

Using video in Initial Teacher Education

Investigating the use of video technology for reflection on lessons

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Glossary

Term	Definition
AfL	Assessment for Learning
ITE	Initial Teacher Education
OU	The Open University
PGCE	Postgraduate Certificate in Education
PL	Professional Learning
PLA	Practice Learning Activity
QTS	Qualified Teacher Status

Executive summary

This PRAXIS-funded research project was designed to provide insight into the benefits and challenges of the use of video technology for reflection on lessons, as reported by the Open University Initial Teacher Education (OU ITE) Partnership student teachers and school-based staff.

The OU ITE Partnership in Wales offers student teachers a part-time or salaried training route into teaching that is completed over two years. The programme is delivered via blended learning that combines distance learning with practice learning in schools.

Key messages from the literature

The use of video technology in lessons can have **positive impact** on:

- The support of student teachers in remote/rural locations
- Time and cost efficiencies
- The ability to revisit lessons as many times as required
- Teachers' ability to accurately recall elements of a lesson

Reflecting on video-recorded lessons can **improve**:

- Pedagogy
- Classroom management
- A teacher's knowledge of their group
- Analysis of transitions between classroom activities
- Teacher self-efficacy
- Quality of classroom discourse
- Language and presentation approaches
- Teachers' ability to self-evaluate

The use of video recorded lessons also offers opportunity to:

- Collaborate with peers, which supports own practice
- Challenge teaching and learning philosophies
- Conduct research

However, there is **wide variation in the use** of video technology:

- Student teachers require support to see the benefits
- Appropriate training is needed on critical reflection using video
- Filming can miss important aspects of classroom culture

Challenges reported include:

- Using video for reflection takes longer to complete
- Supporting resources are required to assist reflection
- Anxiety experienced by those recording themselves
- Privacy for pupils in the filmed class
- Technical issues such as poor sound quality

Methodology

A mixed methods approach provided a holistic view of the current situation regarding the use of video technology in lessons. This included - a literature review, online survey - for student teachers and school-based staff, interviews and discussion groups with teachers, school-based staff and pupils. In total 45 participants contributed to the study between November 2022 and February 2023.

Findings

Reflecting on practice

Conversations with mentors and school colleagues are reported to be the most effective approach used by student teachers and school-based staff to support reflective practice.

A personal (and private) reflective journal is also reported to be effective by:

- 12 out of 31 (30%) student teachers
- 24 out of 56 (43%) school-based staff

Using video technology to record lessons

The majority of student teachers (19 out of 32) do not record their lessons very often. Almost one third of school-based staff (22 out of 59) never record their teaching.

School-based staff report using video technology:

- To share examples of effective practice with other schools
- For training purposes
- Sharing lessons during the development of Curriculum for Wales

Some student teachers and schoolbased staff report feelings of nervousness and anxiety about filming their lessons.

The majority of student teachers (26 out of 32) engaged with the video training materials.

The majority of school-based staff (43 out of 59) have never completed any training. Almost double the proportion of student teachers compared to school-based staff report being confident to use video technology.

Most respondents report limited application of some of the supporting features of the video technology such as

'in-ear' feedback and 'time-stamp' annotation.

The benefits of using video technology

- Identify improvements to practice
- Identify strengths
- Observe different techniques
- Using the video as a basis for mentoring discussions.

The challenges of using video technology

- Vital aspects of learning can be missed
- Safeguarding concerns
- Feeling self-conscious
- Practical aspects of setting up / uploading recordings

Conclusions

Professional conversations and written journals support student teachers' critical reflection. The use of video technology is inconsistent, demonstrating a need for support to embed the effective use of the tool to support student teacher reflection.

Whilst participants identify many benefits of video technology to enhance critical reflection, practical drawbacks such as the time constraints of re-watching, alongside technology issues, appear to inhibit use. Personal anxiety or discomfort about the use of recordings can also hamper engagement.

Such findings indicate that the use of video technology offers benefits in respect of its use as a pedagogical tool to support student teacher learning, and that the challenges are not related to the use of the tool for effective student teacher learning, but are rather more practical or personal.

Abstract

The use of video technology to support the development of student teachers is becoming more and more recognised. Its potential for use as a critical reflective tool is important. This report presents the findings of a research project that investigated the use of video technology for reflection on lessons in teacher education.

The study involved more than 100 participants including student teachers, mentors, practice tutors, school co-ordinators, other school-based staff and pupils who contributed in one or more of the following ways; a discussion group, interview and an online survey.

Key findings include that conversations with mentors and school colleagues are reported to be the most effective approach for reflecting on practice. The use of video technology is reported to be inconsistent. Nevertheless, many benefits of using video technology are identified; including supporting the identification of improvements and strengths, facilitating the observation of different techniques, and providing a basis for mentoring discussions. Challenges raised include the recordings could miss aspects of learning, safeguarding concerns, feeling self-conscious while filming and practical aspects of organising the filming.

There is a clear need for further support to embed the effective use of video technology for it to have a positive impact on student teachers' reflective practices. These findings will inform the development of support mechanisms and resources to address the challenges, particularly as the findings indicate clear benefits in respect of using video technology as a pedagogical tool to support teacher learning.

1. Introduction

This research project provides essential evidence for The Open University Initial Teacher Education (OU ITE) Partnership PGCE Programme regarding the use of video technology¹ to support teacher education across the programme's partner schools. The potential and application of video technology in ITE is constantly evolving and if student teachers are to receive the maximum benefits of using this tool, it is necessary to establish the current level of schools' engagement, the tasks/activities it is used for and the perceived benefits and challenges to all involved.

This PRAXIS-funded study also generated examples of effective practice in the application of video technology in ITE. These examples of effective practice are provided as a bank of short video resources to support future programme delivery.

The research has contributed to a deepening understanding of the barriers and challenges for school staff and student teachers in using video technology and explores its potential to support teacher training.

1.1 The Open University Initial Teacher Education Partnership PGCE Programme

The Welsh education landscape is changing. Some schools began delivering Curriculum for Wales in September 2022, with all schools delivering from September 2023 (Welsh Parliament, 2022); a unified support system for all learners aged 0-25 years has been legislated (Welsh Government, 2022c) and ITE continues to move from a university-led structure to a school/university partnership approach (Welsh Government, 2022b). One particular priority for the Welsh Government is to diversify the teaching workforce (Welsh Government, 2023) and the OU ITE Partnership parttime and salaried PGCE Programmes is contributing to this priority (Glover and Hutchinson, 2022; and Welsh Government, 2019a).

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¹ The Open University ITE Partnership uses IRIS Connect to facilitate secure lesson recording, throughout the report the term video technology is used, yet some survey and interview responses specifically quote IRIS.

The OU ITE Partnership in Wales offers student teachers a part-time or salaried training route into teaching that is completed over two years. Those embarking on the salaried route may already be working in a school or able to secure employment in one. The Welsh Government support the costs of study for students following this route (The Open University, 2022a). Part-time student teachers study pro-rata over two years and may continue with other work or commitments alongside their studies. This is either self-funded or funded through a loan and grants available for part time study in Wales (The Open University, 2022a). The programme is delivered via blended learning that combines distance learning with practice learning in schools (The Open University, 2022b). The OU ITE Partnership is supported by the following roles: Mentor – based in partner schools, they support student teachers during their school placements providing support for planning, teaching, evaluating and assessing learning. Formal lesson observations are completed and regular formative feedback given; Practice tutor – a similar role to the traditional university ITE tutor, they provide support for the student teacher to link the theory and practice learning. They assess the student teacher in relation to the Qualified Teacher Status descriptors and coach mentors; School co-ordinator - they provide oversight for ITE provision within a school; and Curriculum tutor based at the Open University, they support student teachers with their subject and phase areas.

1.2. The rationale for this research project

This study contributes to fulfilling the Welsh Government's ITE accreditation requirement for research to be central in ITE (Welsh Government, 2018). The PGCE Programme promotes research-informed teaching underpinned with high-quality research, and the research team included teachers as researchers. The study has contributed to the development of the PGCE team's research capability and capacity, and ongoing programme development and improvement, all of which will ultimately improve the student experience and support teacher education.

The use of video technology in the classroom, for both experienced teachers and those at the beginning of their career, has grown in recent years. There is growing recognition of the potential of the technology to support critical reflective practice. Experiences during the COVID-19 pandemic led to the introduction of remote observation and assessment of student teachers (Welsh Government, 2021). In 2021 the PGCE team facilitated a virtual second school experience for student teachers and the application of video technology for a micro-teaching activity was reported

by the student teachers to benefit their practice (Cole Jones et al., 2022; Defis et al., 2022). However, it has become apparent that not all schools engage with the video technology to the same extent or with the same level of commitment and it is this that provided the driver to undertake this piece of research, that had the following aims:

- To understand the benefits to schools and student teachers of using video technology to support practice.
- To develop examples of effective application and benefits of using video technology in Initial Teacher Education.
- To discover the barriers and challenges partner schools encounter in the use of video technology.

Consequently, this research project's findings provide meaningful insight for the Programme and wider ITE community on the application of video technology for reflection on teaching. The next section summarises the key messages from the literature on the benefits and challenges of using video technology in teacher education.

2. Literature Review

2.1 Introduction

There is a range of applications for video technology in teacher education and in recent years the body of literature exploring this has expanded. Video technology offers student teachers opportunities to view the usual classroom situation and can provide examples of effective practice (Hamal and Viau-Guy, 2019; McCullagh, 2021). Video technology can also be used to target improvement in classroom management (Hamal and Viau-Guy, 2019; Weber et al., 2018). In this instance the focus is on the application of video technology to support reflection on teaching, both individually and with peers. There is wide consensus that using video technology positively contributes to reflective practice and self-evaluation (Gibbons and Farley, 2021; Göbel et al., 2022; Sablić, Mirosavljević and Škugor, 2021; Thorén Williams, 2020).

It is also reported that video technology can effectively facilitate the opportunity for reflection with peers within a supportive environment (Cole Jones et al., 2022; Defis et al., 2022). However, one research study found that only 14 per cent of video recordings used in teacher education were of teachers' own practice, which consequently reduced opportunities for using video for reflective practice (Christ, Arya and Ming Chiu, 2017, p. 32). Nevertheless, the potential for using video technology for reflection is apparent; one study reported a ten-fold increase in teachers' ability to reflect when using video as opposed to when not using video for reflection (Mann, Crichton and Edmett, 2020).

A social constructivist approach is evident during peer reflection, as knowledge, feedback and results are enabled and created socially (Falter and Barnes, 2020). It is also argued that the social constructivist method evident throughout video peer reflections replicates problem-based learning (Christ, Arya and Ming Chiu, 2014). By adopting the use of peer video reflection, individual's reflective practice is broadened in terms of content and prospects for progressive ideas (Danielowich, 2014). A key component of teacher education for student teachers is critical reflection as the attributes required to incorporate theory into practice are developed (Furlong, 2019; Tiainen, Korkeamäki, and Dreher, 2017). As student teachers reflect on their knowledge they consider alternative approaches to their practice, and this contributes to their effectiveness as a teacher (Glover and

Hutchinson, 2022; Hagger et al., 2008; Körkkö, 2021). Introducing a framework to support reflective practice using video is proposed; for some it involves identifying sections of a video recorded lesson using notation of pedagogical interactions (Riordan, Hardman and Cumbers, 2021). For others, aspects key to forming teacher identity – learning, theory and practice, learning aims, social, cultural and ethical issues, teacher role and environment, and behaviour, with the provision of a reflection guide are noted as being important to support the reflective process (Körkkö, 2021, p. 269). In this instance, particularly as Wales is currently undergoing education reform, it is important to understand the student teacher context and the role of reflective practice for teachers and schools within this.

