2. Background Literature

2.1. Teacher–Teacher Dialogue

There is limited empirical research literature on teacher–teacher dialogue (Woolley et al., 2026) and what exists is 'fragmented', published as a result of individual research projects and not systematically brought together (Lefstein et al., 2020, p. 2). Much of this research focuses on teachers' conversations within the same subject area, particularly in professional discourse communities. There has been some research into the nature of teachers' dialogue within professional discourse communities, often in maths education (Seidel Horn, 2010; Segal, 2019), but also for teachers of English (Boyd et al., 2021) and science (Schafer & Yezierski, 2020). There is very little research on teacher dialogue across subject boundaries; Finch et al. (2021) is a notable exception.

The impact of teachers' dialogues can be varied and extensive. First, there is the impact that involvement in such conversations can have on teachers as individuals, both as a catalyst for change in their practice (Penlington, 2007), but also in helping teachers as individuals consider alternative possibilities (Boyd et al., 2021). Second, there is the impact that teacher–teacher dialogue can have on the professional community, as part of the general climate (Muscella & Dlmauro, 1995) or the learning culture for professional development (Admiraal & Lockhorst, 2012). Conversations between teachers can support the development of professional learning communities (Seidel Horn, 2010) and promote a 'scholarship of teaching' (Harrison et al., 2008, p. 582). Thirdly, there is the potential impact of teacher–teacher dialogue on students. Boyd and Glazier claimed schools could not be intellectually engaging for students unless teachers were engaged in 'learning, thinking, reading and discussing' (p. 130). Others place teacher–teacher dialogue at the centre of 'curriculum construction' (Baildon & Damico, 2008, p. 1645).

It has been suggested that an insight into dialogues could be revealing of both teacher professional learning (De Jong et al., 2022) and 'processes of learning and change' (Lee Bae et al., 2016, p. 169). Penlington (2007) was clear on the matter, arguing that teacher–teacher dialogue is the 'structural glue that holds together other learning activities,' and demanding 'a more robust conceptual foundation detailing how these dialogues work as an effective catalyst for change' (Penlington, 2007, p. 1304). Little is known about how teachers 'navigate' the 'spectrum of disciplinary integration' (Finch et al., 2021, p. 513) or how teachers can be best supported when such reforms are introduced. Research on interdisciplinary teacher–teacher dialogue offers much potential.

2.2. Quality of Teacher–Teacher Dialogue

Research into teacher–teacher dialogue identifies quality concerns noting the surface-level nature of many professional conversations. Boyd and Glazier (2017), after studying a range of collaborative teacher discourse communities, created a spectrum of behaviours. At one end they posit 'contrived collegiality' (Boyd & Glazier, 2017, p. 4) which involves polite exchanges and affirming one another's ideas in cursory ways. Further along the spectrum is 'comfortable collaboration' where 'teachers engage in conversations that focus on immediate issues that allow for easy-to-reach solutions' (p. 5). In this situation, challenges are not issued to teachers' practice. Glazier et al. (2017) suggest aiming for 'critical colleagueship' (p. 5) as a deeper sort of interaction in which teachers:

> engage in analytic dialogue surrounding educational issues. They participate in a back and forth, bidirectional exchange where they develop new ideas from one another and reach conclusions they may not have alone. They move beyond superficial discussion and may even disagree with one another to wrestle authentically with pedagogy and curriculum. (p. 5)

Nelson et al. (2010) found a similar trend in their research on 'deep talk' between teachers, that even when schools gave teachers time to come together for collaborative inquiry, deep conversation was hindered by 'a traditional school culture of congeniality and teachers' inexperience with evidence-based dialogue' (p. 176). Lee Bae et al. (2016) supported this, saying that teachers needed to move away from a 'culture of nice' (p. 168) in professional learning communities and towards 'critical dialogue that uses concrete evidence' (p. 168). Finch et al. (2021) brought a different dimension to this gap, claiming that current institutional structures of schools 'rarely provide the opportunity for teachers to deeply collaborate across disciplines' (p. 523).

Various factors, such as time, inquiry and expert input have been identified that may deepen the quality of dialogue between teachers. In their work with groups of English teachers to introduce young adult literature with sensitive themes, Boyd and Glazier (2017) concluded that 'time is required to cultivate "authentic conversation"' (p. 132). De Jong et al. (2022) focused conversations on 'inquiry instead of evaluation' (p. 1171) and found this helped teachers to challenge one another more. Finch et al. (2021) having a full week to run a professional development programme with a small group of teachers, set up a transdisciplinary task with the specific intention of forcing conversations between teachers of different subjects; in this case the task itself became the tool to deepen the conversation. Lee Bae et al. (2016) reported on teacher–teacher dialogue that took place as part of a programme of lesson study. He found that deeper discussions of science content occurred infrequently, but that the presence of 'knowledgeable others' in the group played a significant facilitative role' (p. 172). The work of Richmond and Manokore (2011) support this in finding that having facilitators in the room, sharing examples, seemed to broaden the dialogue between teachers. There was variety rather than unity in the literature on this question, but factors that contribute to deeper, higher quality dialogue included time, the use of evidence, modelling, the presence of 'knowledgeable others' and some sort of inquiry, or deeper question.

