

**Tech**know**ledge**

FOR SCHOOLS

# TRANSFORMING LEARNING

## A Pilot Study



Dr Barbie Clarke, Siv Svanaes, Heidi Hasbrouck

FAMILY KIDS & YOUTH – MAY 2015

## Contents

Management Summary	2
1. Background:	3
2. Models of Learning Observed:	3
3. Research Objectives:	4
4. The Top Line Findings	4
5. How is Mobile Technology Used?	6
6. Self-paced learning	8
7. Teaching Styles	9
8. What is needed?	11
9. Further questions	13
10. Methodological Approach for next phase	14
Appendix 1: Methodology	16
Appendix 2: Family Kids & Youth	17

## Management Summary

This small pilot study was designed to gain insight into how one-to-one devices are being used to transform teaching and learning. Through the preliminary findings from two school visits that included face-to-face interviews with teachers and students and classroom observations, the insights from this study will be used to inform the next phase of research for the Transforming Learning Project. This report explores the way in which mobile technology<sup>1</sup> is used in the classroom, how its use relates to teaching style, how it can be used to support self-led learning, issues of classroom management and distraction, and what support is needed for teachers to utilise the technology in the classroom. Based on these findings, the next phase of research will focus on the varying experience of teachers through conducting in-depth ethnographies of 9 teachers in 3 schools. This pilot study finds:

- Mobile technology can be utilised at four identified stages of learning: input (disseminating information to students); the learning process (research, producing work); output (submitting work, peer learning and assessment); organisation (diary, time management, and record of learning). Teachers who engage with more traditional approaches to teaching tend to utilise the Tablet in one or two of these stages, while teachers who use 'flipped' and 'challenge based' models attempt to utilise the Tablets throughout all stages of learning.
- There are significant differences observed between the 'regular' lessons and the 'flipped/challenge based' lessons in regards to classroom management. For example, while 'regular' classes have an emphasis on silent work, the 'flipped' and 'challenge based' lessons feature interactive group work and students are free to move around the classroom.
- Independent learning and collaboration are practical life skills emphasised by both schools observed. The research finds that 'flipped' and 'challenge based' lessons tend to emphasise and develop these core skills more than the 'regular' lessons observed as part of this study. Students in 'flipped' and 'challenge based lessons' are expected to lead their own learning through independent research on Tablets and to work in groups.
- Both students and teachers believe continued training and support on how to use a mobile device for educational purposes is necessary in order to use the device effectively. Teachers feel formal and informal CPD is important in building their confidence to allow them to experiment in the way they can transform their teaching and utilise the technology in the classroom.
- Teachers who are more hesitant about utilising mobile technology in the classroom tend to highlight technical problems as a challenge, including students not having their devices, breakages, and internet malfunctions. Teachers cite a lack of time to develop a new teaching style and ways to better integrate the devices in the classroom as an obstacle to using digital devices in lessons.

---

<sup>1</sup> Both schools that took part in this pilot study use one-to-one Tablets across the school.

# Transforming Learning: A Pilot Study

## 1. Background

To explore how Tablets and other one-to-one devices are being used in teaching, educational charity TechKnowledge for Schools (formerly known as Tablets for Schools) embarked on the Transforming Learning Project in the Autumn, 2014. The purpose of the research is to explore ways in which teaching and learning with one-to-one devices is changing the way teachers teach and pupils learn. This report outlines the findings from the TechKnowledge Transforming Learning Pilot Study.

Two schools were included in the Pilot Study: Longfield Academy, Kent and Hove Park School, Brighton. One-to-one Tablets were introduced at Longfield Academy in September 2011 and at Hove Park School in April 2013. Both schools are early adopters of one-to-one Tablets and have a long-standing partnership with TechKnowledge for Schools. The schools have agreed to work in partnership to examine how new teaching models, supported by students' use of 1-2-1 Tablets, can impact learning.