2.2 The Welsh context

Wide-ranging educational reform is ongoing in Wales. For example, all primary schools and some secondary schools began implementing Curriculum for Wales in September 2022 (Welsh Government, 2022a; Welsh Parliament, 2022). One of the key features of the Curriculum for Wales is the autonomy awarded to teachers to take ownership of curriculum development. Initial Teacher Education has also undergone reform; as it shifts from university-led provision to partnership working between schools and universities (Welsh Government, 2018). A recent consultation to refresh the Initial Teacher Education accreditation criteria continues to place emphasis on the importance of teachers as reflective practitioners throughout their career (Welsh Government, 2022b). Reflective practice is frequently mentioned in the professional standards for teaching and leadership with the Professional Learning Passport² supporting this (Welsh Government, 2019b). Student teachers' reflective skills have been noted by Estyn (the education and training inspectorate in Wales) to require improvement (Estyn, 2018) and there is an emphasis on reflection as a means by which to apply theoretical learning within the context of practice (Estyn, 2022). To develop as a learning organisation, schools in Wales are also encouraged to engage in critical reflection (Organisation for Economic Co-Operation and Development, 2018). The following discussion explores the potential benefits and challenges for student teachers and teachers to use video technology

² The Professional Learning Passport (PLP) is a bilingual, flexible online tool designed to support the capturing of, reflecting upon, sharing and planning of learning to improve practice.

to engage in peer and self-reflection to improve practice as reported in the literature.

2.3 The benefits of using video technology for reflection on lessons

Key messages from the literature

The use of video technology in lessons can have positive **practical impact** on:

- The support of student teachers in remote/rural locations
- Time and cost efficiencies
- The ability to revisit lessons as many times as required
- Teachers' ability to accurately recall elements of a lesson

Reflecting on video-recorded lessons can improve:

- Pedagogy
- Classroom management
- A teacher's knowledge of their group
- Analysis of transitions between classroom activities
- Teacher self-efficacy
- Quality of classroom discourse
- Language and presentation approaches
- Teachers' ability to self-evaluate

The use of video recorded lessons also **offers opportunity** to:

- Collaborate with peers, which supports own practice
- Challenge teaching and learning philosophies
- Conduct research

2.3.1 Practical impact

Being able to support student teachers who are placed in remote, rural locations by using video technology offers an advantage both for those training in such locations and those supporting them (Mac Mahon et al., 2021). This view is echoed by Murtagh (2022) who reports that the organisation of lesson observations is simplified and more cost effective. However, it is also found that a combination of

face-to-face observations along with the use of video technology is preferred, with the face-to-face visit providing important context for the supervising tutor (Mac Mahon et al., 2021). Beyond the developmental areas of classroom management, pedagogical growth, and student enrichment, Gibbons and Farley (2021) also note some practicalities of video reflection as providing a time efficient, cost-effective tool to effectively engage practitioners. Sablić, Mirosavljević and Škugor (2021) highlight the benefits as being able to rewatch and study classes as many times as necessary and that teachers can also pause, rewind, and repeat the recording at a pace best suited to them. They also comment on the accessibility and ability to watch at home or in a comfortable and less disruptive environment which means there is a better focus on the content. Others support this finding too, with student teachers appreciative of being able to watch and rewatch video recorded feedback on their teaching (Murphy Odo, 2022).

Others highlight that video technology support student teachers struggling to remember parts of lessons 'you think back on a lesson, and you'll only pick out part of it whereas with the video you'll see the whole thing' (McCoy and Lynam, 2021, p. 934). Example A contains further details of this particular research study. Others agree with the advantage of using video for reflection, with the video providing more accurate evidence of what happened opposed to relying on memory (Mann, Crichton and Edmett, 2020; Kriewaldt et al., 2021). Some participants from one student research group expressed their preferences for the use of digital technology for reflection inspection rather than an in-person visit to the classroom as they found the

Example A: Video-based selfreflection among pre-service teachers in Ireland

(McCoy and Lynam, 2021)

Intervention Group: completed written reflections and used video recordings of lessons (n=15)

Control Group: only completed written reflections (n=20)

In-depth interviews with both groups examined the experience.

- Self-reflection and developing self-reflective practice is supported well by using video footage.
- More information on explaining the technology to pupils would be beneficial.
- Time is needed to give participants opportunity to become familiar with the technology.

presence of the inspector in the classroom intimidating' (McCoy and Lynam, 2021, p. 937). However, merging both the recorded reflection and the in-person feedback is reported to be the preferred method for others in this research group. This

supports others' conclusions who found that teachers and student teachers apply learning drawn equally from both video and discussion (Christ, Arya and Ming Chiu, 2014).

2.3.2 Using video technology to support reflective practice

Gibbons and Farley's research (2021) outlines the benefits of video technology in supporting student teachers in three specific areas namely classroom management, pedagogical growth, and student enrichment. They elaborate on these areas, by explaining that student teachers could reflect on behaviour management and use knowledge to make changes to practice, and praise positive pupil behaviour as identifying behaviour management challenges in 'real-time' can be challenging. In addition to this, student teachers can reflect on the group's dynamic and identify pupils who are struggling. To exemplify their findings on pedagogical growth, Gibbons and Farley (2021) also highlight the ability for student teachers to analyse transitions between activities and eliminate downtime between them, reflect on their instruction with the 'average' class, and improve their questioning strategies or pupil groupings. The impact of this was evident in modifications to lesson plans and delivery which impacted on pupils' progress. Others report that collaborative use of video reflection seems to develop individuals' self-efficacy (Aslan, Erten and Dikilitaş, 2022). Another study recounts similar findings in that those who participate in a video reflection group report teacher self-efficacy positively changes in comparison to those who participate in the non-video reflection group (Gröschner et al, 2018). The quality of classroom discourse practices is also reported to improve following the application of a video reflection programme during mathematics lessons; with improvements in students responding and having opportunities to discuss during lessons (Kohen and Borko, 2022).

Sablić, Mirosavljević and Škugor (2021) agree with these benefits and argue that video reflections allow teachers to observe pupils as they solve problems and share their thinking methods as they do so. Others support this, with it found that those who reflect on both the behaviours of the pupils as well as the teachers improve more than those who only reflect on the teacher's actions (Michalsky, 2021). McCoy and Lynam's research (2021, p. 935) also highlights that video reflection can be used to identify and make improvements towards the 'embodied aspects of teaching' and the behaviours displayed by the teachers themselves such as gesture, tone, position in the room, body language, facial expressions etc. One study required

student teachers to watch their recorded lessons 'with and without sound' for the non-verbal gestures to be more noticeable (Xiao and Tobin, 2018, p. 333). This proved useful during the reflective process as student teachers found that they focus on how information is presented with their bodies, for example with eye contact, facial expressions, and gestures. As a consequence of the study student teachers reported that such actions had become 'more polished' (Xiao and Tobin, 2018, p. 335). Others conclude similar comments, for example, awareness raised regarding the importance of how student teachers present themselves, particularly the language they use (Murphy Odo, 2022; Deneme, 2020). It is also reported that practitioners feel an increased responsibility for what they are saying in lessons when they are being filmed (Charteris and Smardon, 2013).

2.3.3 Improving pedagogy

Witnessing their own practice by using video reflection can help student teachers to critically evaluate learning in systematic ways, which can lead to improved practice as a result of reading feedback, documenting advice, and preparing for mentor meetings (Coffey, 2014; Gibbons and Farley, 2021). Others share this view and state that 'by participating in online reflection, the teacher's desire for change increases' (Sablić, Mirosavljević and Škugor, 2021, p. 1072). A recent study by Harvard University Centre for Education Policy Research was of interest to McCoy and Lynam's (2021) research, and they state that one of the benefits of utilising video technology for reflection on authentic practice led to a deeper reflection than characterised by those in–service teachers that had not engaged with this method. This suggests that the benefits of including video technology outweigh its exclusion. McCoy and Lynam (2021) also comment that in self-reflecting on their lessons, student teachers can identify classroom management strategies such as the pace and content of lessons.

One quasi-experimental study (see Example B) supports this type of finding, as participants report they recognise things about themselves that they had not noticed before (Göbel et al., 2022). Another study also found that one research participant noted the level of language used in delivery was inaccessible to the pupils which resulted in them changing their explanations (McCoy and Lynam, 2021).

Example B: A quasi-experimental study exploring collegial video-based reflection for student teachers (Göbel et al., 2022)

Intervention Group 1: reflected on videos of peers (n=36)
Intervention Group 2: reflected on own teaching videos (n=21)
Control Group: no participation in collegial video-based peer reflection (n=26)
The intervention groups completed a short training course on constructive feedback and were provided with reflection prompts.

- Collegial reflection was appreciated particularly strongly by all groups.
- Both intervention groups reported high appreciation of, and low concerns about, video-based reflection on teaching.
- Concerns about video-based reflection on teaching decreased for those who conducted the video-based reflection on teaching with their own teaching videos (Group 2).

It appears to matter whether participants reflect on their own teaching videos; the experience of **reflection and feedback seem to be more intense when individuals use their own teaching videos.**

After the reflection process: Those using their own teaching videos consistently stated that 'the reflection was supportive and that **it helped them recognise things about themselves or their actions that they had never been aware of before**'. (p. 10)

In a recent Finnish study (see Example C) student teachers reported the experience as being 'empowering' with them able to understand how to support learners, the complexities of the learning process and how to interact with their learners (Näykki, Laitinen-Väänänen and Burns, 2022, p. 7). Other studies also report on the benefits student teachers perceive of viewing their own practice from a unique perspective (Körkkö, 2021; Körkkö, Morales and Kyrö-Ämmälä, 2019; Tripp and Rich, 2012). The realisation of the complexity of teaching is also commented on by others who engaged in video recording their teaching (Murphy Odo, 2022). Another similar study with 55 student teachers found that video recording of lessons helps to improve understanding of the quality of teaching skills and ability to self-evaluate when compared with written self-evaluation of practice (Deneme, 2020).

Example C: Student teachers' video-assisted collaborative reflections

(Näykki, Laitinen-Väänänen and Burns, 2022)

Student teachers (24) video recorded their own teaching sessions, annotated their videos using a video-reflection tool by focusing on socio-emotional interactions, non-verbal elements of interaction and moments, where students felt successful and empowered.

Videos were viewed and annotated by a peer student and a teacher educator. After self-, peer-, and teacher annotations, a **collaborative reflective feedback discussion** involving the teacher educator, videoed student and reviewing peer, was held either face-to-face or online.

- Student teachers viewed the video reflection process as helpful in **making socio- emotional experiences visible and tangible**.
- The video annotation tool was recognised as useful for indicating socioemotional experiences and making them more concrete, thus positive resources for reflection.

Student teachers were able to evaluate teaching situations **holistically and observe connections** of their own socio-emotional behaviours to their students.