2.3. Curriculum for Wales

Curriculum for Wales, in emphasising connections across traditional subject boundaries, depends in secondary schools on curriculum conversations between subject teachers. Discussions around a curriculum for Wales were initiated in 2015 (Donaldson, 2015), with legislation introduced in 2021 (Department for Education, 2021). The curriculum differs significantly from previous iterations in that subjects are grouped into six Areas of Learning and Experience (AoLE) from Health and Wellbeing to Humanities. The curriculum website offers eleven key questions for schools to ask when planning their curriculum, including 'how can disciplinary, interdisciplinary and multidisciplinary approaches support learners to develop different knowledge, skills and experiences?' (Welsh Government, 2022). To enable subjects to come together in such ways, however, we argue that teachers need to engage in dialogue about the content they teach, the purpose of selecting that content and the relationship between subjects.

Due to the emphasis on teacher autonomy and agency within Curriculum for Wales, much of the reform has involved horizontal processes of teachers talking to teachers. This is distinctive from the more vertical, top-down model of curriculum reform and imposition of policy seen in some other countries (Bishop & Mulford, 1999). Research literature on

Curriculum for Wales has focused on the experience of multi-disciplinary AoLEs, and the development of innovative, but controversial, shared models of progression across traditional subject boundaries (Hughes et al., 2020; Morrison-Love et al., 2019). Evans (2022) suggested the need to involve practitioners in the curriculum development process was apparent in the collaborative 'Pioneer' schools employed by the Welsh Government to drive change. His research highlighted the 'multi-faceted and complex' (p. 381) nature of teachers taking ownership of curriculum development. From Donaldson's (2015) report onwards, the principle of subsidiarity was encouraged where teachers took responsibility for curriculum development, within the guidance laid out by the Welsh government (Newton, 2020). It is suggested, through these examples, that the introduction of a curriculum encouraging disciplinary, interdisciplinary and multidisciplinary approaches would change the nature and frequency of teacher–teacher conversations in comparison to more traditional, subject-based curriculum reforms. Little, however, is known about the nature, quality and frequency of curriculum dialogue between teachers beyond the Pioneer Schools as curriculum reforms are embedded.

The relationship between curriculum reform, teacher agency and professional learning is complex, but becomes more so when teachers are expected to bring subjects together. There is a significant literature on curriculum reform and teachers' role in creating change (Bowe et al., 1992; Priestley & Biesta, 2013; Woolley, 2019; Hughes & Lewis, 2020). There are strong disciplinary teacher professional communities that reach across England and Wales (for example, The Historical Association, The Geographical Association, National Association of Teachers of English). This curriculum reform in Wales demands new knowledge from teachers, knowledge of other curriculum subjects, that they may or may not have from their own schooling. Previous research shows teachers' knowledge of other subjects on the secondary curriculum cannot be taken for granted (Woolley et al., 2022).

Teachers in different subject disciplines can have diverse views about the nature of knowledge, how knowledge is constructed and how pupils make progress within that disciplinary tradition. If a curriculum is to cut across traditional subject boundaries, there is a need for teachers from different disciplines to come together and discuss their approach to knowledge. Within current debates on the place of knowledge in the curriculum in England and beyond (Muller & Young, 2019; Niemelä, 2021), less is known about how knowledge works across disciplinary boundaries. Interest in rigorous education which crosses subject boundaries is increasing across Europe, outside England. The OECD Education and Skills 2030 project (OECD, 2019) recognised disciplinary, interdisciplinary, epistemic and procedural as four different types of knowledge together viewed as 'increasingly important for understanding and solving complex problems' (p. 7). Claims have been made over the emergence of a new form of curriculum (Priestley & Biesta, 2013; Priestley et al., 2021) across Europe and beyond which has emphasised the autonomy of schools and teachers in making the curriculum. This is now evident in Scotland and Wales, but also Nordic countries such as Finland. Almeida et al. (2022), in their study of European curriculum autonomy, have pointed to growing evidence of the importance of the empowerment of teachers in the curriculum design process.

3. Materials and Methods

A survey was designed to explore secondary school teachers' experiences of disciplinary and interdisciplinary dialogue in Wales. While the rest of this three-part project depends on qualitative data, recorded teacher dialogues, in the initial stage we wanted a broad picture of the nature and frequency of teachers' conversations about their curriculum subject.

3.1. Survey Design

The survey was designed to answer the question, what experience do teachers in Wales have of substantive disciplinary and interdisciplinary teacher–teacher dialogue? The initial version of the survey had five parts. After Part 1 on informed consent and demographics, Part 2 explored the frequency of curriculum conversations. Items were designed to explore how often teachers talked to other teachers about a series of educational things, from the content they were teaching, to the purpose of teaching that content, to the relationship between different subjects. Items in Part 3 were selected from two sources, first items in a previous survey designed to explore the school environment (Admiraal & Lockhorst, 2012) and second, phrases from a qualitative spectrum of quality in teacher–teacher dialogue (Boyd & Glazier, 2017). Part 4 asked participants questions about what affordances would deepen the teacher–teacher dialogues they engaged in. The final section took some items from the work of Greer et al. (2023), on teachers' experiences with sustainability and climate change as it sought to explore frequency of teacher conversations around the teaching of sustainability and climate change, a substantive area that falls naturally across subject boundaries. The survey was translated into Welsh and uploaded to Qualtrics for online dissemination. A small incentive was offered, donating money to a Wales-related charity for each response. Our decision to include a survey in the research design was heavily influenced by the work of Admiraal and Lockhorst (2012) with Dutch school teachers. While the idea of using a survey to research dialogue seems counterintuitive, the concept of teachers self-reporting on the quality of different sorts of dialogue with colleagues in school was convincing as a way of exploring experiences of dialogue across a jurisdiction.