The main objective for this stage of the research was to assess whether the use of digital devices can have a long-term impact on teaching and learning. Researchers from FK&Y visited both schools and carried out a total of nine lesson observations, four group interviews with students and six in-depth interviews with teachers in order to gain an overall view of the teaching and learning taking place in schools with established use of one-to-one devices.

## 2. Models of Learning Observed

For this initial stage of the research two models of learning, 'flipped' and 'challenge based', were adopted by both schools and offered to teachers through the schools' teacher training programmes, alongside other topics. Teachers who chose 'flipped' or 'challenge based' teaching worked together in small CPD groups throughout the year. These models of learning are grounded in utilising mobile technology to engage core skills including independence and collaboration. For our initial research we observed examples of both types of teaching, as well as more traditionally structured lessons.

### *Flipped Learning:*

Flipped Learning in which students learn new content online by watching video lectures, reviewing presentations or conducting research, usually at home, and what used to be homework is now done in class with the teacher offering more personalised guidance and interaction with students instead of lecturing.

### *Challenge Based Learning:*

Challenge Based Learning is collaborative and hands-on, asking students to work with peers, teachers, and experts in their communities and around the world to ask good questions, develop deeper subject area knowledge, accept and solve challenges, take action, and share their experience.

## **3. Research Objectives**

The overall objective of the Transforming Learning research project is to find out if and how 'flipped' and 'challenge based' teaching can transform learning. In particular it will explore:

- How is one-to-one mobile technology used in the delivery of flipped and challenge based lessons?
- In what way does flipped and challenge based models of learning impact learning?
- In what ways can flipped and challenge based models of learning impact the development of core skills, such as independence and collaboration?
- What do students think of flipped and challenge based lessons? Do they recognise them as different from 'normal' lessons, and if so how?
- Do these forms of learning suit some students more than others?
- How comfortable are different teachers with working with these forms of teaching? Does it suit some teachers more than others?
- What support do teachers need and what challenges do they experience?
- How do flipped and challenge based learning lessons compare to more traditionally structured lessons (i.e. lecture-based with quiet worksheet-based classwork)?

## **4. The Top Line Findings**

These initial findings from this Pilot stage are based on the interviews with teachers and students and observations of different teaching models over one day at Hove Park and Longfield Academy, respectively.

- There were significant differences observed between the 'regular' lesson and the 'flipped/challenge based' lessons in terms of the level of control held by the teacher and the way in which students were allowed to use the Tablets. For example, in a 'traditional' lesson students were guided closely in their task of reproducing an image that they viewed from their Tablets. There was an emphasis on quietness and listening to the teacher compared to 'flipped' and 'challenge based' classes in which

students appeared to be given a greater degree of autonomy, creating video tutorials and independently researching a subject.

- 'Flipped' and 'challenge based' lessons in both schools focused on the development of independent learning and collaboration skills. This was facilitated by the use of a personal learning device. Students were expected to lead their own learning, and this in turn appeared to prompt an openness on the part of teachers to support and encourage creative ways of learning which sometimes involved considerable discussion and noise. For example in a flipped maths class the teacher allowed some of the students to listen to music on their headphones while they were doing their work. Students were able to watch a pre-prepared video tutorial (created by their teacher) as many times as necessary and indeed some were sent back to their desk if they had a question and had only watched it once. The teacher felt this was possible because they had more one-on-one time with each student to identify their varying needs. Subsequently, the teacher could provide more support to some students and allow other students to work things out amongst themselves before seeking assistance.
- Collaboration with others was encouraged and accepted as a way of discovering and solving problems (i.e. asking peers for support or feedback). For example, in a challenge based Spanish class students could choose to work in pairs or individually and often sought the opinions and support of others at their table instead of asking for their teacher's help.

*They were able to say 'I've learned that I need to listen to other people's ideas and we learned that we need to decide who's going to be in charge, and we need to get going quicker. So even if they didn't enjoy it and maybe they don't want to do it all the time, they did seem to learn about working together and working independently to get on with things.*

**'Challenge Based' Science Teacher**

- Teachers described high levels of student engagement in their 'flipped' and 'challenge' based lessons compared with traditional lessons, but there is a learning process and it was felt that students need to be 'eased into' this form of learning.

