



Student: Abir Mahmoud E. Ahmed

Course: PGDip SSRU (pre-doctoral studies)

Placement Supervisor: Dr. Sveta Mayer*

**Correspondance: Dr. Sveta Mayer. Dept. Learning and Leadership. University College London – Institute of Education. 20 Bedford Way. London. WC1H 0AL. Email: s.mayer@ucl.ac.uk*

Title: Flipped Learning in Praxis – FLIP

1. Introduction

In this assignment I will first present an outline of the research project to which I have been attached. I will discuss the organisation of the research project, the research team and the main components of the project. I will then identify the epistemological and ontological stances and the research strategy employed in the project. I will also discuss the project research methods and design and how this aligns with the research strategy. I will later discuss the project's ethical dimensions and how they have been addressed. I will reflect on my experience of the project placement and discuss how it has influenced my view of my own research strategy across all of these sections of the assignment.

2. Project Outline

The project to which I have been attached is called Flipped Learning in Praxis (FLIP). FLIP is supported and funded by the Erasmus Plus programme of the European Commission. FLIP is a two-year project which started in 2014 and will end in August 2016. A number of universities and partners are involved in the project, including University College London (UCL), the University of Iceland and a team of partners from across Europe. The project also involves schools in the UK and in Europe and draws upon the flipped learning approach.

2.1 Aims, Objectives and Guiding Question



FLIP aims to develop innovative methodologies in information and communications technologies (ICTs) to enhance the education provision in schools and other educational organisations. These methodologies will be shared with other practitioners so they can implement flipped learning in their classrooms. The project also seeks to establish guidelines for the implementation of blended learning environments in which ICTs are used to enhance learning environments (Mayer, 2014, p.1). The question guiding the research of the project is formulated as follows: ‘What commonalities can be identified based upon student experience, across cultural/school contexts to provide general guidelines on implementing the blended learning environment?’ (Mayer, 2014, p.1).

2.2 The Flipped Learning Approach

FLIP builds on the relatively new pedagogical flipped learning approach identified by Bergmann and Sams (2012). According to the Hamdan *et al*, (2013), flipped learning integrates technology to deliver learning content and create blended learning environments. This helps to maximise classroom contact time and engage students in interactive meaningful learning. The approach has received limited scholarly attention and aspects of its implementation would benefit from more research (Tucker, 2012). FLIP aims to address some of these aspects including instructors' preparation and emphasises the knowledge, processes and skills that should support successful implementation of flipped learning (Mayer, 2014, p2).

2.3 Focus on School-Based Learning

FLIP focuses on school-based learning and is based on the need of each of the project partners. It engages schools and other educational organisations that have specific provision (e.g. vocational, rural, special educational needs). In Iceland, for example, there has been an emphasis on schools in remote and rural areas. Meanwhile, the emphasis in the UK is on special needs education and vocational education and training. Across these different educational spaces. the project aims to find out how teachers in those schools utilise flipped



learning to create learning activities and how this impacts on student learning (Mayer, 2014, p.1).



2.4 The Research Cycle

FLIP is being implemented in two phases. The pilot phase is an exploratory phase which ran from 2014 to 2015. It involved collaborating with ‘national partner organizations to develop best practices and resources and inform the EU wide guidelines (praxis)’ (Mayer, 2014, p.1). Over the first year all the partners engaged with the practitioners in their countries in a series of professional development workshops and training events where they discussed the flipped learning approach and shared and gathered information about the practitioners’ activities in three areas: a) how they were using technology; b) what they were doing that was student-driven; and c) how students were collaborating. In this way the partners were able to begin collecting some examples of best practice of what individual teachers were doing in their classroom.

The second phase of the project is the case study phase (2015-16), which runs over the second year of the project. Case studies will be carried and the guidelines developed by partner schools and organisations in the first phase will be implemented (Mayer, 2014, p.1). This phase focuses on collecting ‘evidence of practitioner and learner experiences, skills development and attainment’ (Mayer, 2014, p.1). It also aims to provide guidelines and examples of best practice and demonstrate how, by following these guidelines, best practice can be achieved.

2.5 Project Team and Work-Plan

The Project Consultant in the UK is Dr. Sveta Mayer, a principal researcher at the Institute of Education in London. Dr Mayer has been my initial contact during my placement. The project coordinator in Iceland is Arnbjorn Olafsson, Director of Keilir, Atlantic Centre of Excellence.

The project’s work-plan sets out a sequence of seven meetings. I noticed that the pattern in which the meetings were set up is planned in such a way to prevent partners working in isolation and to promote collaboration between the different partners in their separate countries; different partners lead specific meetings, which are held in their own country.