3.2. Ethics

Ethical approval was sought from both universities employing the authors and approval details are stated at the end of this paper. Consent was sought from all participants; those who completed the online survey could not proceed until a consent box was ticked and those who completed the paper survey were also asked to read details and tick a box giving consent. Names of teachers were not collected to alleviate concerns of being recognised. As some Local Authorities in Wales contain only a small number of schools, we have not reported any data where we feel small numbers could lead to the recognition of individual details.

3.3. Data Collection

The survey was disseminated from late January 2025 through teacher networks from Cardiff Metropolitan University and various other teacher education networks known to the authors. As initial uptake was slow, shorter versions were launched in April and June 2025 with the final version on paper. Several items were removed, but there was no change to remaining individual items, seeking to retain the integrity of the data. Several schools in Wales were approached and promised book vouchers for each completed survey.

3.4. Sample

Over 400 secondary teachers engaged with the survey. Findings in Part 1 are based on 291 surveys, including teachers recruited through schools. Findings in parts 2 and 3 are based on 82 online surveys from a wider geographical spread with 13 different Local Authority regions represented across the country. Of the initial, longer, online survey, responses less than 40% complete were omitted. Of the 82 remaining online responses, 72 were completed in English and 10 in Welsh. A total of 18 were from 11–16 schools, 60 from 11–18 schools, 4 from 3–16 schools, 9 were from Welsh-medium schools, 1 from a sixth form college, 4 from schools for pupils with Additional Learning Needs [ALN], none

from independent schools, 2 from Catholic schools and 1 from another faith school. As they were much shorter, paper surveys were only included in the analysis if they were complete.

3.5. Limitations

There were limitations to this approach. Items on the survey may have been interpreted in different ways by different teachers and some of the language may have been lost in translation to Welsh, but we are not trying to make significant generalised claims based on these responses. Data from the small, self-selecting sample of teachers in Wales in this research cannot be generalised to all teachers in Wales and this paper does not intend to make such generalised claims. Instead, we wanted our findings to raise questions in an area with little existing research, the opportunities teachers get to talk to colleagues about the subjects they teach at a time of curriculum reform. We also wanted to explore surveys as a way of teachers self-reporting their experiences of dialogue with teacher colleagues.

4. Results

4.1. Frequency and Nature of Teachers' Curriculum Dialogues

This paper reports on three parts of the survey. The first asked teachers to report on frequency of conversations concerning content, purpose and relationship with other subjects (Table 1). This was completed by the widest number of teachers (n = 291). The second explored factors potentially affecting the quality of dialogue between teachers. The third explored affordances that teachers perceived could deepen future dialogue. These latter two questions depend on a smaller, but diverse, online sample of teachers (n = 82).

Table 1. Frequency of teachers' reported conversations about content, purpose and relationship with other subjects (n = 291) (%).

I Talk to Teachers...	Never	Around Once a Year	Around Once a Month	Around Once a Week	Several Times a Week	Not Relevant	
in my main subject, in my school, about the **content** of our subject	1.7	0.7	9.1	17.8	69.3	1.4	100
who don't teach my subject, but are in my AoLE, about the **content** we teach in our subjects	7	22.2	33.5	23.6	9.9	3.9	100
outside my subject area and outside my AoLE, but in my school, about the **content** within the subjects we teach	15.8	36.6	32.4	10.9	3.2	1.1	100
in my main subject, in my school, about the **purpose** of the subject we teach	6	11.2	23.2	27	31.2	1.4	100
who don't teach my subject, but are in my AoLE, about the **purpose** of the subjects we teach	12.3	27.7	31.6	19.3	5.6	3.5	100
outside my subject area and outside my AoLE, but in my school, about the **purpose** of the subjects we teach	23.9	37.5	29.1	5.6	2.8	1.1	100
in my main subject, in my school, about the **relationship** between our subject and other subjects.	2.5	13.7	40.4	24.9	17.5	1.1	100

Table 1. *Cont.*

I Talk to Teachers...	Never	Around Once a Year	Around Once a Month	Around Once a Week	Several Times a Week	Not Relevant	
who don't teach my subject, but are in my AoLE, about the **relationship** between our subjects	8.1	26.8	38.4	16.2	7.4	3.2	100
outside by subject area and outside my AoLE (but in my school) about the **relationship** between our subjects.	17.2	44.6	29.5	5.6	2.1	1.1	100

4.1.1. Dialogues About Content

The first questions related to curriculum content, asking teachers how often they talked to different groups of colleagues about the content of their subject, other teachers in their main subject, teachers in their AoLE and teachers outside their AoLE. Options ranged from 'never' to 'several times a week.' The most frequent conversations reported on curriculum content were between teachers of the same subject. Nearly 7 in 10 (69.3%) teachers reported such conversations taking place several times a week with a further 2 in 10 (17.8%) reporting conversations about content with teachers of the same subject around once a week. This suggests teachers are talking frequently about what they teach, most often to other teachers who teach the same subject.

Frequent conversations about content were also reported with other teachers in the same AoLE. Although only 1 in 10 (9.9%) report such conversations several times a week, a further quarter report having them around once a week (23.6%). So, one third of teachers (33.5%) are talking to teachers of different subjects, within their AoLE, about the content they teach once a week or more. A further third (33.5%) report having such conversations 'around once a month'.

