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A Dialogue About Educational Dialogue: Reflections on the Field and the Work of The Cambridge Educational Dialogue Research (CEDiR) Group

The CEDiR group

**Faculty of Education University of Cambridge
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A DIALOGUE ABOUT EDUCATIONAL DIALOGUE: REFLECTIONS ON THE FIELD AND THE WORK OF THE CAMBRIDGE EDUCATIONAL DIALOGUE RESEARCH (CEDiR) GROUP

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1. INTRODUCTION

This Working Paper is rather different from others in the Faculty of Education's *Working Paper* series. Our brief was to showcase the work of the [Cambridge Educational Dialogue Research](#) (CEDiR) group, which we hope to accomplish by presenting this paper in its dialogue form, in order to illustrate the very processes that we research. In all, this work was authored by a group of 22 staff and doctoral students.

The Cambridge Educational Dialogue Research (CEDiR) group

CEDiR was originally conceived in response to the growing interest of many Faculty members in educational dialogue. Staff and students had been developing various dialogic research interests for several years, with one outcome being a wide range of Masters and Doctoral projects (the titles of some of which are presented in Appendix Two). The Group's inception in 2015 was also prompted by the recent and impending departures of key professors in the Faculty who have carried out much of the seminal work in the field, namely Neil Mercer, Christine Howe and Robin Alexander. At a time when a global movement of research focussing on the potential of dialogue in transforming education continues to grow, we wanted to ensure that their legacy in this important area would be sustained and built upon into the future by further advancing the reputation of the Faculty as a world-leading centre for interdisciplinary research on educational dialogue. CEDiR's other key aims are:

- to promote collaboration within the Faculty, within the University, and internationally, by building a network of expert partners;
- strategically develop capacity of researchers at all levels and create a supportive environment for generating and sharing high quality research;
- develop and advance dialogic theory and methodology;
- and engage with and impact on policy and practice, nationally and internationally.

Figure 1. A CEDiR event held at the Faculty of Education in 2017

CEDiR was launched in June 2015 by a group of founding members, including Sara Hennessy, Rupert Higham, Christine Howe, Neil Mercer, Fiona Maine and Paul Warwick. Thirty Faculty members attended the inaugural meeting, confirming significant interest in this area. This vibrant group has grown to well over 70 staff and graduate students at the time of writing, representing a wide range of interests in dialogue. A further group of members are ex-students, local teachers or head teachers. Inclusion of practitioners, interdisciplinary working and a dialogic format are important hallmarks of the numerous CEDiR events we run every term. The group has also forged links with 35 high-profile current collaborators and associates, several of whom have visited during our first three years of operation (details of partners, projects, events etc. are on our website at https://www.educ.cam.ac.uk/research/groups/cedir/). We are also pleased to say that CEDiR has been further strengthened by the arrival of Professor Rupert Wegerif in June 2017.

Five inter-connected strands are the current focus of CEDiR research activity. Led by core members of the group, this research builds on existing and ongoing work undertaken by members of the already flourishing CEDiR group to consider important contemporary topics relating to dialogic education. Currently, strands are investigating issues relating to:

- dialogic theory and research methodology
- dialogue, professional change and leadership
- inter-cultural and conflict transformation dialogue
- digital technology and dialogue
- classroom dialogue

An overarching concern within CEDiR is with forms of dialogue that support learning in both formal and informal educational contexts. The dialogue we engaged in to produce this paper proved productive for our own learning as we reflected on our research, examined our theoretical understandings, listened and responded to the perspectives of our colleagues and encountered new thinking from the theorists cited. It was a truly stimulating process

and has served the original aim of moving our thinking forward as a group, as well as communicating to readers some of the key issues with which we grapple. Our own perspectives on these themes are wide-ranging, as seen through the main body of the paper, where extracts from our dialogues are presented verbatim.

The purpose of this Working Paper

At the start, the main purpose of this paper was to showcase the work of the CEDiR group. However, the decision to approach this in a dialogic way ultimately revealed more than we had expected. We found that the dialogic interaction in itself enabled us to engage in productive and intellectually stimulating discussions as a research group. It was a timely opportunity, as a relatively new group, to distil areas of interest and articulate some of the challenges of researching dialogue. Further, the opportunity to write a Faculty Working Paper prompted us to produce an outcome that would be useful and interesting for others to read. Presenting our discussions in a dialogic form is intended to invite readers to join in the process of developing understanding of educational dialogue. By this we mean that readers can 'take part' in our conversations and develop new lines of inquiry. In doing this, we see this Working Paper as having a life beyond its publication date, with the potential to become a catalyst for further discussion about educational dialogue.

Reading this Working Paper

This Working Paper is intended to be read and used by anybody with an interest in the role of dialogue in education. This may include teachers, school leaders, researchers and others beyond academia. We have tried to write it in an accessible style and the structure is flexible. As a whole, the paper is quite long. The idea is that readers can 'dip in' and return to the sections they find interesting in any order. See the contents page for the location of the verbatim extracts of dialogue as well as the methodology, analysis and critical discussion.

In the next section, we outline details of the innovative dialogic methodological approach that we used to build understanding and knowledge together. Following this, we present our discussion on the fundamental question: *What is educational dialogue? (Theme One),* acknowledging that there is no simple or agreed viewpoint in the field, despite many commonalities among the key theorists about what productive dialogue looks like. We then go on to discuss one of the central and persistent educational questions about dialogue: *What is the relationship between educational dialogue and learning? (Theme Two)*. This is followed by consideration of *How is dialogue supported and constrained? (Theme Three)*. Within each theme we offer an introduction to, and overview of, our discussions relating to the nature and definition of educational dialogue. Following the discussion of each line of inquiry, verbatim extracts from the group dialogue are presented. We end with concluding remarks and future directions.

2. METHODOLOGICAL APPROACH

In keeping with the CEDiR philosophy, we were keen to construct this Working Paper in a dialogic fashion. To ensure inclusion of different perspectives and to build knowledge and understanding collaboratively, all CEDiR members were invited to engage in several digital-technology-mediated discussions during the first part of 2017. These discussions were intended to move forward our understanding and to enable CEDiR colleagues to showcase the variety of research that we are directly involved in, or are aware of, in this thriving field. Online discussion forums offer affordances that can support participants' engagement in dialogue (e.g. Hakkarainen & Palonen, 2003; Staarman, 2009) and exchange of ideas in a higher education context (Caldwell & Heaton, 2016). For the development of our Working Paper, we utilised the asynchronous discussion features available in Moodle, the University of Cambridge's Virtual Learning Environment. The phased approach outlined below was devised to ensure a 'dialogic flavour' to the development of the Working Paper.

Phase One (January 2017)

Phase One involved an initial discussion in regard to the topic central to the CEDiR Group's interests, *What is Educational Dialogue?*. Prompted by the working definition on the CEDiR website that existed at that time, this allowed clarification of each other's perspectives on educational dialogue and led to the identification of themes that would guide further discussion during Phase Two (see below). Seven elements of the website definition were initially selected by the Editorial Team to represent contrasting views of the meaning, purpose, theory, and context of educational dialogue (see Figure 2). The aim in doing this was to provoke thought, ignite conversation, and open up possibilities for responding in different ways.

Dialogue is…

    a.   … a synonym for talk, discourse or conversation

    b.   … a distinctive human achievement

    c.   … an end in itself

    d.   … a pedagogical tool

    e.   … inclusive of non-verbal human communication and multimodal forms of communication

    f.   … logistically and ideologically constrained by the prevailing educational discourse, curriculum and assessment frameworks

    g.   … a forum for the continuous co-construction of new meanings

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Eleven colleagues contributed during Phase One over a 10-day period. The Editorial Team met again once this discussion had concluded. Working collaboratively in the Google Docs web-based document management system, they engaged in an iterative process of thematic analysis of the Phase One discussion to identify key themes that could take our discussion and thinking forward during Phase Two. Five themes were established in this way:

1. Definitions, beliefs and practices concerning dialogue

2. Investigating features of educational dialogue

3. Constraints on dialogue in school

4. What is learned through dialogue? Can it be an end in itself?

5. Classroom ethos

Phase Two (February-March 2017)

Phase Two was designed to extend Phase One, employing the five themes (above) as an initial framework. After an invitation to all CEDiR members, a core group of people volunteered to lead discussion for each of these themes (see the coloured thematic boxes, in each section, for details of colleagues who led and contributed to each theme). Discussion threads were set up on Moodle for each theme, including short illustrative quotes from the Phase One discussion to initiate each one.

Discussions in Phases One and Two were underpinned by 'ground rules'. Identified by Mercer and colleagues as essential for encouraging the sharing of ideas and their critical examination (e.g. Edwards & Mercer, 1987; Littleton & Mercer, 2013), a number of ground rules were collaboratively established and refined as the dialogue progressed. The final set of ground rules, which guided the Phase Two discussion, were:

- Everyone is invited to say what they think about the topic in question.
- Each new contribution should aim to address and build explicitly on previous contributions.
- The aim is to come to a collective understanding of each other's points of view, acknowledging key points of agreement and difference of opinion.
- Contributions should include reference to relevant research and theory.
- Contributors may ask others for clarification, explanation and elaboration to help the dialogue to develop in a productive way.

- Each turn should be kept to a maximum of 300 words to help the conversation to flow between participants.

In total, 19 Faculty colleagues contributed to Phase Two (although a greater number than this signed up and accessed the forum, and presumably were reading without commenting). These included doctoral students, postdoctoral researchers and academic staff. Contributions varied in length and style. The editors encouraged contributors to use relatively short posts to develop a conversational flavour in responding to each other. This worked well in many cases, although the inevitable time lapses made it sometimes hard to catch up. The lengthier posts tended to lack a sense of flowing conversation, but they allowed contributors to include rich detail about thinking and to give detailed examples of relevant research experience. In general, there was a lively sense of interest in what others had to say.

The Editorial Team again met to analyse the Phase Two discussions. Following further collaborative work to thematically analyse discussions, the five themes established during Phase One were collapsed to a final set of three:

Theme One: What is educational dialogue?

Theme Two: What is the relationship between dialogue and learning?

Theme Three: How is classroom dialogue supported and constrained?

These themes make up the remaining sections of this Working Paper. Within each theme, we saw that multiple lines of inquiry were also established. These were identified inductively by members of the Editorial Team through tracing elements of discussion in which participants explicitly referred back to preceding posts (for instance, by naming a previous contributor), or in which they followed up earlier comments and questions using the same language. To ensure reliability, two members of the Editorial Team re-read the discussions in full before meeting to discuss, and collaboratively agree on, several potential lines of inquiry. Further rounds of reading were also undertaken by other members of the Editorial Team. This was followed by a further meeting to agree on the final set of lines of inquiry.

It is important to note that other shorter conversational threads were observed in the data. As these tended to be limited in time and number of participants, they have not been included in the analysis. As was helpfully highlighted by the reviewers of an earlier draft, there is evident potential for further developing these and other lines of inquiry, such as exploring key themes in relation to different linguistic and cultural contexts. In presenting an overview of the forum discussions, social comments between contributors have also (largely) been excluded.

We acknowledge the limitations of the approach we adopted to developing the Working Paper. As will be evident from the varied nature of CEDiR's five research strands outlined in Section One, the field of educational dialogue is diverse. Our focus here is specifically on the areas of inquiry defined, with this potentially resulting in some productive discussions being constrained or curtailed. We also appreciate that dialogue is an ongoing process and one in which participants continually develop new and richer understanding. For practical reasons, however, we were required to set deadlines, which may have curtailed elements of the discussion or even prevented some colleagues from contributing at all. It is also unclear how group dynamics may have affected the experience of participants, both positively and adversely. Moreover, the public nature of the discussion might have prevented some from getting fully involved, as may have technical issues. This Working Paper therefore presents a snapshot of thinking together about dialogue within the given time period, bearing in the mind the affordances and constraints of the specific technology-mediated context. In the following section, we move on to consider the first of our three themes: *What is educational dialogue?*

THEME ONE: WHAT IS EDUCATIONAL DIALOGUE?

In this section, we consider the first of our three themes: *What is educational dialogue?* Within the theme, we offer an introduction to, and overview of, our discussions relating to the nature and definition of educational dialogue. Following the discussion of each line of inquiry, verbatim extracts from the group dialogue are presented.

Discussion about the nature and definition of educational dialogue developed in different discussion threads across both phases. As can be observed in this section, several animated and detailed exchanges that appear to reflect some fundamental differences of opinion about the nature and parameters of educational dialogue, emerged, asking both what it is and what it is not. Looking across the Phase One and Phase Two discussions, three main lines of inquiry were established in relation to the question of *What is educational dialogue?*

- Should we define educational dialogue as that which *does* occur or that which *should* occur in educational settings?