Each of the seven meetings has planned dates and clear objectives that closely align with the objectives of the first and second phases of the project. For example, the project's first meeting - a one-day international conference on flipped learning held on 14 April 2015 in Iceland - focused on project structure, timeline, preparation for data collection and contact with pilot schools (Mayer, 2014). The focus of the other meetings progressed from content development to drafting of implementation guidelines, finalising the interim report, developing the guidelines, data collection, finalising content, preparing the guidelines for publication and launching project outcomes (Mayer, 2014).

3. Data Collection, Transcription and Coding

I joined in the second phase of the project at the stages of transcribing and coding. The project has a rich set of qualitative data and the research team is still in the process of collecting more. To this will be added quantitative data at a later date. Dr Mayer gave me access to a selected handwritten data set which included group discussions and individual reflection. This I was tasked to transcribe. The data was collected by Dr Mayer and contained notes of the focus groups' discussions conducted with national partners, lead practitioners and individual practitioners involved in the project.

3.1 Data Collection

Data collection is often seen as 'the key point of any research project' (Bryman, 2012, p.12). FLIP adopts a semi-structured approach to collecting data in order to encourage conversations and allow participants to give their own accounts and views, which, in turn, reflects the open-ended nature of the research question. This prompted me to think of two questions: 1) how to collect data for my own forthcoming project; 2) how to assess the quality of the data-collection procedures, a matter that has become 'a key concern' in academic research (Bryman, 2012, p.13). Looking closely at the methods employed in the FLIP research project helped me to



compare the pros and cons of different semi-structured methods of collecting data from a practical perspective as discussed below.

3.2 Data Collection Methods

In the first phase the primary data was collected from two focus groups that Dr Mayer moderated. A focus group is often used in studies that aim to collect qualitative primary data capturing various perspectives. A focus group also has the advantage of collecting verbal and non-verbal data. As a data collection method this seems to fit well with the research design because it helps obtain the different perspectives of the participants. Yet, as is the case with other methods, it also has a number of disadvantages.

Compared to other data collection methods, such interviews or questionnaires, data collected through focus group and then analysed has the potential to be dense, challenging and/or influenced by many factors. This highlights the importance of learning in depth about the challenges of data collection methods and of being prepared to deal with those challenges (Bryman, 2012).

Dr Mayer took the notes by herself in the two focus groups she moderated. There are a number of advantages to a researcher taking their own notes as opposed to using a tape recording system to record verbatim what participants said. Note-taking allows information to be condensed, which saves time at a later stage. There is also the advantage that notes taken by a researcher represent the researcher's own thoughts so they have better understanding of the meaning. Yet there are also disadvantages as the process can overburden the researcher if s/he has to facilitate the focus group session, guide the discussion and also take notes.

3.3 Managing Time and Resources

Data collected by other means such as a tape recording system, for example, are based on the participants' thoughts and according to Cohen (2011), it can provide the researcher with essential detail and a verbatim account. But it can also be costly, time consuming and lack



‘contextual features’ such as ‘non-verbal aspects’ (Cohen *et al.*, 2011, p.537). Some ways of data collection can be more time consuming than others. But the process of data collection and transcribing is generally time-consuming. This has to be taken into consideration when planning the research timeframe to avoid any consequences that undermine the quality of the research or cause unnecessary stress. Bryman (2012) stresses the importance of managing time and resources and notes that ‘there is no point in working on research questions and plans that cannot be seen through because of time pressure or because of the costs involved’ (p.82).

3.4 Reflection on Data Collection

On account of time pressures, Dr Mayer chose not to record the discussions and decided to use field notes as her instrument for collecting qualitative data in the two focus groups she ran. In the first one, she was guiding the discussion and taking notes. In the second, Dr Mayer was undertaking a number of overlapping roles: moderating the focus group; ensuring the discussion was focused on the research topic; supporting the teachers; and taking notes. As a result the note-taking of the second meeting was very quick and rushed compared to the first meeting. In hindsight it was apparent that combining the roles of moderator and note-taker was problematic. This highlighted to me the importance of thinking not only about the method I use to collect data but also the different roles I might undertake as a researcher at the different stages of my research.

In turn, this prompted me to read further about the role of the researcher in participatory research, and I came to a much better understanding of the complexity of the role: In participatory research the researcher’s role is not fixed but fluid; the researcher might engage in a number of different new and unfamiliar roles including the role of ‘an ally, an advisor, an enabler, and maybe a partner, to users undertaking research’ (Evans and Jones, 2004, p.9).

During the course of my placement I also become more aware of the value of planning each stage of the research carefully from the outset. This is usually done at the proposal stage and continues to develop as the research carries on. I became aware of what Brvman (2012).



Donnelly (2013) and Lambotte (2013) call the ‘messiness of research’, or, in other words, the hidden aspects of the research. If approached positively, I would be able to learn from these, avoid common pitfalls and improve the quality of my own research practice.