2.3.4 Other opportunities offered by using video technology

The collaborative nature of teacher reflection following the analysis of peer reflections is also referred to. It is stated that 'videos allow a large number of teachers to stay in touch with each other[...] they become critical friends and empower each other (Sablić, Mirosavljević and Škugor, 2021, p. 1072). It is also concluded that collaborative reflection of teaching videos is beneficial for the development of reflection-related attitudes for student teachers and offering opportunities to challenge teaching and learning philosophies (Burns, 2020; Göbel et al., 2022). Participants of one study report the positive impact of being able to observe their peers' lessons, and that recordings of lecturers' feedback support this process, as student teachers are able to identify the strengths and limitations of others, and this informs their own practice (Murphy Odo, 2022). Others concur with this finding, with it reported that student teachers who were part of one video reflective group shared strategies and teaching approaches (Gröschner et al, 2018). It is also reported that observing others' videos of their teaching is more impactful than observing one's own as deeper reflection can result (Mann, Crichton and Edmett, 2020). Riordan, Hardman and Cumbers (2021) also comment on the benefit of collaborative video reflection as a research method using feedback and analysis from a range of interpretations, whilst analysing the shared lesson. They

also propose that it is possible to have differing perspectives of the same incident, and this should be taken into consideration.

As the above discussion illustrates, there is a broad range of positive impacts that the use of video technology brings to teacher education and reflective practice, whether this be practical implications for those situated in more remote locations, or by offering the ability to revisit lessons and support the accurate recall of a lesson experience. Others emphasise the improvements that reflective practice based on video recorded lessons can have, along with the potential opportunities for collaborative working provided. Nevertheless, there are barriers and challenges also reported, as discussed in the following section.

2.4 The challenges of using video technology for reflection on lessons

Key messages from the literature

There is wide variation in the use of video technology:

- Student teachers **require support** to see the benefits
- **Appropriate training** is needed on critical reflection using video
- Filming can miss important aspects of classroom culture

Challenges reported include:

- Using video for reflection takes longer to complete
- Supporting **resources** are required to assist reflection
- **Anxiety** experienced by those recording themselves
- **Privacy** for pupils in the filmed class
- **Technical issues** such as poor sound quality

2.4.1 The use of video technology

Gibbons and Farley (2021) identify some of the challenges facing educators when using video reflection and note the extent of use varies significantly between students, with some students using it extensively and others using it hardly at all. They also comment that student teachers may need support to move beyond initial concerns of being recorded for evaluation purposes and to see the benefits of

formative feedback on practice. They also raise concerns with how student teachers are taught to reflect on their practice, noting that there can be differences in guidance among student teachers' supervisors (Gibbons and Farley, 2021). The need for training of both student teachers and their supervisors is also required for video recording to be advantageous for reflective processes (Körkkö, Morales and Kyrö-Ämmälä, 2019; Körkkö, 2021). It is argued that student teachers should receive appropriate training to enable them to reflect critically on their own teaching, and that of experienced others (Murtagh, 2022). It could be argued that teacher education curriculum content should cover aspects of critical reflection using video technology to facilitate teacher agency in this skill. This is a view that is shared by Riordan, Hardman and Cumbers (2021) when they refer to 'Pedagogy Analysis notation' as a useful tool for student teachers to analyse aspects of their video reflections. Others also highlight the need for training to use the video recording technology (Kriewaldt et al., 2021). However, it is reported that filming can miss crucial factors of the classroom culture and environment (Körkkö, Morales and Kyrö-Ämmälä, 2019).

Murtagh (2022) suggests a possible equity issue arising through the proportion of guidance received through video technology which, in some cases, could exceed the traditional number of assigned face-to-face observation and reflection sessions. It might be considered that having more feedback leads to a better understanding of strengths and areas for development. However, teacher education providers may want to avoid creating potential equity issues between student teachers, the 'have vs have not' (Murtagh, 2022, p. 363).

2.4.2 Time for self-reflection

Research conducted by McCoy and Lynam (2021) highlights the increased amount of time required for student teachers to be able to reflect effectively using video technology. This can be a barrier that needs to be overcome. Another project that piloted the use of video reflection with 11 schools provided teachers with the opportunity to review lesson segments from their own or other schools and concluded that a 'substantial proportion of teachers' development time' was taken up by the project (Davies, Perry and Kirkman, 2017, p. 31; Perry, Davies and Brady, 2020). Nevertheless, 10 of the 11 participating schools reported that they would continue to use the video technology after the pilot project. A Rapid Evidence Assessment (Education Endowment Foundation, 2020) also reports similar findings in its summary of the 16 studies examined; although the use of video is reported to

be positive in allowing practitioners to review their own practice and reflect on that of others, the process required more time to complete the professional learning. It was also proposed that the use of videos may not be effective on their own, with other supporting resources required to scaffold conversations (Education Endowment Foundation, 2020). Several studies exemplify the importance of such scaffolding frameworks to support the reflective process while using video recorded lessons (Hollingsworth and Clarke, 2017). Another study focused on mathematics teaching and the importance of scaffolding reflections; following a mentoring intervention, teacher observations of recorded lessons shifted from basic description to targeting 'student thinking, teacher actions and the relationships between them' (Güler and Çelik, 2022, p. 11). In another instance, student teachers reflected on recorded lesson segments and compared their reflections to observations made by experts; this also emphasised the importance of using scaffolding to support student teachers' reflections (Fadde and Sullivan, 2013).

2.4.3 Anxiety of being recorded

McCoy and Lynam (2021) highlight that the positives of using video reflection with student teachers 'were often only achieved after initial nervousness and embarrassment with viewing and hearing themselves on video' (p. 934) were overcome. Student teachers have also reported feeling intimidated before using video technology and it took several viewings of themselves on video for initial anxieties to reduce (Näykki, Laitinen-Väänänen and Burns, 2022). This extends to feelings of 'shame and inadequacy' with video recordings of own lessons (Boldrini, 2020, p. 40), and nervousness in sharing video recordings with others (Murphy Odo, 2022). It is suggested that it is necessary to ensure collaborative reflection using video technology takes place in a 'comfort zone' where individuals have mutual respect and an existing working relationship for the reflective process to be successful (Falter and Barnes, 2020, p. 82).

2.4.4 Lack of a holistic view

The COVID-19 pandemic presented a 'practicum assessment conundrum in the absence of face-to-face observations' (Murtagh, 2022, p. 356). Murtagh (2022) highlights many benefits of video technology including an increase in teacher agency and increased accessibility for the university tutor, but they also highlight the potential challenge of not gaining a holistic view or including pupil voice in remote reflections, outside of noting pupil engagement via the 'chat' function. In

planning the future role of video technology, making potential adaptations explicit to use pupil voice and ensure that pupil outcomes are thoughtfully considered may need to be taken into account. A key finding of a study that involved seven teachers included major concerns raised by participants of the impact of video recording a lesson on the privacy of their classroom (Er, Toker and Yücelyiğit, 2022). Technical issues, such as poor sound quality, are also mentioned by some as creating challenges for using video technology in initial teacher education (Mac Mahon et al., 2021).

2.5 Conclusion

The positive impact of using video recorded lessons has been extensively reported. With there being reported benefits to those teaching in remote/rural locations; time saving and efficiencies made regarding the necessity to travel to schools for supervisory visits, as well as providing the opportunity to revisit the lesson experience at a later date (Mac Mahon et al., 2021; Murtagh, 2022; Murphy Odo. 2022). There is also strong evidence to indicate the value of recording lessons to support reflection too. Aspects of classroom management, pedagogy and the teacher's knowledge of their class all contribute to the development of the teacher's self-efficacy (Gibbons and Farley, 2021; Gröschner et al, 2018; Michalsky, 2021). Using recorded video of lessons to reflect on practice is described as being 'forwardlooking' (Xiao and Tobin, 2018, p. 342). Without the use of video recordings there is a reliance on memory, as opposed to focusing on particular actions which is more evident when using video recordings. The potential of using video to support collaborative working has also been explored by some, with the opportunity to challenge teaching and learning philosophies offered (Gröschner et al, 2018; Mann, Crichton and Edmett, 2020; Sablić, Mirosavljević and Škugor, 2021).

However, there are others who report the barriers and challenges of using video technology in teacher education. Support is required for student teachers to see the benefits, as well as ensuring there is adequate training to use the technology (Gibbons and Farley, 2021; Körkkö, 2021). Training is not only required to use the video technology but also to scaffold the reflective process too (Murtagh, 2022; Riordan, Hardman and Cumbers, 2021). Another challenge experienced is that of the increase in the time required to complete professional learning using this approach (Perry, Davies and Brady, 2020; McCoy and Lynam, 2021). A further challenge to overcome for some is the nervousness and anxiety of viewing themselves and /or

others watching them teach (Boldrini, 2020; Murphy Odo, 2022). Other issues such as poor sound quality can negatively impact the benefit of recording lessons. For some, the concern for the privacy of those in the class is also something hindering the video recording of lessons (Er, Toker and Yücelyiğit, 2022).

Nevertheless, the functions of video technology are continually evolving and this applies to applications within teacher education too. For instance, one feature of video recording is that of editing; and while student teachers edit their recorded lessons it is proposed that their self-reflection process improves (Sancar and Deryakulu, 2022). The use of the 360 format as opposed to standard video recording is also gaining momentum, with teachers noticing more actions in the classroom when viewing recorded lessons in the 360 format (Kosko, Ferdig and Zolfaghari, 2021). This increase in the use of virtual/augmented reality is reported to have a positive impact on motivation and learning (Wyss et al., 2021).

As a blended learning approach is delivered by the OU ITE Partnership it offers an interesting context in which to explore the application of video technology to support reflection in lessons further.

3. Methodology

This study used a mixed methods approach to provide a holistic review of the current situation regarding the use of video technology in lessons. This included a literature review, and gathering the views from a range of contributors who support the delivery of ITE using an online survey, interviews and discussion groups. Figure 3.1 is a summary of the data collection methods used.

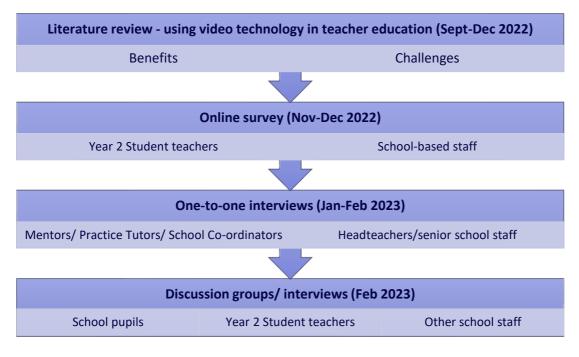


Figure 3.1 A summary of the data collections methods

As Figure 3.1 shows, Year 2 PGCE student teachers and all OU ITE partner school-based staff involved in teacher education were invited to complete a short online survey on their current use and views of video technology in ITE during November and December 2022. Appendix A contains the online survey questions. At the end of the survey all respondents were invited to volunteer to participate in an interview or group discussion to explore their views further. During January and February 2023, eight one-to-one telephone or Teams interviews with school senior managers, mentors, practice tutors or school co-ordinators took place, along with four online discussions involving five student teachers; 25 school pupils (face-to-face discussion) and six other school-based staff (face-to-face discussion). One school-based staff provided their views in writing. Appendix B contains the interview and discussion questions used. All discussions and interviews sought to discuss participants' experience of using video technology and the benefits and challenges of this. The discussion groups were about 45 minutes long and the interviews about

30 minutes. Each adult participant received a £20 thank you voucher for their time and participation.