- How can dialogue be defined in relation to other processes, such as communication, talk, non-verbal interaction, and particular sets of discourse features?

- Is there a potential conflict between dialogue understood philosophically, as an ethical form of relating authentically to others, and dialogue seen as a pedagogical tool?

THEME ONE - LINES OF INQUIRY:
1: SHOULD WE DEFINE EDUCATIONAL DIALOGUE AS THAT WHICH *DOES* OCCUR OR THAT WHICH *SHOULD* OCCUR IN EDUCATIONAL SETTINGS?

Here, we question some basic assumptions about educational dialogue: are we thinking about what *does* happen or what *should* happen in educational settings? Such questions are of particular interest, as they interrogate the extent to which intrinsic expectations and constraints in any educational setting impose constraints on the dialogue that could possibly occur. Additionally, the questions probe the extent to which a 'stripped down' version of the dialogic ideal can still be termed 'dialogue'.

As the discussions unfold, the conversations seem to converge on a notion of educational dialogue as 'educationally productive dialogue', and much subsequent discussion centres on dialogue in formal school settings. But there remain some general questions about the particular characteristics of educational dialogue, the criteria by which it could be defined (and therefore investigated), and the possible reasons for attempting to define and agree on key features. This line of inquiry incorporates reference to current and previous research

projects. It also draws on philosophical thinking, such as the views of Bakhtin and others, that 'dialogue is unavoidable'.

However, the terminological confusion is also seen to present barriers to developing the research field, with some urgent prompting for the research community '…to try and get our act together!'. An emerging view of different traditions supports the need for a 'good enough' or shorthand working definition of dialogue that both enables investigation, and will in turn be developed through investigation. The discussion of research needs is interwoven with thinking about if there may be, more fundamentally, a lack of clarity about whether the 'capacity to dialogue' is part of the human condition (Rousseau), as opposed to a specific human achievement (Kazepides, 2012). So, can dialogue be defined in the absence of an ethical dimension? Of interest, too, is the final turn towards other contexts and purposes of educational dialogue, such as mediation between disputants. This specific line of inquiry remains open at the end, although it connects closely to the two that follow.

DISCUSSION

The opening contribution challenges an apparent ambiguity in the CEDiR website definition:

> **Christine:** … Does it refer to the dialogue that occurs in educational settings as opposed to other settings, or does it refer to the dialogue that supports educational aims as opposed to the dialogue that is non-productive? ... I found that it focuses on a long list of discourse features that are clearly regarded as productive, so I realised that it is the second sense that is of interest. However, I think it's important not to forget the first sense, for the goals, roles etc. that characterise educational settings (as opposed to other settings and regardless of whether the educational setting is parent-child, teacher-class, coach-team) impose constraints on the forms of interaction that could possibly occur. … I think these constraints mean that the features in CEDiR's list not only typically do not co-occur in educational settings, but probably could not in principle ever co-occur. There is antipathy between the totality and what educational settings allow. For this reason, I became a little uneasy about the use of the term 'dialogue' on the CEDiR website, because it could be read as necessitating the totality of the listed features. How can features that never co-occur and probably cannot co-occur be the subject of empirical analysis? Any presumption of productivity has to be an act of faith, rather than an empirically founded proposition. Moreover, if it is not the totality, which features can be stripped away and the interaction still be regarded as 'dialogue'? … In truth, I suspect that in everyday parlance we'd happily use the term dialogue for interactions that lack some (and possibly all) of the listed features.

This post prompts the following response, which ends with some agreement about the 'educationally productive' factor:

> **Rupert H:** … I can entirely understand how you might find the description of dialogue summarised at the top of this thread as an unattainable ideal, and question both the pursuit and evaluation of it on that basis. For example, if we were to hold that 'a' to 'g' above are criteria in a strict logical sense, so that talk is dialogue if and only if all are met in each utterance, then I agree that we would have created something Plato might be proud of but that we would never actually see. However, I

certainly don't see it that way and I wonder if anyone in this group does either. I think the term 'educationally productive dialogue' is a practical response to this problem – and I suspect that when many of us talk about 'dialogue' we are using it as shorthand for our conception of this term. As such, it certainly bears further definition.

A further contribution then moves the conversation towards the need for research evidence about educational value, extending also to consider possible differences for groups and the whole class:

> **Sara:** … Christine comments on the differences between educational and other settings too – and while I agree that not *all* the recognised features of productive dialogue (assuming we all agreed on what they are) would occur in any single dialogue, they probably wouldn't in any setting actually? Her question about which features are necessary or typical characteristics of what we recognise as educationally productive dialogue is pivotal – and we certainly need the evidence base. Our ESRC Classroom Dialogue project[1] looks at this to some extent by analysing which features of whole class dialogue are associated with learning gains. More info from peer discussions would also be useful as she points out, although there is already some evidence from her own work and others'; so much work in this field has concentrated on small group work, probably precisely because it is much less constrained without the authority figure's presence.

A parallel focus on the notion of educationally productive dialogue is taken forward in an exchange between Christine and Rupert:

> **Christine:** … We should make it clear that we are primarily interested in the second of my two interpretations [see Christine's first entry above], perhaps by rephrasing as 'What features of dialogue are educationally productive?' or 'What characterises educationally productive dialogue?'. I actually think the CEDiR website does an excellent job of listing the candidate features, i.e. the list of features is clearly based on a very comprehensive and thoughtful trawl through the literature. But I think we need to take the features one-by-one, and ask dispassionately about the evidential base for treating them as productive.

> **Rupert H:** … Of all those partial definitions at the top, it seems to me the most potentially stringent is the last: 'continuous co-construction of new meanings' – as I think a-f aren't that lofty or unattainable at all (some, like b, are clearly not designed to be criteria). The bar one sets for g, however, could vary enormously: from demanding an uninterrupted stream of perpetually novel and interrelated ideas, to simply demanding that two or more speakers' remarks remain implicitly addressed to one another. The latter could be backed up by Bakhtin's claim, explored further by Matusov (2009), that dialogue is unavoidable: in an epistemological sense we engage in it even when our communications with others are instrumental, objectifying or even violent, simply because responding to our projected understandings of the other, however crude, is the only way meaning can ever be made….

The purpose for defining the concept then arises, as he continues:

> **Rupert H:** … 'educationally productive dialogue' is one way of redefining the concept to make it practical and acceptable to our purposes. What substantially underpins this, I think, is another partial definition not on the list: dialogue means engaging with another (or others) as if they really matter (Higham, in press)…. To return to the start, then: I don't think the partial descriptions at the top of the thread are criteria at all. What we need are empirically verifiable features that fit under

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[1] https://www.educ.cam.ac.uk/research/projects/classroomdialogue/

those descriptions - supplemented, I hope, by the additional description I've suggested. I think SEDA (Scheme for Educational Dialogue Analysis[2]) and its variants represent a good attempt to represent these in a way that can be refined and validated empirically.

Yet a later set of exchanges suggests that the research field is itself hindered by differences in terminology, except for the more extreme examples of evident 'monologue':

> **Sara:** … it is clear that across the field researchers use the term in different ways (see the review by Howe & Abedin, 2013, for instance), from most inclusive (any interaction/turn-taking between participants) to most specific (only for those forms of dialogue where there is now a rough consensus in terms of being construed as productive for learning – succinctly summed up by Tristan and Rupert as 'when argument, reflection and exploration are promoted' in an ethos of 'respect across difference'). Nevertheless, I think even most (but possibly not all) of the first group would probably agree that 'shouting at someone to stop fiddling with their pencil isn't dialogue', it is monologue. They would simply preface more fruitful forms of dialogue with 'productive' or 'academically productive' or some such in order to make the distinction. Those who use the term more selectively tend to employ other terms, especially 'discourse' or 'classroom discussion/talk' or 'talk/discourse moves' for what they consider to be non-dialogic forms of interaction. I think Mortimer and Scott's (2003) suggested two dimensions of dialogic-authoritative and interactive-non-interactive communication are helpful here, and unfortunately these are often conflated by other researchers. Because the two dimensions are deemed somewhat independent, communication can fall into any of the resulting four quadrants…

The focus on terminology extends further in more general terms, initiated by Christine's reflection on writing her commentary on a special issue of the journal Learning and Instruction on 'Advances in research on classroom dialogue' which looks at the relationship with learning outcomes:

> **Christine:** … no matter how you define 'dialogue' or even 'educational dialogue' you will find educational researchers who mean exactly the same as you do but use a different term and you will also find researchers who use the same term but mean something different… This Special Issue refers (at the very least) to 'effective classroom dialogue', 'academically productive talk', 'productive classroom dialogue', and the 'dialogic mode of teaching', while to achieve comprehensiveness in the review mentioned earlier (Howe & Abedin, 2013) we found ourselves obliged to use all of the following as search terms in addition to our focal construct of 'dialogue': answer, argumentation, communication, conversation, dialogic, discourse, discussion, feedback, ground rules, interaction, interactive, IRE, IRF, language, oracy, question, reciprocal, recitation, speaking and listening, talk and turn-taking. Using fewer terms would have resulted in the omission of research that covers exactly the same range of classroom behaviours as that addressed in at least one of the studies badged explicitly as concerned with dialogue. While on one level terminological choices are arbitrary, differences nevertheless have the potential to create confusion, and make it harder to integrate the work of different researchers.
>
> **Sara:** … I think that terminology is quite important as the very broad sense of 'dialogue' makes it hard to develop the field…and renders the terms 'dialogic' or 'dialogic pedagogy' virtually meaningless – yet these can be very useful… I conducted a quick experiment a few months back to test my own hypothesis that most do use the term in a more specific sense. I was skimming

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[2] http://www.educ.cam.ac.uk/research/projects/analysingdialogue/

through all the chapters in the recently published Resnick, Asterhan & Clarke (2015) edited collection while preparing a bid and took the opportunity to be systematic in jotting down the authors' uses of the term dialogue so as to take a snapshot of the current field (and terms do ebb and flow in popularity of course). Basically, 19 of the 34 chapters mention dialogue beyond their titles; 10 of these 19 predominantly use dialogue to mean productive forms of discourse of the kind we would recognise (although one of these, a highly esteemed researcher who should know better, sloppily includes 2 broad uses as well), 6 further chapters have ambiguous or minimal uses, 3/19 have predominantly broad uses. The other 15 chapters don't use the term but use alternatives, mainly academically productive talk, discourse, classroom discussions, and accountable talk. This mixture is quite consistent with what Christine reports above too, drawing on Howe & Abedin (2013). Overall it is a somewhat mixed picture then, however the predominant use of the term dialogue is quite evidently in the productive sense. These 10 chapter authors draw on Alexander, Mercer, Bakhtin and others. The introduction/overview to the book by Resnick et al itself very clearly defines dialogue in the specific sense, drawing out features of dialogue and reasoning that we would recognise as productive for learning…

… I guess my other question for the community is, will we ever converge on a (roughly agreed) definition of dialogue - and can we even agree on what dimensions it might cover? What are we sacrificing in the meantime? Do policymakers and practitioners consequently have an even more fuzzy grasp of what dialogue is than the research community?! Is it time to try and get our act together?

Interwoven with this debate about definitions and terminology are questions about ethics:

Farah: … Is it possible that to arrive at a working definition, if not consensus, on the parameters of a description that captures pedagogical dialogue, the philosophical underpinnings need to be first determined. Perhaps we are uneasy about declaring an instrumental definition of dialogue (which is entirely useful to us as researchers seeking to impact learning in classrooms), as dialogic, precisely because it may not meet our philosophical conception of dialogic authenticity. Although, it may be far too idealistic, if we truly have conviction that dialogue is an ethical form of relating to others, then perhaps we need to turn to an examination of the self that relates, and consider the learning process as one which is in some sense, a process of personal growth.

This conception of dialogue may take us back to the aims of a traditional liberal arts education, where the capacity to dialogue is valued as something that is a given in the human condition (as Rousseau, 1979 would have it), as opposed to a specific human achievement (as Kazepides, 2012 would have it). By identifying dialogue as a human achievement, it could be argued that in some sense it becomes a form of techne in the Heideggerian sense, and perhaps this is why, when we research it in its instrumental mode, it becomes difficult to define due to the absence of an ethical element.