Conversations about content with teachers outside the AoLE were far less frequent. Here a much smaller number (14.1%) of teachers report having conversations about the content they teach once a week or more, although a further third (32.4%) report them once a month and a further third again (36.6%) report having them once a year. It is worth noting that 15.8% of teachers report never having such conversations about the content they teach with teachers outside their AoLE. This shows us that secondary teachers' conversations about content in Wales are much more frequent within subject communities and that opportunities for connection between teachers across the school, through dialogue, do not seem to be present.

4.1.2. Dialogues About Purpose

Teachers' reported conversations about the purpose of what they are teaching can be seen as much less common than conversations about content, across every grouping. There is a similar pattern in that the most frequent conversations about purpose happen within subject communities of teachers (31.2% report several times a week). Over half of teachers (57.2%) report such conversations taking place once a week or more and over 80% of teachers (81.4%) report such conversations happening once a month or more often. This suggests teachers are not just talking to their subject colleagues about what they are teaching, they are also talking about why they are teaching such content, just much less frequently than talking about the content itself.

Conversations about purpose in the AoLE are less frequent, but still significant, considering that this involves teachers talking to teachers of another subject about what is

taught and why it is taught. A quarter of the teachers surveyed in Wales (24.9%) report such conversations once a week or more and over half (56.5%) report such conversations once a month or more. One in eight (12.3%) teachers report that they never have such conversations. Within the AoLE teachers are quite regularly talking to teachers of other subjects about why they are teaching certain content.

Conversations reported outside the AoLE about purpose are much less frequent than those in the AoLE or in the subject community. Fewer than 1 in 10 teachers (8.4%) report weekly conversations about the purpose of their subject with teachers outside their AoLE. Nearly a quarter (23.9%) report never having such conversations. Over 60% of teachers (61.4%) reported that it was once a year or less often (including never) that they have conversations about the purpose of their subject with teachers from other subjects outside their AoLE. This supports the finding that opportunities for meaningful connection through dialogue between teachers across the school do not seem to be present.

4.1.3. Dialogues About the Relationship Between Subjects

Reported conversations between secondary teachers in Wales about the relationship between their subjects are much less frequent than conversations about content or purpose. Still, a significant number of such conversations seem to be taking place in Wales, but mostly within subject communities. Over 40% of teachers (42.4%) reported such conversations taking place within their subject community once a week or more and a further 40% reported such conversations once a month. Over 80% (82.8%) of teachers therefore report such conversations, about the relationship between their subject and other subjects, once a month or more. Perhaps due to the language of interdisciplinarity in Curriculum for Wales and the introduction of AoLE groupings of subjects, teachers are more likely to have conversations about how their own subject relates to other subjects.

These conversations about the relationship between subjects also seem to be taking place within the AoLEs, although slightly less common than within subject groups. In total 62% report such conversations once a month or more (in comparison to 82.8% within the subject), but nonetheless, teachers are reporting such conversations. Conversations outside the AoLE about the relationship between subjects are much rarer, with a comparative 37% reporting them once a month or more and only 7.7% reporting them once a week or more. 17.2% of teachers report never talking to teachers outside their AoLE about the relationship between their subjects and a further 44.6% report only having those conversations once a year, meaning that over half of teachers surveyed have a conversation once a year or less about the relationship of their subject with other subjects when that conversation is with any teacher outside their AoLE. This raises concerns about teachers' knowledge of the wider curriculum and of opportunities for curriculum coherence or student experience of topics which occur across subject boundaries, such as sustainability and climate change.

4.2. Factors Affecting Quality of Dialogue

Part 2 of the survey explored descriptions of the quality of dialogue and factors in the environment that might affect dialogue such as agency and time. A 5-point Likert scale was used to gather data across the 9 questions. As this part of the survey was omitted from the later, paper version, the number of participants is lower, at 82. These 82 teachers, however, come from a wide range of Local Authorities across Wales and teach the full range of secondary subjects.

Table 2 shows teachers' responses to each statement. In terms of the quality of conversation, nearly 80% of teachers agreed there was a friendly atmosphere in their school when teachers engaged in curriculum conversations and almost 70% agreed that teachers discussed different perspectives when talking about curriculum content. More than half

of participants, however, reported that surface level curriculum conversations for easy solutions were common and only just over 30% reported that deeper, more challenging curriculum conversations were common. This raises questions about the depth of dialogue between teachers.

Table 2. Factors affecting quality of dialogue (n = 82) (%).

In My School...	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	
we tend to avoid more sensitive issues in our curriculum discussions	4.1	26.0	39.7	23.3	6.8	100
teachers discuss different perspectives when talking about curriculum content	2.7	5.5	23.3	53.4	15.1	100
there is a friendly atmosphere when teachers engage in curriculum conversations	4.1	1.4	17.8	56.2	20.5	100
surface level curriculum conversations for easy solutions are common	1.4	15.1	30.1	45.2	8.2	100
deeper, more challenging curriculum conversations are common	12.3	27.4	28.8	27.4	4.1	100
teachers are given agency to decide the focus of curriculum conversations	4.1	21.9	32.9	35.6	5.5	100
senior leaders decide the focus of curriculum conversations	8.2	16.4	24.7	35.6	15.1	100
leaders encourage curriculum conversations between teachers from different AoLEs	11	8.2	30.1	42.5	8.2	100
time is set aside for teachers to support one another on what we teach	4.1	26	39.7	23.3	6.8	100

In terms of agency, only 40% of teachers reported that they were given agency to decide the focus of curriculum conversations and, supporting this, over 50% reported that in their school senior leaders decided the focus of curriculum conversations. Teachers in Wales appear brave though in what they discuss—only 30% report avoiding more sensitive issues in their curriculum conversations. While the responses here are not clear-cut, a significant number of teachers report not having agency over their professional dialogues. It is worth noting that, while half of teachers said here that curriculum conversations between teachers from different AoLEs were encouraged by senior leaders, the previous section showed data to suggest such conversations were rare.