Table 3.1 The research participants.

Role	Online survey respondent	Interview or discussion group participant
Student teacher	32	5
School-based mentor	13	5
Practice Tutor	4	1
School Co-ordinator	7	2
Headteacher	4	1
Other school staff	63	6
Learners (pupils)	n/a	25
Total number of roles	123	
Total individual participants*	91	45

^{*}A number of survey respondents undertake more than one role for the PGCE Programme. For example, they are a practice tutor and the school co-ordinator, or a mentor and the school-co-ordinator. All roles are accounted for above, with the total number of individual participants included in the final row. One interviewee provided written comments.

<u>Appendix C</u> contains a detailed breakdown of the survey respondents regarding school type, sector, and English/Welsh medium.

Ethical approval for the research project was received from the Open University Human Research Ethics Committee (HREC: 4452). All participants received information sheets prior to discussions/interviews and consent obtained. All participants were free to withdraw themselves from the research. Participants were also asked if they wished to contribute to the collection of video recorded segments to support student teachers and school-based staff to use video technology for reflective practice effectively in future. A collection of resources was created and forms an integral element of the PGCE programme's ongoing delivery.

Descriptive statistics were used to support the analysis of the survey responses with thematic analysis employed for interview/discussion group data. Even though specific stages are expected within thematic analysis, flexibility is also evident (Braun and Clarke, 2022). In this instance, all members of the research team familiarised themselves with the data and themes proposed for the different strands for the analysis. Regular team meetings ensured consistency of approach to coding.

The analysis of survey responses and the thematic coding of interview/discussion data facilitated the response to the following research questions

- 1) How do partner schools use video technology to support Initial Teacher Education?
- 2) What are the benefits of using video technology for student teachers, experienced practitioners, teacher educators and senior school staff?
- 3) What are the perceived barriers and challenges for student teachers, experienced practitioners, teacher educators and senior school staff in using video technology?

The following sections include the discussion of the study's findings (Section 4) and the conclusions and recommendations (Section 5).

4. Discussion of findings

This section is informed by the online survey responses and interview/discussion data.

4.1 Reflecting on practice

Key findings*

Conversations with mentors and school colleagues are reported to be the most effective approach used by student teachers and school-based staff to support reflective practice.

A personal (private) reflective journal is also reported to be effective by:

- 12 out of 31 (39%) student teachers
- 24 out of 56 (43%) school-based staff

*Survey responses

The approaches that student teachers and school-based staff found to be the most effective to support their reflective practice were explored in the online survey. As illustrated in Figure 4.1, the use of a reflective journal that participants keep private was particularly important for school staff, with a slightly higher proportion of school-based staff who responded to this question (42.85%, 24 out of 56) reporting this approach compared to 38.7% (12 out of 31) of the student teachers.

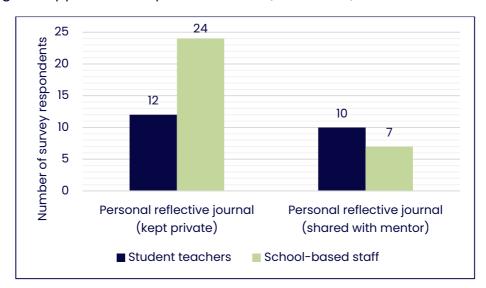


Figure 4.1 Using a personal reflective journal as an effective approach for reflective practice [Student teachers: n=31; School-based staff: n=56]

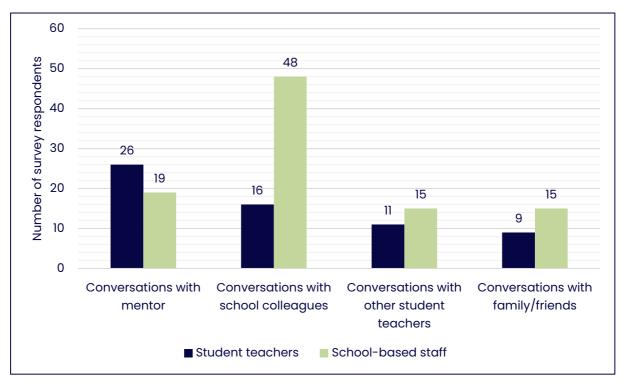


Figure 4.2 Using conversation with others as an effective approach for reflective practice [Student teachers: n=31; School-based staff: n=56]

Almost all (85.71%, 48 out of 56) school-based staff reported 'conversations with school colleagues' as an effective approach. The student teachers' responses were similar, but even though a smaller proportion (51.61%, 16 out of 31) reported on the effectiveness of conversations with school colleagues, their mentor is a school colleague and this was recorded separately (Figure 4.2). Conversations with other student teachers, and with family and friends, are also used by some. Sixteen student teachers also commented that they use discussions with curriculum tutors to reflect on practice; 11 use the Practice Learning Activities (PLAs), and seven use discussions during formal university teaching sessions and the forum posts. Almost half of school-based staff also mentioned they use modelling lessons/examples of practice (24 out of 56). In addition, some offered a response as to which of the approaches they find to be the most effective for reflective practice (Figure 4.3).

As can be seen from Figure 4.3, it is the conversations with mentor/school colleagues that dominated the responses from both student teachers and school-based staff. A small minority reported a private journal, and for student teachers conversations with other student teachers, and school-based staff – modelling lessons are also used.

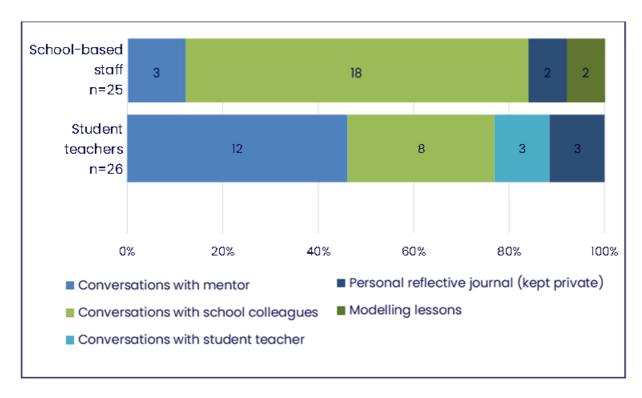


Figure 4.3 The most effective approach for reflective practice

Almost all survey respondents (85 out of 91) commented on how their favourite approach for reflection, mainly conversations with others, compared to using video technology. About half report that they found it 'about the same', however, some explain they had not used video technology much. One teacher expanded:

I think they go hand in hand and are **a great starting point** for discussion, reflection and highlighting good practice and modelling. (School-based staff)

Ten respondents commented that their preferred approach was 'less effective than using video technology'. Several explanations given by research participants discuss the benefits of being able to 'rewatch' the lesson;

I feel that if I could also use video technology then I would be able to specify which part of a lesson went well or where the children struggled which I wouldn't necessarily see when I was teaching from the front. (School-based staff)

Video evidence would show/highlight things **live on the class floor** rather than waiting and discussing with others and relying on their comments. Watching things that come up could be easily discussed. (School-based staff)

But as one respondent commented, although they believe their preferred approach is less effective, they 'do not have the time to set up a camera at the start of a lesson, then spend an hour watching it back'.

About a third of respondents (27 out of 85) report that their preferred approach is 'more effective' than using video technology. A few provide additional comment about this; with video technology noted to be 'time consuming', and 'make people feel uncomfortable'. Four respondents comment that a 'face-to-face' discussion of 'professional dialogue', is effective, with one noting that a combination of using video reflections and conversations with colleagues is the ideal scenario. Some of these issues are explored in more depth in sections 4.3 and 4.4. The following section discusses student teachers' and school-based staff's thoughts regarding how often they use video technology, views on training completed for this and the software's features that support reflective practice.

4.2 Using video technology to record lessons

Key findings*

The majority of student teachers (19 out of 32) do not record their lessons very often.

Almost one third of school-based staff (22 out of 59) never record their teaching.

School-based staff report using video technology:

- To share examples of effective practice with other schools:
- For training purposes;
- Sharing lessons during development of Curriculum for Wales content.

Some student teachers and school-based staff report feelings of **nervousness and anxiety** about filming their lessons.

- The majority of student teachers (26 out of 32) engaged with the video technology **training materials**
- The majority of school-based staff (43 out of 59) have never completed any training

Almost double the proportion of student teachers compared to school-based staff report being **confident to use video technology**.

Most respondents report **limited application** of some of the supporting features of the video technology such as 'in-ear' feedback and 'time-stamp' annotation.

*Survey responses

The frequency of recording lessons or segments of a lesson was reported to be varied between student teachers and school-based staff. Even though all student teachers are required to record lessons, and share these recordings with their practice tutor, the majority did not record often. A very low number of school-based staff frequently record their teaching (Figure 4.4). Almost a third of school-based staff report that they never record their teaching.

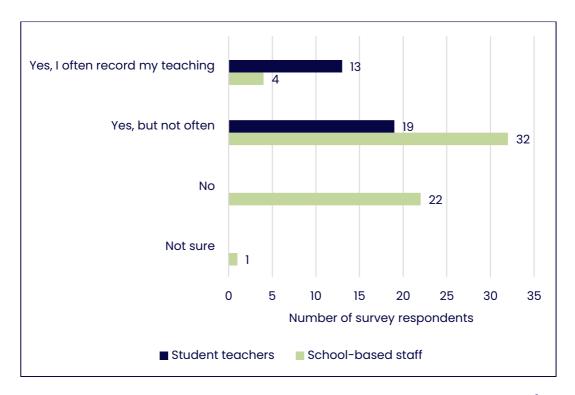


Figure 4.4 Frequency of student teachers and school-based staff recording lessons [Student teachers: n=32; School-based staff: n=59]

Most school-based staff interviewees discussed the fact that the recording of any teaching is mainly by student teachers. Some expanded that even though their school had multiple recording kits, they are mainly used for student teachers. Even though the staff in one school had decided not to use video technology a few years ago, they had recently started to record lessons for training purposes, and to share examples of effective practice more widely with other schools in the region.

Another school representative also commented that while developing the Curriculum for Wales lessons were recorded and shared with different settings, which they reported as being 'helpful'. One experienced school-based mentor discussed that as more is now understood about the importance of reflective practice it is important to record as much as possible, 'you don't have to use it all'. In their view if lessons are recorded regularly, the children become used to it and the recorded situation is then not a false one. Nevertheless, a few school-based staff commented on how they had felt apprehensive when they had previously video recorded lessons. This nervousness is mirrored by student teachers, with staff commenting that some student teachers find it 'quite stressful'. However, this does not appear to be the case for all; one mentor commented that their current student teacher enjoyed filming. And student teacher interviewees commented that they

video recorded lessons frequently, with one expanding that they use it for reflection – noting that 'you don't always see what other people see'.

Another student teacher interviewee reported that the video recording supported their mentor's written observation notes. Using video recordings for formal observations was referred to by the majority of interviewees, including a small number who refer to its application to quality check teaching. However, familiarisation with the technology is reported to hinder the progress for some student teachers in using it effectively. Nevertheless, the majority of survey respondents report that they are familiar with their setting's code of practice, but even though they had sought ICT support in their school, the proportion who have completed any training to use video technology (i.e. IRIS Connect) is very low (Figures 4.5 and 4.6).