The context and purposes are also seem to matter, not just in considering different forms of classroom structures (such as the small group work mentioned earlier), but also in moving towards other domains of dialogue. In extending to consider mediation between disputants, Hilary leaves us with open questions at the end about different traditions and discourses:

Hilary: … Firstly definitions - I would like to share my experiences over the years of trying to define mediation, and what it is and is not. When I first started out as a mediator, fresh from my training,

I was very clear about what third parties must do in order to engage in proper mediation between disputants. Unlike arbitrators, for example, they should avoid taking sides or offering solutions. As time went on, I realised that other people who called themselves mediators did not take such a purist stance, and sometimes directly or indirectly offered solutions, or else clearly saw themselves as primarily offering support to the 'victim'. When I did some more research, it became clear that being a mediator simply means being in the middle and acting as some form of conduit. My training, I came to realise, had prepared me in a particular tradition of community mediation which draws on humanistic psychology. Others who had come from a criminology background, for example, had a different idea about what it is to mediate. Perhaps the same applies to dialogue. Etymologically, the original term contains *dia* (through) and *logue* (speech or reason). I found it useful when I googled it to be reminded that the term is not 'duologue'. Although it contains the idea of conversation between two or more people, the *dia* is not about duality. Thus the term simply refers to what happens through two or more people speaking in response to each other. This makes it hard to argue that something is more or less 'dialogic'. We can, however, say that dialogue is closer or further away from Socratic dialogue, or that it is more or less authoritarian. Perhaps the difficulties of definition are more prosaic than we realise, and that it is more a matter of distinguishing which tradition of dialogue we are referring to?

2: HOW CAN *DIALOGUE* BE DEFINED IN RELATION TO OTHER PROCESSES, SUCH AS COMMUNICATION, TALK, NON-VERBAL INTERACTION, AND PARTICULAR SETS OF DISCOURSE FEATURES?

Asking *what is educational dialogue?* prompts discussion of how narrowly or widely dialogue may be defined in relation to other processes, such as communication, talk, non-verbal interaction, and sets of discourse features. There is extended debate about if *dialogue* can or should be defined as a distinctive form of communication with intrinsic links to knowledge construction and academic learning, or whether it better serves as an umbrella term for all human interaction. Consideration of interrelated elements of classroom dialogue leads to some agreement about the difficulty of defining dialogue in terms of specific utterances. The line of inquiry moves towards the re-establishment of a dimensional understanding and interpretation of dialogue, rather than an observable and agreed set of acts or features. This is opened out further with the addition of a multimodal perspective to incorporate dialogue with other forms of communication, rather than in relation to them. If changes in the 'dialogic space' occur (e.g. with the use of new interactive technologies), then do new forms of dialogue emerge?

DISCUSSION

One contribution gets straight to the point in asking 'where does dialogue begin and end?':

> **Rupert H:** … I think it's important not to extend the definition of dialogue too widely to include all forms of talk. Shouting at someone to stop fiddling with their pencil isn't dialogue. However, I think

it's also possible - and valuable - to extend the concept of dialogue beyond spoken interaction. Beyond the obvious example of sign-language, I think it's also valuable to distinguish monologic and dialogic approaches to, say, reading a book: you can read it as an authority to memorise, or as a (more or less) reasoned, evidenced voice which you seek to understand and respond to. Thus understood, it's more productive to think about dialogue as a process than a product, and one that's founded in relationships of equity, respect across difference and shared focus, rather than happening, say, in the contexts of an education institution.

Tristan: … I would tend to agree; if the term 'educational dialogue' is broadened to include all human interactions in the classroom it would cloud the truly 'dialogic' events from view. Whilst additional talk data may well be collected by researchers (and participants for that matter), not all utterances will serve to construct new knowledge. Many interactions will in fact hinder the process of coming to a shared understanding and it would be inappropriate to assume they all have the same dialogic 'heft'.

… On the subject of conceptions of 'educational dialogue' in classrooms; as a practitioner, it is clear that many teachers believe that merely asking children to answer closed sentences aloud is 'dialogue'. The closed initiation-response-feedback (IRF) sequence is well established and gives the illusion of dialogue whilst keeping the narrative of a lesson heading in a predetermined direction. However, it is only when argument, reflection and exploration are promoted that a true dialogue can be constructed and all parties may experience its cognitive effects. This Socratic dialogue may be viewed as idealistic but if new insights are to be generated in schools (as opposed to the mere monologic transmission of 'facts'), concepts of dialogue that stress the reciprocity of talk must be adopted by educators.

The next post returns to the question of purpose, asking 'How broad a definition of dialogue is useful?', and it prompts a lively conversation:

Elisa: I agree with the distinction between dialogue versus talk, dialogue being a particular kind of talk. I also agree 'talk' might be restricted in Rupert's terms because communication includes non-verbal elements, nonetheless I think talk is a useful proxy for what we mean. In attempting to define dialogue in the schooling context… because we don't only mean talk, or knowledge, or relationships when we say dialogue, we mean a combination of all these, taking place in a certain way. In Littleton and Howe's (2010) book, Lefstein (2010) proposes four dimensions of dialogue that might be an interesting starting point: ideational (what is done with knowledge), metacommunicational (the ground rules), relational (issues to do with emotions, relationships and power), and aesthetic (discourse genres and how these are used)….Leo Lago and I departed from these dimensions and are working on a model to analyse dialogic teaching in three interdependent dimensions: assumptions (underlying norms, beliefs, goals), teaching instruments/tools (learning objectives, activities, evaluation), and classroom practices (day-to-day events including talk, knowledge and relationships). [As explored in Calcagni and Lago (2017).]

Tatiana: … The other side of this question is: how widely can specific turns vary in dialogicity? For example … perhaps "STOP FIDDLING WITH YOUR PENCIL!" is not a dialogic turn, yet if the response produces a productive dialogue between student and teacher (or student and student), then is the turn defined by the process? If dialogue is a process, and not a product, how able are we to deconstruct each turn under the same definitions? Alternatively, one may say something to promote "argument, reflection, and exploration" but get blank stares or a sullen silence in return. Does this make the turn any less dialogic, if the process of dialogue hasn't been successfully initiated? …a teacher may say all the 'right' things, but still not succeed in fostering a dialogic classroom. If it is a matter of … then what if a teacher has a non-dialogic, authoritative intent, but

students still promote and establish a dialogic classroom filled with productive classroom dialogue?

This line of inquiry extends to consider what constitutes 'dialogue', with a proposal to re-establish a dimensional understanding and interpretation rather than an observable and agreed set of acts or features:

> **Rupert H:** … Firstly, and probably controversially, I would like to move away from trying to define 'dialogue' as a particular set or sequence of communicative acts, either by intention and/or by outcome. Ending up in a position where we're asking, 'Is this dialogue or not?" probably isn't helpful, and suggests recourse to an authority that doesn't exist. Instead, I would suggest that we have a set of environmental, cultural, interpersonal, attitudinal and behavioural factors that can be interpreted as more or less dialogic in a given circumstance - and, with caution - more generally. The overlap with Lefstein's (2006) useful categorisation here, but at first glance I'd say not complete… So of each turn or utterance, instead of asking, is this part of a dialogue or not? Does it start one or end one?' we can ask, 'by virtue of what qualities / characteristics might we call this dialogic?' Similarly, we can ask of a situation (such as a lesson activity): how dialogic was this interaction? What were the observable responses that made it more or less so, and what were the reasonably interpretable consequences of those responses? Given the almost infinite complexity of dialogue as an interpersonal phenomenon, identifying and focusing on specific characteristics and their apparent consequences can lend us precision and rigour without the burden of making binary judgements….

Grounding this line of argument in the classroom seems to bring some threads together, with reference back to earlier posts. This line of inquiry is then opened out at the end incorporating 'dialogue' with other forms of communication, rather than in relation to them:

> **Sara:** … Tristan's report of teachers often conflating closed I-R-F with more open-ended dialogue highlights the dangers in terms of perhaps not recognising the distinctive (and useful) functions of these different kinds of interaction within a teacher's repertoire (cf. Alexander 2008; Mortimer & Scott 2003), nor the need for professional development in this area. We already have other terms like 'talk' that can describe the wider form, as we've mentioned. However that term can include all sorts, even monologic teacher talk, rather than the joint reasoning, critique and knowledge building we are seeking. … (A)s well as dialogue being a particular kind of talk, could we also argue that talk is a kind of dialogue?! In other words, that dialogue is multimodal and spoken language is just one form. I've made the case for this in the context of using technology, which can offer new dialogic spaces – opportunities for rich new forms of dialogue to evolve as learners share, manipulate and critique ideas. Our studies illustrate how an interactive technology environment can highlight differences between learners' perspectives and help make their thinking processes more explicit (Hennessy, 2011; Mercer, Hennessy & Warwick, 2010). Of course talk is usually present too, but sometimes less so, as other forms of communication come to the fore.

3: IS THERE A POTENTIAL CONFLICT BETWEEN DIALOGUE UNDERSTOOD PHILOSOPHICALLY AS AN ETHICAL FORM OF RELATING AUTHENTICALLY TO OTHERS, AND DIALOGUE SEEN AS A PEDAGOGICAL TOOL?

All of the discussions about defining educational dialogue are underpinned by fundamental questions of purpose, tradition and context, with some acceptance of uncertainty. There is particular debate about relational versus instrumental characteristics of dialogue, relating to questions about authenticity and 'true dialogue'. The third main line of inquiry focuses on what is seen as a potential conflict between dialogue understood more philosophically, as an ethical form of relating authentically to others, and as a pedagogical tool (which was one of the initial prompts in Figure 2). This raises further questions about the need to examine the 'self' that relates in dialogue, suggesting that learning can be seen as a process of personal growth. Formal schooling has intrinsic expectations, demands and constraints, but teachers and students can still have genuine interest in exploring each other's ideas and learning together. It is suggested that classroom dialogue is not inevitably 'inauthentic'. Can teachers take professional responsibility to enable children to be heard and treated equally as active participants in classroom dialogue, even with the systemic power imbalances?

DISCUSSION

The notion of dialogue as a 'pedagogical tool' attracted discussion from the start of Phase One:

> **Ruth:** … When looking at the CEDiR working definition of educational dialogue my eye is first caught by the notion of dialogue as a pedagogical tool. This jars with me for some reason, but why? Dialogue might be understood as intrinsic to human experience and education - so what is the problem with seeing it as a pedagogical tool? My first thoughts are that the word 'tool' might suggest that a teacher could employ classroom dialogue (or at least the appearance of lively and purposeful conversation) to achieve certain learning outcomes. And in current times in England, many of these outcomes are defined and constrained within the prevailing curriculum and assessment frameworks. So how can the teacher her/himself be engaging authentically in dialogue in these circumstances? How can the students (all or some of them)? Or, whatever the intention, does classroom conversation with sufficient dialogic features become 'educational dialogue' with all its unpredictable transformative potential? If schools have more open, inclusive and transformative aims for students' learning and development then is dialogue a tool or is it the whole workbench, fixings, materials, designs and product?...

Four responses in quick succession extend the discussion towards specific areas of educational concern, such as assessment, and towards underlying assumptions about the relational or instrumental nature of 'dialogue':

> **Ayesha:** … I think this is a very interesting starting point for this discussion. I am particularly interested in how dialogue is used for assessment for learning (AfL) purposes and the same question arises – how explicit should teachers' strategies be? In purposefully using a dialogic

approach there are more opportunities for teachers to make AfL type judgements. But should they be setting these up specifically to allow them to make such judgements or should the judgements emerge more authentically from a good session of dialogue? Does the need to make these judgements detract from the authenticity of the dialogue? Or do these judgements improve dialogue because they allow the teacher to see where to go next? Is more pedagogically 'useful' dialogue less authentic?

Rupert H: … I agree that there is a potential conflict between dialogue understood more philosophically as an ethical form of relating authentically to others, and as a pedagogical tool. I think the partially instrumental nature of the classroom, and of pedagogy, are important here as you suggest. In an ideal world - at least from a dialogic perspective - the classroom (if it existed at all) would be a space of voluntary association and engagement around pre-existing and emergent problems and areas of inquiry. However, we largely work within a context of compulsory schooling with substantially fixed curricula.

[D]oes this state of affairs allow us to take a partially instrumental approach to pedagogy in relation to dialogue? Do students need to be 'forced to be free' by being trained to engage in dialogue, even if partly against their inclination or will? Do we need to engage in dialogic techniques shown generally to be beneficial even if we cannot yet tell whether they will suit the particular children at hand? For me the answer is yes, because of the ethical imperative that sits behind it: even if dialogic pedagogy requires 'transcendental violence' (Biesta, 2004) and rough approximations, the alternative is not to support young people to engage in authentic, I-thou relationships with others. This at best supports the development of individual agency as a competitive function to the detriment of collective agency, perpetuating wider inequality and violence.

