SETTVEO: Evidence-based reflection and teacher development

Steve Walsh

SETTVEO: Evidence-based reflection and teacher development

Steve Walsh

www.britishcouncil.org

About the author

Steve Walsh is Professor of Applied Linguistics and Communication at the School of Education, Communication and Language Sciences, Newcastle University, UK, where he was, until recently, Head of Department. He has been involved in English language teaching and teacher education for more than 30 years in a range of overseas contexts. His research interests include classroom discourse, teacher development and second language teacher education. He has published ten books and more than 100 research papers. Currently, he is a Visiting Professor at the University of Hong Kong.

Abstract

This article reports findings from a British Council ELTRA-funded research project which looked at the use of technology-enhanced learning in a CPD (continuing professional development) context. The aim of the study was to provide English language teachers with appropriate tools and procedures to enable them to reflect on and improve their practice through the creation and use of an app: SETTVEO. This app extended previous work, using the SETT (Self-Evaluation of Teacher Talk) framework (Walsh, 2006, 2011, 2013, 2017) and VEO (Video Enhanced Observation) app (Miller, 2015). The central argument of the study was that reflective practice (RP) would be enhanced when reflections are evidence-based by giving teachers something to reflect *on* and something to reflect *with*. Here, the focus of reflection is classroom interaction, which underpins much of what is learnt in any classroom. As previous studies have shown convincingly, understandings of teaching and learning can be enhanced through a detailed understanding of interaction. Specifically, the aim was to help teachers, through reflections on their teaching, to develop their classroom interactional competence (CIC; Walsh, 2013). Through the use of SETTVEO, and subsequent collective dialogue and reflection, an online community of practice was established, enabling participants to share and comment on examples of English language teaching around the world. The goal was to establish and evaluate a more dialogic, collaborative approach to RP. Findings suggest that the use of self-observation, with data and accompanied by some kind of dialogue, can promote up-close and detailed understandings of teaching and learning. While technology helped to mediate this process in most cases, for some, it created additional difficulties.

Contents

1

Introduction

Few practitioners and teacher educators would question the value of reflection and reflective practice (RP). Professionals have been reflecting on their practice for many years, since the inception of RP by Dewey (1933) and its subsequent elevation to its present position, which, arguably, is one of orthodoxy or widespread acceptance (Mann and Walsh, 2013). In most professional education settings, RP occupies a central position. 'The best thing any education can bequeath is the habit of reflection and questioning' (Grayling, 2003: 179).

The starting point for this study is that although RP has established itself as a 'ubiquitous presence in professional education and practice' (Mann and Walsh, 2013: 25), it is not being operationalised in systematic and evidence-based ways, nor do teachers have access to appropriate tools to help them reflect on their practice. There are three aspects to this problem:

1. There is both a lack of data-led research on RP and a need for data-led practice in RP. Essentially, there is a need for more evidence from the perspectives of both research and professional development.

2. Current thinking in teacher education emphasises approaches that foster teacher autonomy and self-development. For this to be effective, there is a pressing need for teachers to acquire the skills and practices which will allow them to develop, using evidence from their own contexts.

3. Following on from 1) and 2), the proposal here is that teacher efficacy will be heightened when teachers develop closer and better-grounded understandings of their contexts. Evidence-based reflection is, I suggest, the most appropriate means of ensuring that such understandings occur.

Much of the work on RP over several years has focused on written forms of reflection. In this study, the focus is on dialogic reflection (Mann and Walsh, 2017), whereby professional development is enhanced through collaboration and dialogue with a colleague or critical friend. The claim is not so much that one form of reflection is in any way better than another, rather that there needs to be a rebalancing of written reflection – which tends to be solitary – towards something spoken, dialogic and collaborative.

The aim of this study is to enable teachers to reflect on their practice through the use of SETT (Self-Evaluation of Teacher Talk) and VEO (Video Enhanced Observation) – henceforth 'SETTVEO'. The use of an effective teacher development framework such as SETT with the innovative video technology of VEO (i.e. its use of tags and an online portal) is designed to help teachers gather and interpret their own teaching evidence and that of others. Essentially, teachers gain the skills needed to identify and make meaning of what is relevant and what can be improved in their teaching through individual and collaborative reflective practice. RP will be enhanced when reflections are evidence-based by giving teachers something to reflect on and something to reflect with. Here, the foci of reflection are the interactions which take place and which underpin much of what is learnt in any classroom; 'interaction is the most important element in the curriculum' (van Lier, 1996). Understandings of teaching and learning can be greatly enhanced through an up-close, fine-grained and detailed understanding of classroom interaction.

In this study, teachers were encouraged to collect evidence through the SETTVEO app and then use that evidence to both reflect on current practice and improve their classroom interactional competence (CIC; Walsh, 2013). The advantages of video for reflecting on practice are well-established in the literature. According to Kong (2010: 1,772):

> The use of these video systems is considered constructive in supporting student–teachers to externalise their reflective thoughts, based on accurate video-recorded data from their teaching practice.

The VEO app was developed by teacher educators and allows users to record and tag videos which can be uploaded and saved into a portal. Teachers can then build online communities in order to share and reflect on their videos to improve the quality of their teaching in a sustainable manner. By enabling the live-tagging of video, the VEO app goes further, generating data and evidence which is both quantitative and qualitative in nature. Predefined tags are used by practitioners to time-stamp video and classify moments in a manner that allows their aggregation and quick recall. On review, automatic categorisation of these micro-events builds up a profile of practice for the entire episode, while facilitating easy access to each individual moment. The tags allow the user to jump to the exact instance within the video, presenting a rich view of action, interaction and context that can be shared for further analysis and evaluation.

This tagging functionality allows for systematic data collection over time, supported by illuminating video evidence that can be interpreted and analysed by multiple practitioners and researchers. An intuitive, easy-to-use system enhances teachers' understanding by presenting data in a readily understandable format, providing a base on which reflective processes can occur. The data tags pick a path through the relative chaos of a teaching episode while maintaining access to video for situated recall of interactions. Resultant conversations can heighten awareness to drive changes in, and build understanding of, interaction for professional practice.