3.5 Validity of Data

Cohen and others argues that qualitative data collected by observation and accounts is often subject to a range of criticisms, including lack of objectivity and the researcher’s biases, due to their reflective role and interpretation of data. (Cohen *et al.*, 2011). With this in mind, the research team employed various strategies for good practice throughout the processes of collecting, transcribing and verifying data.

This was to ensure systematic verifications and validity checks which, according to Bryman (2012), ‘[are] concerned with the integrity of the conclusions that are generated from a piece of research’ (p.47). In this regard, Cohen views validity as a research ‘requirement’ and ‘an important key to effective research’ (Cohen *et al.*, 2011, p.179).

In order to ensure validity the team members undertook different roles with constant checking and cross-checking to minimise subjectivity. For example, I transcribed the notes that Dr Mayer took. Then Dr Mayer checked the transcription I produced to verify that the transcript was a true reflection of the original notes. The transcription was then crosschecked and verified with the various partners involved in the discussions before a master document was created.

By having the notes transcribed by someone other than the note-taker, Dr Mayer aimed to acquire an absolute reproduction of the notes rather than another interpretation. In other words, by detaching oneself from the collected data to avoid interpretation and stay true to the notes, a researcher seeks to minimise invalidity and maximize what Cohen refers to as ‘content validity’ (Cohen *et al.*, 2011, p.179).

Yet it is essential to remember Gronlund’s (1981) warning that the subjectivity of respondents in qualitative data ‘contribute[s] to a degree of bias’ therefore. validity ‘should be



seen as a matter of *degree* rather than as an *absolute* state' (cited in Cohen *et al.*, 2011, p.179, my italics).

3.6 Coding

Cohen refers to coding as an essential aspect of qualitative data analysis. Coding 'is simply a name or label that the researcher gives to a piece of text that contains an idea or a piece of information' (Cohen *et al.*, 2011, p.559). There are different kinds of coding but the team used what Hennink (2011) calls 'inductive codes' (p.218). These are developed from scanning the primary data for the most common words and phrases the participants used. This approach helps highlight the issues of significance to the participants and further allows the data to 'speak for itself' (Hennink, 2011, p.218). This again, ties in with the ethos of the participatory action research approach discussed in section 4.4.

Being involved in the coding stage during my placement has enabled me to gain important practical experience. For example, I learnt how to use Nvivo software to code qualitative data. I also had hands-on experience in coding data and verifying my understanding of the process through various discussions.

For example, as the process of data verification continued, Dr Mayer suggested we both decide on the codes separately and later compare our choices and discuss our understanding of what determined our choices. To ensure validity, the team members did their coding independently and later met to compare codes and reach an agreement on one coding system. This exercise addresses any biases that exist and tries to reduce them by getting a shared understanding and consensus of what the coding is and how the research team is going to analyse the data.



4. Philosophical Framework

4.1 Epistemology and Ontology

Defining the ontological assumptions of the research or ‘[wa]ys of answering the question: What is the nature of social reality?’ is essential to determine the research design and strategies (Blaikie, 2007, p.3). The ontological stance of the FLIP project is clearly constructivist. Constructivism ontology is embedded in the general aim of the project, the research questions, methodology and how the data is collected, analysed and the conclusion is drawn. Ontology is about the decisions and understanding that a researcher has about which aspect of reality they want to explore.

In the project, the researchers wanted to explore the understanding of the involved partners of flipped learning and thus took an interpretivist stance in order to observe, analyse and understand the partners’ perspectives and reality. To achieve this, further decisions about epistemology had to be made, and, unsurprisingly, the FLIP project has an interpretivist epistemology achieved through focus groups. This in turn developed into an inductive research strategy, one which uses qualitative methods to collect and analyse data.

4.2 Inductive Research Strategy

The project has an inductive, bottom-up research strategy, one which ‘involves the search for patterns from observation and the development of explanations – theories – for those patterns through series of hypotheses’ (Bernard, 2011, p.7). The research team did not establish hypotheses or apply theories at the start of the research; rather they are being informed as they move on.

One of the objectives of the project was to recognise the similarities that the project holds in relation to flipped learning with the Hamdan *et al.* paper (2013). It also aims to recognise what is distinct about the project and identify aspects that are not included in the



Hamdan *et al.* (2013) analysis of flipped learning. This ties in with the participatory action research approach of the project discussed in section 4.4.

The workshops and focus groups conducted in the first phase intended to open up the thinking of flipped learning and find out the different ways that practitioner thought about digital technology and flipped learning in addition to those aspects covered in Hamdan *et al.* (2013). Due to the investigative nature of the inductive research strategy, the researcher has the flexibility to change direction according to the data and insights as the research develops. This in turn aligns with the exploratory design that the study employs and also with the participatory action research approach of the project.