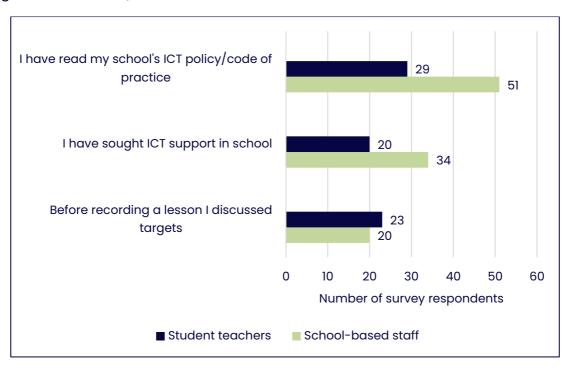


Figure 4.5 ICT policies and support [Respondents selected all that applied. Student teachers: n=32; School-based staff: n=54]

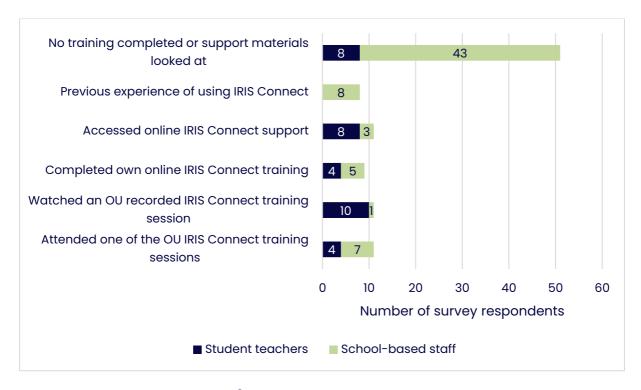


Figure 4.6 IRIS Connect training. [Respondents selected all that applied. student teachers: n=32; School-based staff: n=59].

Interviewees' comments support the survey findings, in that the majority had not completed any training to use the video technology. Nevertheless, a few referred to the fact that they feel confident when using ICT anyway and apply these skills to this application. A couple of interviewees commented that they value the support of either their mentor or other school staff to help them to use the video technology.

Figure 4.7 shows how confident student teachers and school-based staff reported being to use video technology to support their practice. As can be seen the proportion of student teachers who strongly agree/agree that they are confident is almost double that of the proportion of school-based staff respondents (65.63% for student teachers (21 out of 32) and 37.29% (22 out of 59) for school-based staff). This response was replicated during the interviews/discussions with more school-based staff commenting on their 'apprehension' and feeling 'nervous' about being recorded. One teacher explained that although they were not comfortable to begin with using the video technology, this eased the more that they used it. However, they emphasised that they would still prefer to have an in-person observation than it being video recorded. Yet, for another teacher they discussed that it can be 'nerve-wracking' being observed anyway and as a result it is difficult to remember parts of a lesson and using video technology means you are able 'to look back on your own practice and that gives you a different perspective'.

For the student teachers who reported being nervous – this focused on either concern that the technical elements would not work, if the Wi-Fi failed for example or that they 'felt pressure' and if they gave children an incorrect answer that this would be recorded. One student teacher also reflected on how the children react to the camera; with some being 'on mute, and some too scared to answer'. But, as commented by teaching staff, these issues lessen as learners become more familiar with lessons being recorded. One teacher commented that as the use of video technology is embedded in the school, this helps student teachers to build their confidence too. The success of this is attributed to the fact that:

I think it's **an ethos** thing, maybe as with anything everybody is reluctant to do anything, and then when you engage with a few members of staff and they **share the benefits** of it and take away that fear that everybody has of new things. Then I think everybody else wants a piece of it. (Mentor)

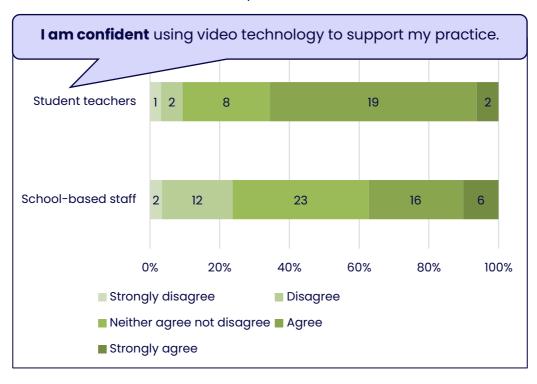


Figure 4.7 Confidence to use video technology [Student teachers: n=32; School-based staff: n=59]

Survey respondents reported on their levels of knowledge and understanding of the use of video technology for a range of activities (Figures 4.8 and 4.9). The proportion of student teachers and school-based staff reporting good/excellent knowledge and understanding of the use of video technology for reflective practice, to support professional learning, to support student teachers and to support research is similar.

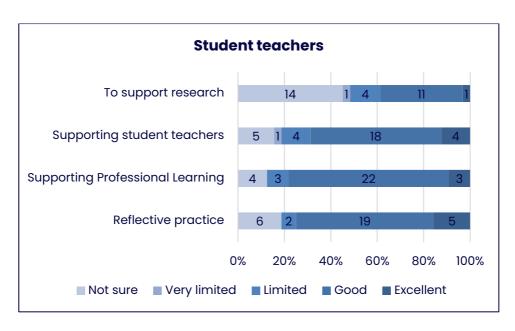


Figure 4.8 Student teachers - knowledge and understanding of the use of video technology [n=32, apart from 'to support research' n=31]

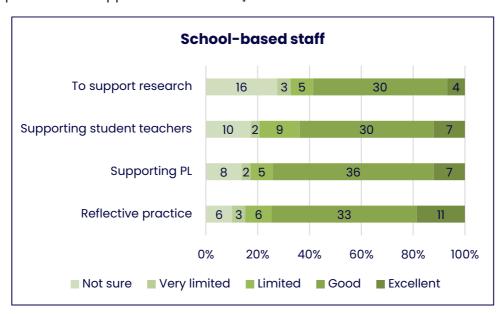


Figure 4.9 School-based staff - knowledge and understanding of the use of video technology [n=58, apart from 'reflective practice' n=59] PL - Professional Learning.

Twenty survey respondents provided additional comment on this theme. Four raise some concerns about the use of video technology. These concerns focus on the possibility of additional stress/worry for the students: it is proposed that there is a lack of opportunity to interact with pupils, 'see books or see the lesson from the pupils' point of view'. However, other survey respondents emphasise the advantages, for example school staff comment on the benefits of using it for 'sharing of good (and not so good) practice can significantly improve teaching and

learning in classrooms'. Several student teachers agree with this perspective, for example:

It has been useful as a trainee teacher to watch back my own delivery of teaching and analyse and assess where I may be able to make improvements. At the time of the lesson, you may miss out on certain things so as a tool to reflect I think it's very useful.

(Student teacher)

The benefits and challenges of using video technology to support practice, as reported in the survey findings and interviews, are discussed in more depth in the following Sections 4.3 and 4.4 of this report.

Figures 4.10 and 4.11 present the frequency of sharing and personal evaluation using video technology as reported in the survey responses. As it is a requirement of the PGCE programme for student teachers to record lessons the more frequent recording reported by student teachers can be explained.

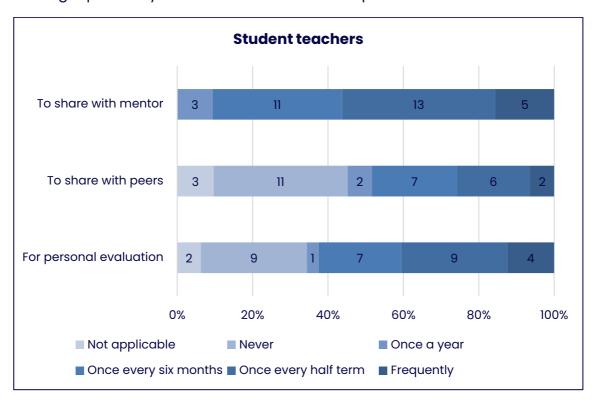


Figure 4.10 Frequency that student teachers use video technology for personal evaluation and to share with others [n=32, apart from 'share with peers' n=31]

Whereas a much higher proportion of school-based staff (30 out of 58) report never sharing recordings with others (Figure 4.11).

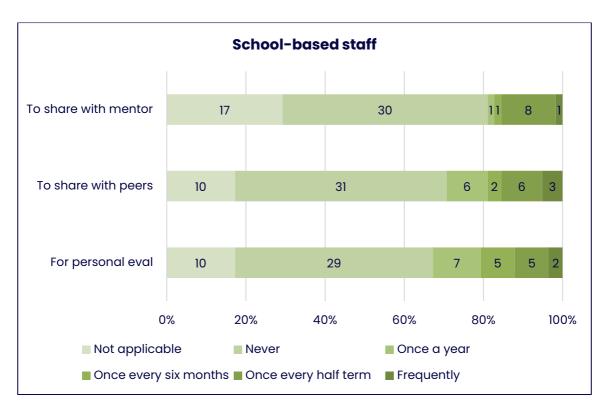


Figure 4.11 Frequency that school-based staff use video technology for personal evaluation and to share with others [n=58]

The video technology includes a range of tools to support reflective practice. This includes 'in-ear' – where a teacher can receive comment/ feedback via an earpiece while they are teaching; and 'time-stamp' annotation, which allows the viewer to add notes to the recording at any point they wish. Figure 4.12 shows quite limited application of these features by both student teachers and school-based staff. Some survey respondents qualified their answers, by explaining that they lack training regarding the use of the different tools, but that they would like to learn more, whereas others offered further detail as to how they apply the tools, as one student teacher comments:

I do use it [the time-stamp annotation] to provide some reflective notes on my own teaching before sharing with my practice tutor.

(Student teacher)

Other survey respondents refer to different technology that they use to support personal reflections such as Seesaw and Audacity. The frequency with which student teachers and school-based staff use the range of video technology 'tools' available to support practice varies (Figure 4.12). As can be seen from the survey findings in Figure 4.12, overall, limited use of the 'in-ear' and 'time-stamp' features

is reported, with slightly more student teachers using the features than school-based staff.

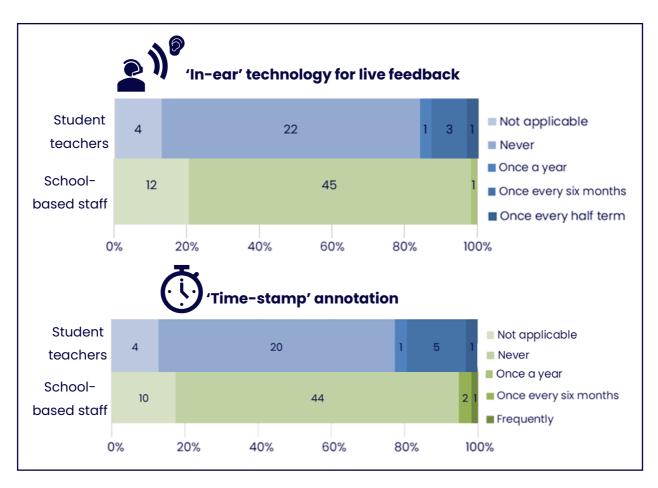


Figure 4.12 Use of 'in-ear' and 'time-stamp' [Student teachers: n=31; School-based staff: n=58 'in-ear'; 57 'time-stamp']

The extent to which student teachers and school-based staff use the 'forms' function to focus on a specific line of enquiry or use the CPD resources available on the web-based IRIS Connect platform were also reported. The responses were very similar to the use of the time-stamp annotation tool, with the vast majority of both students and school staff never using them. Six student teachers report using the forms once a half term and five school-based staff report frequently accessing the online platform's resources.