This project set out to support and cultivate deeper curriculum conversations, particularly interdisciplinary conversations. The survey gave the opportunity for a snapshot of teachers' perceptions on whether those deeper curriculum conversations are taking place. While only around a third of teachers (31.5%) agreed that deeper, more challenging curriculum conversations were common, 4 in 10 (39.7%) disagreed with the statement, suggesting that deeper, more challenging conversations were not common in more schools. With the reverse version of the question, over half (53.4%) of teachers declared that 'surface level curriculum conversations for easy solutions are common.' The results support the

same conclusion, that there is work to be done with teachers in Wales to support deeper curriculum conversations.

4.3. Opportunities for Deeper Interdisciplinary Dialogue

Participants were asked what would support them to have deeper curriculum conversations with teachers of different subjects. There was a 5-point Likert scale for responses, reported in Table 3.

Table 3. Affordances for deeper curriculum conversations (n = 82).

I Would Have Deeper Curriculum Conversations with Teachers in Different Subjects If I Had...	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
more time away from teaching	2.9	4.3	10.1	42	40.6
deeper knowledge of my subject	13	33.3	21.7	20.3	11.6
deeper knowledge of other subjects	4.3	21.7	20.3	39.1	14.5
a shared understanding of purpose	2.9	10.1	23.2	49.3	14.5
conversations modelled by senior leaders	4.3	13	33.3	39.1	10.1
conversations modelled by other teachers	2.9	4.3	36.2	46.4	10.1
subject-specific networks to support professional learning	2.9	4.3	13	46.4	33.3

The most popular option to support deeper curriculum conversations was, unsurprisingly, more time away from teaching (82.6%). Shortly behind this came 'subject-specific networks to support professional learning' with four in five teachers (79.7%) agreeing with the statement. This is explored further in Section 5. Only a third of teachers (31.9%) responded that they felt 'deeper subject knowledge of my subject' would lead to deeper curriculum conversations. We therefore need to know what teachers expect from subject-specific networks and professional learning if it is not deeper subject knowledge. It may be that teachers, within the significant innovations of Curriculum for Wales, want the support of being around teachers of their own subject and professional networks in order to build confidence to engage effectively with teachers of other subjects. 'Deeper subject knowledge of other subjects' was a popular option with over half (53.5%) of participants agreeing that it would deepen their curriculum conversations. 'A shared sense of purpose' was more popular with 63.8% of participants agreeing. This suggests the need for ongoing dialogues between teachers of different subjects, that understanding the purpose of other curriculum subjects cannot be assumed.

5. Discussion

Teachers talk. Despite being isolated in their classrooms for much of their working day, teachers have many professional conversations with one another across the course of a year. These are worthy of more research as a site of professional learning and potentially a site where key curriculum reform decisions take place. The findings reveal that teachers' reported curriculum conversations most often focus on the content that they teach, rather than articulating purpose or the overarching aims of the curriculum. This is similar to the findings of Smith et al. (2025), exploring history teachers as curriculum makers in England and Scotland, who found teachers focused on selecting content, sequencing and resources rather than on discussing the overarching aims of the curriculum. In a curriculum

framework that demands subsidiarity and agency, there seems to be a need for professional discourse to move beyond content and look towards purpose so that connections between subjects can go beyond surface-level connections towards more meaningful and powerful insights, supporting the overall curriculum for students.

Teachers report that they spend time conversing about the curriculum within their subject area. This is not surprising but is a behaviour worth identifying as it could be reinforcing traditional subject boundaries and preventing innovation. Where interdisciplinary curriculum reform is the goal, it is necessary to provide time, opportunity and motivation for teachers to talk to colleagues beyond their main subject area. While interdisciplinary conversations are clearly happening within the AoLEs of Wales, there are significantly fewer conversations between teachers outside of their AoLE. This fits with previous research which explored the relationship between departments of science and RE in English schools, that most departments worked independently, with little dialogue between teachers (Woolley et al., 2023). This independence, however, seems insufficient in a country where interdisciplinary and multidisciplinary approaches are now encouraged. There are many vital topics such as sustainability and climate change, relationships and sex education or information and misinformation that naturally occur in more than one subject. Conversations and planning should not be limited to those within subject or AoLE. If teachers are not talking about the relationship between their subjects at all, then how might they find time or agency for conversations about such topics which cross traditional subject boundaries? If students are to come to a full understanding of such topics, and the different ways of knowing that are applied to them, then teachers and students may benefit from knowing how such topics are approached in other subject lessons. This applies in either a disciplinary or interdisciplinary curriculum. If students are to be supported to make links across subject boundaries, then teachers may need to develop knowledge of other curriculum subjects in their current form, and that depends on valuing of dialogue between teachers of different subjects.