*When you first start they come with every little problem... gradually you see them become more and more independent.*

**'Flipped' Maths Teacher**

*In maths we do a thing called flipped learning where [the teacher] would write a list of things that you can do on the board. And then she'll give you a couple of websites you can go on and do some revision and it's, like, basically better than reading out of a book.*

**Boy Year 9**

## 5. How is Mobile Technology Used?

*One thing that I like about the [Tablet] is that you have everything at your fingertips; you can do research on it; you can do everything on this little pad!*

**Girl Year 9**

One-to-one devices were observed being used at different stages of the learning process at both schools. Teachers who experimented with 'flipped' and 'challenge based' lessons were found to use the Tablets throughout the different stages of the learning process. In more traditional lessons the Tablets were used for individual parts of the process and only when the teacher asked students to use it.

- **Input:** In some classes mobile technology was used to produce and disseminate learning materials for students, either in preparation for class or to be followed during class (with the opportunity to be reviewed at a later date). This included:
  - Teacher-made resources (e.g. PDF's, presentations, video tutorials): In the most basic form a teacher would ask students to follow a presentation (slide show) that was available on their Tablets as well as being presented on the classroom screen. Teachers also sought to save on printing by asking students to look at hand-outs on their Tablets instead of printing them. Some teachers took the presentations a step further by including embedded videos, or quizzes that students could interact with on their Tablets and see the overall class results (something the students enjoyed). One 'flipped' teacher recorded her voice over the slides, creating a video tutorial students could review at their own pace and in their own time.
  - Additional resources sourced by the teacher (e.g. links, videos, apps and websites): These resources were used in preparation for a lesson or set as extra work after the lesson.
- **Learning Process:** Mobile devices were sometimes used as part of the learning process during class or for class assignments. This could take the form of independent research or producing work on the device (versus a worksheet or a computer). This included:
  - Research: Access to information through web searches with the capability of information displayed in different formats (i.e. videos, images, news articles, journals, educational supplements). There was a greater emphasis on student-led research in 'flipped' and 'challenge based' lessons. Students were given a task to discover or research a topic or specific question which was then fed back to the class. Students interviewed in both schools emphasised their ability to discover more information immediately about a topic being

taught in class as a positive element of having a one-to-one device in class. Furthermore, they expressed frustration at sometimes being unable to look up topics in more traditional classes because the teacher had a 'Tablets closed' rule.

*It's unlimited in what you can look for. In a book you are limited. It makes you more independent because you can look things up for yourself. You don't need to waste the teacher's time – with a class of 30 you can look stuff up on your own when the teacher is busy.*

**Boy Year 9**

- Evidence of work (e.g. taking pictures, videoing, notes, presentations): Students were adept at creating content from their Tablets, including slide presentations with embedded content (links, videos, images, etc.) and recording and editing their own films (often in the form of a video tutorial). It was noted that more traditional classes often used written workbooks as evidence of work while treating the mobile device as a textbook supplement.
- Individual access to learning material allowed for paced learning (e.g. shared content, forums, saved resources): Both students and teachers appreciated that students were able to follow lessons at their own pace by being able to go back to previous slides or content saved on their Tablet, or move ahead if they were a faster learner. The act of sharing among themselves allowed students to gain access to a wide range of information.

*It's independent and it's also nice to be with your friend. It's quite nice if maybe one person is Googling it and the other person makes the Keynote. It's nice to share with other people what you've learned and in that way you get more information."*

**Boy Year 9**

- **Output:** Mobile devices were sometimes used as part of the submission process. Students could share their work with teachers and peers for immediate feedback.
  - Homework and assignments handed-in virtually through email, VLEs or tailored apps (e.g. Showbie): Teachers utilised different apps for managing student work which students could access to review their teacher's feedback and check their progress. Some teachers continued to give students an option of handing homework in virtually or in paper form, allowing for different types of learners. A 'flipped learning' teacher gave a poignant example of a student who was very strong at maths but struggled to write because of dyslexia. The Tablet allowed the student to record videos explaining the way in which he solved equations, in place of written answers. It was through viewing these videos that the teacher discovered how well he excelled in maths.