4.3 Exploratory Research Design

Bryman identifies research design as ‘the frameworks for the collection and analysis of data’ (Bryman, 2012, p.45). Having looked at the aims and questions of the project, I concluded that the project has adopted an exploratory design, which, according to Brown (2006) ‘tends to tackle new problems on which little or no previous research has been done’ (cited in Research methodology, 2016, p.1). FLIP deals with a relatively new area of inquiry, namely the flipped learning, where studies are limited, particularly with regard to implementation (Tucker, 2012).

4.4 Participatory Action Research Approach (PAR)

FLIP has a Participatory Action Research (PAR) approach, which Wandsworth (1998) identifies as a type of research that ‘involves researchers and participants working together to examine a problematic situation or action to change it for the better’ (cited in Kindon *et al.*, 2007, p.1).

Looking at the research exploratory design and inductive strategy, it becomes clear how the participatory action research fits in within the research framework. However, this was not all clear to me at first. I confused participatory research for action research since the debates



that the latter adopts also relate to ‘participative inquiry and practice’ (Bergold and Thomas, 2012, p.3).

It was only when I read the papers of McTaggart (1991), Traynor (2004) and Bergold and Thomas (2012) that I came to realise that participatory research is not another label for action research. Although they are not limited to explanation of data and they both involve inquiry and making social change, they can be conducted separately or maintain a different emphasis in any one research project (Traynor, 2004, p.1).

The approach has received a lot of praise yet also a number of criticisms, some relating to ethics and these will be touched upon in the section on ethical considerations below. However, using a participatory action research approach reflects commitment to involve participants in the ‘knowledge-production process’ (Bergold and Thomas, 2012). It also acknowledges and makes use of local participants' knowledge since the approach's primary concern is conducting collaborative research ‘*with*’ people as opposed to conducting research ‘*to or for*’ people (Cohen *et al.*, 2011, p.37). For this particular reason, FLIP research team decided that it is the approach most suited to measuring impact of outcomes, working with practitioners and conducting professional development workshops and focus groups.

In the UK the FLIP project team collaborated with a group of practitioners or teachers in the partner schools in action research. They focused on flipped learning to develop practice for children with Special Educational Needs (SEN). The researchers did not start with a set of guidelines but rather began a process of sharing information. The various workshops and focus groups that were carried out were intended to define the main framework and build up an understanding of flipped learning and SEN practice.

The teachers involved were given time to develop their practice based on their understanding. The researchers were working through the flipped learning approach but they left it is up to the teachers to implement the approach as they saw fit for the learning needs.

Teachers were also left to interpret the input about SEN practice. They kept a record of the blended learning pedagogic practices they developed and students' experiences. The



research team ran focus groups with the teachers to capture their perspective and understanding of evidence-based practice and how to utilise technology to support it.

4.5 Research Methods

Participatory action research often employs a range of qualitative and quantitative methods. FLIP uses mixed methods to collect qualitative and quantitative data. The qualitative data is collected via focus groups, case studies and a questionnaire which is also designed to collect quantitative data.

The study did not target a representative sample of the population. It specifically targeted the teachers that the national partners invited to be part of the project. Therefore, the study employed a questionnaire as opposed to a survey, for example. The questionnaire has both qualitative and quantitative questions so that the research team will be able to triangulate the results. The advantage of triangulation is discussed in the ethical consideration section.

At this stage of the project the team is collecting the data from all the practitioners, the resources and the lesson plans they used. The questionnaire is currently live so they are also collecting the data for the questionnaire. The data analysis aims to learn about the flipped learning approach that everybody has taken and to recognise the outcomes for the pupils (Mayer, 2014, p.1).

5. Ethical Considerations

5.1 Reflection and Lessons Learnt

In this section I am going first to discuss my understanding of ethical issues before and after engaging with the input and the online discussions sessions of the *Methods of Investigation* module. I will comment on the first session in particular, in which we had an online group discussion about ethics and politics in social science research. I will later discuss the ethical considerations of the FLIP project.



Before embarking on this course and taking part in the FLIP project, I had a broad understanding of the three main ethical principles for research conduct set by the World Medical Association (WMA), which include respect of persons, beneficence and justice (Hennink *et al.*, 2011, p.63). Due to the lack of practical experience in research, my understanding of these principles was limited. The distinction between ethics and morals that Robson (2011) refers to was not clear and I did not fully appreciate the complexity and the broad spectrum of ethical dilemmas, which are often argued to be ‘context-specific’ (Robson, 2011, p.197).

Codes of practice and guidelines including those of the British Educational Research Association (BERA) and the British Psychological Society (BPS) initially seemed vague and open to interpretation. Yet, as the course progressed, I came to view this aspect as an advantage when I understood that ethics are ‘situated’ and are best interpreted in their specific context (Cohen *et al.*, 2011, p.76). This also allows social researchers to adopt and interpret ethics in ‘ways fitting the needs’ of their specific research (Robson, 2011, p.197).