It is notable that teachers' reported conversations concerning the relationships between subjects are reported to be quite rare in the experience of many of the participant teachers. It is important to ask whether the introduction of AoLEs in Wales, while perhaps increasing conversations within the AoLE, unintentionally reduces such conversations with subject teachers outside the AoLE. This may be an unintentional outcome of curriculum design, but it raises concerns about teachers continuing to hold misconceptions about subjects they know little about, again, not supporting the overarching curriculum understanding of students (Woolley et al., 2022).

In times of curriculum reform, the quality of dialogue between teachers could be argued to have significant bearing on the extent and quality of the curriculum reform. In Wales in particular, the notions of subsidiarity and teacher agency at the heart of the reform mean that surface-level, friendly conversations are unlikely to promote transformation of the curriculum. In many ways, the findings reported above are reassuring. Teachers in Wales who responded to the survey claim that they do not avoid sensitive conversations, and they take different perspectives when talking about curriculum content. They were more likely to report, however, that surface level curriculum conversations for easy solutions were common and 39.7% disagreed with the statement 'deeper, more challenging curriculum conversations are common' in comparison to 31.5% agreeing. Indeed, over three-quarters of participants (76.7%) agreed that there was 'a friendly atmosphere when teachers engage in curriculum conversations. The literature shows arguments from across the globe for a move away from 'contrived collegiality' (Boyd & Glazier, 2017, p. 4) or a 'culture of nice' (Lee Bae et al., 2016, p. 168) among teachers towards a more critical colleagueship. We

need to ask what the nature and frequency of teachers' conversations would look like if a culture of interdisciplinarity and critical colleagueship was genuinely encouraged.

In some ways the teachers in this survey report quite a balanced approach to agency—while half suggested that 'senior leaders decide the focus of curriculum conversations' it was just under half (42.1%) that reported 'teachers are given agency to decide the focus of curriculum conversations.' While the vertical incentive of passing down national policy may lead to certain requests for certain conversations between certain groups of teachers in meetings or on professional development days, there is also a sense that horizontal conversations between teachers could be encouraged, with teachers given agency and trust to decide the focus of the conversation and themes that might connect them. Initial curriculum reform, passing from policy, through leadership, into practice, must surely necessitate leadership encouraging certain curriculum conversations between teachers, but if the desire for teacher agency is authentic, then it should be possible to identify more teachers deciding the focus of curriculum conversations as they use their own professional and disciplinary knowledge to identify the needs of their students and their own areas for development.

Nearly 80% of teachers agreed that 'subject-specific networks to support professional learning' would have an impact on deepening their curriculum conversations. The participants are not asking for professional learning to develop deeper knowledge of their subject as only 31.9% agreed with this. They therefore seem to be looking to subject-specific networks for something else. It seems reasonable to suggest that what the teachers are looking for is the confidence that comes from sharing ideas with people who come from a similar subject background first, as that may then help them to select, articulate and share their existing knowledge and curriculum experiences with teachers from different backgrounds, building confidence and sharing ideas. The teachers of Wales seem to want the support of professional networks to help them make realistic and meaningful connections with other subjects. Within a setting of subsidiarity this needs to be carefully defined. It does not appear that the teachers want the planning to be done for them, but they do want to share ideas, they do want support and reassurance from people in their own subject to help them engage in worthwhile conversations with others that will yield positive and rich learning experiences.

This paper reports the use of a survey for teachers to self-report their experiences of curriculum conversations in secondary schools in Wales. The survey results are revealing and could be more so if surveys were repeated over time or used to compare teachers' experiences of curriculum reform in different countries. Anecdotally there have already been shifts away from experiments with interdisciplinarity in some schools in Wales due to the decision to continue single subject GCSE qualifications, but little is known of the extent of change across the country. A simple survey could be a way for school leaders to identify the curriculum conversations teachers are having, and group certain subjects together for professional development if they would benefit from understanding other curriculum changes. This is particularly important for themes that cut across the curriculum such as 'human rights,' or sustainability but we argue it is also essential for student experience of a coherent curriculum, the vital endpoint of all quality professional development.

6. Conclusions

At a time of intense curriculum reform, when professional learning is a priority, it is revealing to shine a spotlight on teachers' curriculum dialogues. As a research tool, this can reveal patterns in teacher behaviour which help to identify the impact of national policies at a local level and show necessary preconditions for effective collaboration or interdisciplinarity. The findings reported here have implications at several levels. At a

school level it might be critical for school leaders, planning for a coherent curriculum, to question the frequency and nature of curriculum conversations among their own school staff and consider how deeper conversations, focused on purpose, might be encouraged. There could be a role for subject associations and subject advisors to provide subject-specific professional development programmes which focus on deeper dialogues and disciplinary language within the subject community which could then result in deeper interdisciplinary dialogue. Findings also suggest teachers could have more agency within the curriculum reform programme, as first intended. At the heart of teacher agency is teachers' ability to articulate and defend what they teach, and how and why they teach that content. The interdisciplinary structure of AoLEs have clearly given teachers in Wales opportunities to hold such dialogues, but there remain important questions about dialogue with teachers beyond the AoLE, for example between science and RVE or English and Art. If vital transdisciplinary topics such as sustainability or ethical and informed citizens are important, then these cannot be left to teachers in a single subject or a single AoLE, but depend on dialogue across traditional subject boundaries. Collaboration is in danger of being shallow and ineffectual if time and effort are not first directed towards valuing such dialogues. Finally, this paper has implications for research into both curriculum reform and teacher professional development. Further papers in the project will reveal more of our qualitative explorations into teachers' dialogues and efforts to support teachers' in engaging in deeper dialogues, but there is still much need for research into teachers' lived experience of curriculum reform, or reform will remain an expensive policy exercise.