- Peer learning and assessment: Students could share their work in one space and utilise each other's work as revision documents. For example in a 'flipped' English class students researched different uses of punctuation, created learning tools for their classmates that they presented to each other in small groups and then ended the class by uploading the learning tool (presentations, quizzes, videos) to one virtual space to be used for revision.
- Record of learning for students to be able to see their progress in a particular class on a centralised, portable device: While some teachers utilised the Tablet to keep a record of individual student's learning and progress, others did not.
- **Organisational Tool:** Mobile technology could be used for the overall management of a student's busy schedule and learning.
  - VLE's or apps such as Showbie or Edmodo used to manage workload and be monitored by both teachers and parents: This was believed to allow for more open communication between parents and teachers. While teachers recognised the potential for this communication and recognised that some parents might be more active in their child's learning activity and progress, the research has not currently followed the use of the one-to-one device at home as well as at school.
  - Time management device (alarm, note reminders, class timetables): A few students saw this as the most important use of the Tablet in their day, particularly as they made the transition into a new school with new structures (particularly Year 7).

## 6. Self-paced learning

At both schools one-to-one devices were viewed as central to self-paced learning and the students interviewed believed this to be a positive aspect of using mobile technology in learning. However teachers at both schools pointed out that some students struggled with this more independent form of learning and emphasised that such students needed close support at first.

Flipped and challenge-based teachers believed that through utilising the mobile device as a guide, a research tool and an organisational tool, they no longer had to teach 'to the middle' but were able to facilitate learning for all abilities. This was felt particularly to benefit high achievers, struggling students and students with learning difficulties.

*It frees a bit more teaching time so you can spend more time with them.*

**'Flipped' Maths Teacher**

*I like it because if the teacher is explaining something and you already know it you can just go ahead and do the work, rather than waiting.*

**Girl Year 8**

*If the teacher carries on too quickly you can keep on looking at it.*

**Girl Year 8**

Self-paced learning was also felt to benefit 'middle learners', particularly boys who were seen to be less engaged in their learning, although teachers found that it took more time to ease these students into the learning process.

*It doesn't particularly suit students who like to sit and be quite passive, so it's challenging them. That's the positive side of it.'*

**'Flipped' English teacher**

*It suits diligent young women and challenges very active boys. It suits the girls and it pushes the boys.*

**'Flipped' English teacher**

The process of enabling students to have access to a wider variety of information and content through a mobile device is key for 'challenge based' learning. The process is set up to present a research question that students then need to research and answer independently or in small groups.

*When the teacher says it, she only says a couple of things but when you look on an iPad it's got loads of different ideas and things.*

**Boy Year 9**

*I guess it sort of teaches you to pick out things for yourself so instead of the teacher going 'this is what happens, this is what happens.' If you have to find it yourself it sort of teaches you skills to do that."*

**Boy Year 9**

This process of independent learning also occurs within the more traditionally taught classes in one-to-one schools in that the mobile device enables students to look up further information outside of class to learn more.

## **7. Teaching Styles**

The observations and interviews in this pilot study revealed two important factors that may help to determine how the mobile technology is used in learning.

- **Teaching style:** Some teachers were recognised as having a 'big personality', which inevitably affected their teaching style. There was a nuanced difference however between 'personality' and teaching style. While the 'personality' might continue outside the classroom, both students and teachers recognised that some teachers

had a specific format or style to which they taught. For example in a 'traditional' class that was observed in the research, a teacher maintained a warm, approachable personality but kept the class structured in rows with a traditional lecturing format.