The following sections discuss the benefits and challenges as reported by student teachers, school-based staff and pupils in the survey responses and interview discussions.

4.3 The benefits of using video technology

Key findings

- The majority of interviewees and survey respondents note the top benefit of using video technology as identifying improvements to practice.
- The second most frequently mentioned benefit of video technology for student teachers is to **identify the** strengths of the lesson. This is the third most important factor for school-based staff.
- The second most frequently mentioned benefit of video technology for school-based staff is to **observe different techniques.** This is the third most important factor for student teachers.
- Many interviewees and survey respondents note one of the most important benefits of using video technology is in using it as a basis for the mentoring discussion.

An overview of the benefits of video technology as reported by student teachers and school-based staff in their survey responses is presented in Figures 4.13 and 4.14. The most frequently mentioned benefit for both school-based staff and student teachers is the use of video technology to identify areas of improvement. This supports student teachers to understand the aspects of their practice that need to be developed and provide a stimulus for discussions to instigate critical thinking around how the improvements can be tackled, the steps that are needed to do this and any necessary support.

The second most frequently mentioned benefit by student teachers is that video technology is useful to identify strengths and determine what is going well in lessons. This view is echoed by 26 school-based staff and is their third most frequently mentioned benefit. Using video technology this way supports mentors to offer praise and build student teacher confidence in identifying aspects of practice that are developing well. Mentors can support their student teachers to build on their strengths in future lessons.

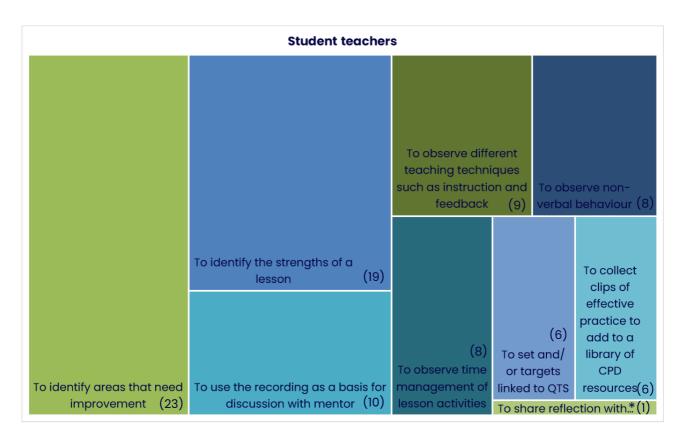


Figure 4.13 The benefits of recording a lesson or part of a lesson for student teachers. Respondents instructed to select their top three [n=32]. The larger the area the more who report the benefit. *To share reflection with pupils to evaluate their learning.

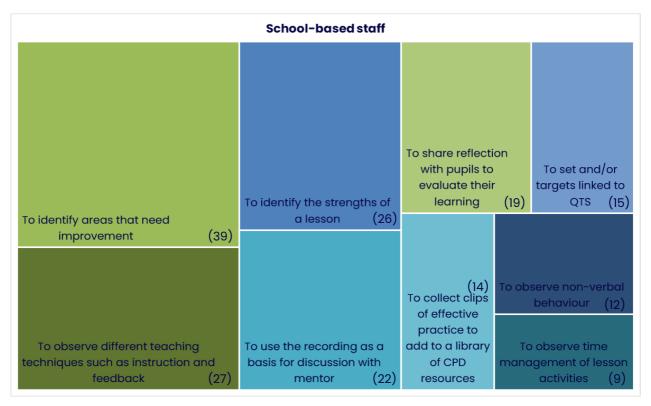


Figure 4.454 The benefits of recording a lesson or part of a lesson for school-based staff. Respondents instructed to select their top three [n=56].

Being able to observe different techniques used in a lesson is the second most frequently mentioned benefit by school-based staff and resonated with nine student teacher responses, making this their fourth most frequently mentioned response. Figure 4.14 shows that school-based staff are aware of the wealth of teaching techniques that experienced school colleagues possess and observing their practice in a familiar context with similar children is beneficial. Student teachers can use these video observation opportunities to develop a range of pedagogical tools, an awareness of curriculum development, and assessment of pupil progress.

Twenty-two school-based staff and ten student teachers report valuing video technology to use the recording as a basis for discussion with mentors. By centring a mentoring discussion around video reflection, student teachers are given concrete examples of their own practice that are developing well and other areas that need development. It is possible to stop the recording at a time-stamped point to analyse the student teachers' position, instruction and action. The unique perspective of a video reflection enables student teachers to interpret mentor comments in a way that is meaningful to them.

Outside of these top four benefits, popular responses include identifying non-verbal behaviours, identifying targets for QTS and managing time in a lesson. In using the video recording to share with pupils, this is reported to be of greater importance to 19 school-based teachers with eight responses in comparison to the student teachers, where only one responded that this is a benefit. This could be attributed to the experience levels of school-based staff, who are accustomed with their own practice and focus on the progress of the pupils they teach. Highlighting this use to student teachers could help them to further understand the range of benefits available through a more creative use of the video technology.

Interviewees also detailed the ways in which video technology is an effective self-and peer-reflection tool to identify areas for development and strengths in their teaching. Being able to watch themselves and listen to instruction and pupil responses encourages mentors and student teachers to engage in professional dialogues that spark critical thinking about how the improvements can be addressed, the steps needed and to identify any necessary support. Using video technology enables student teachers to recognise their good habits and if they have any distracting idiosyncrasies that could be avoided. The asynchronous function of reflection play-back allows students to reflect when it is convenient.

Interviewees found strength in being able to have reflection-time on a private level, where students are encouraged to watch recordings of their teaching at home, and in a very safe environment to critique their own lesson. Almost half of the interviewees note that by using video technology to reflect this way, some of the emotion is removed, resulting in them being more open to feedback and to discuss areas for improvement.

4.3.1 Improvements and strengths

"You may miss a certain child who always has their hand up as you are looking somewhere else; as teachers we're always trying to **improve practice** and are always learning"

"Because when I watched myself back, I realised I was repeating something quite often and I thought 'well, is that effective'?"

"Video gives people who lack confidence in front of an audience an opportunity to shine."

School Coordinators

"My student could see things that he thought were working, were not working as well as they thought they were. He thought another wasn't a great lesson, but on reflection could see there was a lot of learning going on."

"They can analyse their stance and their presence in that environment and they can review their practice different ways, their body language, owning that classroom management situation, to see whether that is influenced by different classes, different groups, or different ages."

Mentors



"At the start of my lesson I used to take too long standing there, talking to the children, not getting them engaged"

"I could **use Welsh and teach a good lesson** – so realised I am quite confident."

Student Teachers



Being able to critically reflect and recognise these actions is a useful skill for student teachers to learn so that they can take ownership of their own development, which is a key feature of the Professional Standards for Teaching and Leadership in Wales (Welsh Government, 2019b). In addition to recognising improvements in their own pedagogy, several interviewees reported on some of the wider observations that video technology facilitates. These include; given the busy nature of the working classroom with a wide range of abilities, learning goals and events happening, being able to recall certain aspects of the lesson may be difficult for beginning teachers. A third of interviewees reported that video technology supports their memory of the lesson. This demonstrates the video recordings can support the

critical reflection process by bringing the mentor and student teacher together for a contextualised professional dialogue that supports feedback, enables mentors to question thought processes that lead to pedagogical decision making, and build on teachers' reflection skills. Having differing perspectives of the same lesson can be a positive dimension for video technology and some interviewees report valuing the video recording as a basis for mentoring discussions.

4.3.2 A basis for mentoring discussions

"When there was a weak student, they recorded multiple lessons and at the same time there was live observation. When observing we added questions to prompt the teacher's reflection at points during the lesson (time-stamped so they could find it on the recording); IRIS was purposeful for this."

"It is hard to reflect in the moment and you **miss the small things** you've done that have been successful or unsuccessful... it is easier to show them [student teachers] this on the recording and this is more poignant for them."

"When you get together and have that conversation you've picked up on different things." "It can be difficult to remember how things have gone, so the video is another 'thinking' device, as I can't take it all in in the moment."

School Coordinator



Mentors



Student Teacher



Beyond the immediate benefits of using video technology impacting positively on student teacher development, one interviewee was keen to give a deeper insight into how reflecting with a specific focus makes a difference to their practice. They reported being able to observe Assessment for Learning techniques in another setting which helped them to critique their own practice and learn from this collaboration.

For one mentor, the use of video technology to support student teachers who may be struggling with a specific aspect of their practice was reported to be important. Being able to analyse the working classroom and the impact of their personal traits, body language and characteristics can be illuminating for student teachers and is sometimes an aspect that is overlooked unless it causes an immediate concern. One interviewee discussed how watching a video reflection back with a focus on specific pupils allowed them to hear missed pupils' responses, and a further four

interviewees highlighted being able to analyse learner engagement in a lesson. Two interviewees discussed playing the video reflections back to pupils in a way to share learning and behaviour habits. However, a strong feature of using video technology lies in the sharing of practice. One mentor discussed the way the video technology is used to train new teachers in science experiments that they have not yet undertaken themselves.

4.3.3 Sharing practice

"[...] Teaching Assistant recorded themself delivering an intervention with a child to share with others delivering the same intervention. There were generic videos of available, but it was better using our own recordings, as they were in our setting and with our children; this was more authentic."

"It's also helped to **share good practice** and I think that's the
biggest thing. If I'm doing a
heart dissection and
somebody doesn't know how
to do it, they can just watch
the video in their own time."

"When practice tutors have come in to observe, the students have found it helpful to **share broader experience** with the person and this spans more than just the lesson observation."

"Something that we did during our training was we had to do an IRIS video with a focus on Assessment for Learning, and that was nice to see how different teachers use AfL in different ways, and some of these techniques I wasn't aware that they were Assessment for Learning."



Mentor



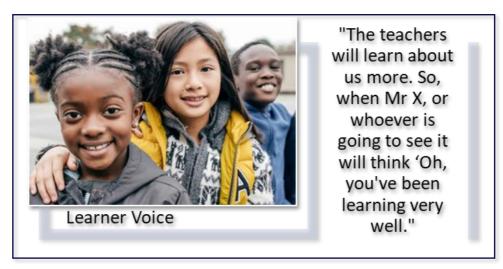




Interviewees noted that video technology is suitable for teachers at all stages in their career and could also be used for whole school training. They reported positively on using video technology to support professional learning, either through using the reflections themselves, or taking the opportunity to view the free professional learning videos and tutorials on the web-based platform. Several interviewees reported on the flexible nature of video reflection, giving student teachers control over what they learn, when, where and with whom they share, collaborate, and seek feedback.