The online discussion of the module associated with this assignment has helped develop my thinking of ethical consideration for my future project. The first session addressed different approaches to research ethics and examined a number of codes of practice and guidelines. It also looked into various ethical dilemmas including the use of deception in social research.

Although the use of deception in social research has been widespread according to Robson (2011), the group’s discussion found this issue to be challenging as it raised questions about participant risk and the nature, scope and value of using deception. It also raised questions about the ‘cost-benefit approach to ethics’ (Robson, 2011, p.205) which Frankfort and Nachmias (1992) explain as the tension between ‘two rights’. These are ‘the right to conduct research in order to gain knowledge’ and the ‘rights of participants to self determination, privacy and dignity’ (cited in Cohen *et al.*, 2011, p.89).

Cohen notes that ethical decisions are built on ethical principles but different ethical principles may conflict (Cohen *et al.*, 2011, p.76). Cohen's statement and the range of views



and different approaches to research ethics that I came across in this module prompted me to explore the different principles of ethics and examine their problematic nature with a different eye and positive attitude this time.

I found the following principles for example of particular interest: the '*deontological view*', which is concerned with treating people as ends rather than a means; the '*consequentialist view*', which is concerned with the outcomes of actions; '*situational ethics*', which views what is right depending on the situation; and the '*virtue ethics basis view*', which is concerned with the pursuit of good for its own sake (Cohen *et al.*, 2011, p.76).

Previously I would have favoured the '*deontological view*' and argued against all others. Now I align more with the view of Bryman (2012), namely that a researcher can take one of many possible stances on ethics. I am aware that each view has its own limitations and that there is no one ethical view with absolute moral value or one that has an absolute validity that can be deemed fit to address all ethical dilemmas in every situation. Adhering to the letter of an ethical principle without regard to the situation would involve divorcing ethics from its social context and adopting a rigid stance.

The wide range of views on ethics gives researchers flexibility and help prevent them falling into subjective judgment. Robson notes that the relatively vague ethics codes and guidelines allow 'social researchers to adopt 'situational relativist' approach in which ethical decisions are made on the basis of issues applicable to specific research projects' (Robson, 2011, p.197).

I agree with Robson's view, which also aligns with what Bryman (2012) suggests, namely that a researcher can take one of various possible stances on Ethics. I am still exploring and examining different views and approaches of ethical research in an attempt to develop a more sophisticated understanding.

5.2 FLIP - Ethical Considerations



According to the Framework for Research Ethics published by the Economic and Social Research Council (ESRC) there are six principles for ethical research. ESRC (2015) also states that social research should follow the appropriate ethics review. This is a crucial step before commencing a research project and it endeavours to protect all involved parties in the research. It also means to ascertain that any potential or actual risk of harm is minimal (ESRC, 2015). The FLIP project has obtained ethical approval from the Institute of Education Ethics Committee and is currently running in its second and final year.

ESRC (2015) states that ‘research should be designed, reviewed and undertaken to ensure integrity, quality and transparency’ (Bryman, 2012, p.144). From the outset the FLIP project strategy reflects commitment and respect to its participants. The research orientation of the project employs a participatory action research approach, which suggests that the aim and questions of research ‘develop out of the convergence of two perspectives—that of science and of practice. In the best case, both sides benefit from the research process’ (Bergold and Thomas, 2012).

As is evident from the project’s letter of invitation and consent forms, FLIP engages, on voluntary basis, participants ‘whose life-world and meaningful actions are under study’ in its two phases and these participants are viewed as partners in a process of collaborative ‘knowledge-production’ (Bergold and Thomas, 2012). FLIP aims to maximise the benefit for its participants by engaging them in voluntary tutorials, national professional development workshops and opportunities to collaborate with various professional partner organizations. This sense of partnership is articulated in the invitation sent to participants as shown in Appendix A.

However, one of the main criticisms of the participatory approach concerns the very principle for which it is often lauded. The relationship between researcher and participant in non-participatory research is well defined. But collaborative participation forms the base for the relationship between researchers and participants in participatory action research.



This in turn can pose various ethical challenges relating to boundaries and rules that govern social communication among participants. Researchers have to build a relationship based on openness and mutual trust with participants to express their views and maintain focus. They have to make carefully considered ethical decisions to deal with such issues during the project. Bergold (2012) warns that ‘participatory research is always in danger of being used by very different parties for purposes that contradict its postulated fundamental concept’ (p.12).

FLIP employs a mixed methods approach. It triangulates multiple data sources including case studies, focus groups and a questionnaire with qualitative and quantitative questions. The triangulation and cross verification of primary data aims to minimise measurement and sampling biases and ensure high level of validity of the research outcomes. This complies with the ethical principle of beneficence. The ethical principle of justice is also evident in the level of integrity and systematic approach to primary data verification that was followed in the transcription and coding stages I was involved in and came to experience.