VEO has been trialled in numerous geographical locations and educational contexts across the globe for various purposes, including improving initial teacher education in the UK and Finland; enabling ongoing teacher CPD (continuing professional development) in the USA, China and Ghana; researching university-level medical education; and evaluating pupil understanding of taught concepts. The advantages that VEO brings to analysing complex situations make it highly appropriate for studying interaction, where multiple perspectives are possible and where relevant frameworks can clarify and enhance its understanding.

The SETT framework has been used in a range of educational settings since its publication in 2006 and further development in 2011 and 2013. These include initial teacher education programmes (PGCE) for English and drama teachers; INSET courses for experienced teachers; a study evaluating the value of classroom observation in the Middle East (Howard,

2010); CELTA (Certificate in English Language Teaching to Adults) programmes around the world; a primary science classroom; various secondary EFL contexts around the world; two university classroom contexts; and an Irish medium secondary classroom. In short, the framework has been used extensively to promote awareness and understanding of the role of interaction in class-based learning and to help teachers improve their practices.

The SETT framework comprises four classroom micro-contexts (called *modes*) and 14 interactional features (called *interactures*). Classroom discourse is portrayed as a series of complex and inter-related micro-contexts or modes, where meanings are co-constructed by teachers and learners and where learning occurs through the ensuing talk of teachers and learners (Walsh, 2013). The key to developing good practice is for teachers to acquire detailed profiles of the interactions that take place in their classes as a means of understanding how learning opportunities are created and how 'space for learning' (Walsh and Li, 2012) can be opened up, and to create the kind of dialogic, engaged learning environments which have been advocated in UK primary and secondary classrooms for more than ten years (see, for example, Mercer, 2009; Alexander, 2008).

In the current study, SETT and VEO were combined to help teachers profile their interactions, improve their CIC and enhance learning and learning opportunity. By sharing their reflections in an international online community of practice (CoP), it was possible to develop a global network of reflections, with teachers identifying and talking about common problems and issues in a range of English language contexts. Online communities were formed between teachers sharing videos of interactions, evaluated according to the SETT framework and using the SETTVEO's tagging function. In this way, it was possible to share understandings of CIC – which is highly context-specific – and acquire insights into professional practices from a range of contexts. By making comments and comparisons and by engaging in reflective accounts, the goal was to increase awareness and understanding of the types of interaction that help learning. The process was engendered by classifying, aggregating, sharing, comparing and discussing practice in an iterative, reflective process. Communicating via the VEO social/professional network, these processes and the communities involved were able to operate at distance, thus exposing practitioners to a wider range of different interaction styles and offering a clearer view of their own practice.

2

Dialogic reflection

Dialogic reflection (Walsh, 2006; Walsh and Mann, 2015; Mann and Walsh, 2017) is a collaborative process of professional learning which entails interaction, discussion and debate with another professional. Dialogic reflection emphasises learning (and professional development more broadly) as a social process whereby meanings and new understandings of complex phenomena are mediated by language. Dialogue allows meanings to be co-constructed, new understandings to emerge and professional learning to develop. Dialogic processes can either be intrapersonal or interpersonal (private or public; cf. Vygotsky, 1978), entailing interactions between individuals or between an individual and an artifact or tool. It is a process that draws heavily on sociocultural theories of learning, which highlight the importance of language as a mediating tool and stress the value of social interaction in professional learning.

Current thinking on best practice in professional learning emphasises discovery-based learning through problem-solving, the value of 'talk' in promoting new understandings and the importance of publicly derived knowledge becoming privately internalised or appropriated. Much of the current thinking on CPD in language teacher education recognises the value of interaction and dialogue in the process (Johnson, 2009). According to van Lier (2000), in a language learning context, social development can only become language acquisition when the quality of the interaction is maximised. Collaboration with the teacher, less able learners, more able learners and the individual's own resources can facilitate interaction which is both meaningful and productive. Arguably, the quality of that interaction is very much dependent on the teacher's ability to manage complex interactional processes and 'correctly' interpret the learning environment.

In the present study, where the focus is on teacher education rather than language learning, there are parallels between the kinds of practice advocated by van Lier in a language classroom and the need for dialogue and reflection in professional learning contexts. In such environments, where practitioners interact with peers or more experienced colleagues, it is the quality of the interaction and dialogue that influences how new understandings are derived and internalised. Put simply, the value of dialogic reflection is inextricably linked to the quality of the interaction which underpins it.

Dialogue enables understanding by allowing interactants space and support to express their ideas and arrive at new or different takes on a particular practice, issue or concern. Opportunities for reflection and learning are maximised when new concepts, or the metalanguage used to realise them, can be both understood and verbalised. However, the centrality of speech to learning has another, more significant dimension in that consciousness, considered by Vygotsky (1978) as being central to learning, is developed through social interaction. Learners become more aware, through participation in social activity, of themselves as learners. Dialogic reflection may lead to deeper, longer-lasting professional development and can facilitate the appropriation of good practice.

A second key element of sociocultural theory which chimes with elements of the reflective cycle is collaboration, seen here as being highly relevant to the reflective cycle (cf. Schön, 1983). While for some, the process of reflection may be seen as a solitary practice (see, for example, Ostermann and Kottcamp, 1993/2004; Larrivee, 2004), it is not always easy to be critical when reflecting on one's own behaviour or practice. As Ostermann and Kottcamp put it, 'analysis occurring in a collaborative and co-operative environment is likely to lead to greater learning' (1993/2004: 6).

Other researchers have demonstrated how collaborative reflection might be fostered. In their framework of collaborative RPs, Cooper and Boyd (1998) list learning buddies, mentoring, peer-coaching, work exchange or shadowing, action research, study group, peer support groups and professional dialogue groups, among others. Farrell (2006: 3) talks about teacher groups for professional development and identifies three types of groups: peer groups within the school, teacher groups that operate out of the school and within a school district, and virtual groups that can be formed anywhere on the internet.