Lisa: … As to your comment about the use of the word 'tool' I also have a difficulty with this because I think it suggests that dialogue can somehow be brought out and used on special occasions rather than being embedded in the classroom. Although this may in some way be the case, in that a teacher may plan for situations where dialogue can be used specifically to enhance learning and therefore may also generate AfL opportunities, maybe regarding dialogue as part of the classroom environment might be more useful. Whilst dialogue is not part of the visible environment it can certainly be regarded as part of an ethos and a way of learning in the classroom, and therefore becomes ever present, rather than a specially employed 'tool'.

Tristan: … I think that the idea of dialogue as a pedagogical tool is an ideal place for us to start. I really enjoyed Rupert's ideas on the dichotomy of dialogue in the classroom and this is something I have been increasingly aware of in my own practice. Dialogue would seem to be a "tool" that learners naturally possess (although like any tool, requires practice to be used effectively) and Vygotsky (1962) would have us believe that it is through the acquisition and use of our inner dialogue that the construction of new ideas and understanding occurs.

I am convinced that dialogue is a tool for *thinking and learning* but not necessarily *teaching.* If it is indeed a pedagogical tool (one that can be implemented by teachers), it is only rarely used to co-construct knowledge, a process that is impeded by the implicit hierarchy that exists between teachers and students. Reciprocal, cumulative and expansive dialogue can only exist in classrooms where it is cultivated by a teacher and there are many factors that may prevent this; not least the prescriptive curricula found in most settings. Indeed, Wegerif (2013) argues that even the concept of the ZPD (Zone of Proximal Development) is not dialogic. Despite participants appreciating and taking into account one another's positions, the 'novice' will still be working towards an already established (monologic) truth determined by another.

The notion of 'authenticity' re-appears at several points, raising questions about what this

might mean in the formal school context:

> **Courtney:** … Children clearly have a natural tendency to interact, communicate, and converse with others, for many purposes, including learning and building understanding of the world around them. It seems that there is some consensus here that the use of educational dialogue as a sort of strategy or intervention to promote specific, imposed learning outcomes has the potential to spoil the authentic essence at the core of dialogue….

> **Sara:** … The discussions about authenticity of dialogue in those inevitably constrained conditions of schooling have been very thought provoking. It may in one sense be 'inauthentic' because certain subject knowledge and understandings need to be developed in demonstrable ways. However, given that in the CEDiR Group (and wider research community) we are interested in *educational* dialogue, i.e. that which takes place within educational settings, all of which have concrete learning objectives and most have associated assessment measures, perhaps it can be construed as 'authentic' in the sense that participants are genuinely interested in exploring each other's ideas, in developing better understandings, and in joint knowledge building? Even if an authoritative voice (of teacher/expert) is sometimes introduced within the flow of the dialogue in order to focus it towards curriculum aims.

There are some emerging concerns about children's role in classroom dialogue:

> **Courtney:** … my main worry is that teachers may not explicitly acknowledge that children bring their own set of goals and their own desire for understanding to a dialogic activity. In this way, teachers can become too directive in their involvement, deciding what knowledge is to be obtained, instead of allowing children to actively build new knowledge based on sincere interest and engagement in the discussion. Tristan made the point that the use of educational dialogue can be constrained by classroom hierarchy of teacher and students, which further impedes the co-constructive nature of authentic dialogue. However, I take a more optimistic stance on the potential for teachers to reflect on their role in dialogic activities in order to actively avoid these pitfalls and to instead assume a role that supports children in accomplishing their own goals ….I think dialogic activities can be reframed as a way to help children develop the ability to more actively engage in dialogue with peers, making the ability to successfully participate in dialogue in and outside the classroom more of an end in itself, rather than for a means to an alternate curricular end (perhaps this might prompt a further discussion about dialogue as an end in itself).

This connects with exploration of underlying classroom ethos, referring back to an earlier comment from Rupert:

> **Tatiana:** … I want to clarify (and perhaps problematize) the points about equity and respect. Ideally, I absolutely agree that 'dialogue [is] a process...that's founded in relationships of equity, respect across difference and shared focus', but I struggle with the thought that this may be saying that dialogue is impossible (or unlikely?) in unequal power relationships. I worry that this may inadvertently suggest that those with power extend that power over dialogue absolutely. Surely, there is room for those with less power (/those oppressed) to establish, guide, facilitate, promote, and conduct dialogue, even despite attempts from the powerful to silence. Is dialogue possible where oppressive power exists? (Is this not the status quo of countless institutions in our world?) And how do dialogic/non-dialogic turns affect the larger dialogicity of words exchanged in such contexts?

In conclusion, Farah picks up on earlier questions about defining dialogue in relational rather than instrumental terms, with reference to educational aims and assumptions

about learning social relations and personal growth:

> **Farah:** ... Is it possible that to arrive at a working definition, if not consensus, on the parameters of a description that captures pedagogical dialogue, the philosophical underpinnings need to be first determined? Perhaps we are uneasy about declaring an instrumental definition of dialogue (which is entirely useful to us as researchers seeking to impact learning in classrooms), as dialogic, precisely because it may not meet our philosophical conception of dialogic authenticity. Although it may be far too idealistic, if we truly have conviction that dialogue is an ethical form of relating to others, then perhaps we need to turn to an examination of the self that relates, and consider the learning process as one which is in some sense, a process of personal growth. [Ahmed and Lawson, 2016]

THEME TWO: WHAT IS THE RELATIONSHIP BETWEEN EDUCATIONAL DIALOGUE AND LEARNING?

In this section, we turn to one of the central and persistent educational questions about dialogue: *What is the relationship between educational dialogue and learning?*. Building an understanding of the relationship between educational dialogue and learning is no doubt integral to the uptake of educational dialogue in classroom settings and policy initiatives. Yet, as noted by the discussants, research in this area often takes the form of relatively small-scale studies in particular contexts. Particular problems can arise when measurable outcomes are expected or desired, given the acknowledged diversity of approaches in this field and the intrinsic difficulties of measuring talk, learning, and achievement. However, there is a growing body of evidence, including some promising larger-scale correlational approaches, that appears to support a relationship between identifiable aspects of educational dialogue and certain student outcomes. This notably includes recent research findings from Howe et al's ESRC-funded Classroom Dialogue Project which investigated teacher-pupil dialogue in English, maths, and science lessons.

One of the five Phase Two discussion threads asked: *What is learned through dialogue? Can it be an end in itself?*. This was introduced by a quote extracted by the editors from the Phase One discussion, with the intention of provoking contributors to further consider the educational purposes and outcomes of dialogue:

> I think dialogic activities can be reframed as a way to help children develop the ability to more actively engage in dialogue with peers, making the ability to successfully participate in dialogue in and outside the classroom more of an end in itself, rather than for a means to an alternate curricular end (perhaps this might prompt a further discussion about dialogue as an end in itself).

A parallel Phase Two thread focused on: *Investigating features of educational dialogue*. This was introduced by a quote from Phase One that calls for understanding of the features of educational dialogue that may make dialogue productive for learning:

> …we need to take the features (of dialogue) one-by-one, and ask dispassionately about the evidential base for treating them as productive. Have they ever been shown to support student learning, reasoning, attitudes etc?

Phase Two threads were initially framed by three perspectives:

- Is dialogue an end it itself?
- What may be learned through dialogue (e.g. subject matter and/or dialogue/thinking/reasoning skills themselves)?
- How can we identify through research the features of dialogue that are productive for learning?

In response, the discussion followed three main lines of inquiry. The first two explore the relationship between educational dialogue and learning. Both of these then converge on methodological questions, to form the third:

- Which aspects of dialogic encounters make dialogue a natural medium for learning?
- What are the conditions, attitudes, or orientations that are required for genuine educational dialogue to take place?
- How might certain methods and outcomes evidence the role of dialogue in learning?

In this way, the overarching question about the relationship between educational dialogue and learning is explored in Phase Two through the use of two discrete, albeit conceptually intertwined, discussion threads.

As evidenced within the discussion threads that follow, there is a working list of necessary features that appear to make dialogue a natural medium for learning, and this list has generated support from those in and beyond CEDiR. However, there is also a sense of urgency to establish consensus on the core characteristics of educational dialogue. This task is far from straightforward: it involves consideration of a variety of purposes and contexts within which learning and dialogue converge. Nonetheless, consensus is an important first step in uniting a seemingly fragmented field.

As we see below, there is a general agreement about the conditions under which productive dialogue takes place, including factors related to pre-existing dialogic skills, attitudes, interpersonal and cultural conditions, structures of participation, types of support, and technological tools that enable access to all participating members. However, it is difficult to establish research designs that effectively account for such variables, as they are often intertwined with each other and are context specific. The contributors begin to think creatively about novel approaches to measurement, and express an eagerness to continue to do so in order to better conceptualize and communicate how genuine dialogue can foster learning in diverse educational settings. There is massive methodological diversity within the field, and there is value to be gained from collating the wide variety of relevant research on the apparent outcomes of dialogue, which include curricular learning, reasoning and attitudes.

THEME TWO - LINES OF INQUIRY
1: WHICH ASPECTS OF DIALOGIC ENCOUNTERS MAKE DIALOGUE A NATURAL MEDIUM FOR LEARNING?

This is a rather short line of inquiry, but it is important, because it incorporates two perspectives that set the scene for subsequent discussion. One discussion begins with the notion of dialogue 'as a natural medium for learning', drawing first on the work of Kazepides (2012) and then turning to Dewey (1916). This thinking is developed in terms of the human disposition to engage with others, based on a positive orientation towards difference. Principles of curiosity and openness to difference come to the fore, with the suggestion that dialogue and learning go hand in hand: 'to be more dialogic means to be more open to learning' (Phillipson & Wegerif, 2017). Meanwhile, a parallel discussion in a different thread begins by raising questions about the features of dialogue that enable it to contribute to learning, with a view to moving research forward. This contribution challenges the notion of an essential dialogue-learning link. It is suggested that while there is evidence that certain aspects of the dialogic process demonstrate its relationship to learning, we should also note the role of individual reflection in extending and consolidating learning. Both of these perspectives then lead to extended discussion about research methodology, which is developed as a key line of inquiry in its own right (see *Line of Inquiry 3* below). Meanwhile another strand of conversation turns to look more specifically at the conditions, attitudes, and orientations required for genuine dialogic engagement to take place in educational settings.

DISCUSSION

One conversation begins by outlining key principles of curiosity and openness to difference, suggesting that dialogue and learning go hand in hand:

Rupert H: … Speech is a (the?) distinctive human characteristic - an evolutionary marvel. However, speech is not dialogue. Dialogue, as Kazepides (2012) argues, is a 'refined human achievement': a positive orientation towards difference in the other and the world that transcends biological caution and embraces a dialogic conception of the self. Dialogue is thus a natural medium for learning, since that disposition to value and engage with difference engenders curiosity and empathy towards the person or matter at hand. Its motivation is intrinsic and affective, unlike the way much learning is framed around extrinsic motivators - punishments and rewards. For Dewey (1916), thinking is not an abstract skill but a form of intelligent response to the encounter with difference.

Sara: … So there is no dichotomy between curriculum learning and learning to think and learn together with others, they go hand in hand? At least that's what I think I am arguing in a paper I'm currently co-authoring (Mercer, Hennessy & Warwick, 2017) so other timely views are welcome! As Rupert Wegerif puts it, teaching and learning are through and for dialogue. A nice quote from his brand-new book – like Rupert H emphasising openness - follows:

'"Being better at dialogue means learning how to ask better questions, how to listen better, hearing not only the words but also the implicit meanings, how to be open to new possibilities and new perspectives, while of course learning how to think critically about new perspectives through comparing different points of view. More than all these specific skills... to be more dialogic means to be more open to learning'" (Wegerif & Phillipson 2017).

Meanwhile a parallel discussion raises questions about identifying the features of dialogue that enable it to contribute to learning, with a view to moving research forward:

Christine: … Based on current literature, it seems reasonable to hypothesize that educationally productive dialogue includes: being open to new ideas and change of mind; listening and attunement to others; being responsive to and valuing others' contributions; cumulatively building on / elaborating / synthesizing / following up others' ideas; exploring difference, comparing and evaluating alternative perspectives, working towards reconciliation, negotiating consensus; challenging and critically questioning others' ideas; exploring possibilities collectively through creative thinking. But I can immediately see gaps too, e.g. those who emphasize 'exploratory talk' would probably wish to see more explicit recognition of 'justifying viewpoints with reasons in response to challenge'. The exhaustiveness of my list doesn't matter at this stage in the game: the point is simply that we need some form of list if we are ever to get started.

This contribution then challenges what others see as the essential dialogue-learning link, pointing out the role of individual reflection in extending and consolidating learning:

Christine: …. For instance, 'challenging and critically questioning others' ideas' consistently proves to be helpful, as does 'working towards reconciliation, negotiating consensus'. However, while productive reconciliation/consensus has to be achieved (as opposed to initiated) at some point, achievement doesn't itself have to be dialogic: it can occur just as effectively (often more effectively) through individual reflection hours/weeks/months after group work is complete. So I'd be a little skeptical about 'cumulatively building on' too.