- The teachers who were using 'challenge based' and 'flipped learning' models appeared overall to be less exacting in the classroom and to actively encourage creative learning. Conversely, teachers using more traditional teaching methods emphasised their appreciation of the role of the teacher as an authority figure, and the need for traditional writing and reading for coursework. One teacher for example was concerned that using a Tablet too much in class might detract from developing important skills such as handwriting.
- Interestingly, students recognised these different teaching styles and personalities, and could appreciate that some teaching models, including traditional models, appealed to students' different learning needs. When asked to compare their experiences of teaching in the school the students explained that different teachers had different styles of teaching, including how strict they were or how much autonomy they offered, but most did not have a preference for one style over others. Students recognised that different teaching styles could support different needs and different subjects.
- **The role of the device in the teaching style:** Teachers with a more traditional approach to classroom management tended to offer limited use of mobile technology whereas teachers with a more relaxed approach gave the students more autonomy in how they used the device. For example the traditional classroom would use the Tablet to read a PDF or follow a slideshow on the whiteboard with teachers designating times the Tablets could be used. The less traditional classrooms tended to use the Tablets for a range of activities including research, creating content (presentations, films), reviewing resources provided by the teacher, and uploading work.
- Allowing students autonomy in the way in which they use their devices calls for a trusting relationship to develop between student and teacher; a belief that students would be able to manage their own learning and would be engaged in the task at hand. This appeared to be easier in the 'flipped' and 'challenge based' teaching models because teachers were able to interact with each student on an individual basis in the class rather than needing to be teaching to the whole class. The observation sessions found that if a student had become distracted or was not fully engaged in the task at hand, the teacher was able to refocus them by giving them individual guidance and, if necessary, additional tasks.
- While distraction inevitably happened in both environments observed, the ability of teachers using the 'flipped' and 'challenge based' models to re-direct and re-engage students was evident. The teachers using these alternative models of teaching appeared to be able to use the Tablet as a tool to re-engage students, partly because

these models allowed them to act as individual facilitators rather than strictly controlling the use of the device and emphasising the ability to take them away if they were misused (although this was the ultimate sanction in all classes observed).

*What I like about that setup is that I get to target particular students who I know are weak in that area (...) I get different relationships with students in those types of lessons, rather than being, I suppose, a traditional teacher.*

**'Flipped' English teacher**

- **Confidence:** This is a theme that emerged in the pilot study. This includes teachers' self-confidence in their ability to change the dynamic of their classroom management and also their confidence in the support they would receive from the school and wider community. It is evident from this pilot study that there needs to be a belief in the school that students are able to self-regulate their behaviour and their learning and not become distracted by either the device itself or the opportunity to work with their peers.
- Equally, teachers need to have the confidence that colleagues and teacher leaders will support a more animated environment which might include noise, movement and group work, or alternatively mean allowing students to work independently with headphones. The teachers interviewed recognised these needs in order to enable them to engage with the alternative models of teaching. However, teachers also admitted to sometimes questioning their ability to manage the classroom but trusted that senior management would understand and support their teaching methods.

*Sometimes you'll feel like, you'll have a member of the senior management team walk in, and students are standing on tables and running around and perhaps talking and being really buzzy about something, and you'll look at them and you'll just know that they won't see that as a positive environment.*

**'Flipped' English teacher**

*We've had a lot of curriculum changes, as has everyone, and I think when there's a lot of change going on you kind of revert back to what you know, like the safety of 'here's a lesson and I am going to teach it' (...) As I am starting to understand more what it is that we need to achieve in the new curriculum set-up I am getting a little bit more confident and putting students back in that position.*

**'Flipped' English teacher**

## 8. What is needed?

- **Flipped and challenge based lessons are seen to re-distribute the teacher's workload.** Teachers spend more time preparing lessons, but the lessons themselves are described as much less labour intensive. The teacher is free to walk around the classroom and to offer support where needed. For example by assigning group and independent exercises that were supported by teacher-generated video tutorials,

one teacher was able to complete marking and assessment during the lesson. In addition this teacher was able to provide one-to-one support and feedback to students as they completed their tasks. The teacher felt the immediacy of the marking and verbal feedback provided them with a greater understanding of each student's progress.