In addition to being used as a monitoring tool by practice tutors, video reflection also supports practice tutors to learn of student teacher progress over time and with a variety of learners. This is useful as practice tutors do not experience the day-to-day progress of student teachers and it can help to guide them in selecting appropriate feedback and targets for progress. Interviewees reported that using

video technology helps to prepare student teachers for formal observations in school, for both internal and external quality assurance processes. As one mentor comments; "it would help when you have got Estyn in or anyone coming to observe you."



[Image Creative Commons]

The principal benefits in using video technology are in identifying strengths and areas for improvement. There is a focus on the PGCE pedagogical goals to educate new teachers to the highest possible standard, to become life-long, critical practitioners so that they can help the next generation of pupils become ambitious, capable learners. Pupils also observe this reflective practice by student teachers, and it is reassuring that the learner voice also indicated a positive view of using video technology to improve practice.

The range of benefits for the use of video technology identified by participants in supporting their reflection on their own practice indicates that the technology continues to be a valuable and effective tool beyond its use as a mitigation for COVID-19 restrictions on the assessment of practice. However, whilst there are clear benefits identified, the possible drawbacks and limitations of specific approaches (such as the time-consuming nature of this mode of reflection or unfamiliarity with new technologies) may explain some of the inconsistencies in use. The challenges of using video technology as a tool for reflection are explored in further depth in section 4.4.

4.4 The challenges of using video technology

Key findings

- **School-based staff** feel that the use of video technology can miss vital aspects of learning that you would pick up through in-class observations, e.g. questioning learners.
- **Safeguarding concerns** can sometimes mean that individual learners are not permitted to be filmed, which can hinder the filming process.
- Student teachers, learners or school-based staff can feel self-conscious when being filmed, which can impact on the learning experience.
- Practical implications of filming can be a barrier, e.g.
 using appropriate equipment, setting up the camera,
 capturing the learning, uploading the film to the online
 platform.

There are several challenges to the use of video technology to support teaching (Table 4.1). It is apparent that many of the barriers identified in the survey responses are related to the practicalities of filming within a classroom context. All student teachers and just under half of the school-based staff raised their concern about technical challenges, including setting up the camera, capturing the learning effectively and uploading to the online platform. For example, student teachers were concerned about battery life, Wi-Fi connection and positioning of recording equipment; as one student teacher commented; 'it was the technical side of initiating it that caused the worry'. Connected to the practicalities of filming learning experiences there is the added pressure of setting up the equipment before starting a lesson. Twice as many school-based staff as student teachers report this as a barrier to the use of video technology.

Table 4.1 The challenges /barriers to using video technology to support teaching.*

Challenge	Student teachers (n=31)	School-based staff (n=59)
Technical challenges (Wi-Fi/necklace microphones/battery life of iPads)	CO CO CO CO CO CO CO CO	පත පත පත පත පත පත පත පත පත පත
Lack of time to set up the technology	00000000	00000000 000000
Lack of understanding how to use the technology		888888888 8888888
Pupils' response to video equipment in the classroom		
Lack of confidence to share video and receive feedback	- <mark>.</mark>	-@:-@:-@:-@:-@:-@:-@:- @:-@:-@:-@:-
Lack of research on the benefits of using video technology	Q (999999
Lack of senior school staff support to use video technology	****	21

^{*}Some reported more than one challenge. Each symbol represents two survey responses.

Another concern reported by both student teachers and school-based staff is safeguarding. Ensuring that they adhere to the school policy and avoid filming individuals who are not permitted to be filmed is reported to be a barrier to the use of video technology. One school-based respondent feels that 'ethically, there is a grey area' regarding 'what happens with that recording when there is a vulnerable pupil', whilst another school-based member of staff recognised that extra care is required to ensure that due diligence is taken when filming particular groups of learners, e.g. looked after children.

For two thirds of the school-based staff, the lack of understanding of how to use the technology is reported to be a barrier to its use. For the student teachers, this is less

of an issue, as they had received focused input during seminars. One respondent explained:

We had a seminar at the start of last year that showed us how to use it. Afterwards, **I explored the guidance** myself, and bits that I found tricky I went back to the recorded seminar and looked at the guidance. (Student teacher)

Some school-based staff are supported by their student teacher to use the technology, although some felt that they needed to know more about the features that are available to support reflective practice.

Approximately two-thirds of student teachers and a third of school-based staff consider that filming could affect the response of the pupils within the recorded lesson, suggesting that individuals 'played up' when being filmed. One school-based respondent remarked that 'all my children think they're on stage as soon as the video goes on'. This is not conducive to effective learning.

Some school-based staff recognise that, for some student teachers, the priority for the lesson could become the filming rather than the teaching and learning. As one school-based member of staff explained, student teachers can 'become more concerned about the quality of the recording than the quality of the lesson'. To counter this suggestion, it was notable that one student teacher recognised that the filming impacted on the support available to learners, as:

It took a member of staff having to record for me, so it meant that then there was **one less member of staff** with the children.

(Student teacher)

Several school-based staff and student teachers report that there is a feeling that the video-recording of the learning experience missed something of the essence of quality that they felt had been achieved within the lesson. One student teacher reported being disappointed that the film 'looks bad' because it does not show the complete learning environment, as 'you're not seeing the whole'. This sentiment was also felt by one school-based staff interviewee, who felt that the ability of the film to capture the 'impact on learners' depends on 'how good the person doing the filming is and what they choose to home in on'.

When considering the sharing of and viewing of filmed practice, three times as many school-based staff expressed their concern than student teachers. This suggests that those beginning their careers are more comfortable with observation and feedback than their more experienced colleagues. One respondent noted that unless there is a 'guide to support the watching of it', observing a film could be of little or no benefit. Several respondents remarked on the initial 'fear of the unknown' when being filmed, feeling like 'big brother's watching me', and the discomfort of watching themselves teaching, which could be counterproductive from a reflective point of view. One school-based respondent also noted that student teachers found: 'it was a painful process to watch themselves... I'm not sure how much they took on board as they didn't want to watch themselves on camera'.

A lack of time was recognised by some student teachers as a barrier to fully engaging in the use of video technology to support teaching, citing that they only film one lesson per Practice Learning experience to share with their practice tutor, even though they thought it would help to film themselves more regularly.

Three student teachers and fourteen school-based staff remarked on the lack of engagement with research regarding the benefits of video technology to support teaching as a barrier to its use. It is hoped that the current study will play a small part in countering this argument.

5. Conclusions

During the global pandemic, the OU ITE Partnership originally introduced the use of video technology as a mitigation strategy for the impact of restrictions on schools, but its potential for wider use and enhanced effectiveness provided the rationale for further exploration. This mixed methods study sought to understand the possible benefits and drawbacks of using video technology to support student teachers' reflective practice. This study also aimed to identify examples of effective practice in using video technology used by participants, as well as to identify any barriers or challenges encountered, and will inform and shape ongoing programme development in support of enhancing students' success.

However, whilst the need for student teachers to develop effective critical reflection skills to improve practice as beginner teachers is well established in the field of Initial Teacher Education discourse, the use of new, digital technologies to support teacher education is an emerging and under-researched area. A review of contemporary literature synthesised theoretical understandings of the importance of critical reflection, an established element of student teacher learning, with studies which explored the use of video technology as a specific tool for reflection. There is limited research available about using video technology to support student teachers' reflection skills specifically. Furthermore, in the context of wide education reform which positions the ability to critically reflect at the heart of the Professional Standards of Teaching and Leadership for teachers in Wales, there is limited empirical research within Wales and the United Kingdom, with the literature review taking account of studies predominantly across the global north.

As a distance learning provider of ITE, the context of this study also makes an important contribution to the debate about how distance learning pedagogies can be adapted to develop new, innovative, creative distance ITE pedagogies. This offers an original contribution to the field of ITE discourse.

The review of literature supported the development of these research questions:

- 1) How do partner schools use video technology to support Initial Teacher Education?
- 2) What are the benefits of using video technology for student teachers, experienced practitioners, teacher educators and senior school staff?

3) What are the perceived barriers and challenges for student teachers, experienced practitioners, teacher educators and senior school staff in using video technology?

In this study, participants identified a number of ways in which the programme design supports student teachers' critical reflection which included professional conversations with school mentors and university tutors, alongside other tools such as written journals. However, more contemporary approaches to the use of tools such as the use of online forums and video technology were less common amongst participants.

The use of video technology was inconsistent, demonstrating a need for further support to embed the effective use of the tool to support student teacher reflection. Whilst participants, including student teachers and their mentors, identified many benefits to the use of video technology in enhancing critical reflection, practical drawbacks such as the time constraints of re-watching and discussing whole lessons, alongside technology issues, appeared to inhibit use despite the acknowledged benefits. Others recognised the benefits, but the personal anxiety or discomfort about the use of film recordings also hampers engagement with the tool. Such findings would seem to indicate that the use of video technology does offer a range of benefits in respect of its use as a pedagogical tool to support student teacher learning, and that the majority of challenges or drawbacks identified are not related to the use of the tool for effective student teacher learning, but are rather more practical or personal.

It is important for both student teachers and their mentors to access suitable training that will enable them to use video technology effectively. Also, to support the critical reflection process, suitable materials are needed to scaffold the process. Outputs generated as a result of this research study include a resource bank of short video recordings and mini case studies showcasing the effective use of video technology for student teachers and mentors. It is also proposed that future research could possibly explore the application of 360 video recording and the impact that this could have on supporting the critical reflective process in teacher education.

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Appendix A: Online survey

Investigating the use of video reflection on lessons

Introduction

By completing this survey you are contributing to The Open University Partnership PGCE team's understanding of the use of video technology to support reflection and professional learning.

Your participation is voluntary, and you can withdraw your consent at any time, by closing the survey. Confidentiality and anonymity are assured. If you have any questions about the research please contact the lead researcher Alison Glover: alison.glover@open.ac.uk or the alternative contact Grace Clifton: grace.clifton@open.ac.uk. This project has received a favourable opinion from The Open

Consent: Completing the survey confirms that you give consent for The Open University to use the data you provide:

University Human Research Ethics Committee (ref: HREC/4452).

- In a research report, findings may also be shared with the partnership, student forums and used in academic papers.
- Quotes from the data can be used in the research outputs, attributed to the relevant PGCE route (primary, secondary, part-time/salaried or partnership (mentor, practice tutor, school co-ordinator) or school role e.g. teacher, leadership team, headteacher.
- . * Required

C I am happy to continue and answer the survey

Data Protection: Your survey responses will be processed and stored in accordance with The Open University's <u>PGCE (Wales) Student Privacy Notice</u>. Raw data will be seen only by Open University staff. Aggregated anonymised data will be used for

research and may be published in reports, academic journals, or in other public contexts. You may withdraw your data by contacting at any time up until when the data is aggregated (1st March 2023).

Accessibility: If it is difficult for you to complete the survey online, please email: <u>Wales-PGCE@open.ac.uk</u> or telephone us on +44(0)2920 471170.

We look forward to receiving your responses and thank you in advance for taking the time to complete the survey.