ESRC (2015) states that ‘Research staff and participants should be given appropriate information about the purpose, methods and intended uses of the research, what their participation in the research entails and what risks and benefits, if any, are involved’ (p.1). The project documentation I had access to, including communications with participants, follows a clear protocol that abides by these principles. For examples, it articulates in detail the timeframe, phases and end dates of the research. It explains the nature of the research and its purpose. It also explains that the findings will be disseminated with other teachers and researchers and published as a research report in a professional and academic journal.

Bryman (2012) warns that funded researches are more exposed to funding bias. Funding bodies could influence the ‘research concerns and questions’ (p.150) in order to support their own interests. FLIP is an EU-funded research yet the research team confirmed that the funding body did not require them taking any particular approach nor influence any aspects of the research concerns including the research questions.



Research ethics stress that '[i]ndividual research participant and group preferences regarding anonymity should be respected and participant requirements concerning the confidential nature of information and personal data should be respected' (ESRC, 2015). I have seen for myself the qualitative data set I transcribed did not contain any disclosure of identity, full names, sensitive or personal data. The participants were only identified by first name. The information letters and consent forms sent to headteachers, teachers, parents and children also complied with these principles.

6. Conclusion

The placement I undertook for this module provided me with a valuable opportunity to experience the 'messiness' and complexity of the research process. Getting practically involved in research reveals the gap between theory and practice and the different dimensions that theory alone does not show. I explored different aspects of research including the epistemological and ontological stance, ethical considerations, data analysis, research design, approach, strategy and methodology. I gained an insight into the complex interconnected relationship between these aspects and how they align to form the research construct.

During my placement, I have benefitted from observing the consistent and systematic approach to validity checks that the research team maintained throughout the coding stage to ensure research integrity. The high level of support and various insightful discussions with Dr Mayer have helped me change my mindset and ultimately approach research with a different perspective. I have learnt to move beyond a linear rigid view of research and view it as a multi-faceted and open-ended process that is flexible and complex in nature. By the same token, I realised the variety of roles that a researcher can play in any one research project. O'Leary (2004) points out that 'the best researchers are those who manage to be creative in thinking, yet logical in structure' (p.4).

I also had an opportunity to explore some of the different choices and decisions made in the coding stage including choices of data collection and time management and what



determines these choices, as explained in the coding section. The assignment has given me the opportunity to do some in-depth reading which helped me to eliminate some misconceptions and clarify my understanding of some concepts including Participatory Action Research (PAR). In spite of the advantages of using PAR in studies similar to the FLIP research I might not choose to draw on it my imminent future research. As a novice researcher, I would benefit from developing more expertise to be able to competently address the challenges PAR invokes.



References

Bergmann, J. and Sams, A. (2012) *Flip Your Classroom: Reach Every Student in Every Class Every Day*. Washington: ISTE.

Bergold, J. & Thomas, S. (2012) Participatory research methods: a methodological approach in motion. *Qualitative Social Research*. [Online] 13 (1). Available from: <http://www.qualitative-research.net/index.php/fqs/article/view/1801/3334>. [Accessed 12 May 2016].

Bernard, R. (2011) *Research Methods in Anthropology: Qualitative and Quantitative Approaches*. Lanham: Rowman and Littlefield.

Blaikie, N. (2007) *Approaches to Social Enquiry*. Cambridge: Polity Press. [Online] Available from: <https://goo.gl/MsomNV>.

Bryman, A. (2012) *Social Research Methods*. Oxford: Oxford University Press.

Cohen, L., Manion, L. & Morrison, K. (2011) *Research Methods in Education*. 7th edition. London: Routledge.

Denscombe, M. (2010) *Ground Rules for Social Research: Guidelines for Good Practice*. England: Open University Press.

Donnelly, P., Gabriel, Y. & Pan, B. (2013) Untold stories of the field and beyond: narrating the chaos. *Qualitative Research in Organizations and Management: An International Journal*. 8 (1). p.4-15.

ESRC Framework for Research Ethics. (2015) [Online] Available from: <http://www.esrc.ac.uk/files/funding/guidance-for-applicants/esrc-framework-for-research-ethics-2015/>. [Accessed 2 May 2016].

Evans, C. & Jones, R. (2004) Engagement and empowerment, research and relevance: Comments on user-controlled research. *Research Policy and Planning*. [Online] 22 (2). p.5-13. Available from: <http://eprints.kingston.ac.uk/4049>. [Accessed 22 May 2016].

FLIP (2014) *Flipped Learning in Praxis*. [Online] Available from: <http://www.flippedlearning.eu/> [Accessed: 7 May 2016].