In addition to dialogue and collaboration, another central feature of dialogic reflection is the tools and artifacts which can be used as a catalyst (e.g. metaphors, critical incidents and video) and help promote more systematic and focused professional dialogue. Examples include the use of transcripts and recordings of classroom talk, developing and extending the argument for the inclusion of lesson transcripts in the process of learning to teach and developing ways of thinking reflectively. More recently, there has been an effort to move away from transcription on the basis that it is too time-consuming and not always representative of what 'really happens'. One alternative is the use of 'snapshot' lesson excerpts: short five- to seven-minute recordings which are then analysed without transcription (see Walsh, 2011). Stimulated recall is a particularly valuable tool for making reflection more specific and grounded through the use of video playback and discussion. It is especially useful as part of a supervisory or mentor relationship and can help to frame and focus dialogic talk.

Returning to the notion of online and internet-based dialogic reflection, there follows a brief outline of the value of online discussion forums and online blogs. These artifacts help to mediate dialogic reflection and enable participants to reflect together to achieve a collective understanding of an issue or puzzle. By way of example, I present a summary of a study undertaken in Chile and discussed at length by Mann and Walsh (2017).

Of interest in Morales' study (2016) is her use of the term 'collaborative reflection'. She makes the point that teachers use a variety of sources to collaboratively reflect on technology integration, exploring different options and sharing ways of achieving common goals. She also highlights the extent to which collaborative/dialogic reflection can help foster closer understandings of context and reduce the feelings of isolation or anxiety which can be found in almost any educational setting.

I return to the notion of an online CoP in the findings section below. In the next section, I present a brief summary of the other central construct in this study: classroom interactional competence.

Context

The following extract is taken from the interactions of eight English language teachers from Chile and Easter Island talking in discussion forums and blogs that were part of an online teacher training and development course implemented on the virtual learning environment Moodle. The aim of the online course was to develop teachers' technological and pedagogical skills to use technology with language learners. The duration of the course was eight weeks and the developmental cycle included theoretical aspects of technology for L2 teaching, practical activities and both individual (blogs) and collaborative (discussion forum) reflection. (Individual blogs were presented in Chapter 5.)

Data

Meg: Tuesday 18 June 2013, 22.24

I agree that adapting coursebook materials to make them relevant for students is crucial to even begin to connect with students. As Frank said, even changing the names of the places mentioned in textbooks so they are familiar (places in Chile) is a start. We are always trying to make language the most relevant for students. How can we make language more relevant than negotiating meaning with a real human being in the target language? Telecollaboration is the Communicative Approach at its best. I can't think of a better way to make the contents of a textbook leap off the page and onto a computer screen in the form of a real person!

Cece: Monday 24 June 2013, 03.55

In some ways coursebooks are good for teaching culture, but it is not the best way to accomplish that task. They try to cover some interesting topics and they engage students in some activities related to culture, but with technology you can go further – they get closer to the target language and they have more options to get to know the new culture they are studying. Through technology, students can get in touch with native speakers, they can search information if they have questions and they can practice in real time different life situations.

Neko: Tuesday 25 June 2013, 12.44

Completely agree with you. Since technology is really close to students' lives, why not use it for productive reasons? Kids use their mobiles way more often than computers now, so we as teachers should take advantage of all that! I think that's the key, we can use any tool at hand and achieve the established goals (just by knowing how to adapt the contents and so on).

Easter: Monday 24 June 2013, 20.33

Most of the textbooks should be designed at promoting exposure and practice of the target language. However, I have some doubts that I would like to set up. Are the topics interesting for language learners? Are the tasks appropriate and effective for encouraging productive skills? I have been working with the coursebooks provided by the Ministry of Education for state schools and I don´t like them. I consider online resources as a good way of fostering not only intercultural communication but also providing language learners with linguistic authentic materials that can be used to engage students in challenging tasks. These motivating activities can be used to support language exposure and practice as well.

Commentary

Reflection in the online course was usually initiated by the online tutor (this researcher), but the teachers had the opportunity to do so as well. In the extracts above from the discussion forum about teaching materials and using technology to teach culture, it is possible to observe how teachers use their experience, prior knowledge and the input they received in the course in order to construct new knowledge in collaboration.

3

Classroom interactional competence

CIC is defined as 'teachers' and learners' ability to use interaction as a tool for mediating and assisting learning' (Walsh, 2013: 65). It puts interaction at the centre of teaching and learning and argues that, by improving their CIC, both teachers and learners will immediately improve learning and opportunities for learning. As discussed previously, the aim of the present study was to give teachers something to reflect with – presented in the previous section under dialogic reflection – and something to reflect on, discussed in this section under CIC.

The central argument of a focus on CIC is that by helping teachers better understand classroom interaction, there will be a corresponding impact on learning, especially where learning is regarded as a social activity which is strongly influenced by involvement, engagement and participation. The starting point of an understanding of CIC is to acknowledge the centrality of interaction to teaching and learning. As in any institutional setting, the core business (here, learning a language) is accomplished through interaction; some would even go as far as to say that the interaction which takes place is the learning – they are one and the same thing (see, for example, Hellermann, 2008; Kelly Hall et al., 2011).

CIC focuses on the ways in which teachers' and learners' interactional decisions and subsequent actions enhance learning and learning opportunity. CIC addresses questions such as:

- How do teachers and learners co-construct meaning through interaction?

- What do participants do to ensure that understandings are reached?

- How do interactants address 'trouble' and repair breakdowns?

- What is the relationship between CIC and language learning?

- How is 'space for learning' created and maintained?

