

From Sage on the
Stage to Guide on
the Side. An Action
Research Project using
a 'flipped classroom'
model

Neil Dougan

Profile

Neil was network TV Producer & Director for 24 years, making programmes for BBC, ITV, Channel 4 and Sky. He directed celebrities, comedians, actors and politicians in long form documentaries; drama/docs; theme nights; comedy and ob docs. Subjects included; entertainment, music, film, arts, history, biographies, travel, current affairs and sport.

Subject Specialism

My subject specialism is Film and Television, which I currently lecture at undergraduate levels HE4, HE5 and HE6 in the School for Creative Technologies at the University of Bolton. My specialism arose in two ways. Firstly from my industry experience where I had 24 years in British Network TV as a Producer/Director and Series Producer making a wide range of programmes for all the major networks, BBC, ITV, Channel 4 and Sky. I worked for the BBC for many years as well as many brass-plate independent companies in Glasgow, London, Birmingham and Manchester.

Secondly, before embarking on a Media career I graduated with an M.Arts (Joint Honours) in Film & Television & Theatre Studies from Glasgow University. That degree also academically underpins my subject specialism, as the Film & TV aspect was not practice based but theory led. This had meant that I am now also teaching critical theory and film studies as well as the practical aspect, which is unusual combination for someone coming from industry.

Evolution of my Education Project on 'flipped classrooms'

As a full-time educator working in Higher Education it is important to keep a keen eye on innovative practices and on how I can improve my own teaching practice and in turn improve the lectures I deliver to students. When I was teaching at Edge Hill University something happened that changed how I looked at current teaching practices. I was teaching in the University's brand new £18 million media center and I noticed as I walked through the teaching corridors and looked into the floor to ceiling clear glass classrooms that the lecturers were only using the SMARTboards to display YouTube videos and while actually instructing reverted to dry markers on the whiteboard. This practice seemed perverse in its Luddite approach to technology in a building that was meant to represent and enhance 21st Century digital technology.

That thought stayed with me when I began lecturing in Bolton and when the Education Project assignment arose in the PGDE course I thought to base it learning the SMARTboard technology, adapting it to Film and TV content for lessons. I began researching into the subject and arranged what became an intensive extended session with a specialist in SMARTboard software. I had used it before when doing my CELTA certificate but the purpose in this session was to find a way to capture the moving image of film and television in SMARTboard and use it in my classroom for specific teaching purposes. The specialist is an educator himself and not just a technician so he was motivated to adapt the educational tool to my needs. Between us that day we achieved that.

My aim for the project at that point was to develop my skills in the software and continue to adapt it to my film and TV lecture content. Then I would offer to impart this knowledge and skill to my five fellow lecturers in the Media department. I mention this as a prelude into my eventual Education Project and it is connected and overlapping.

I observed that like Edge Hill many lecturers in Bolton University do not use the SMARTboard, a fact confirmed by the tutor who had just helped me. It struck me as ironic that we were teaching film and television and their place in 21st century digital technology to students using smartphones, laptops and operating on a variety of social media platforms while failing to engage with them in a technologically stimulating way.

My first step in doing the project was to identify the curriculum need in relation to my classroom practice. I decided that I needed to use some e-learning related practice that would stimulate not just the students but myself as lecturer. To do this would ultimately require Action Research, a term that our tutor had highlighted in class. I immersed myself in beginning to understand that type of research. I quickly found that Lawrence Stenhouse advocated that 'curriculum research and development ought to belong to the teacher' (Stenhouse, 1975 p. 142). and that 'it is not enough that teachers' work should be studied: they need to study it themselves' (p.143). That excited me but I tempered that with the realisation that I had to frame my present and future research within reflective practices. Carr and Kemmis (1986) see action research as a means to social change and 'emancipatory' both for students and teachers. They advocate that action research can be used to understand one's own practice; to make one's practice better; to accommodate outside change and to change the outside in order to make one's practice better.