- **It was however acknowledged that the initial set up** and preparation of materials that these models require can be daunting for others, and some teachers believed it would require more work on their part.

*Personally for me I find that very time consuming and I haven't found the time to do it yet. Whether or not I will find the time, I don't know! But I do find that it is time consuming... the prep work for the teacher.*

**Humanities Teacher**

*If it was to really work and really every lesson was to be like that and that high level of engagement than you would have to have more time to facilitate it and that's probably my only reason all my lessons are not like that.*

**'Flipped' English teacher**

- **There is a need for informal, on-going CPD** that helps teachers reflect on and experiment with their teaching. Teachers across the board emphasised the importance of CPD to develop their confidence and skills in using one-to-one devices in the classroom. While some teachers felt colleagues and teacher leaders support them fully, others felt overwhelmed by the task of integrating the devices.

*I was excited... but I thought I could use it in more ways than I have. That's probably me not having the time to experiment in different ways to use them.*

**NQT English Teacher**

- **Students as well as teachers need additional support to learn how to use the device** in an appropriate way for learning. Both teachers and students admitted that not all students are as technologically advanced as it is often assumed, particularly in relation to utilising the device for educational purposes. Before receiving the Tablets for learning in the school, many of the younger students already had access to technology but had only used it for entertainment and communication. Both teachers and students noted in interviews that there is a learning curve on how it can be used as an educational device.

*Don't assume all students have a certain level of digital literacy. There needs to be discrete teaching of how to use these things in school also.*

**Flipped English teacher**

*I think they still see it as a fun thing versus as an educational tool at the moment, but it's slowly changing.*

**English Teacher**

- **Technical problems can frustrate students** and require some teachers to have 'back-up lessons' ready for each lesson. A lack of trust in the technology working may deter teachers from investing in flipped and challenge based learning. Teachers who were more wary of the devices and subsequently more traditional in their teaching method cited technology malfunctions or internet problems as a frustration. However, teachers who were more comfortable with using the devices tended to downplay the occurrence of technical problems.
- **Effective use requires consistency.** Teachers believe there needs to be agreement on how digital technology will be used for various tasks so that students know what to expect and what is expected of them. Teachers also think there needs to be clear communication about what students have been told and what they expect from their teachers. Some students found the lack of consistency in apps used for submitting work, contacting teachers, and viewing resources frustrating. For example, one group of students interviewed noted some teachers use Showbie while others use email or Dropbox and this sometimes left them confused about where to access their assignments or resources.
- **New teaching styles may require more flexible classroom space.** Both schools highlighted the importance of the learning environment to allow for experimentation in teaching style. For example, one teacher noted they were lucky to have one of the larger classrooms in the school because it gave flexibility for students to work in different group sizes and gave the teacher greater opportunity to move freely in the space. Some teachers noted they would not be able to have students move around a small class with locked in desks. Overall, dynamic classroom space was regarded as a benefit to experimenting in teaching particularly in relation to developing independent learning and collaboration skills.

## 9. Further questions

- **How can teachers who are hesitant about transforming learning be encouraged to move forwards?** Some teachers were not confident that 'flipped' and 'challenge based' learning would work for their class. They recognised it as a successful approach for certain subjects but could not see the benefits for their particular subject. For example, teachers in one school saw the success of 'flipped' or 'challenge based' learning in English but would not necessarily see it working in other subjects, meanwhile at the other school teachers saw the success in Maths but could not see the benefit in the Humanities.

*I think for certain classes it's really, really useful. I think for Maths it's absolutely invaluable because you can do a video and have that there and it can teach them over and over again and the thing with maths is its reinforcement, reinforcement, reinforcement.*

**Humanities Teacher**

- **Transforming learning and integrating mobile technology is sometimes seen as something for new or 'modern' teachers** and not all teachers self-identify as 'modern'.