These alternative perspectives both then develop into a related line of inquiry about research methodology (see Strand 3 below). Meanwhile another strand turns to look more specifically at the conditions, attitudes and orientations required for genuine dialogic engagement to take place in educational settings, as seen in the next section.

2: WHAT ARE THE CONDITIONS, ATTITUDES, OR ORIENTATIONS THAT ARE REQUIRED FOR GENUINE EDUCATIONAL DIALOGUE TO TAKE PLACE?

The discussion here begins with reflection on the cognitive skills and interpersonal habits required for genuine educational dialogue to take place. Certain habits and conditions are seen to enable both purposiveness and openness, which in turn are the foundation of dialogic skills. The idea of a 'conducive climate' is then developed to include the essential teacher-learner relationship, seeing the teacher as a co-learner and facilitator in the classroom, not merely a transmitter of the curriculum. In parallel, another thread of conversation draws attention also to the classroom participation structures required for student engagement in productive educational dialogue, taking the example of a research

[3] in which an interactive whiteboard (IWB) was used to help create the conditions for productive group talk to take place. Yet questions remain about how to demonstrate learning outcomes with this type and scale of classroom research. This prompts later reflection on the relative ease of systematically exploring factors in group work, compared to investigation of whole-class learning and teaching. Thus, these first two lines of inquiry lead jointly to the third, asking how certain methods and outcomes might evidence the role of dialogue in learning.

DISCUSSION

This conversation begins with reflection on the cognitive skills and interpersonal habits required for genuine educational dialogue to take place:

Rupert H: … It [dialogue] requires having an end in view so that the situation at hand, and the unknown, perplexing or surprising elements within it might be understood and directed towards that desired end. All our actions have purposes, more or less examined and justified. By understanding the activity or phenomenon of dialogue as fundamentally a response to difference, rooted in a disposition of openness, we are drawn to focus on creating the cultures and attitudes from which genuine dialogue springs. From this perspective, 'dialogue skills' are better understood not as atomised personal qualities but as habits of authentic response built in favourable interpersonal and cultural conditions. Without both the conditions and the habits, no dialogue is possible....

Sara: ... [I] would likewise say that dialogue skills are dependent on being built up - and subsequently applied - within a conducive climate for dialogue and a meaningful learning context.

This notion of a 'conducive climate' prompts attention to the teacher-learner relationship:

Farah: I would like to extend the idea of orientation to teacher professional identity. If teachers approach dialogic practice as an end in itself, then perhaps their understanding of the teacher-learner relationship may be extended, by viewing the teacher as co-constructor of knowledge, or seeing the teacher's role as facilitator of cognitive and affective development of the learner through a dialogic relationship, as opposed to seeing the teacher as transmitter of a curriculum. This orientation may then impact classroom practice and facilitate deeper understanding of subject knowledge, as well as the cognitive skills and ethical habits outlined in Rupert and Sara's comments.

This wider focus is further extended in a parallel that thread draws attention to the classroom participation structures:

Ruth: … In classroom experience there are also questions about who participates in conversations and what type(s) of participation may help or hinder learning - linking, I suppose, to questions about how classroom ethos and participation structures may influence student participation in dialogue...

….I remember in the IWB and collaborative group work project with Neil (Mercer) and Paul (Warwick) we focused mostly on seeing whether and how primary children's collaborative use of

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[3] http://iwbcollaboration.educ.cam.ac.uk/publications/

the IWB for group learning facilitated productive talk (using Mercer et al's framework of exploratory, cumulative and disputational). This was on the assumption that such talk supported learning, but we didn't look at learning outcomes systematically within that project. So there may be a sense in this type and scale of project (and others) that the chains of argument connecting dialogue and learning have to be 'joined up' from a number of different studies (which makes sense if we see research endeavour as cumulative).

In a later response, the conversation returns to methodological issues:

Christine: … In the context of small-group work amongst students, it is relatively easy (note only 'relatively') to explore identified features systematically. It is possible to organize groups (and group tasks) in a fashion that allows: 1) manipulation of the frequency of one feature while holding the frequencies of the others constant; 2) assessment of the implications of the manipulation for learning outcomes.

These first two lines of inquiry therefore converge on the third, asking how certain methods and outcomes might evidence the role of dialogue in learning, as seen next.

3: HOW MIGHT CERTAIN METHODS AND OUTCOMES EVIDENCE THE ROLE OF DIALOGUE IN LEARNING?

Given the embedded nature of dialogue within individual dispositions, interpersonal orientations, and cultural settings, the teasing out of dialogue and its relationship to curricular learning is far from simple. In this line of inquiry, which again straddles both discussion threads, contributors explore how to establish a firmer research base linking dialogue to learning. There are several interlinked elements. The first specific matter of principle concerns the feasibility of measuring latent variables like 'orientation'. There is agreement about both the potential usefulness and the difficulty of doing this. In parallel, and more generally, attention is drawn to the sheer diversity of research objectives and approaches that have resulted in the development of a substantial but highly fragmented evidence base. Contributors make it clear that there are both massive constraints and opportunities in the accumulation of evidence, much of which stem from the open system within which educational research takes place. It is acknowledged that strengthening the evidence base presents several challenges, which research has only just begun to unravel. Yet the discussion ends on an optimistic note in outlining how current work is moving forward. There is also a final indication in this section that engagement in the dialogue itself helps to connect experiences and move thinking forward by bringing relevant memories to mind.

DISCUSSION

There are several opening gambits to this line of inquiry, including these:

Rupert H: … What I would like to see is a set of activities / questionnaires that could 'measure' or indicate the extent to which those cultural conditions, and those dispositions, are being realised. How might we do this?

Sara: Critical reasoning skills are often a desirable outcome but there is also some evidence that dialogic teaching approaches can foster development of substantive knowledge too, especially from UK and Mexico. Note that a special issue of Language & Education edited by van der Veen & van Oers and just published (2017, 31:1) focuses on precisely this relationship. However the evidence remains patchy and mainly small-scale. Hence the focus of our ESRC project team (Howe, Mercer, Hennessy, Vrikki & Wheatley) on exploring whether more dialogic (primary) teaching is in fact related to core subject learning gains on standardised tests – but also on scientific and general reasoning tests.

Questions about measurement come to the fore:

Farah: I agree that approaching dialogue as an orientation will help us to navigate these questions. I am less inclined to think that it is possible to 'measure' or quantify the orientation, although I agree that indicators are useful.

Sara: *...*Regarding measures, it would be great to try to develop some more sophisticated rating scales (I agree it is not easily quantifiable!)... in the ESRC project we do rate every lesson overall on a 3-point scale according to how teacher-led it is and how much student participation we see; we developed the descriptors in these dimensions based on some of the draft global indicators we developed for the British Academy project as part of development of SEDA. We could share our present instrument if anyone was interested, but it probably needs further development to cover all indicators.

More generally, in another interchange, attention is drawn to the sheer diversity of research objectives and approaches in this field:

Ruth: ...Methods for investigating features of educational dialogue depends on both the aims and the conventions in the relevant research area.... Some researchers focus primarily on what may be seen as dialogic forms of learning and teaching and knowledge construction - often with an intervention involved (e.g. the introduction of classroom 'ground rules', to take one familiar example). So research is likely to include data on students' cognitive, social and affective processes as well as observable features of communication. Other researchers focus differently on what may be seen as naturally occurring dialogue in educational settings, using approaches like conversation analysis, corpus linguistics, linguistic ethnography, critical discourse analysis, and so on, commonly asking questions about how language and communication reveal, represent and develop power relations, social bias and identity in that setting (including questions also of whose knowledge is seen as valuable in school). Researchers in both of these broad areas face considerable difficulties in interpretation and coming to definitive conclusions, not least because of the multiple influencing factors in the immediate, wider and historical contexts of experience...

Maria: ...My first reaction would be that, while there is a lot of research on classroom dialogue, evidence to date tends to be somewhat suggestive rather than conclusive, largely due to the fact that studies tend to be small-scale. Nevertheless, there is evidence suggesting a *link* between

productive forms of dialogue and student learning. In discussing this further, however, I think it is important to distinguish between contexts of dialogue within the classroom. Most evidence comes from the context of student group work. There is also considerable work on teacher interaction with individual students (including work on scaffolding). Teacher-orchestrated dialogue on the other hand has been studied less.

Of course, we hope that the outcomes of the ESRC project will shed more light on these questions and determine whether there is any impact on all three aspects in question: student learning, reasoning and attitudes.

Ruth: .... I hadn't quite realised that in the ESRC project you're looking at student attitudes as well as learning and reasoning. I can see that it certainly makes sense to do this. Are you looking at attitudes to school in general? Does this include students' attitudes to group work, which would of course be relevant to their engagement in dialogue [...]

Christine goes on to highlight the importance of controlled versus naturalistic research design in the generation of a viable evidence base, with an optimistic contribution:

Christine: ...Identifying the features of dialogue that are productive for learning is not an inductive task: there are literally an infinite number of ways in which samples of dialogue could be codified, so inductive methods will not give us the answer. We need hypotheses.

...While cycles of highly controlled but artificial experiments followed with naturalistic but looser interventions are possible for small-group interaction, they can't readily be used to explore whole-class teaching. It's naturalism or nothing, and without the backcloth of experiments this can be extremely challenging...Intervention methods are especially problematic in whole-class research because you have no a priori grounds for anticipating what any control group will do, particularly when ideas about productive dialogue have been circulating around the educational community for some considerable period of time (and control teachers may already be using them)...

The alternative is to exploit naturally occurring variation (one of the methods that Ruth signals), correlating frequencies with student outcomes, and this is the method that we're using in the ESRC project. As Maria said, our outcome measures cover curriculum subjects (maths, literacy and science), reasoning, and attitudes (to school and self-as-learner). The potential drawbacks are: 1) we are at the mercy of the variables on our list being ones that teachers actually use; 2) likewise we are at the mercy of teachers varying over their usage of variables that they do use; 3) we need to take account of numerous other variables that are likely to be related to dialogue and/or outcome. As regards the ESRC project, there are some variables that seldom get used – synthesizing for instance – but the other two problems look tractable, so we're reasonably optimistic about interesting results…

The conversation then prompts another participant's personal memories of previous research, leaving an open-ended conclusion:

Ruth: ...I think that your ESRC project correlational approach is really interesting in offering a way to exploit naturally occurring variation. And I've just realised at the very moment of writing this that years ago, as a Masters student, I trialled an applied behaviour analysis approach that exploited natural variation (in group discussion) with a visual graphing technique. The idea was to plot intervention variation as it occurred in real time, rather than setting up a structured A-B-A-type intervention programme. If the outcome plots split according to intervention-type this could be taken as an indication of different intervention effects. It was called the 'alternating treatment design' I think, and I must look back at it and see if there's any potential connection to dialogue

analysis (e.g. in looking for patterns in how conversations develop in different group structures or other distinctive 'treatments').

THEME THREE: HOW IS DIALOGUE SUPPORTED AND CONSTRAINED?

In this section, we consider our final theme, *How is dialogue supported and constrained?*. Two threads (*How do wider constraints on teachers and schools influence educational dialogue?* and *What are the essential features of a classroom ethos that enables dialogue to thrive?*) were initiated at the start of the Phase Two discussions. These questions were posed following the analysis of Phase One discussions, which revealed multiple contributions that raised issues relating to the realisation of dialogic education in practice. For instance:

> Reciprocal, cumulative and expansive dialogue can only exist in classrooms where it is cultivated by a teacher and there are many factors that may prevent this; not least the prescriptive curricula found in most settings.

> What are the necessary features of the 'fully dialogic and inclusive classroom ethos'... which is the essential foundation for any episodes of dialogue to be able to take place? This goes beyond specific 'talk moves' to characterise -- and develop -- the climate where dialogue might thrive and the dispositions, values and intentions that underpin it.

Two lines of inquiry were established after an analysis of these complimentary discussions:

- Constraints and limitations relating to educational dialogue

- Approaches to supporting educational dialogue

THEME THREE - LINES OF INQUIRY
1: CONSTRAINTS AND LIMITATIONS ON EDUCATIONAL DIALOGUE

When considering the wider constraints on educational dialogue, the role of high stakes written external assessment was highlighted as a major contributing factor. Whilst acknowledging the difficulty, and expense, of assessing talk, the lack of national policy support for dialogue and oracy skills was considered to be telling. There was agreement that policy makers must be made to think again, if their curricula are to deliver the enhanced critical thinking skills that contemporary employers value. Novel assessments may also be

required in order to encourage school leaders to buy-into a dialogic pedagogy, given the emphasis they necessarily have to place on external measures of learning.