At the most basic level action research involves a cycle of planning or a spiral. That is planning, action, monitoring and reflection. This is a classic sequence but in reality as I found it does not necessarily start in planning and smoothly move forward. For me there was observation of existing practice (reconnaissance) before I was ready to intervene and change things. It's an interesting phenomenon that an educator may find it difficult to separate one of part of the process from another. A lecturer may find himself reflecting, as s/he is something that Donald Schön (1983) calls 'knowing-in-action' – and monitoring also will take place as action proceeds. That said once the first change has been completed the action research cycle would generally advance in the above manner. Having now begun to understand the action research methodology I needed a way forward in beginning my inquiry.

The breakthrough was Whitehead (1985) who asked six questions which enabled me as a fledging action

researcher to breakthrough and begin my inquiry:

- I. What is your concern?
- II. Why are you concerned?
- III. What do you think you could do about it?
- IV. What kind of evidence could you collect to help you make some judgment about what is happening?
- V. How would you collect such evidence?
- VI. How would you check that your judgment about what has happened is reasonable, fair and accurate?

The first three questions helped me identify my project. My concern was multi media students not being stimulated enough by the teaching methods on our courses. I was concerned because they may drop out and affect our retention rate and/or were silently displeased and unfulfilled with our School's (of Creative Technologies) lo-tech methods. What I 'wanted to do about it' was find a challenging practice that would invigorate their experience in the classroom but with a technological aspect to it so as to entice my media-aware students.

I began researching innovative ways of teaching and e-learning and after some time exploring another pet subject of Massive Open Online Courses (MOOC's) I came across a related article that may not only change my practice but the nature of my educational career.

The Transformational Potential of Flipped Classrooms (Horn 2013) introduced me to the concept of a move away from lecturer-centered teaching to student centered learning by turning on its head (flipping) the structure of instruction. Horn explains that 'the flipped classroom is a form of blended learning in which students learn online...[and]...time in the classroom, previously reserved for teacher instruction, is spent on what we used to call homework, with teacher assistance as needed'. It was two teachers who allegedly originated the technique. Bergman and Sams (2010) were struggling to reteach lessons for absent students and so paid \$50 in 2008 to buy software to record their lessons. These two highly experienced American chemistry teachers initiated an idea that has caught the imaginations of innovative educators and is a current 'hot' topic – the teaching practice of flipped classrooms.

What fired my imagination was that it appeared to be a solution not just to my concerns outlined above but to another more central and fundamental major concern I have been harbouring as a relatively new lecturer. That is; I could tangibly sense in the class that as I am giving lectures on various subjects there is a massive compromise taking place. Even though classes are meant to be representative of a clustered level of competence and ability, it is inevitable that some students are more able than others. In giving a lecture at a particular learning pace and despite checks and balances established via student feedback some students fall behind in their understanding of the lecture while others may be impatient that I am not getting to the next new point quickly enough as they have already understand the previous one. As for those who have missed the class, the structure outline of a lesson may all be that remains in a PowerPoint

Flipped classrooms appear to address these issues plus offer the technological frisson that young learners may desire. Absentees can view online lessons while slower learners can rewind online tutorials again and again. However, Horn's article above being my inspiration it was far from being the best definition of what a 'flipped classroom' is. The core idea is to flip the common instructional approach. Tucker (2012) explains that with teacher-created videos and interactive lessons, instruction that used to occur in class is now accessed at home, in advance of class.

Class becomes the place to work through problems, advance concepts, and engage in collaborative learning. Most importantly, all aspects of instruction can be rethought to best maximize the scarcest learning resource—time. Flipped classroom teachers almost universally agree that it's not the instructional videos on their own, but how they are integrated into an overall approach, that makes the difference.

The Flipped Classroom (Tucker, 2012)

While that explains 'flipped classrooms' in a detailed way, it is important to explain what they are not as there appears to be common misconceptions about what they are, usually from skeptics of the practice.

As McDougall insists (2012) The Flipped Classroom is not:

A synonym for online videos. About replacing teachers with videos. An online course. Students working without structure. Students spending the entire class staring at a computer screen. Students working in isolation.