The relevance of CIC is clear. If our aim as language educators is to promote dialogic, engaged and 'safe' classroom environments where learners are actively involved and feel free to contribute and take risks, we need to study the interactions which take place and learn from them. My suggestion here is that we need to acquire a fine-grained understanding of what constitutes CIC and how it might be achieved. This can only be accomplished by using data from our own context; the starting point has to be evidence from the classroom in the form of a video- or audio-recording, self- or peer observation. Only by starting to describe interactional processes can we begin to understand in some detail our local context. Not only will such an understanding result in more engaged and dynamic interactions in classrooms, it will also enhance learning.

While it is true to say that CIC is highly context-specific, not just to the particular class but also to a specific moment in the discourse, there are a number of features of CIC which are common to all contexts. First, teachers may demonstrate CIC through their ability to use language which is both convergent to the pedagogic goal of the moment and appropriate to the learners; language use and pedagogic goals must work together. This entails an understanding of the interactional strategies which are appropriate to teaching goals and which are adjusted in relation to the co-construction of meaning and the unfolding agenda of a lesson. This position assumes that pedagogic goals and the language used to achieve them are inextricably intertwined and constantly being re-adjusted (see Walsh, 2013; Seedhouse, 2004). Any evidence of CIC must therefore demonstrate that interlocutors are using discourse which is appropriate to both specific pedagogic goals and the agenda of the moment.

Secondly, CIC facilitates interactional space: learners need space for learning to participate in the discourse, to contribute to class conversations and to receive feedback on their contributions. In short, CIC creates 'space for learning' (Walsh and Li, 2012). There are several ways in which space for learning can be maximised. These include increasing wait time by resisting the temptation to 'fill silence' (by reducing teacher echo), by promoting extended learner turns and by allowing planning time. By affording learners space, they are better able to contribute to the process of co-constructing meanings – something which lies at the very heart of learning through interaction.

Thirdly, CIC entails teachers *shaping* learner contributions. Shaping involves taking a learner response and doing something with it rather than simply accepting it. For example, a response may be paraphrased using slightly different vocabulary or grammatical structures; it may be summarised or extended in some way; it may require scaffolding so that learners are assisted in saying what they really mean; or it may be recast (cf. Lyster, 1998) – 'handed back' to the learner but with some small changes included. By shaping learner contributions and helping learners to articulate what they mean, teachers are performing a more central role in the interaction while, at the same time, maintaining a student-centred, decentralised approach to teaching.

Having discussed the key theoretical constructs which informed this research project, I will now describe the methodology used.

4

Methodology

The study was guided by the following research questions:

1. How do VEO and SETT networks promote evidence-based reflection?

2. To what extent are teachers able to improve their CIC through the use of SETTVEO?

3. What evidence is there that the process of using SETTVEO, combined with reflection and online discussion, results in more dialogic, engaged learning environments?

5

Context

Using outcomes from a recent research project, the present study was able to recruit a total of 30 teachers in five participating countries. Teachers were recruited through a research network created by the ELTRA-funded 'Which English?' project (Young and Walsh, 2010). By using this network, a total of five partner countries were included in the study (Spain, Turkey, Chile, Thailand and China). Six university English teachers volunteered to participate in each country, giving a total of 30 teachers. For technical and data restriction reasons, China was unfortunately forced to withdraw from the project, so the final cohort comprised 24 teachers from four participating countries.

The following approaches to data collection were adopted:

Phase 1: In this phase of the project, baseline data were collected to include a short, video-recorded lesson segment of each teacher; a short reflective commentary on that segment by each teacher; and an online interview with the research team. In this phase, the aim was to provide an overview of teachers' professional practices in each of the four contexts. The recordings and commentaries were then to be uploaded to the VEO platform and analysed by the research team using SETTVEO. Phase 1 lasted three months.

Phase 2: In the second phase of the study, participating teachers each made four 'snapshot' recordings of their teaching (ten to 15 minutes per recording). Online training in the use of SETTVEO was provided to all participants. Each recording was then reviewed and evaluated using SETTVEO. The recordings and reflective commentaries were uploaded to the VEO platform and made available to the entire community comprising four country partners. Phase 2 lasted around six months.

In Phase 2, teachers followed the below procedure:

■ make a recording

■ upload to VEO portal

■ tag using SETTVEO

■ reflect on the recording using the app

■ share reflective comments by uploading them to the portal

■ add additional feedback on each participant's commentary.

Phase 3: In the final phase of the study, participating teachers took part in online focus groups and individual interviews to evaluate the extent to which their RPs had changed and to consider any changes in CIC. Phase 3 took around three months.

Data were analysed using the following combination of approaches:

1. Profiles of each teacher's classroom practices were created using the VEO software and SETT tags. These provided detailed qualitative and quantitative information about teachers' interactional practices, use of language, levels of learner involvement, use of language in relation to pedagogic goals and so on.

2. Conversation analysis was used to transcribe and analyse a sample of the video-recorded classroom data.

3. Thematic analysis was used to analyse focus group and interview data.

4. Reflective commentaries from teachers' interactions in the online community, together with their posts, were analysed using thematic content analysis.

6

Data analysis and findings

For limitations of space, findings will be presented under the main thematic categories emerging from the data.

6.1 Theme 1: CIC – use of interactures and metalanguage

One of the key questions posed in this study was if and by how much teachers could improve their CIC. Several teachers made comments on this in their reflections.

Teacher A, below, for example, talks about her elicitation strategies and gives reasons for her particular use of display or referential questions, two of the interacture tags used in the SETTVEO app. Of interest in this extract is the extent to which this teacher uses an appropriate metalanguage to describe her practices – she talks about question types and (indirectly) teacher echo ('I repeated the same phrases several times'). She goes on to include two additional interactures: content feedback and form-focused feedback. It is also of interest to note that she is able to rationalise her use of particular features which helped and supported her students.

Indications of CIC include an ability to use an appropriate metalanguage and to be able to justify 'online decision making' (Walsh, 2013) – both of which are evidenced by this teacher in her reflective commentary. She refers to five of the 14 interactional features included in the app and can both justify her interactional decisions and explain how level is an important determiner of these practices.