Accepting that external assessment places limitations on classroom dialogue, discussants were prompted to reflect upon the importance of oracy in education.[4] There was a consensus that oracy relates to a set of communication skills, including listening, that can be explicitly learned, and that these skills may also be constrained by external factors. The experiences of oracy children have in their homes are chief among them, but the oracy, or lack thereof, of all adults and children they interact with will impact on learners' skill sets. A range of tools was highlighted that may help promote oracy in educational settings (for example, the Oracy Skills Framework developed by CEDiR researchers: Mercer, Warwick & Ahmed, 2017).

For any school-based dialogic intervention to become effective, established leadership is crucial. In order for educators to overcome the constraints placed upon dialogue in the classroom, school leaders must clear the path for them to do so and support their efforts. Of course, the logistics, budget, and timetabling required to enable teachers to engage in this professional development may, however, be considerable. Existing frameworks and materials (such as those developed by the Leadership for Learning network) can help to support school-based colleagues to realise their intention to promote dialogue, as well as be a potentially valuable resource for establishing professional dialogues between educators themselves.

The internal factors at play in the constraint of dialogue were also considered. Limits are not only placed on classroom dialogue by external authorities, such as the leaders, parents and policy makers discussed thus far, but also by educators themselves. These stem from the inherent contradiction of dialogic practice whereby a teacher must cede control of the knowledge building process whilst often having a predetermined learning outcome in mind. This thread of discussion was resolved by contributions that highlighted the means by which internal power structures are created and maintained, and thus serve to prohibit classroom dialogue.

DISCUSSION

In the opening post of the 'constraints' thread the impact of external assessment was succinctly outlined. This was elaborated upon by subsequent posts and the impact of policy makers on classroom practice was also touched upon.

> **Sue:** … When (as in England) statutory assessment is high-stakes for schools, heads and teachers, there is an understandable tendency to focus on that which is valued in formal assessment.

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[4] For a clear and succinct outline of the relationship between oracy and dialogue see this blog by Neil Mercer.

Speaking and listening / oracy skills do not (currently) count in national assessments; if they featured - as they have to some degree in the past - no doubt there would be greater emphasis on promoting quality dialogue in classrooms. Part of the reason these aspects of learning were 'downgraded' is that it is difficult and expensive to assess speaking validly and reliably.

Ruth: … Sue's contribution has made me think also about the external views of what school students should learn and [how] they might demonstrate their learning.

Maria: … One of the biggest constraints is the type of assessment which does not normally focus on verbal communication. Certainly, on the ESRC project, which takes place in Year 6 classrooms, teachers often tell us how individual silent practice increases as they get closer to SATs (National Tests) at the end of the year.

Christine: … I agree with what everyone has written so far about the current curriculum and assessment framework being a major influence on dialogic practice. In the short term, it must always be quicker to cover some body of knowledge in an overloaded curriculum and with impending high-stakes assessment via monologue (which is why we often lecture as academics!) than to engage even in the classic IRF forms of educational dialogue, let alone the forms that we hypothesize to be productive.

Sue: Classroom dialogue is key to assessment for learning; Summerhill's democratic approach rests on dialogue, and the pupils' hour-long discussion in the royal courts of justice to decide whether to accept the government's capitulation over an Ofsted report (The Guardian, 2000) must stand as testimony to the power of dialogic skills learned over many years.

Christine: … We also need to persuade policy-makers to think again. When I last looked at the relevant websites, it was not simply that oracy skills do not currently count in national assessments; it was that when Michael Gove was Educational Secretary a health warning appeared on the policy documents that (under New Labour) had been produced to promote these skills...This, by the way, is the main reason why we're including SAT scores in the battery of outcome measures (curricular, reasoning, attitudinal) used in the ESRC project: if we can show that dialogic practices are relevant for something that highly skeptical policymakers really care about, then there is some chance, at least, of changing the framework.

In considering the constraints external assessment places on classroom dialogue, contributors were prompted to reflect upon the role that they would have it play and the importance of oracy in education:

Ruth: … Number 1 on the list of 'the top ten employee skills to look out for' (Learn Direct, 2013) is 'verbal communication… However, despite communication being a highly-desired skill, 33% of companies think their workers are lacking it, according to a survey by HR Magazine.' In thinking about constraints on dialogue in school I'd find it really helpful to understand the relationship between 'verbal communication' as above, oracy, and engagement in dialogue. Any offers?!

Ayesha: … My quick thought on that, Ruth, is that Oracy as an overarching set of skills would include verbal communication but also the non-verbal. Similarly, oracy skills are needed for good engagement in dialogue… Looking at the oracy skills framework (Mercer, Warwick & Ahmed, 2017), this includes the social and emotional, physical, cognitive and linguistic… what is missing, if anything, that is important for dialogue? Perhaps what is missing is a matter of emphasis more than anything else - on the listening? … The engaging of others?

Sharon: … It is interesting that employers place verbal communication top of the list (or at least that is how it is shown here). It is also of interest, from the point of view of classroom settings, that

verbal communication is only part of a wider gamut of oracy skills, as outlined by Ayesha.

Sue: … I do think, as Ayesha suggests, that listening needs more emphasis. It is such a crucial part of dialogue, although difficult of course to observe, which may be part of the reason it gets relatively little attention. Robin Alexander (2004) does though refer to it, both for children and teachers. I remember 'active listening' being a key component of many professional development programmes, with explicit activities designed to develop the skill for teachers learning together, as well as for pupils in what were often termed 'student centred learning' approaches (eg. Brandes & Ginnis, 1986).

In order for educators to overcome the constraints placed upon dialogue in the classrooms, leaders must clear the path for them to do so and support their efforts. This strand of thinking was generated by Sue's description of Leadership for Learning (LfL):

Sue: … 'Dialogue' is the central principle of the LfL framework that was a product of the Carpe Vitam LfL international project. In the book of the project (MacBeath & Dempster, 2008) we talked about 'disciplined dialogue' particularly in relation to the book's title 'connecting leadership and learning'... This notion of 'disciplined dialogue' has been picked up particularly in Australia as an approach to the professional discussion of qualitative or quantitative data on matters affecting learning (Dempster et al., 2017). Other contexts in which the LfL principle of dialogue has been picked up include schools in Trenton, New Jersey, USA and Pakistan (Javed, 2013).

Farah: … The work of LfL aptly demonstrates the impact generated by exploring the conceptualisation of leadership amongst school leaders, on the whole school community. Often the constraints on teachers described so well above, are exacerbated by the pressure on school leaders to meet external (government) curricular and assessment goals. School leaders subsequently creating an atmosphere that generates constraints at the classroom level is an obvious hazard, but no less relevant. Dialogue is already well woven into LfL, but I am wondering if this strong basis can be built upon, by something more explicit about leading dialogically or leading dialogic schools.

Christine and Farah elaborated on the issue by shifting the focus onto the time required to embed dialogue within a curriculum:

Christine: ... lack of time to implement is one of the major reasons that research shows teachers to give for abandoning the practices we value, even when they have enthusiastically engaged at, e.g., a series of professional development workshops…. So we need to persuade teachers that the short-term fix is a false economy: students better understand the material when highly dialogic methods are used, so teachers won't need to revisit old themes so often in the future…. there are studies indicating student complaints about the time they are 'wasting' on talk when they could otherwise be 'learning'! I'm sure that 'ground rules' as Neil has consistently emphasized are helpful in pre-empting student cynicism, especially when their negotiation includes evidence that students will find persuasive.

Farah: … My own experience as a school leader is that it takes time to shift collaborative thinking amongst staff to a dialogic approach to learning and to school life, and that such an ethos can easily dissipate if it is not regularly and actively renewed, especially when there are changes internally or in response to government directives.

Limits are not only placed on classroom dialogue by external authorities such as the leaders, parents and policy makers discussed thus far but also by educators themselves. Christine raised the issue of internal factors that are at play, making her reasoning explicit

so that others could coordinate their responses:

Christine: …Might Piaget (1932) not have been correct when he claimed in effect that 'being open to new ideas and change of mind', 'being responsive to and valuing others' contributions', 'exploring difference, comparing and evaluating alternative perspectives', and 'challenging and critically questioning others' ideas' are not achievable in any genuine sense when authority figures (like teachers) are present? It is at least possible that optimizing dialogic practices in classrooms necessitates combinations of whole-class teaching and small-group interaction. In which case, questions are immediately raised about how these two contexts should be integrated (so that students progress), and how achievable all of this is in cultures where there is no tradition of group work.

Sharon: … I especially like Christine's reflections on the 'internal' factors that act as constraints on the classroom implementation of dialogic practice. I think the issue of teacher as authoritative figure both in terms of teachers not knowing when to be authoritative and when to scaffold, and also in terms of a teacher's presence 'disrupting' dialogic goals, as a challenge when coming to grips with the role of teachers in dialogic practice. The latter point reminded me of a conversation I once had with a friend of mine, who was in her eighties at the time, in which she recounted a childhood in which adults were not as present in children's activities in the way that they seem to be today… she talked about children of all ages playing together, settling their own disputes, negotiating the rules for games, making decisions on the sharing of sweets and toys, and working out the groups' pecking order in verbal and non-verbal ways. In effect, the children learnt from each other…. the notion of guided play, is an approach that has always made me feel uneasy. Maybe Piaget was on to something?

In a related thread (*What are the essential features of a classroom ethos that enables dialogue to thrive?*), contributors also considered the need for leaders and educators to clear the path for classroom dialogue. Tatiana invited others to express their opinions on the questions at the heart of this issue. This led to the epistemology that educators prescribe to those in their care to be brought into question:

Tatiana: … What support are teachers given to foster dialogic classrooms? How do you teach for the standardized test dialogically? Who controls the ideas and how? And how do we convince them to make choices to promote dialogic classrooms?

Fiona: … I propose that in order for a truly dialogic classroom to be enabled, the bottom line is that teachers need to feel that they can give up some control. I'm not talking about behaviour management, I'm describing the control of ideas. Whose ideas REALLY count?

Ruth: … Good question! It made me think about the value given to different forms of knowledge and, indeed, the epistemological understandings that are held by teachers and children. It reminds me of some of the work that Linda Hargreaves and I developed on primary children's views about knowledge and knowing. We asked groups of children to have a discussion about questions like 'what does it mean to know something?'. So we tried to investigate their thinking in a 'dialogic' way that was intended to enable them to construct their ideas together. And of course Rocío García Carrión (and her INCLUD-ED colleagues) had already developed their work significantly in the direction of seeing how to give educational value to the knowledge of often marginalised home communities such as travellers. Interestingly, Rocío's 'dialogic literary gatherings' focus on reading classic texts, so there's a bringing together of access to culturally-valued material with increased participation in dialogue to tease out their meaning and relevance. How does the control of ideas in the classroom fit with classroom ethos, curriculum requirements, and any ideas that may be

remaining of a (Western) literary and cultural canon - and more?

Fiona: … In the work that Riikka and I did exploring teacher interactions with children in small reading groups (Maine & Hoffman, 2016), we found that sometimes when teachers appeared to be promoting a dialogic approach by supporting the children to develop particular uses of language to enable critical and creative thinking together, they were actually quite subtly still directing children towards the apparent authoritative interpretations of texts. These interactions seemed to expose underlying epistemological orientations that the teachers had about the pursuit of 'correct' knowledge or pursuit of ideas that could be contested or justified. Analysed at a linguistic level, these orientations were not apparent (there were instances of building, linking, disagreeing by all parties) but when the content was explored too, it was clear that the 'control of ideas' had not been relinquished at all… The approaches adopted by some of the Philosophy for Children practices seem to democratically get at this, and Matthew Lipman's (1976) work is an interesting starting point.

Tatiana: … This exchange makes me think whether the 'control of ideas' truly belongs to teachers, or if our education systems have seized it (and are unwilling to cede it to students). I think we see a lot of research that points to teachers' inflexible views on knowledge, but I wonder how much of that comes from the restraints placed on them (or, the control over them) that districts/systems have.