Doc's Flipped Classroom!

It was just as important to clarify to myself what it was not as much as what it was. I then discovered a phrase, which encapsulated it all – the title of this Education Project: 'From Sage on the Stage to Guide on the Side.' Over twenty years ago, in 1993, a small article by Alison King appeared in the journal *College Teaching*. That article would initiate a big debate on education reform. Its' emphasis was to shift the role of the lecturer away from being the 'the sage on the stage' during class time to one where s/he empowers the students to embrace and own their studies supported by the lecturer now being by a personal 'guide on the side'.

I used the action research outline in Waters-Adams (2006) as the basis of my Education Project. They advocated 'research on action' by using 'action as a tool for research'. This helped me separate out the meaning of the two words in the one phrase 'action research'. Even more usefully they explained that the 'process [is] driven by a dialogue between the elements of action and the intentions behind action or [the] practice and the values behind practice'. (2006 : 98). The intentions and values behind the action were of great importance to me as explained above. I asked myself - why should I use action research? My answer - because I want to change my practice as an experiment. I asked myself what is practice? Simply put I concluded that it is the way I carry out my professional actions. I had encountered the notion of the 'theory-practice divide' and cutting across that divide appears to be action research which appealed to me as it appears to encourage a practitioner to consider both theory and practice as part of a single whole. What appealed to me most about embarking on action research for my Education Project was that it developed the capabilities of teachers as 'professional knowledge makers, rather than simply as professional knowledge users'. As Waters-Adams, conclude,

In an age of centralisation and the proliferation of national guidelines and strategies, action research can help teachers feel in control of their own professional situation. (2006)

This, as I will explain later, has turned out to have a long lasting impact on my immediate career path and imminent PhD decision. Indeed, Carr and Kemmis (1986) describe action research as a 'critical educational science' and one, which it proved I became engrossed in. Using Waters-Adams (2006) I used their action research model. At this point in the process I was aware I was in the 'reconnaissance' stage where I had already mapped out my main area of concern and that I now needed to focus on what I could do about it.

As mentioned above I decided to do an experiment in Flipped Classrooms. I had already used Waters-Adams (2006) golden rules for selecting a topic.

- 'Keep it manageable – keep the focus small scale' – I decided to use one small size class of 14 students.
- 'It should be interesting to you' – I decided to use a film studies class, which would be challenging both as a subject and as a class of our most able students.
- 'It should be workable – you are not stumped for ideas, but can identify ways in which you might have a go at addressing your question' – I chose a class where I could use flipped for one part of the class and compare and contrast with a traditional lecture within the same session.
- 'It is not too disruptive of normal routines' – I could use a lesson that was already in in one of my module and not have to bring a set of students together thus not in any way disrupting the my schedule or those of the University and students

I had to prepare for my in class presentation to my PDGE peers and there were some important issues to

resolve. I examined all the modules I was teaching and decided that the one that I wanted to 'flip' as part of the Education Project was MED 4006 Reading and Researching the Screen. This is where I teach Film Critical Theory to first year HE4 students. Firstly because the subject matter lent itself to being 'flipped'. That is, the main classical theory elements could be taught in the same way with the same materials every year. I could therefore make a pre-class video that could be used again next year and like-wise I could in principle 'flip' the whole module if this proto-type proved successful. The content could be replicated whereas many of my other modules were more fluid and open ended reactive to the needs of both the individuals and the group with many tutorial sessions e.g. work-based learning. Secondly the class is made of articulate engaged students who would embrace potential initiative and change rather than sabotage it through disengagement and non-attendance.

I also consulted my colleagues/peers and course leader. I explained what I intended to do and asked if they were comfortable with my intended one off practice. They plus my course leader all agreed that I should proceed for my benefit in relation to my PGDE. For the benefit of the students engaged in a different practice and for the Media tam to review at a later date. At this stage it was agreed there was no need to inform middle management, the Academic Group Leader, as this was strictly a pedagogical matter and not one impinging on administration, financial or protocol issues.