Author Contributions: Conceptualisation, M.W., T.B., R.A.B.; methodology, M.W., T.B.; formal analysis, M.W.; investigation, M.W., T.B., V.J., E.S., K.C.; data curation, T.B.; writing—original draft preparation, M.W.; writing—review and editing, M.W., T.B., R.A.B., E.S., K.C., V.J.; visualisation, M.W.; project administration, M.W.; funding acquisition, R.A.B., M.W., T.B. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by Templeton World Charity Foundation, with grant number 32039.

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki, and approved by the Ethics Committee of Canterbury Christ Church University (Ethics Application No. 2425-0255, on 24 February 2025) and Cardiff Metropolitan University Ethics Committee.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The original data presented in the study are openly available in osf.io at https://doi.org/10.35542/osf.io/t7jf8_v1 (accessed on 2 May 2026).

Acknowledgments: This research was undertaken out of the University Research Centre, NICER, at Canterbury Christ Church University. Special thanks to those in subject network organisations and schools that promoted and advertised the survey. We are indebted to the teachers in Wales who took the time out of their busy lives to complete the survey.

Conflicts of Interest: The authors declare no conflicts of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

Abbreviations

The following abbreviations are used in this manuscript:

AOLE Area of Learning and Experience

References

Admiraal, W., & Lockhorst, D. (2012). The sense of community in school scale (SCSS). *Journal of Workplace Learning*, *24*(4), 245–255. [CrossRef]

Almeida, S., Sousa, F. J. R., & Figueiredo, M. (2022). *Curriculum autonomy policies: International trends, tensions and transformations*. CICS.NOVA—Interdisciplinary Centre of Social Sciences, School of Social Sciences and Humanities, NOVA University of Lisbon.

Baildon, M., & Damico, J. (2008). Negotiating epistemological challenges in thinking and practice: A case study of a literacy and inquiry tool as a mediator of professional conversation. *Teaching and Teacher Education*, *24*(6), 1645–1657. [CrossRef]

Barbour, I. G. (1966). *Issues in science and religion*. Prentice-Hall.

Bishop, P., & Mulford, B. (1999). When will they ever learn? Another failure of centrally-imposed change. *School Leadership and Management*, *19*(2), 179–187. [CrossRef]

Bowe, R., Ball, S. J., & Gold, A. (1992). *Reforming education and changing schools: Case studies in policy sociology*. Routledge.

Boyd, A. S., & Glazier, J. A. (2017). The choreography of conversation: An exploration of collaboration and difficult discussions in cross disciplinary teacher discourse communities. *The High School Journal*, *100*(2), 130–145. [CrossRef]

Boyd, A. S., Rose, S. G., & Darragh, J. J. (2021). Shifting the conversation around teaching sensitive topics: Critical colleagueship in a teacher discourse community. *Journal of Adolescent & Adult Literacy*, *65*(2), 129–137. [CrossRef]

De Jong, L., Meirink, J., & Admiraal, W. (2022). Teacher learning in the context of teacher collaboration: Connecting teacher dialogue to teacher learning. *Research Papers in Education*, *37*(6), 1165–1188. [CrossRef]

Department for Education. (2021). *Curriculum and assessment (wales) act 2021*. Available online: https://www.legislation.gov.uk/asc/2021/4/contents/enacted (accessed on 2 May 2026).

Donaldson, G. (2015). *Successful futures independent review of curriculum and assessment arrangements in Wales*. Welsh Government.

Evans, G. (2022). Back to the future? Reflections on three phases of education policy reform in Wales and their implications for teachers. *Journal of Educational Change*, *23*, 371–396. [CrossRef] [PubMed]

Finch, L., Moreno, C., & Shapiro, R. B. (2021). Luminous science: Teachers designing for and developing transdisciplinary thinking and learning. *Cognition and Instruction*, *39*(4), 512–560. [CrossRef]

Glazier, J. A., Boyd, A., Bell Hughes, K., Able, H., & Mallous, R. (2017). The Elusive Search for Teacher Collaboration. *The New Educator*, *13*(1), 3–21. [CrossRef]

Greer, K., Sheldrake, R., Rushton, E., Kitson, A., Hargreaves, E., & Walshe, N. (2023). *Teaching climate change and sustainability: A survey of teachers in England*. University College London.