Extract 1 – Teacher A

I asked mostly display questions to help them do brainstorming about the topics and to make most of the students be able to speak about the topics. At the beginning I needed to ask some referential questions (00.20) to refer to the exercises we did in our former lessons. After watching myself in the video I saw that I repeated the same phrases

several times, but I think this helped them speak better and self-confidently because they were elementary-level students and needed to hear too many repetitions and examples. Firstly, I used content feedback to emphasise how they would find relevant supporting ideas for the topics we discussed, how they would agree/disagree with each other, how they would organise their ideas and list them. Secondly, I mostly preferred form-focused feedback because they were in need of hearing correct forms and learning how to make correct sentences.

An important feature of the SETTVEO app is the tagging function, which allows users to 'tag' (i.e. mark) specific features of their interactions and then review these features later. The software then prepares a statistical breakdown showing how features are used, which ones occur most frequently and how the use of certain interactional features affected the interaction. In Extract 2 below, Teacher C is talking about her use of teacher echo, a feature which many teachers comment on – in one study (Walsh, 2006) it was referred to as a teacher's *bete noire!* Here, Teacher C focuses on her excessive use of discourse markers (sometimes referred to as transition markers). In fact, these tokens perform a very important function in classroom discourse, acting almost like punctuation marks and helping students stay focused and avoid becoming lost in the interaction (see, for example, Breen, 1998).

Teacher C then goes on to look at the statistical breakdown of specific features, making a valid comparison between display and referential questions – the former dominate most classroom talk, while teachers often miss opportunities to ask genuine, or referential, questions. Again, she demonstrates a high level of CIC through her ability to use an appropriate metalanguage and justify her actions, even being quite critical of her decisions at times.

Extract 2 – Teacher C

Looking at the tagging session report, I observed that the teacher echo was excessive to my standards. It made me realise that I should make an effort to reduce it, because I found it annoying to watch myself saying so many 'OK's and 'all right's. The amount of display questions on the report was high at 40 per cent, compared to the referential questions at 15 per cent. The amount of content feedback and seeking clarification was quite similar at approximately 15 per cent. The lowest rate was form-focused feedback with only about three per cent. Although I was a bit disappointed at myself for making the tagging session a bit long because of the wait times for the reading and watching the videos, the extended wait time was quite low in the report, at only five per cent.

The theme of questioning is taken up by Teacher D in Extract 3 below, who acknowledges that many questioning routines are determined by the material. Indeed, the IRF exchange structure (whereby a teacher Initiates, student Replies and teacher gives Feedback) often dominates much classroom interaction precisely because teachers are following a coursebook or handout; the turn-taking is to a large degree organised around the material. Interestingly, Teacher D justifies her choice of questioning strategy by the lack of response from students (students were reluctant to speak). Note, too, how reactions and non-verbal behaviour are judged – quite appropriately – to be equivalent to content feedback; teachers communicate as much through the 'unsaid' as through their words.

Extract 3 – Teacher D

I observed that I asked mostly referential questions and display questions during the class and most of the questions were directed by the textbook or with some additions like 'what do you think about ...?' or 'how is it ...?' I felt that students were reluctant to speak and they were even far beyond elaborating on discussions; for that reason, I preferred to go with the referential and display questions within the textbook. I felt happy even when I heard simple one- to two-word utterances from my students. After watching the video, I saw that I did not provide much feedback; still I could see that some of my reactions could be considered as content feedback.

In some cases, teachers were able to articulate what had taken place in their classroom practice, providing rich evidence and making extensive use of the SETTVEO metalanguage. Consider Teacher E in Extract 4 below, for example, who comments on five of the interacture tags used in the app and provides a justification for each of her actions. She portrays a student-centred approach to teaching, evidenced by the constant reference to students when explaining her use of language and interaction-type. Arguably, such a nuanced and fine-grained analysis of her teaching was only possible through use of the app.

Extract 4 – Teacher E

The recorded part of my lesson was focused on comprehension of their reading material, which students completed right before the recording. Therefore, mostly referential questions were asked during this part of the recording. Right after, students answered related questions in pairs, which was a bit long. I marked it as extended time, but I allowed it because it is very beneficial for my students. Usually, during this part of the lesson, I like to walk around the room and provide them with form-focused feedback and error correction. And, the last part of the recording, students focused on exercises from the book, where the key vocabulary was used in practice. This part as well was marked as extended time.

Teachers' ability to rationalise their actions in relation to the language and interactures used is a clear indication of CIC. In each of the extracts presented in this section, teachers demonstrated a high level of awareness of their actions and were able to articulate their online decisions through the use of the metalanguage and tagging function used in the SETTVEO app. With more time, and greater support and feedback, these teachers could almost certainly have attained an even higher degree of CIC, a point which is taken up in the discussion below.

6.2 Theme 2: Use of metaphors

Interestingly, some of the teachers in the study made use of metaphors in their evaluations. Metaphors in both English language education (ELE) and English language teacher education (ELTE) have been found to be a very powerful means of enhancing learning and helping learners deal with complex ideas or new knowledge.

Teacher B in Extract 5 uses a nautical metaphor, comparing her classroom to a ship, with herself as the captain and her students as her crew. Sensitivity and learner-centredness are shown in her analogy; note, for example, the way in which she describes how she and her students learn from one another and, though one in their common goal, they are unique as individuals. This teacher provides a sense of coherence and cohesion in her account by using vocabulary items which belong to the same word family: *ship, flowing river, captain, journey, squad, route, destination*. While there is no reference to interaction, SETTVEO or the interactures, the extract below confirms that the video-playback has allowed this teacher to think more deeply about her practice and produce this very vivid metaphor.

Extract 5 – Teacher B

I aimed to develop students' thinking and speaking skills, get a wide participation and ask them display questions in order to let them talk spontaneously. In this regard, I visualised my classroom as a ship on a flowing river in which we are talking about our ideas, experiences, dreams and learning from each other; me as a captain of the ship having more responsibility in the same journey; and my students as a squad whose members are unique with different backgrounds, but they follow the same route to reach their destination.