Courtney: … I am particularly interested in pursuing Tatiana's question… In the research I carried out for my MPhil thesis, I worked closely with a nursery school teacher to implement group dialogue around stories with the aim of promoting children's sustained, shared thinking, perspective taking, and understanding of difference…. I discovered that the most useful way I could support the teacher in developing her approach was by providing opportunities for thoughtful and open reflection and by acting as a sounding board for her to talk through her impressions and emerging ideas. She specifically mentioned that preparing for the meetings by watching the recordings of the previous story discussion was one of the most useful ways to drive these reflection discussions, because she could more easily initiate discussion with me with specific dialogic episodes in mind…. In doing so, she shifted part of her dialogic teaching approach to focus more on guiding participation instead of leading the children to some pre-specified understanding or interpretation of the texts. [Froehlig (in press)]

Leonardo: … I think that [there] is an unresolvable tension within the traditional educational system because there is an inherent contradiction in it. Here I follow Matusov (2009) who separates 'education as a practice' which is inherently dialogic, and 'education as a project' that can be essentially anti-dialogic (p. 3). For me, in such anti-dialogical system where competition, grades, standardised exams, textbooks and curriculum are the rules, there is a huge constraint to authentic dialogue. For instance, this kind of educational ethos promote a kind of conceptualisation in which students do not recognise that knowledge is elaborated with others and then tend to value the ownership of a contribution rather the co-construction.

This thread of discussion was resolved by contributions that highlighted the means by which internal power structures are created and maintained (and thus prohibit classroom dialogue):

Farah: … I think it is more about where teachers are on a spectrum of control, as the influence of normative cultural interpretations will always mean that there is some degree of subtle control, particularly in relation to interpretation of texts. As well as children's personal epistemologies, teacher's epistemologies and orientation towards a dialogic ethos, as well as their professional

identity, are crucial elements affecting the kinds of classroom ethos they establish, and therefore need to be considered.

Courtney: … To Farah's earlier point, there may indeed always be some degree of control within classrooms, particularly in relation to interpretation of texts, but it seems that there is value in finding ways to help motivate teachers to reflect on their use of control and to productively develop their abilities to promote authentic, sustained, and free-flowing dialogue among peers. I think the most important element of this process is that teachers have an appreciation of the tension between a control / authority and authentic classroom dialogue, and that they are open to developing their teaching practices in introspective ways.

2: APPROACHES TO SUPPORTING CLASSROOM DIALOGUE

In both of the discussion threads curated in this phase, contributors spoke to one another about their solutions to the constraints on classroom dialogue, outlined in the first line of inquiry. They offered examples of tools that have the potential to overcome these constraints and agreed that the skills required for classroom dialogue to be productive, such as listening, could be explicitly taught and learned. The tools required to successfully implement a dialogic pedagogy were considered by the group. These included the establishment of principles (e.g. ground rules for talk) in order to provide a common language and coherence in a classroom. The Cambridge Oracy Assessment Toolkit and T-SEDA schemes were highlighted as ways in which teachers could assess and reflect upon dialogue in their lessons.

During the discussion, the group accepted that only certain phases of a typical lesson can be dialogic, and that more 'traditional' monologic elements will continue to play a role in education (particularly when the subject narrative needs to be driven forwards). However, where it is practical, teachers must feel emboldened to relax their epistemological stance in order to direct children to explore and take ownership of their own knowledge. The group reached consensus that dialogue between adults in and around the classroom was of paramount importance to this end, as teachers must be supported in their efforts by all stakeholders, if they are to relinquish some of their authority and allow classroom dialogue to flourish. This led to the potential for *Lesson Study* as a means to promote educational dialogue and a culture of collaboration, both professionally and within the classroom, to be considered. It was suggested that engaging groups of teachers in educational research on dialogue might be a means of prioritising productive dialogue in the classroom. Other strategies ,such as 'the tuning protocol', were also offered for consideration in order to support the wide range of adults in and around classrooms to communicate more productively with one another, thereby promoting productive talk with and between their students.

DISCUSSION

In both of the discussion threads curated, contributors spoke to one another about their solutions to the constraints outlined above and offered examples of tools that have the potential to support classroom dialogue:

Sue: … Another set of principles (concerning Assessment for Learning and derived from the Learning How to Learn project – James et al., 2007) were shown to support cross-phase professional dialogue and learning in a school cluster. According to the participants (primary and secondary teachers) the principles provided a common language and promoted coherence among the group (Swaffield et al., 2016).

Ruth: … I've noticed some useful Masters and doctoral projects on Lesson Study coming through in the last few years…. From seeing a number of Masters projects in this area one of my impressions is that a teacher's engagement in research on educational dialogue can actually become the means of prioritising and carving out time for productive dialogue.

Maria: … In our project (led by Jan Vermunt), teachers were inducted to the Lesson Study process and part of their induction was to introduce them to 'rules for talk'. As the research team of the project, we delivered a workshop on productive forms of talk (Neil and Paul were part of this) and teachers seem to be really interested (Vrikki et al., 2010; Warwick et al, 2016). So, creating the culture for collaboration and effective dialogues is key in both contexts: classroom and professional development.

Paul: … Secondary schools have a particular issue… our experience… suggests that it takes considerably longer for these teachers to embed a dialogic ethos than it might for a primary teacher. An answer here when scaling research may be to work across a whole year group, with all subject teachers; the benefit is that common purpose is generated, Lesson Study may be used to analyse progress across the year, and fruitful discussions between teachers is promoted. This will be our next phase in our research schools, working with our initial 'ambassadors' to develop colleagues' practice.

Christine referred back to the issues that educators face when implementing a dialogic pedagogy and built upon the consensus that professional dialogue was of paramount importance to its success:

Christine: …. Research that I have read about (see Howe & Abedin, 2013, for specific references) highlights teachers abandoning the practices after attempts to implement because they find it difficult: 1) to deal with what they see as inherent contradictions, e.g. over when to be 'authoritative' and/or to 'scaffold' and when to allow free exchange of viewpoints; 2) to keep track of divergent ideas so they can facilitate productive syntheses. 3) to assess whether dialogue is productive, especially when it occurs during small-group interaction amongst students (as other contributors to this thread have also noted – and over 25 years ago, Jenny Cheshire wrote about this too, showing how teacher assessors often undervalue students who support substantive contributions from other group members rather than make these themselves) (Cheshire & Jenkins 1991); 4) to cope with student cynicism about the role of talk…. The Cambridge Oracy Assessment Toolkit, which Neil, Paul and Ayesha have developed, may help… insofar as it offers tools for assessing individual contributions to small-group dialogue… T-SEDA is relevant here too.

Sue: … Or protocols such as 'the tuning protocol' originally developed by the Coalition of Essential

Schools. This is essentially a way of structuring group reflection around an individual's practice or problem; I use this for group critical friendship. I have introduced it to all my Masters students as well as used it in professional development (PD) sessions and know that many people have subsequently used it with their own staff and in their classrooms with students. 'Educational dialogue' in my mind is definitely about teachers' learning as well as children's. Other terms are common in the literature, such 'problem encounters' and 'constructive problem talk' (Robinson & Timperley, 2007), 'professional learning conversations' (Earl & Timperley, 2009; Danielson et al., 2009) and as 'peer conversations' (Timperley, 2015).

Farah: … I do think it is important to research examples of 'dialogic practice' such as Philosophy for Children, Dialogic Literary Gatherings or the traditional Islamic pedagogy called Halaqah (the subject of my PhD), in order to identify the characteristics of classroom ethos that may allow these practices to flourish.

Leonardo: … I can see an educational intervention at classroom level with a group of teachers to discuss 'learning through dialogue' and the development of academically productive talk. Here, one can balance the individual aspirations of each student and, at the same time, cover the required content. This is an explicit 'instrumental approach to dialogue' in education (Matusov, 2009). In a changing progressive scenario, the intervention could act at school level and involve many players (all teaching staff, school management and community) in order to realise an 'ontological approach to dialogue'(Matusov, 2009).

Paul brought the 'constraints on dialogue' thread to a close with a detailed description of the <u>Digitalised Dialogues Across the Curriculum (DiDiAC)</u> project:

Paul: … in a research class for the DiDiAC project (DiDiAC, 2017)... teachers are both building a dialogic culture in their classrooms and integrating the use of a microblogging tool into that culture. Teachers in three subject areas in schools in the UK and Norway are involved in the initial phase, with the UK Year 7 classes using iPads to access the 'Talkwall' technology devised by the University of Oslo. This enables groups and individuals to 'post' ideas onto a teacher wall at the front of the class, and to manipulate these posts in various ways to extend and develop their ideas. In an observed science lesson there was again a strong dialogic intent in the planning, but targeted to specific lesson phases and activities; this acknowledges Mortimer and Scott's (2003) suggestion that there may be almost no such thing as an entirely 'dialogic lesson', and therefore the potentially dialogic phases need careful attention... Again the teacher used prompts and scaffolds – reference to the class ground rules for talk, specification of the specific rules that were the focus of the lesson, repeated reminders of what the teacher was expecting to hear (and thus valued) in group discussions, an emphasis on reasoning in the students contributions to Talkwall, and individual and peer assessments of the quality of talk at the end of the lesson…. The teachers were developing their practice, and each would freely admit that it has taken time and effort to develop a dialogic ethos in their classrooms and to embed dialogic intentions into their practice. [Explored in Kvaavik, K.S. (2017).]

In addition to listening, other tools required to successfully implement a dialogic pedagogy were considered by the group. This was prompted by Sharon's reflections of teaching in nursery and Foundation stage settings, built upon by others:

Sharon: … I noted that a type of constraint in the classroom, was the experience of oracy that children brought into school from home. Teachers often find… that children's experience of engaging in meaningful dialogue… with the wider base of oracy skills, is lacking. This lack of what I will call 'comfortable' dialogic skills in this age range, e.g. the ability to use language to express

ideas (even simple ones), emotions (the mainstay of a nursery / Foundation Stage classroom!), engage in conversations, ask questions, direct games / play etc. is often not evident…. the home environment can act as a constraint on teachers' dialogic goals. Also, having worked with a wide range of adults in my classrooms from special needs teachers, to classroom assistants and parental support, I think there is a place for supporting these adults in the ways in which they communicate with each other in the classroom environment.

Sue: … Sharon's observation about home environment and some children's under development of dialogue reinforces that fundamentally we are talking about a skill set that can and should be taught and learned. Her mention of early years made me think about Margaret Carr and her work on learning stories, agency and dialogue… 'Genuine dialogue requires the deliberate creation of opportunities for initiative-sharing and collaboration' (Carr and Lee, 2012, p. 5); children's learning portfolios and stories can be a great catalyst for dialogue. Lots of links with Reggio Emilia too of course. I am convinced of the power of modeling. Also of scaffolds or tools for talk and dialogue. These may be sentence stems or questions (eg. the 'See-Think-Wonder' and 'Connect-Extend-Challenge' routines from David Perkins, Harvard Project Zero, 1974) … There is an incredible number of activities, tools, routines and protocols etc. that can be used to stimulate and structure dialogue, designed for or adaptable to all learners of whatever age.

The role of dialogue between adults in (and around) the classroom was built upon and led to the brief consideration of Lesson Study as a means to promote educational dialogue:

Ruth: … if we could expand the notion of 'educational dialogue' to include dialogues that may support teachers' learning, then the example of Lesson Study comes to mind (e.g. Warwick et al., 2016). It is interesting to see how primary and secondary schools may actively create the conditions that enable Lesson Study discussions to happen, including the practical considerations and finance for freeing teachers to engage in it together.

Maria: … In relation to the point on Lesson Study, it is certainly the case that adults too need to be trained to use productive forms of dialogue in order to enhance their collaboration on planning and reflecting on lessons (which would in return enhance their own learning). This especially applied to contexts like the UK and other Western cultures where the teaching profession has traditionally been one of more isolated work – although I think this is less and less the case nowadays.

Paul: … I recently [attended] a Lesson Study as an 'external expert', where the focus was on Reception children who had been observed in lessons not really participating in any discussion, either whole class or in groups. The LS questions were: to what extent did the focus children actually engage in classroom talk? Was the teacher missing something? Were they more actively engaged than suspected? And, to what extent could the talk they engaged in be characterised as dialogue? In devising the lesson on how to make the best sandcastle… a key point to note is that the teacher had specific talk intentions for the class embedded in his plan (as Dawes et al., 2004 suggest in [their] practical guide, 'Thinking Together'). He'd thought about getting the children to build on one another's ideas and provide reasons to explain the order of a sequence of building and testing. He'd considered oral sentence starters – 'And it would be better if…' etc. – resources to stimulate talk, and grouping of the children. He hadn't really thought about what happens in a conventional 'talking partners' activity so, to echo an earlier post, protocols for listening seem as important as those for talking.

4. CONCLUSION

It is heartening to see this working paper emerging from CEDIR, not least because it embodies so well the interests of a group of colleagues who have come together to pursue research on the nature and functions of dialogue in educational settings. It is also good to see the various themes and issues within this field of investigation set out so clearly – and to see those involved in this applied field of educational research practising what they preach in setting out the 'ground rules' for their own collaborative discussions!