Hamdan, N., Mcknight, P., Mcknight, K. & Arfstorm, M. (2013) A Review of Flipped Learning. *Flipped Learning Network*. [Online] Available from: <http://researchnetwork.pearson.com/wpcontent/uploads/ExecSummaryFlippedLearnig.pdf>. [Accessed 2 May 2016].



Hennink, M., Hutter, I. & Bailey, A. (2011) *Qualitative Research Methods*. London: Sage.

Israel, M. & Hay, I. (2006) *Research Ethics for Social Scientists*. London: Sage.

Kindon, S., Pain, R. & Kesbey, M. (2007) *Participatory Action Research Approaches and Methods: Connecting People, Participation and Place*. London: Routledge. [Online] Available from: <https://goo.gl/ed39TJ>. [Accessed 14 May 2016].

Lambotte, F. & Meunier, D. (2013) From bricolage to thickness: making the most of the messiness of research narratives. *Qualitative Research in Organizations and Management: An International Journal*. 8 (1). p.85-100.

Mayer, S. (2014) *Erasmus Plus Flipped Learning in Praxis: An Invitation to Turn Learning Upside Down and Inside Out!* Institute of Education. Unpublished.

Mayer, S. (2014) *Research Brief – Erasmus Plus _Flipped Learning in Praxis (FLIP)*. Institute of Education. Unpublished.

O'Leary, Z. (2004) *The Essential Guide to Doing Research*. London: Sage.

Research Methodology (2016) *Exploratory Research*. [Online] Available from:

<http://research-methodology.net/research-methodology/research-design/exploratory-research/>. [Accessed 14 May 2016].

Robson, C. (2011) *Real World Research: A Resource for Users of Social Research Methods in Applied Settings*. Chichester: Wiley.

The Social Research Association Ethical Guidelines (2002) [Online] Available from: <http://the-sra.org.uk/wp-content/uploads/SRA-Ethics-guidelines-2002.pdf>. [Accessed 2 May 2016].

Traynor, S. (2004) *Comparative Similarities and Differences Between Action Research, Participative Research, and Participatory Action Research*. [Online] Available from: <http://www.arlecchino.org/ildottore/mwsd/group2final-comparison.pdf>. [Accessed 29 May 2016].

Tucker, B. (2012) The flipped classroom: online instruction at home frees class time for learning. *Education Next*, 12 (1). p.82-83. [Online] Available from: <http://educationnext.org/the-flipped-classroom/>. [Accessed 1 May 2016].



Appendix A - Erasmus Plus_Flipped Learning in Praxis

An invitation to turn learning upside down and inside out!

- Develop and use innovative and new methodologies in ICT and enhance your current educational provision.
- Create equal opportunity for all to receive education through personalised learning, to battle inequity, underachievement and dropouts.
- Collaborate with EU educational and private organisations* to help achieve this.

The Project

You are invited to join an EU Lifelong Learning Erasmus Plus funded project* drawing upon the blended 'flipped' learning' approach to develop innovative and new methodologies in ICT to complement the education provision in your school or education organisation. The blended (flipped) learning approach enables educators to take on the role of personalised facilitator and to create personalised learning by (a) using ICT-based learning activities to deliver curriculum content which frees up time to (b) create social-experiential peer group activities using project-based learning. Blended (flipped) learning provisions for personalised learning and means learners can access teaching and learning resources according to their own progress and speed, anytime and anywhere. By becoming involved you will join a project team who are building on existing blended (flipped) learning initiatives across Europe and start collaborating to develop and use best practices and resources. Leading ultimately to the development of a shared platform across EU of evidence-based best practice guidelines (praxis) and resources for other teachers/educators to implement according to their learners' needs.

How to get involved

Our aim is to engage schools and educational organisations that have specialised provision (e.g. rural, vocational, special education) and/or are innovative and strive to meet the needs of individual learners. You may become involved in the pilot or case study phase of the project or both:

- Pilot phase -you will collaborate with national partner organisations to develop best practices and resources and inform the EU wide guidelines (praxis). Collaboration will be over a period of two academic terms during year 1 of the project (2014-15).
- Case study phase -you will implement the EU wide guidelines (praxis) and resources (generated in the year 1) and gather evidence of practitioner and learner experiences, skills development and attainment. Data collection will be over a period of one academic term during year 2 of the project (2015-16). You will have opportunity to engage in tutorials and national workshops and collaborating with the partner organisation within your country. At the end of the project you will join everyone involved across EU in celebrating and sharing your experiences at conference.

Get in touch! If you are interested in learning more please email us as below.

UK: Dr. Sveta Mayer, Lecturer. Institute of Education, University of London. Email: s.mayer@ioe.ac.uk; Tel: 07891578990 (m) Iceland: Arnbjorn Olafsson, Director. *Keilir, Atlantic Center of Excellence, Educational Centre. Email: arnbjorn@keilir.net; Tel: +354 690 6651 (m) *Keilir, Atlantic Center of Excellence, in collaboration with University of Iceland and Institute of Education, University of London and in partnership with private and education sector organisations from Iceland, Germany, Italy, Slovenia and Norway.



