MIRANDANET   University of
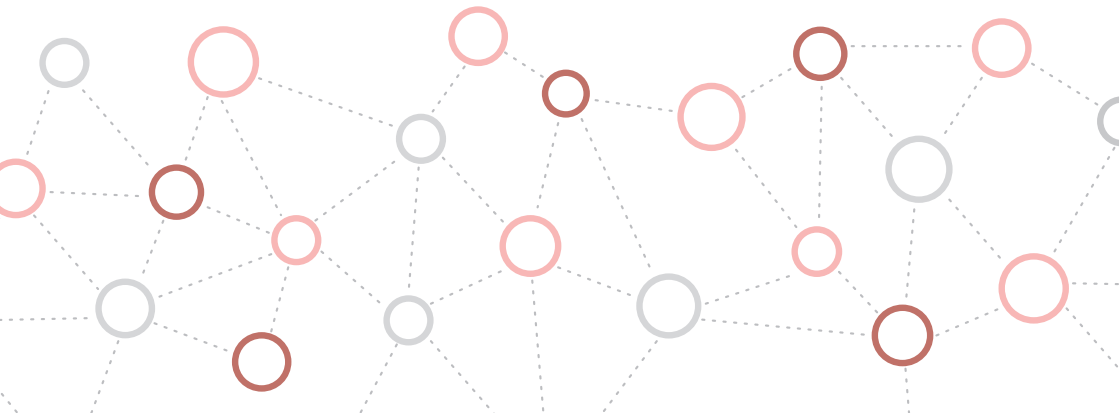   Bedfordshire

Phase One

Innovation in Teaching and Learning

Using web enabled video technology to build professional
capital through reflective practice, coaching and collaboration.

MirandaNet Fellowship research project
led by Professor Christina Preston

Innovation in Teaching and Learning

Using web enabled video technology to build professional capital through reflective practice, coaching and collaboration.

Research Phase One

Summary

This summary reports on the first phase of an extended research project investigating the practice of teachers who use a web-based video system developed by IRIS Connect. The system enables self-review, peer review, sharing, coaching and the building and sustaining of communities of practice.

Most importantly, uniquely to the IRIS Connect system, the teacher controls all aspects of the use of the video: what practices are filmed; who views it; how it is shared; how it is used to improve professional performance.

IRIS Connect decided to commission research into the impact on active users and, in particular, whether the key features are actually being successfully enabled. The research will also inform teacher-led refinements of the system. IRIS Connect have drawn on a large pool of users to elicit teachers' views on the system. By September 2013, the IRIS Connect product was being used by over 600 schools, universities and colleges in England. A growing presence is also being established in many other countries. The rapid growth of the IRIS Connect system during a period of economic constraint shows how much the product is valued by educators.

Research Background

The development of IRIS Connect's web-based video system is based on the existing literature about significant concerns around the impact of traditional teacher professional development on teacher practice. The fundamental flaw in plans to use traditional CPD to develop the workforce has been amply described in Joyce and Showers (2002). Failure was explicitly demonstrated in the snapshot of training provision for the TDA by Cordingley et al (2011) suggesting that less than 1% of training led to transforming existing practice. This failure to transform practice was captured by Michael Fullan (1991) when he noted, "*Nothing has promised so much and has been so frustratingly wasteful as thousands of workshops and conferences that led to no significant change*".

The starting point for IRIS Connect's development was the belief that an effective education system relies upon a highly trained workforce, "*The quality of an education system cannot exceed the quality of its teachers*" (McKinsey and Company 2007)'.

1.

From the seminal research of Sanders and Rivers (1996) onwards there has been a general consensus on the significant impact of the individual teacher.   As Professor Dylan Williams said, "*If we are serious improving the outcomes for pupils what we have to do is invest in the professional development of teachers*" (Reality Check 2010).

Many of the ideas underpinning the development of IRIS Connect are made explicit by Michael Fullan and Andy Hargreaves (2012).   Effective teaching in their view is not an individual activity but relies on developing communities of practice where implicit knowledge becomes explicit and experience is shared.

IRIS Connect studied the range of literature in order to ensure that their web-based video system reflected the following key features of adult learning:
· Experience based and contextualised learning
· Self reflection and peer review
· Coaching and mentoring
· Building communities of practice and consequent social capital
· Research and Action Research

The importance of these features have been identified in a wide range of research and literature, including: Bandura, (1977), Borko and Putnam (1998), Biggs (2006), Leanna (2011), City, Elmore, Farman, Teitel (2009), Joyce and Showers (2002).