Harrison, C., Hofstein, A., Eylon, B., & Simon, S. (2008). Evidence-based professional development of science teachers in two countries. *International Journal of Science Education*, *30*(5), 577–591. [CrossRef]

Hughes, S., & Lewis, H. (2020). Tensions in current curriculum reform and the development of teachers' professional autonomy. *The Curriculum Journal*, *31*(2), 290–302. [CrossRef]

Hughes, S., Makara, K., & Stacey, D. (2020). Learning progression in the humanities: Identifying tensions in articulating progression in humanities in Wales. *The Curriculum Journal*, *31*(2), 276–289. [CrossRef]

Ke, L., Friedrichsen, P., Rawson, R., & Sadler, T. (2023). Teacher learning through collaborative curriculum design in the midst of a pandemic: A cultural-historical activity theory investigation. *Teaching and Teacher Education*, *122*, 103957. [CrossRef]

Lee Bae, C., Hayes, K. N., Seitz, J., O'Connor, D., & DiStefano, R. (2016). A coding tool for examining the substance of teacher professional learning and change with example cases from middle school science lesson study. *Teaching and Teacher Education*, *60*, 164–178. [CrossRef]

Lefstein, A., Louie, N., Segal, A., & Becher, A. (2020). Taking stock of research on teacher collaborative discourse: Theory and method in a nascent field. *Teaching and Teacher Education*, *88*, 102954. [CrossRef]

Morrison-Love, D., Donaldson, P., & Barnes, J. (2019, June 3–6). *Design & technology and computer science in the CAMAU project: The genesis of learning progression in the new curriculum for Wales*. Pupils Attitudes Towards Technology Conference 2019 (PATT 37), Msida, Malta. [CrossRef]

Muller, J., & Young, M. (2019). Knowledge, power and powerful knowledge re-visited. *The Curriculum Journal*, *30*(2), 196–214. [CrossRef]

Muscella, D., & Dlmauro, V. (1995). Talking about Science: The case of an electronic conversation. *Journal of Information Technology for Teacher Education*, *4*(2), 165–181. [CrossRef]

Myatt, M., & Tomsett, J. (2021). *Huh: Curriculum conversations between subject and senior leaders*. John Catt Educational Ltd.

Nelson, T. H., Deuel, A., Slavit, D., & Kennedy, A. (2010). Leading Deep Conversations in Collaborative Inquiry Groups. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, *83*(5), 175–179. [CrossRef]

Newton, N. (2020). The rationale for subsidiarity as a principle applied within curriculum reform and its unintended consequences. *Curriculum Journal*, *31*(2), 215–230. [CrossRef]

Niemelä, M. (2021). Crossing curricular boundaries for powerful knowledge. *The Curriculum Journal*, *32*(2), 359–375. [CrossRef]

OECD. (2019). *OECD Future of education and skills 2030: OECD learning compass: A series of concept notes OECD*. Available online: https://www.oecd.org/content/dam/oecd/en/about/projects/edu/education-2040/1-1-learning-compass/OECD_Learning_Compass_2030_Concept_Note_Series.pdf (accessed on 12 February 2026).

Penlington, C. (2007). Dialogue as a catalyst for teacher change: A conceptual analysis. *Teaching and Teacher Education*, *24*, 1304–1316. [CrossRef]

Priestley, M., Alvunger, D., Philippou, S., & Soini, T. (Eds.). (2021). *Curriculum making in Europe: Policy and practice within and across diverse contexts*. Emerald Publishing Limited.

Priestley, M., & Biesta, G. (2013). *Reinventing the curriculum: New trends in curriculum policy and practice*. Bloomsbury.

Richmond, G., & Manokore, V. (2011). Identifying elements critical for functional and sustainable professional learning communities. *Science Education*, *95*(3), 543–570. [CrossRef]

Saks, K., Hunt, P., Leijen, Ä., & Lepp, L. (2025). From zero collaboration to teamwork: Forms of teacher collaboration and factors that support or hinter it. *Education Sciences*, *15*(1), 87. [CrossRef]

Schafer, A. G. L., & Yezierski, E. J. (2020). Chemistry critical friendships: Investigating chemistry-specific discourse within a domain-general discussion of best practices for inquiry assessments. *Chemistry Education Research and Practice*, *21*(1), 452–468. [CrossRef]

Segal, A. (2019). Story exchange in teacher professional discourse. *Teaching and Teacher Education*, *86*, 102913. [CrossRef]

Seidel Horn, I. (2010). Teaching replays, teaching rehearsals, and re-visions of practice: Learning from colleagues in a mathematics teacher community. *Teachers College Record*, *112*(1), 225–259. [CrossRef]

Smith, J., Harris, R., & Burn, K. (2025). History teachers as curriculum-makers in policy and practice: Quantitative insights from England and Scotland. *Journal of Education Policy*, *40*(2), 288–312. [CrossRef]

Spencer, N., & Waite, H. (2022). *'Science and Religion': Moving away from the shallow end*. Theos.

Welsh Government. (2022). *Curriculum for Wales: Enabling learning*. Hwb.

Woolley, M. (2019). *Teaching history in a neoliberal age: Policy, agency and teacher voice*. Routledge.

Woolley, M., Bowie, R. A., Hulbert, S., Thomas, C., Riordan, J.-P., & Revell, L. (2022). Science and RE teachers' perspectives on the purpose of RE on the secondary school curriculum in England. *Curriculum Journal*, *34*(3), 487–504. [CrossRef]

Woolley, M., Bowie, R. A., Hulbert, S., Thomas, C., Riordan, J.-P., & Revell, L. (2023). Teachers' perspectives on relationships between secondary school science and religious education department. *Curriculum Journal*, *35*(3), 378–395. [CrossRef]

Woolley, M., Breeze, T., & Bowie, R. A. (2026). Teacher talk: Why it matters. *Professional Development Today*, *24*(2). Available online: https://www.teachingtimes.com/teacher-talk-why-it-matters/ (accessed on 2 May 2026).

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.