In the second metaphor example, presented opposite in Extract 6, we witness Teacher D offering a rather negative critique of her lesson. Again, no reference is made to the app or its tagging function, but her reflections suggest that she felt somewhat despondent following the video-replay. Her choice of language to capture this episode (*dead batteries, a far-fetched marathon, a poor swimmer*) effectively describes the essential ingredients of any piece of teaching (teacher, students, materials), though her tone is clearly negative.

Extract 6 – Teacher D

Basically, two skills, speaking and reading, were fostered during this short session, which started with a whole-class speaking and continued with a pre-reading task (matching interview questions with the responses). The tools and materials that were used in the class were only the textbook and the projector. The main challenge for me, as a teacher, was to activate and inspire my students to speak or at least to provide responses to my questions during the discussion. Therefore, I can use the following metaphors:

- *dead batteries for my students*
- *a far-fetched marathon for my lesson*
- *a poor swimmer for myself.*

Perhaps the main rationale for including these metaphorical examples is to highlight the power of video in teacher education and to demonstrate its multifarious uses (see Theme 4 below). In the examples presented here, teachers were free to choose their own metaphors to really express their feelings, to give us a genuine and honest sense of their teaching contexts and to help us understand the complexities of teaching and learning. Perhaps by focusing on the detail in their practice, these teachers were able to stand back and see what was really going on – surely something which we all need to do from time to time in our reflections.

6.3 Theme 3: Changes to practice and self-awareness

In a project which focuses on RP, there is clearly an interest to note any changes to practice or, rather, if any changes to practice were reported. Here, three extracts have been selected to exemplify some of the changes reported by participating teachers.

The message in Extract 7 could not be clearer: the main goal of ELE is to teach students to speak the language; again, the emphasis is very much on the students rather than on teacher performance (*the best way of creating self-sufficiency; the better they feel and learn*). One of the main advantages of tagging software like the SETTVEO app is that, while the user may be focusing on their own use of language and interactional features (i.e. the teacher's), they cannot ignore what students are doing. Many of the comments in the data referred to the actions or engagement of learners; a further stage would be to try to explain these in relation to what was said by the teacher since one aspect of CIC is to understand how teacher and learner interaction are inextricably linked.

Extract 7 – Teacher M

Speaking and helping them speak is the best way of creating self-sufficiency. The more they speak, the better they feel and learn.

The extent to which SETTVEO promoted a focus on learners – a point made in relation to Extract 7 – is illustrated in the next extract. Teacher G in Extract 8 focuses on task variety and the need to vary tasks more. She is able to highlight the main problem or issue in her class (*not all the students talked about the topic*) and suggest a possible way forward: the use of pair/group work and a more interesting worksheet. Of interest, too, is the reference to 'learning more instinctively', which suggests that – for this teacher at least – certain task-types promote more 'instinctive' opportunities for learning. While this idea would need to be explored further with Teacher G, this extract highlights the extent to which a focus on speaking helps students to gain confidence and become more independent as learners.

Extract 8 – Teacher G

When it comes to the question 'What would I change if I taught the same lesson again?', it would definitely be task variety. I criticise myself about sticking to the same type of task, which can be really boring for unmotivated learners. As far as I observed in my class, due to some personal factors, lack of task variety and restricted time, not all the students talked about the topic, which was not my expectation before the class. Had there been small pair or group work, students could have participated and been more productive. I could have distributed worksheets about famous people's life stories; therefore, they could have felt more inspired and orientated to learning more instinctively.

In Extracts 9 and 10, two teachers demonstrate how their awareness developed through participation in the study. In Extract 9, Teacher C highlights the importance of wait time and the need to give students space by not 'stealing' their speaking time. She also notes the importance of allowing students to express their opinions more and take control of topic (cf. Slimani's (1989) work on 'topicalisation': learners are more likely to learn effectively when they have control of the topic).

Extract 9 – Teacher C

If I were to change anything in this session, what I would do would be to talk less. I observed that I was haste, and I stole from my students' speaking time. I also asked them if they were ready during the extended wait time, more than I should have. Towards the end, my students were more active, and they engaged more, because they had a chance to give their opinion on the subject.

Teacher A, on the other hand, is concerned to highlight the importance of management in teaching, linking the importance of good management to a growth in confidence. She is very positive about her participation in the study; what is very encouraging is the fact that the SETTVEO project gave her a desire 'to grow and learn as a teacher'. Part of the sub-text of the project is that teachers need to acquire and develop skills which will allow them to make sense of their professional practice, to become researchers of their context and to become autonomous in their ability to change and develop. The comments of Teacher A suggest that this is indeed feasible and even desirable once the right conditions are in place. In this study, participants were given an opportunity to put their teaching under the microscope and learn from the experience; it would not be inconceivable for such practices to become more widespread, especially with the exponential growth of video in ELTE.

Extract 10 – Teacher A

Moreover, my expectation of myself as an educator is that of a good teacher with many management tools. I have grown exponentially in my management skills throughout this experience and have gained a lot of confidence in my ability to improve further with each future classroom. I'm excited to grow and learn as a teacher for many years to come thanks to this experience. Teaching is definitely a 'learning process'.

6.4 Theme 4: The advantages of video

To illustrate and extend the argument which concluded the last section, Theme 4 focuses on the advantages of video in teacher education and professional development, something which several teachers commented on. It is clear when reading the next extract that, for some of the participants at least, the use of video in teacher learning is of great benefit. Previous studies (see, for example, Mann and Walsh, 2017) have highlighted the use of video in ELTE and pointed to this medium as an important and progressive tool in future CPD.

Teacher B, with 16 years' experience, emphasises the value of self-observation as a means of understanding classroom dynamics and understanding student feelings and attitudes. Of importance in this observation is the fact that she seems to suggest that her own strengths and weaknesses can be gleaned by focusing on her learners, an acute and mature observation. Rather than 'blaming the learner', this teacher takes responsibility for her professional practice, acknowledging that while her understanding of teaching and learning can be developed through self-observation, a focus on her students will clearly highlight her strengths and weaknesses as a teacher.