The Research Team

The research commission was won by the MirandaNet Fellowship. The Fellowship is a professional organisation, founded in 1992, with a reputation for engaging teachers in projects as co-researchers both in international government and company-funded projects.

The MirandaNet approach of involving the users as co-researchers also underpins the IRIS Connect philosophy that teachers should have ownership of their continuous professional development (CPD). University of Bedfordshire researchers in the team are focusing on the ethics of teacher ownership as well as modes of publication for classroom research.

Methodology

This first questionnaire was designed to explore the impact on practice amongst teachers who are actively using the system for their professional development. Questions focused on whether the web-based video system is:
· developing a stronger sense of professional efficacy;
· building teachers' confidence and self esteem;
· impacting upon collaborative learning and building professional capital;
· creating an observable impact on pupil outcomes.

Approximately thirty schools were contacted resulting in ninety-nine responses from individual teachers. The majority of the responses were electronic and automatically collated; in a few cases hard copies of the questionnaire were collected manually and uploaded onto the database.

Findings

Q6. Before using IRIS Connect, did you ever see yourself teaching?
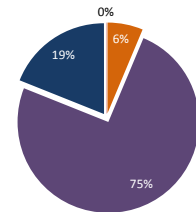Total responses: 93

	Number
Yes	31
No	62
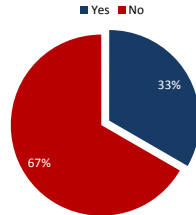
Impact on Teaching Skills

Q9. Has IRIS Connect had an impact on your teaching?
Total responses: 95

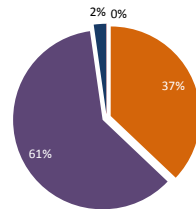|	Number
Negative Impact	0
No impact	6
Positive impact	71
Very positive impact	18

Q13. Do you consider that using IRIS Connect will have an impact on the observation grade you will receive at Ofsted?
Total responses: 89

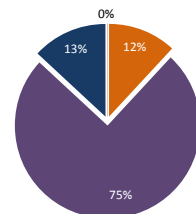|	Number
A worse grade	0
No change	33
Improved grade	54
More than one grade	2

Impact on Confidence

Q10. Has using IRIS Connect had an impact on your confidence as a teacher?
Total responses: 84

	Number
Fallen significantly	0
Fallen slightly	10
Risen	63
Risen significantly	11

Q11.Has your willingness to take risks in your teaching changed as a consequence of using IRIS Connect?
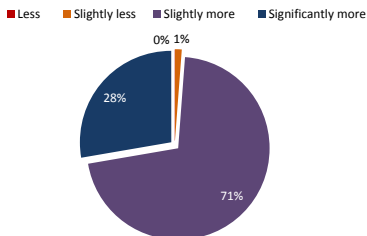
Total responses: 81

	Number
I take fewer risks	0
I am more cautious about risk	3
I am more confident to try new things	55
I am willing to be very experimental	23
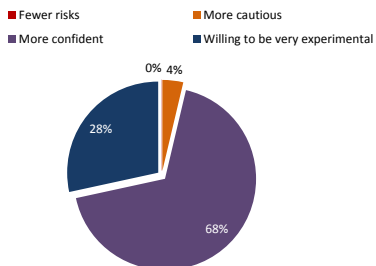
Q17. Do you think that those teachers using IRIS Connect are taking more responsibility for their own CPD?

Total responses: 83

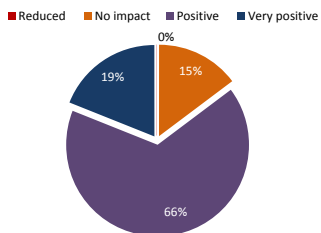|	Number
They are taking far less responsibility	0
They are taking slightly less responsibility	1
They are taking slightly more responsibility	59
They are taking significantly more responsibility	23

Impact on Collaboration

Q12. Do you consider that IRIS Connect has had a positive or negative impact on collaborative practice in your school?

Total responses: 95

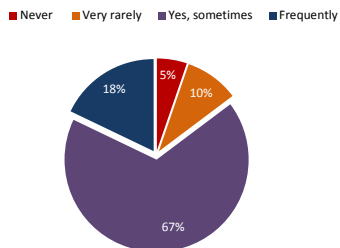|	Number
Reduced collaboration	0
No impact on collaboration	14
Had a positive impact on collaboration	63
Had a very positive impact on collaboration	18

Q14. Have you shared your lessons, or had lessons shared with you, using IRIS Connect?