*It has started and we are encouraged to do it, so far I haven't done a flipped learning lesson.*

**Humanities Teacher**

- **How can CPD on the use of one-to-one mobile technology best be delivered to teachers?** Teachers cited CPD as integral to their confidence in teaching and using the mobile devices. Further research should look more closely at what forms of training and support teachers find particularly helpful.

## **10. Methodological approach for the next stage of research**

For the next stage of research into the effects of one-to-one devices on teaching and learning, the research will focus on the varying experiences of teachers. Another long-term FK&Y research partner, Honywood School, Essex (which has been using one-to-one devices since September 2011), will be joining the research. This research will take place in Spring 2015.

Researchers from FK&Y will visit the schools to carry out lesson observations followed by interviews with three teachers who have different perspectives on one-to-one mobile devices in teaching (3 sets of 3 teachers, totalling 9 teachers). Researchers will observe lessons and interview teachers who have been identified by the school to fall into one of the following three categories:

1. *Tablet enthusiast teacher.* A teacher who holds enthusiasm for using Tablets to develop his/her teaching to facilitate this.
2. *Tablet non-rejecter.* A teacher who may use the Tablet by incorporating it into their lesson but is not making significant changes to their teaching style in the process (i.e. using it as a calculator, or instead of printing out a PDF, to follow a lecture on the board).
3. *Tablet-challenged/hesitant.* A teacher who may be using mobile technology but has not yet had the time, training or opportunity to learn how to use it effectively in class (e.g. NQTs).

Developing the further questions outlined above, the objective of each site visit is to observe the lessons of the teacher first before conducting an in-depth interview with the

teacher to reflect on their lesson. This will include asking them their thoughts on the class, what they believe worked well and what did they felt they struggled with.

## Appendix 1

### Methodology:

Interviews and observations for the Pilot Study were conducted at Hove Park School and Longfield Academy (as presented in chart below).

<b>Lesson Observations</b>
<ul style="list-style-type: none"><li>▪ 3x flipped lessons</li><li>▪ 3x challenge based lessons</li><li>▪ 3x control lessons (no new learning model used)</li></ul>
<b>Teacher Interviews</b>
<ul style="list-style-type: none"><li>▪ 2x teachers teaching flipped lessons</li><li>▪ 2x teachers teaching challenge based lessons</li><li>▪ 1x teacher currently not implementing new teaching models</li></ul>
<b>Student Interviews</b>
<ul style="list-style-type: none"><li>▪ 5x Year 8 students (from flipped lesson)</li><li>▪ 5x Year 9 students (from challenge based lesson)<ul style="list-style-type: none"><li>▪ 4x Year 7 students</li><li>▪ 4x Year 9 students</li></ul></li></ul>

## Family Kids & Youth

Established in 2002, FK&Y has recently worked on research projects with children and young people for the BBC, Unilever, IKEA, Youth United, The Prudential, The University of Cambridge and The Department of Health. It is the main consultant and supplier to IKEA on family and children's research and author of The Play Report, the largest study ever carried out in 25 countries on parenting and play. FK&Y has been the long-term evaluator for the charity Youth United looking at the notion of behaviour change in childhood and adolescence through young people's involvement in community activity. FK&Y's report on digital advertising and marketing to children on behalf of CAP and the ASA was published in February 2015.

The FK&Y team has academic qualifications in psychology and sociology and founder Dr Barbie Clarke's research at the University of Cambridge has focused on children and their use of social media. FK&Y is a Company Partner of the Market Research Society (MRS), and holds membership with the British Educational Research Association (BERA), ESOMAR and the British Psychology Society (BPS), abiding by the codes of conduct of these organizations, including those guidelines involving research with children. FK&Y works closely with the Faculty of Education, Cambridge and the Department of Education, Sussex, and its advisors include Professor David Buckingham, University of Loughborough and Professor Colleen McLaughlin, University of Sussex, both of whom sit on the FK&Y TechKnowledge for Schools Pedagogy Group. Last year FK&Y was appointed onto the UK SBS government research roster as a supplier of research with children and young people. All members of staff have DBS clearance.

<http://www.kidsandyouth.com/>