Extract 11 – Teacher B

I had an opportunity to reflect on my teaching as a teacher having 16 years' experience considering my classroom video as a part of the SETTVEO project. During this period, I found a chance to make a self-observation which enabled me to be deeply aware of my classroom dynamics, students' attitudes and feelings during the class and as a matter of course my strengths and weaknesses.

6.5 Theme 5: Project evaluation

The final section of analysis offers a brief evaluation of the study. Extracts 12 and 13 are from comments made by two of the four in-country co-ordinators who oversaw teacher recruitment, data collection, training, etc.

Extract 12 exemplifies some of the issues which can arise when conducting this kind of research. Apart from recruiting teachers in the first place, the main issue is retaining them, especially when they are employed on the kind of zero-hour contract described below. As Co-ordinator A, Sara, points out, under such conditions, not only are teachers extremely busy and unable to focus on anything other than their teaching, but rapid and high staff turnover is the norm.

A project like this one becomes almost unmanageable if there is constant turnover of staff and participants keep changing. And yet, to fully appreciate professional issues and engage in CPD-focused research, we need more longitudinal studies, which, in turn, clearly depend on a constant and unchanging group of participants. Sara quite rightly comments on this in her evaluation.

Her second point is perhaps even more telling: the use of technology can actually add to complications and make projects even more difficult to manage. This was certainly the case in the present study – China was forced to withdraw owing to technical issues. Other studies (see, for example, Li, 2008) have identified similar issues with integrating and using technology in educational settings.

Extract 12 – Co-ordinator A (Sara)

Re SETTVEO, yes, before Christmas I contacted the teachers and asked them if they could work on their reflections. It was difficult to contact them as 1) out of five teachers, four have left the university and 2) Christmas, summer, other jobs, etc. I believe the main problem we had is that during data collection, they were soooo overwhelmed with teaching that it was impossible for them to do anything else really. That is the problem when teachers work without a contract … they teach in different places to make ends meet. Very common here … I think it's similar to the zero hours contract system in the UK. I was thinking that maybe we should include in the report that this is an issue regarding critical CALL in terms of the challenges we face in contexts where teachers are not given proper time for professional development. I was reading an article about how technology can sometimes complicate things. Perhaps the British Council would find this information useful for their actions regarding teacher education.

To end on an upbeat note, consider Extract 13 below, which comments on some of the issues raised by participants when viewing themselves on video for the first time. Of interest here is the value – once the initial shock of seeing and hearing oneself on camera wears off – of video in affirming and strengthening beliefs about teaching. And this is a valid and important point: through self-observation, we are not always seeking to change or develop; rather, we are looking to be reassured that our practice is appropriate, that we are decent teachers and that our students actually learn something. To that end, the SETTVEO project achieved its goals.

Extract 13 – Teacher H

SETTVEO has been an opportunity for participant instructors to raise awareness of what they have employed in their classes. The participants from time to time informed me about the issues which led to raise their awareness of their own experience inside a real classroom context. For example, one of them stated that she had not heard her voice like this in the classroom and it was so strange for her. Also, another participant told me that she had not thought she repeated the same information that much inside the classroom. Besides, it really strengthens the participants' beliefs and ideas about what they are employing inside the classroom as well as their use of the classroom discourse.

As a conclusion, SETTVEO is both a challenge and a change for all of us. The project is also fun and a learning process for us and it contributes to our understanding of the teaching–learning process with genuine classroom-based data.

7

Discussion and conclusion

To recap, this study was guided by the following research questions:

1. How do VEO and SETT networks promote evidence-based reflection?

2. To what extent are teachers able to improve their CIC through the use of SETTVEO?

3. What evidence is there that the process of using SETTVEO, combined with reflection and online discussion, results in more dialogic, engaged learning environments?

At the time of writing, there are still a number of datasets outstanding with the consequence that findings are incomplete. This said, from the data presented here, there is some evidence to suggest that the use of SETTVEO does indeed result in reflections which are evidence-based and informed by interactional data. There is also evidence, from the interview data, to highlight the value of the practices and procedures used in the study as a means of developing CIC; by logical extension, it would be fair to claim that the teachers made comments concerning the extent to which their classes had become more engaged and more dialogic.

The aim of this study was to help teachers improve their RP though the use of technology, in this case the SETTVEO app. The rationale for this goal is that for many teachers, RP is something they are told to do as part of a training course such as CELTA or the Diploma in Teaching English to Speakers of Other Languages (Delta) and then largely forgotten. RP is rarely taught and hardly ever embedded in a teacher's professional practice. The present study was an attempt to facilitate reflection by providing teachers with something to reflect on (CIC) and something to reflect with (dialogic reflection).

From the relatively limited evidence presented here, it is apparent that video has much to offer in any teacher development context. Recent studies (see, for example, Mann, 2018) confirm the value of video in mediating understandings of teaching and in unpacking the complexities of that process.

By giving teachers a tool and focus, reflection becomes extremely 'doable' and useful. Note too that relatively short 'snapshot' recordings have value in heightening awareness and deepening understandings; given an appropriate tool and a clear focus, there is no need for wholesale transcription of lessons. Put simply, video creates opportunities for professional development in a relatively short space of time and without an enormous investment of energy. Future studies would be well-advised to focus on this approach by using short extracts, a clear focus and by employing a mediating tool like the SETTVEO app. There is also much to be learned through research projects which have a longitudinal dimension, something which was not feasible in the present study.

One of the most important aspects of the use of video in teacher education is that it quickly, easily and inexpensively provides evidence on which to reflect. In order to move away from the kind of subjective and often value-laden RP promoted by comments such as 'X went well but I need to work on Y', we need evidence in the form of class data. Video can provide such evidence very quickly; it can be replayed to allow time for greater reflection and it serves as a historical record of a teacher's professional development over time. Few tools offer so many advantages and enable teachers to discuss their teaching so easily. In sum, video is the *sine qua non* of evidence-based reflection.