Total responses: 95

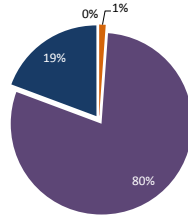|	Number
Never	5
Very rarely	9
Yes, sometimes	64
Frequently	17

Q16. Do you think, as a consequence of using IRIS Connect, there has been an increase in teachers talking to teachers about teaching?
Total responses: 88

	Number
There are far fewer conversations	0
There are slightly fewer conversations	1
There are more conversations	70
There are significantly more conversations	17

Far fewer ■ Slightly fewer ■ More ■ Significantly more

0% 1%
19%
80%

Q18. Do you think that IRIS Connect has had an impact on the level of collaboration between colleagues in the school?
Total responses: 93

	Number
There is less collaboration	1
There has been no change in collaboration	15
Collaboration is growing between staff using IRIS Connect	63
There is significantly more collaboration	14

■ Less ■ No change ■ Growing ■ Significantly more

1%
15% 16%
68%
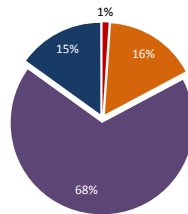
Impact on Pupils

Q8. Do you feel that the use of IRIS Connect has had a direct impact on pupil outcomes
Total responses: 89

	Number
Pupil outcomes have fallen	1
There has been little or no improvement	41
There has been an improvement	47

■ Outcomes have fallen ■ Little or no improvement
■ There has been an improvement

1%
53% 46%
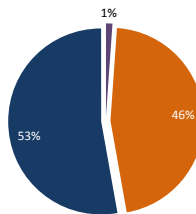
Q12. In your experience, what has been the impact on pupil behaviours of using IRIS Connect in the classroom
Total responses: 94

	Number
Significant outcomes in pupil behaviour	1
Slight deterioration in pupil behaviour	6
No negative impact on pupil behaviour	74
Behaviour has improved	13

■ Significant deterioration ■ Slight deterioration
■ No negative impact ■ Behaviour has improved

1%
14% 6%
79%
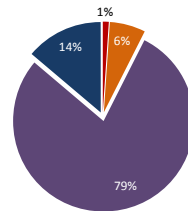
User Experience

Q7. Overall, what is your experience of using IRIS Connect?
Total responses: 97
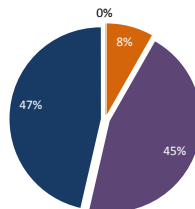
■ Poor ■ Could have been better ■ Good ■ Very Good

	Number
Poor	0
Could have been better	8
Good	44
Very good	45

0%
8%
47%
45%

Q1. Position in the school
Total responses: 98

Head	2
Deputy Head	10
SLT	34
Teacher	37
NQT	5

Q2. What age phase do you teach?
Total responses: 88

Primary	27
Secondary	61

Q3. How long has the school had IRIS Connect?
Total responses: 95

2 terms or less	3 - 5 terms	6 - 8 terms	9+ terms
20	32	27	16

Q5. Please circle all the ways in which you have used IRIS Connect
Total responses: 95

Self review and reflection	89
Peer review and coaching	65
Sharing best practice with colleagues in the school	55
Coaching others	43
Being coached	35
Being 'in-ear' coached	21
Collaborating with colleagues in other schools	19
Providing 'in-ear' coaching	16
Using with students to review their own learning and behaviour	15
As part of student voice to provide feedback to teachers	4

Discussion

Given that effective teaching is from some perspectives a performance skill it is surprising that two thirds of the sample had never seen themselves teaching before: 92% found the experience valuable.

The range of practitioners who replied were senior managers, senior leaders, classroom practitioners and NQTs.   Using the system over a period of time, they had become familiar enough with the technology to be creative in the ways that they had used the system with practically all the respondents finding value in self-review and reflection. Also, the IRIS Connect system was widely used for: peer review and coaching; sharing best practice with colleagues in the school; coaching others. Being coached and being 'in ear' coached were popular features as well as providing 'in ear' coaching in schools where this was relevant. Fifteen teachers reported on providing feedback to pupils. Four courageous teachers had even used the system so that pupils could give them feed-back on their teaching skills.

The benefits of the system became clear because in terms of impact on teaching skills, **94% of the teachers thought that using IRIS Connect to reflect on their practice had 'positive' or 'very positive' impact: 63% that their Ofsted grade would improve in the future by one or more**.