PGCE Wales team

Background

What type of school	are you	currently on	placement in o	r work in?	* Required
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C Primary C Secondary C 3-16 C Special school C Other
If you selected Other, please specify:
My school is:
Please select your current role (select all that apply to you). * Required
☐ Part-time OU student teacher ☐ Salaried OU student teacher ☐ Mentor ☐ Practice Tutor ☐ School Co-ordinator ☐ Teacher ☐ School Leadership team ☐ Head teacher
☐ Other
If you selected Other, please specify:

Your school role

How many years have you been employed in teaching?				
How many years have you been supporting student teachers?				
Using video technology				
Have you ever recorded a lesson or part of a lesson?				
Please select all of the following that apply to you?				
☐ I have read my school's ICT policy/code of practice				
 □ I have sought ICT support in school □ Before recording a lesson I discussed targets 				
before recording a ressort raiseassea targets				
Have you completed IRIS Connect technology training? (Please select all that apply)				
∇ Yes, I attended one of the OU IRIS Connect training sessions				
Yes, I watched a recording of the OU IRIS Connect training session				
 ✓ Yes, I completed my own online training to learn about IRIS Connect ✓ Yes, I accessed online support to use IRIS Connect 				
☐ I had used IRIS Connect before studying the PGCE/ or before my involvement with the Open University				
∇ No, I haven't completed any training or looked at any support materials on IRIS Connect				

Knowledge and understanding

How would you describe the level of your knowledge and understanding of the use of video technology for:

Please don't select more than 1 answer(s) per row.

	Excellent	Good	Not sure	Limited	Very limited
Reflective practice	Г	Г	Г	Г	Г
Supporting professional learning	Г	Г	Г	Г	Г
Supporting student teachers	Г	Г	Г	Г	Г
To support research	Г	Г	Г	Г	Г

Please provide additional information to support any of your above answers.

Tools and functions

Which video technology tools and functions do you use to support your practice?

Please don't select more than 1 answer(s) per row.

	Frequently	Once per half term	Once every six months	Once a year	Never	Not applicable
Recording reflections for personal evaluation	Г	Г	Г	Г	Г	Г
Recording reflections to share with peers for feedback	Г	Г	Г	Г	Г	Г
Recording reflections to share with mentor/practice tutor for feedback	Г	Г	Г	Г	Г	Г
Use the 'in-ear' technology for live feedback	Г	г	Г	г	Г	Г
Use the 'time- stamped' annotation function	Г	Г	Г	Г	Г	Г
Use the 'forms' to focus on a specific line of enquiry	Γ	Г	Г	Г	Г	Г
Use the CPD resources available on the web-based platform	Г	Г	Г	Г	Г	Г

Please add more information about any of your responses above.					
To what extent do you	agree with th	e following st	atement?		
Please don't select more	than 1 answer	(s) per row.			
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I am confident using video technology to support my practice	Г	Г	Г	Г	Г
Benefits What do you think are the top three benefits of video recording a lesson or part of a lesson?					
 □ To identify the strengths of a lesson □ To identify areas that need improvement □ To use the recording as a basis for discussion with mentor □ To observe non-verbal behaviour □ To observe different teaching techniques such as instruction and feedback □ To observe time management of lesson activities □ To set and/or evaluate targets linked to QTS □ To share reflection with pupils to evaluate their learning □ To collect clips of effective practice to add to a library of CPD resources □ Other 					
If you selected Other, please specify:					

Challenges

What do you find are the main **challenges/barriers** to using video technology to support teaching practice? (Please select as many as apply and add any others you have come across)

 □ Lack of understanding how to use the video technology □ Lack of time to set up the video technology □ Lack of senior school staff support to use video technology □ Technical challenges (wifi/ necklace microphones/battery life of iPads) □ Lack of confidence to share videos and receive feedback □ Pupils' response to video equipment in the classroom □ Lack of research on the benefits of using video technology □ Other 			
If you selected Other, please specify:			
Reflective practice Which of the following methods do you use to reflect on your practice? (Please select all hat apply)			
 □ Personal reflective journal (kept private) □ Personal reflective journal (shared with mentor) □ Conversations with mentor □ Conversations with school colleagues □ Conversations with other student teachers □ Conversations with family/friends □ Discussions with Curriculum Tutor □ Modelling lessons/exemplars of practice (to support mentoring) □ Discussions during formal university teaching sessions □ Forum posts □ Practice Learning Activities □ Other 			

If you selected Other, please specify:
Of all the approaches you use to reflect on practice which one do you find to be the most effective? Please explain why.
How does the approach you find the most effective for reflective practice compare with using video technology to support reflection?
Please provide additional comment if you wish.
Improving practice
What aspects of your teaching do you want to improve the most? e.g. classroom management, differentiation, engaging all learners please explain your answer.
Is there anything else about using video technology that you would like to share with us?
Is your school part of the Open University Initial Teacher Education Partnership in Wales?

Interview or discussion opportunity

If you are interested in participating in a short interview or discussion group to explore the use of video technology further, please provide your contact details below.

Please note that all contact details will be removed from survey responses before they are analysed.

Name
Email address
Telephone number

Thank you

By clicking on the Finish button you are reconfirming your consent and your answers will be submitted. If you wish to withdraw please close this window.

Appendix B: Interview/discussion questions

Student teacher discussion group - Video technology study

Introduction: Researcher/s introduce themselves to the group, explain that the intention for the discussion is to gather student teachers' views on their experiences of using video technology and understand their views on the benefits and challenges of using this to support reflective teaching practice.

Reaffirm they have consented to participate and gave permission to record the discussion, remind the group that this will only be used for the purposes of this research and will be destroyed once the project is complete.

- How often do you use video technology?
 Prompt when was the last time, all the lesson, only a segment of the lesson?
- 2. How did you feel the first time you used the video technology?

 Prompt excited, reticent, it was an expectation,
- 3. What training have you received to use the video technology? Prompt is it sufficient, anything missing?
- 4. Do you think you act differently in lessons that you know are being recorded? Prompt – why/ how do you act differently?
- 5. Do you think recording lessons makes a difference to your practice?
 Prompt specific examples from practice of the differences/ improvements?
- 6. Are there different benefits depending on where you are in your teaching career to using video technology?
- 7. Are there any problems / challenges in recording lessons?

 Prompt can there be a negative impact on the class examples?
- 8. Do you have any other comments about the use of video technology to support reflection and teaching practice?
 - Prompt specific tasks more suited to being recorded than others, improvements to training/ potential for the technology.
- 9. Please can you tell me your school /location in Wales this is to see the extent of coverage across our partnership and Wales for this piece of work.
 - You will receive a £20 thank you voucher for your time sent to the email address we used to set up this discussion. Thank you for your time.

Partner school staff interviews and discussion groups – Video technology study

Introduction: Researcher/s introduction, explain that the intention for the interview/ discussion is to gather views on the use video technology and understand their views on the benefits and challenges of using this to support reflective teaching practice/ professional learning. Along with the experiences for their school.

Reaffirm they have consented to participate and gave permission to record the discussion, remind that this will only be used for the purposes of this research and will be destroyed once the project is complete.

Note to researcher: the following questions can be used to base the interviews and discussions with all school based staff on. There are a few questions more applicable to some than others:

Background

To begin with please can you tell me what your role in the school is and whether you are involved in teacher education? (OU role or with other ITE providers; extent of ITE experience)

[Senior school staff interviews—please describe and explain the role of video technology in your school?

Prompt – how long has the school been using it? Tasks used for – mentoring student teachers/ supporting NQTs. All other questions apart from no. 2 to be asked].

All other school staff and student teachers:

- How often do you /does the school use video technology?
 Prompt when was the last time, all the lesson, only a segment of the lesson?
 Is there a specific purpose (Professional learning)? Recording your own lessons? Viewing recordings for students / other staff you mentor/ support?
- 2. [Probably more applicable to student teachers] How did you feel the first time you used the video technology?

Prompt - excited, reticent, it was an expectation,

- 3. What training have you received to use the video technology? Prompt is it sufficient, anything missing?
- 4. Do you think you /teachers (and/or pupils) act differently in lessons that you/ they know are

Prompt – why/ how do you act differently?

being recorded?

- 5. Do you think recording lessons makes a difference to practice?

 Prompt specific examples from practice of the differences/ improvements/ impact?
- 6. Are there different benefits depending on where you are in your teaching career to using video technology?

Prompt – student teacher, NQT, more experienced practitioner? Is it more beneficial for a particular career stage?

7. Are there any problems / challenges in recording lessons?

Prompt – can there be a negative impact on the class - examples?

- 8. Do you have any other comments about the use of video technology to support reflection and teaching practice?
 - Prompt specific tasks more suited to being recorded than others, improvements to training/ potential for the technology/ role in professional learning?
- 9. Please can you tell us the name of your school or village/town located as we want to be able to see how effective we have been in collecting input from across the partnership and Wales. No school names will be used in reporting unless cases studies are created and specific permission will be obtained for this from you /and your Headteacher directly.

Thank you for your time. You will receive a £20 thank you voucher in the next few weeks.

Learner discussion group – Video technology study

Introduction: Researcher/s introduce themselves to the group, explain that the intention for the discussion is to gather views on their experiences of being in a classroom when video technology has been used and to understand their views on the benefits and challenges of using this in schools.

Reaffirm they have consented to participate and gave permission to record the discussion, remind the group that this will only be used for the purposes of this research and will be destroyed once the project is complete. Remind the learners that they should not use specific teacher's names when discussing their experiences.

Note to researcher: This discussion can be led by the learners – if there is an aspect of the use of video technology they which to explore more – follow their lead.

- 1. How often have you been in lessons when the teacher has used video technology?

 Prompt when was the last time, all the lesson, only a segment of the lesson, do some teachers use it a lot? Type of teacher using it more (newer/more experienced?)
- 2. Do you think that teachers teach /act in a different way when their lessons are being recorded?
- 3. Why do you think some teacher record their lessons?
- 4. Do you behave differently in lessons that you know are being recorded? Prompt – why/ how do you behave differently?
- 5. Do you think recording lessons makes a difference to your learning?
- 6. What do you think could be the benefit for a student teacher; new teacher; experienced teacher to record their lessons/ or parts of lessons?
- 7. Are there any problems / challenges in recording lessons can there be a negative impact on the class?
- 8. Do you have any other comments about the use of video technology and teachers recording their lessons?

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Appendix C: Survey respondents

	Total	English-medium	Welsh-medium	Dual stream
Primary	63	38	7	18
Secondary	26	24	2	
3-16 sch	1	1		
Special school	1	1		
	91	64	9	18

[Each respondent selected one or more roles they held in school, which is why figures in some of the tables total more than 91 as each response is recorded alongside the role identified as well. And for some questions respondents could select as many answers as applied to them.]

Role		Primary	Secondary	3-16 sch	Special school	English medium	Welsh medium	Dual stream
Part-time OU								
student								
teacher	16	15	1			12	3	1
Salaried OU								
student								
teacher	16	15	1			14	1	1
Mentor	13	6	6		1	12	1	
Practice Tutor	4	1	2	1		4	0	
School Co-								
ordinator	7	4	1	1	1	7	0	
Teacher	40	23	16	1		25	1	14
School								
Leadership								
team	20	10	8	1	1	16	1	3
Head teacher	4	3	1			2	2	
HLTA	2	2	0			2	0	
Exams officer	1		1			1	0	
Total number								
of roles								
mentioned	123	79	37	4	3	95	9	19

Using video in Initial Teacher Education

Investigating the use of video technology for reflection on lessons

Final PRAXIS funded project report 2022/23 01 AG

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The Open University ITE Partnership PGCE June 2023

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