A second feature of the present study was its focus on CIC, something which has been heralded for some time now as a potential 'third strand' in ELTE programmes. While most teacher education courses around the world highlight the importance of subject knowledge and pedagogical skills as key strands, hardly any emphasise an understanding of interaction. Given its centrality to learning, it seems vital to foster up-close and 'ecological' (van Lier, 1996) understandings of classroom interaction.

If we accept that interaction is where the action is, the place to look for evidence of learning, then surely it warrants closer scrutiny. Advances in technology and the widespread use of video make this so much easier to achieve. And yet course providers, materials designers and curriculum and policy planners have not, to my knowledge, seized this opportunity by integrating interactional competence into their courses and degrees. There is a pressing need to do so if we are to create engaged, dynamic learning environments of the kind proposed by Mercer (2009). By making CIC a core requirement on ELTE programmes, course providers would be taking an important step in highlighting the need for a detailed understanding of interaction.

The final element of the present study was its focus on dialogic reflection and to my mind this is the most compelling reason for adopting an approach to RP which entails the use of video, a tool and discussion with a colleague or critical friend. The SETTVEO app enabled short recordings to be made, shared in a

CoP and discussed. The potential from what was essentially a small-scale study is enormous; it would not be difficult, for example, to extend the present project to something much bigger, culminating in an international corpus of professional practice comprising video recordings and reflections from every corner of the globe. The potential to offer such a product is with us now; there are clearly enormous advantages in developing an online resource through which teachers comment on and compare English teaching practices around the world. Not only would such a resource promote greater understandings of teaching and learning, it would result in closer and deeper understandings of context, surely the most important element in language education.

References

Alexander, RJ (2008) *Towards Dialogic Teaching: Rethinking Classroom Talk* (fourth edition). York: Dialogos.

Cooper, C and Boyd, J (1998) 'Creating sustained professional development', in Brody, C and Davidson, N (eds) *Professional development for cooperative learning: Issues and approaches*. Albany, NY: State University of New York Press: 49–62.

Dewey, J (1933) *How we think. A restatement of the relation of reflective thinking to the educative process* (revised edition). Boston: D. C. Heath.

Farrell, TSC (2006) (ed) *Language Teacher Research in Asia*. Alexandria, VA: TESOL.

Grayling, A (2003) *Meditations for the Humanist: Ethics for a Secular Age*. Oxford: Oxford University Press.

Hellermann, J (2008) *Social Actions for Classroom Language Learning*, Clevedon: Multilingual Matters.

Howard, A (2010) Is there such a thing as a typical language lesson? *Classroom Discourse* 1: 82–100.

Johnson, KE (2009) *Second Language Teacher Education: A Sociocultural Perspective*. London and New York: Routledge.

Kong, SC (2010) Using a web-enabled video system to support student–teachers' self-reflection in teaching practice. *Computers & Education* 55, 1772–1782.

Kelly Hall, J, Hellermann, J and Pekarek Doehler, S (eds) (2011) *L2 Interactional Competence and Development*. New York: Multilingual Matters.

Larrivee, B (2004) 'Assessing teachers' level of reflective practice as a tool for change'. Paper presented at the Third International Conference on Reflective Practice, Gloucester, UK.

Li, L (2008) *EFL teachers' beliefs about ICT integration in Chinese secondary schools*. Unpublished doctoral thesis, Queen's University, Belfast.

Lyster, R (1998) Recasts, repetitions and ambiguity in L2 classroom discourse. *Studies in Second Language Acquisition* 20: 51–81.

Mann, S and Walsh, S (2013) RP or 'RIP': A Critical Perspective on Reflective Practice. *Applied Linguistics Review* 4/2: 291–315

Mann, S and Walsh, S (2017) R*eflective Practice in English Language Teaching: Research-Based Principles and Practices*. London and New York: Routledge.

Mercer, N (2009) *Words and Minds: how we use language to think together*. London: Routledge.

Miller, P (2015) Video-enhanced observation: a new way to develop teacher practice. *Optimus Education*. Available online at: http://my.optimus-education.com/video-enhanced-observation-new-way-develop-teacher-practice Accessed 20 April 2016

Morales, S (2016) Unpublished PhD thesis. University of Newcastle.

Osterman, KP and Kottkamp, RB (1993/2004) *Reflective practice for educators: improving schooling through professional development*. Thousand Oaks, CA: Corwin Press.

Schön, DA (1983) *The Reflective Practitioner*. London: Temple Smith.

Seedhouse, P (2004) *The Interactional Architecture of the Second Language Classroom: A Conversational Analysis Perspective*. Oxford: Blackwell.

Slimani, A (1989) The role of topicalization in classroom language learning. *System* 17/2: 223–234.

van Lier, L (1996) *Interaction in the Language Curriculum: Awareness, Autonomy and Authenticity*. New York: Longman.

van Lier, L (2000) 'From input to affordance: social-interactive learning from an ecological perspective', in Lantolf, JP (ed) *Sociocultural Theory and Second Language Learning*. Oxford: Oxford University Press.

Vygotsky, LS (1978) *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.

Walsh, S (2006) *Investigating Classroom Discourse*. London: Routledge.

Walsh, S (2011) *Exploring Classroom Discourse: Language in Action.* London and New York: Routledge.

Walsh, S (2013) *Classroom Discourse and Teacher Development.* Edinburgh, UK: Edinburgh University Press.

Walsh, S and Mann, S (2015) Doing reflective practice: a data-led way forward. ELT Journal 69/4: 351–362.

Walsh, S and Li, L (2012) Conversations as space for learning. *International Journal of Applied Linguistics* 23/2: 247–266.

Young, TJ and Walsh, S (2010) Which English? Whose English? An investigation of 'non-native' teachers' beliefs about target varieties. *Language, Culture and Curriculum* 23/2: 123–137.