Secondly, teachers' self confidence and sense of empowerment improved as they used the web-based video system. In particular, **88% felt their confidence as a teacher had risen**, and **96% felt they would be more likely to try new practices or be experimental in their approach to teaching**. Even more conclusively, **99% felt they were taking more responsibility for their own professional development.**

Thirdly, the sense of collaborative learning and the building of professional networks grew. In detail, **83% considered there had been a positive impact on collaboration between colleagues; 85% of the respondents felt there had been a positive impact on collaborative practice within the school itself; 19% had started to use the system to share with colleagues in other schools and, conclusively, 99% felt there were more conversations between teachers about teaching**.

Lastly, the teachers were asked if they perceived an improvement in pupil performance and behaviour as a direct result of their own improved practice. This was a difficult question to answer at this early stage in adoption but, even so, **53% of teachers considered that improvements in pupil outcomes were already evident.**

Conclusions

This small study on web-based video illustrates how this kind of system can have an impact on the effectiveness of professional development programmes. Impressive results were observed by teachers themselves in the following key areas: a sense efficacy; confidence; professional collaboration; sharing; developing professional capital through communities of practice.   Most

importantly, the teachers were expressing, almost unanimously, pride in taking ownership of their own learning agenda.

In addition, important evidence appears, even in these early stages, showing that half of these professionals already perceive that the improvements in their own professional practice are having some impact on their pupils' performance and behaviour. **These results provide valuable evidence for school to consider if they want to improve the quality of teaching, raise standards and utilise pupil premium effectively.**
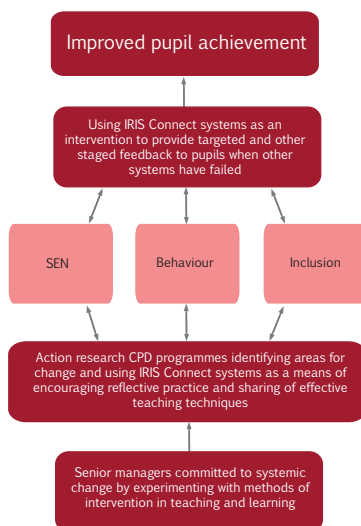
Overall, there are high levels of agreement amongst the ninety-nine teachers who have used this web-based video over a month for improving their own practice and performance. This level of agreement suggests that **this innovative video tool should be considered for use in school based professional development programmes whereever possible and appropriate.** Further research will analyse the questionnaire data in more depth and triangulate these perceptions with other measures.

Further Research

The aim of this second stage will be to look more deeply into the potential of the IRIS Connect intervention to improve pupil achievement. It will investigate in depth the practices in schools where improvements are already measureable in the areas of SEN, Inclusion and overall behaviour.

The data provided from these case studies will be analysed in more depth in order to which issues the schools using the video system think are important. These issues might include: information about the contexts in which the web-based video works best; management practices that make the use of video more efficient; the role of leadership in the success of innovation; methods of adapting professional development to give teachers more ownership; the impact on building communities of practice; methods of creating a reflective approach to teaching and learning; principles and practice of coaching using web-based video; and how video can be actively used by pupils themselves to enhance their own learning.

In particular, the next stage will be focusing on advice for senior managers about techniques that can result in a rise in the achievement of pupils who have not responded to other forms of intervention. Early investigations in this second stage into the impact on a small group of children of IRIS Connect interventions, led by teachers, suggests there is potential for significant change in the lives of those who are currently finding progress in learning difficult and slow.

Improved pupil achievement

Using IRIS Connect systems as an intervention to provide targeted and other staged feedback to pupils when other systems have failed

SEN   Behaviour   Inclusion

Action research CPD programmes identifying areas for change and using IRIS Connect systems as a means of encouraging reflective practice and sharing of effective teaching techniques

Senior managers committed to systemic change by experimenting with methods of intervention in teaching and learning

The model to be developed and tested in the second stage of the action research.

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Dr Christina Preston

If you would like to know more about these interim research findings or you would like to be involved in the second stage please contact Dr Christina Preston, Professor of Educational Innovation, MirandaNet Fellowship and University of Bedfordshire, who is leading the team.

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IRIS Connect

If you would like to find out more about IRIS Connect please visit www.irisconnect.co.uk.

Alternatively, contact Graham Newell, Director of Education on 08453 038 578 or email graham@irisconnect.co.uk.