Appendix B – parent and child information letter and consent form:

UNIVERSITY COLLEGE LONDON AND XX SCHOOL RESEARCH PROJECT

RE: Erasmus Funded Research Project: Flipped Learning in Praxis

Dear Parent/Carer

I am pleased to have an opportunity to write to you and introduce an innovative research project my colleague Dr. Kaska Porayska-Pomsta and I are undertaking with Barrow Hills School. The project is funded for 2 years until August 2016 by Erasmus and involves other schools in UK and wider in Europe. The project is called 'Flipped Learning in Praxis' because we want to learn how teachers in schools are innovating their teaching and learning practices, for instance by switching (flipping) between using technology-based versus more conventional classroom practices.

At [school name], the aim of the project is to ascertain how teachers are using blended (flipped) learning to devise learning activities that develop pupils' learning skills and their knowledge of science and numeracy. In doing this project we are hoping to answer the following research questions:

1. How are teachers integrating blended (flipped) learning into their classroom practices to design learning activities for pupils;
2. How are pupils experiencing learning using the blended (flipped) learning activities teachers design;
3. How are pupils interacting with teachers as they engage in the learning activities and;
4. What is the impact of teachers' learning activities upon pupils' progress in (a) learning science and numeracy curriculum knowledge and (b) developing learning skills for self-regulating behaviour to sustain their attention?

We have been working collaboratively with your child's teacher running workshops to introduce the project to them and discussing how they can make a contribution in helping us answer our research questions. To answer these questions we will be asking teachers to tell us about the kinds of learning activities they devise for your child and the progress your child is making in the classroom. We are also encouraging teachers to produce short video recordings to illustrate their classroom practice and your child's learning experience in the classroom. All this will help us to learn what works well for your child and to build an understanding of your child's learning experience in the classroom.

By the end of the project in August 2016 we will be producing a research report to be published in a professional and academic journal to share our findings with other teachers and researchers. The research report will include the project aims and research questions, a description of how the project was undertaken, the research findings and the conclusions we've drawn from the project about how teachers effectively use blended (flipped) learning to support student learning. In the report the identity of any and all of the children will be kept anonymous. No video footage will be included in the research report. In addition, we will not include the school's identity nor any teacher identities in the research report.



We hope you find our project interesting and can see how the research would help your child's teacher and us to understand how best to use blended (flipped) learning to support children's learning. We would like both your and your child's agreement to do this research. Enclosed with this letter is a consent form for you to complete to indicate the level of permission you and your child feel comfortable giving us.

Please complete the form and return it to your child's teacher. Please be assured, even after signing the consent form, you and your child have the right to withdraw from any or all aspects of the research without explanation. You simply need to let [Name School Contact], know and they will inform me.

If you have any questions you need answered or if you like to meet with me before you complete the form please do not hesitate to contact [Head Teacher Name] or me and we will make arrangements. Our contact details are below.

With best wishes,
Sveta

Dr. Sveta Mayer, Principal Researcher.

_____ *Date:*

UCL – Institute of Education, University College London
20 Bedford Way. London. WC1H 0AL.
Tel: 07891578990 (m); Email: s.mayer@ucl.ac.uk

[Head teacher name], Headmaster

Signature:

Date:

[School Name]

[School Address]

[School Contact Telephone and Email]



UNIVERSITY COLLEGE LONDON AND XX SCHOOL RESEARCH PROJECT

Erasmus Funded Research Project: Flipped Learning in Praxis

Parental Consent Form

Please read each statement and indicate with a tick if you agree to give your consent

Tick below if you

agree

I have read and understood the information letter about the research.

I would like my child to be involved in the research project and understand my child and I have the right to withdraw consent at anytime without explanation.

I give permission for the researchers to question my child's teacher and learn about the teaching and learning activities they devise to support my child's learning.

I give permission to my child's teacher to produce and share video recordings of my child's learning experiences within the school.

In order for the researchers to collect, collate and interpret data to give meaning to the report and its findings, I give permission to the researchers to use:

1. School data about my child's learning targets and progress in school.

2. Teacher assessment of my child's progress in class.

3. Teachers' video recordings of my child's learning experiences within the school.

I give permission to the researchers to publish a research report about the project and I understand the video recordings of my child will not be used and that my child's identity will not be disclosed at anytime in the report.

Parent/Carer Name: _____ School Name: _____

Parent/Carer Signature: _____ Date: _____

My Child's Name: _____



My Child's agreement:  Child's Signature (if appropriate):

Telephone: _____ Email: _____

Postal Address (optional):

Thank you.