Four years ago, Lyn Dawes and I published an article reviewing the history of research into classroom talk as a medium for teaching and learning (Mercer & Dawes, 2014). We concluded that, more than forty years after the work of pioneers like Flanders, Barnes and Cazden, and partly thanks to developments in technology, we know significantly more about communication in the classroom between teachers and their students. Work from within the CEDiR group has provided some of the key evidence in this respect. As researchers who work with teachers (rather than doing research *on* teachers), we can confidently encourage those practitioners to develop a more critical awareness of how they use talk as the main tool of their trade; and we can direct our students who are learning to teach towards the kinds of talk strategies habitually used by the most effective teachers. We also know much more about the potential value of talk for collaborative learning, and what teachers and students can do to make group work more productive. Our advice and guidance is increasingly sought by policymakers, school leaders and practitioners internationally. On a less positive note, we must recognize that despite an accumulating wealth of relevant evidence, educational policy makers in the UK (or at least in England) still seem to have little awareness and understanding of how addressing the quality of classroom talk can improve the quality of classroom education. So we must continue our efforts, both in carrying out research and in maximising its impact. I believe that those efforts will be more satisfying and successful if we work collaboratively, as our own research suggests people should.

Neil Mercer, February 2018

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APPENDIX ONE: CONTRIBUTORS' BIOGRAPHIES

Contributors include:

Farah Ahmed is co-convener of the CEDiR strand: Intercultural and Conflict-transformation Dialogue. She is a school leader and has recently completed a PhD study that uses the scheme for educational dialogue analysis to evaluate the quality of classroom dialogue generated in *halaqah* (circles of learning) in Islamic-faith primary schools in the UK.

Meaghan Brugha is a Research Assistant and a student representative with the CEDiR group. She is completing her PhD in the Faculty of Education with a research focus on dialogic pedagogy in blended learning environments for refugees pursuing higher education. Meaghan also works part-time for a research consultancy, Jigsaw Consult, based in London.

Elisa Calcagni is completing a PhD focused on school-based professional development to promote dialogue in primary mathematics classroom in Chile. She is one of the student reps for CEDiR and part of the T-SEDA team.

Hilary Cremin is a Reader in the Faculty. She researches, writes and teaches about peace education and conflict transformation in schools and communities. Her most recent work seeks to deepen understanding of restorative interventions in schools through the coding and analysis of teacher-mediated dialogue following peer conflict. She has also worked as a community mediator.

Current/Recent Projects:
- **Developing Restorative Approaches to Conflict Dialogue in Schools:** Analyzing teacher-mediated dialogue following peer conflict. (Faculty of Education Research Development Fund: 2017-18. Cremin).
- **Preparing UK and Ugandan Educational Professionals to Work with Students in/from Settings Affected by War and Trauma.** (Cambridge-Africa ALBORADA Fund: 2016-18. Cremin).
- **Learning Communities for Peace Evaluation - Spain, Sweden, Greece, Croatia, UK, Belgium, France.** (Evens Foundation, Belgium: 2017-18. Cremin, Tsuruhara).

Courtney Froehlig is a PhD student in the Faculty of Education investigating how Nursery and Reception teachers can leverage small-group reading and guided dialogue to support children's social reasoning and perspective-taking. Alongside her research, Courtney is working with children's centres and primary schools in Cambridge to conduct community workshops with the aim of promoting reading and dialogue around stories in the home: thepanoramaproject.org.

Sara Hennessy is Reader in Teacher Development and Pedagogical Innovation, and Deputy Director of Research, in the Faculty. She co-founded the CEDiR group. Her research interests focus on classroom dialogue to support subject learning and inquiry, and how this can be mediated by educational technology use and teacher professional development.

Current/Recent Projects:
- [Classroom dialogue: Does it really make a difference for student learning?](#) (2015-17)
- [A tool for analysing dialogic interactions in classrooms](#) (2013-2015)
- [Using a research-informed professional development workshop programme to impact on the quality of classroom dialogue using the interactive whiteboard](#) (2014)

Rupert Higham is Lecturer in Educational Leadership at the UCL Institute of Education. While at Cambridge, he co-founded the CEDiR group and co-convened an international centenary conference on Dewey's 'Democracy and Education'. His research is on values-led school improvement, responsible leadership and educational dialogue, in theory and practice.

Recent projects:
- [PI: An evaluation of Round Square's IDEALS](#) (2015-2016)
- [A tool for analysing dialogic interactions in classrooms](#) (2013-2015)

Christine Howe is a developmental psychologist who after a long career in Psychology was appointed Professor of Education at the University of Cambridge in 2006, a position from which she has recently retired. Her research interests include children's reasoning in science and mathematics; children's communicative, linguistic and peer relational skills; dialogue and learning during collaborative group work and whole-class teaching; and young people's experiences of racism and discrimination. She directed a recently completed, ESRC-funded project entitled [Classroom dialogue: Does it really make a difference for student learning?](#)

Tristan Igglesden is the Director of Studies at an independent preparatory school and an EdD student at the Faculty of Education. His doctoral work focuses on the affordances of Learning Management Systems (such as Google Classroom) that support classroom dialogue.

Ruth Kershner is Lecturer in Psychology of Education and Primary Education. She is co-convenor of the CEDiR 'Classroom Dialogue' strand and a member of the development team for the [T-SEDA](#) resource. Her research interests include dialogic and relational approaches to inclusive pedagogy, and the development of dialogic research methods.
Current/Recent projects:
- [A tool for analysing dialogic interactions in classrooms](#) (2013-2015)
- Perspectives on diversity and belonging in primary classrooms: Supporting Early Career Teachers in the development of inclusive pedagogy (British Academy/Leverhulme: 2013-14. Kershner & Black-Hawkins).
- [Interactive Whiteboards and Collaborative Learning in Primary Science.](#) (ESRC: 2007-09. Mercer, Kershner, Kleine-Staarman, Warwick).

Leonardo Lago is a PhD student at the Faculty of Education, University of Cambridge. His current interest is in promoting classroom dialogue in Brazilian primary school through researcher-teachers partnership. Formerly, he worked as a Physics teacher in secondary

education and developed research on Science Education and Activity Theory during his Master degree.

Lisa Lee is a freelance educational researcher with particular interest in dialogue and STEM subjects. She is a qualified primary teacher and has undertaken a Masters degree in Education, Researching Practice at the University of Cambridge, Faculty of Education. She was part of the T-SEDA team.
Recent projects:
- Classroom dialogue: Does it really make a difference for student learning? (2015-17)
- A tool for analysing dialogic interactions in classrooms (2013-2015)
- Research for Cambridge Maths Hub into the use of Singapore style textbooks in primary mathematics lessons

Fiona Maine is Senior Lecturer in Literacy Education at the Faculty. She is one of the co-founders of CEDiR and co-convenes the Dialogic Theory and Research Methodology strand. Her research is primarily concerned with 'dialogic readers' and how children talk and think together as they make meaning from visual and multi-modal texts. She is currently leading a British Academy/Leverhulme project investigating peer interactions in different reading contexts (2016-2018) and is just about to start a large Horizon 2020 European project focusing on the promotion of cultural literacy through the teaching of dialogue (DIALLS 2018-2021).

Louis Major is a Research Associate based at the Faculty. He is interested in the use of digital technology for educational purposes, in particular the role of technology in supporting educational dialogue. He is currently the lead Cambridge-based RA on the Digitalised Dialogues Across the Curriculum (DiDiAC) project. He also co-leads CEDiR's Digital Technology and Dialogue research strand that focuses on the interaction between dialogue in educational settings and digital technologies.

Neil Mercer is Emeritus Professor of Education at the University of Cambridge, where he is also the Director of Oracy Cambridge: the Hughes Hall Centre for Effective Spoken Communication and a Life Fellow of the college Hughes Hall. He is a psychologist with particular interests in the use of talk for thinking collectively, the development of children's spoken language abilities, and the role of teachers in that development. He has worked extensively and internationally with teachers, researchers and educational policy makers.

Sue Swaffield is a Senior Lecturer (Educational Leadership and School Improvement) at the Faculty of Education. She co-founded the Leadership for Learning Cambridge Network that has 'dialogue' as one of its five key principles. Dialogue is central to LfL projects as well as her other main research interests of Assessment for Learning and Critical Friendship.

Maria Vrikki is a Postdoctoral Researcher at University of Cyprus. Her research interests focus on productive forms of dialogue in teacher-student interactions and teacher-teacher interactions in professional development contexts. Maria's current project examines the

effect of teacher-student dialogue on student achievement, in combination with other established factors of teaching effectiveness.

Current/Recent Projects:

- Promoting quality of teaching: A comprehensive and dynamic framework (2018-present)
- Classroom dialogue: Does it really make a difference for student learning? (2015-17)
- Teacher Learning and Lesson Study in Mathematics (2014-16)

Sharon Walker is a doctoral student at the Faculty of Education, University of Cambridge. Her current research concerns UK government policy in higher education and race equality. Previously, as part of the Underground Mathematics project, she researched the role of classroom dialogue in promoting students' mathematical thinking and learning.

Paul Warwick is a Senior Lecturer in Education at the Faculty. He has research interests in the interactions between technology and dialogue; science education; and teacher learning. He is currently the UK Principal Investigator on the Digitalised Dialogues Across the Curriculum (DiDiAC) project, and co-leads CEDiR's Digital Technology and Dialogue research strand. Previous projects have included Using a research-informed professional development workshop programme to impact on the quality of classroom dialogue using the interactive whiteboard (2014), and he is a member of the Thinking Together project.

APPENDIX TWO: EXAMPLES OF MASTERS AND DOCTORAL WORK RELATING TO DIALOGUE UNDERTAKEN AT THE FACULTY (2012-2016)

In this section, a small selection of examples, drawn from a wider field of relevant graduate work relating to dialogue, are included to give a sense of the range of topic interests undertaken by the Faculty's Masters and Doctoral students.

MPhil theses

Year	Course	Author/title
2015	Psychology	**Hurtado, J.** / 'Classroom talk and student participation: Exploring productive interactions in two Chilean classrooms with children from different socio-economic backgrounds'.
2014	Educational Research	**Song, Y.** /An Investigation of the relationship between thinking style and participation in classroom dialogue among secondary school students in mainland China.
2013	RSLE	**Unthiah, A.** /The effects of collaborative dialogue on lexical acquisition of L2 English learners in Spain: a mixed methods study
2012	Educational Research	**Knight, S.** /Finding knowledge - the role of talk in collaborative information retrieval.

MEd theses

Year	Course	Author/title
2016	Researching Practice	**Dennis, D.** / Dialogic learning in online environments: a case study of advanced level students studying epistemology
2015	Researching Practice	**McCullough, M.** / Profiles of dialogic talk in teacher-student and student-student interactions: a exploratory study

2013	Primary	**Kite, P.** /Some children are more equal than others: How can the introduction of ground rules for whole class discussion support access and engagement
2013	Researching Practice	**Horsley, A.** /Mind the Gap: To what extent does bridging the gap between classroom dialogue and writing enhance students' learning.
2012	Herts	**Caldwell, T.** / Developing learning dialogues to support primary pupils' mathematical learning

Ongoing and recent doctoral projects:

Farah Ahmed. Pedagogy as Dialogue between Cultures: Exploring Halaqah (circle time), an Islamic oral pedagogy enabling autonomy and a culturally coherent education for Muslim children in a pluralist society.

Annabel Amodia-Bidakowksa. Disciplinary dialogues: Examining the influence of subject cultures on classroom dialogue and learning outcomes in English primary schools.

Meaghan Brugha. Dialogic pedagogy for refugee higher education.

Elisa Calcagni. Professional dialogues to foster dialogic pedagogy in mathematics: design and trial of a school-based teacher professional development program in Chile.

Christina Chinas. Mediation of teachers' learning through talk within a professional learning community: a case study in Cyprus.

Courtney Froehlig. Supporting early educators to challenge children's correspondence bias in talk around stories using a dialogic intervention framework: A critical-design ethnographic approach.

Tristan Igglesden. The affordances of Learning Management Systems that support dialogue.

Laura Kerslake. A design-based project investigating the factors impacting on the success of a Philosophy with Children intervention in primary schools.

Leonardo Goncalves Lago. Putting dialogue to work in Brazilian primary school: from teacher education to science lessons.

Ana Rubio Jimenez. The exercise and development of self-determination of students with intellectual disabilities through the facilitation of dialogic spaces.

Ana Laura Trigo Clapés. Dialogic teaching for students with conditions within the autism spectrum.

Toshiyasu Tsuruhara. Relational transformation through dialogue: Conflict mediation meeting in a secondary school in the UK.

Yu Song. An investigation of the relationships between thinking style, participation in classroom dialogue and learning outcomes - a study based in Mainland China.