I presented my project to the class and I managed to overcome what I anticipated to be the most difficult aspect of the talk - that of explaining what the principle of a 'flipped classroom' is. I did so by showing the principle in three different ways; a short video, then a podcast and finally an infograph. I was using the very materials I could utilise to make a 'flipped classroom' to explain what it was it was. The deliberate irony was not lost on my peers and they seemed to understand the concept clearly in their feedback and they themselves began to debate the potential merits within their teaching environments in further education, secondary and primary school. The next step was to ask permission of the Reading and Researching the Screen students to undertake the new practice in their lesson and to further seek their participation in whatever research method feedback that I decided on. Waters and Adams (2006) suggest that there are three concerns about choosing the research method. The first is the 'lack of time for an action researcher' during their normal teaching schedule '... therefore difficult to maintain rigour in data gathering and critique'. I was concerned about this as my PGDE assignments continually impacted on new full time teaching schedule. The second is 'validity as research' which raises the question of action research '...carried out by individuals who are interested parties in the research'. Despite wanting to embrace action research 'accusations of inevitable researcher bias in data gathering and analysis', intellectually unsettled me and I began doubt my own reasons for researching flipped classrooms. Perhaps I was too positive, too excited with the new potential practice and I would inadvertently support its positive aspects and suppress its negative aspects in modeling it for the students. However Water and Adams asserts that, 'it is impossible to access practice without involving the practitioner', so far so obvious, but the conclusion alleviated my critical self doubt,

Practice is action informed by values and aims, which are not fully accessible from the outside. The practitioner may not even be wholly aware of the meaning of his or her values until he or she tries to embody them in her action.

Waters and Adams (2006)

I was not only relieved I was invigorated to proceed with the research. That said I did so with some trepidation as I hadn't conducted formal academic research before and I needed to understand the principles very quickly. This took me to Waters and Adams third concern about choosing the research method - 'unfamiliarity with research methods'. It seems that, 'action researchers frequently explore what may constitute adequate research methods at the same time as they are researching their practice', leading to accusations of 'unreliability in data gathering'. However the writer conclude that 'flawed or not, the [action research] process provides the most reliable access to practice'. That freed me to continue – there was no other option but to proceed with the research albeit in a self-conscious reflective manner.

My next major consideration was the ethical aspect as any research involving other people has this dimension.

I knew this from my time producing and directing documentaries for network television dealing with sensitive religious and political topics as well potential exploitation of on and off screen contributors.

With action research in education is obvious that is inherently ensconced in the social world it takes part in, that it would affect the daily working lives and studies of those working in the institution. I made it one of my main duties to ensure rights would not be infringed and to promote fairness in my interpretation of data. I consulted the respective students who all agreed willing and openly to take part.

I made a change from my class presentation to my peers where I stated that the subject of my 'flipped classroom' lesson would be 'Cinematography'. Instead I chose 'Sound in Film' as the topic. I did this for three reasons:

1. Cinematography is one of the most interesting topics in the module and it would be hard to gauge if the students' interest in the lesson would be high due to this rather than how I was teaching it in a different way and therefore hard to measure with data.
2. I chose the topic of Sound in Film instead because it is regarded, rightly or wrongly, as one of the least appealing topics and is a challenge to teach either in a traditional way or even in a new different way.
3. Cinematography is a stand-alone two-hour lesson, however I had planned to Sound in Film in conjunction with Music in Film as they complement each other.

My biggest breakthrough thus far in the process was my realisation to not only introduce a flipped class on the topic of Sound in Film but to compare and contrast my teaching of Music in Film in a traditional way immediately afterwards, one hour of each subject back to back. I could therefore draw direct comparisons with immediate effect.

I had to quickly learn about the methodologies of qualitative and quantitative research and the principle of triangulation. While action researchers can use any method of data gathering it would have to give reliable and useful evidence of any effect that my action might have. There are many methods available but I decided the most appropriate in the given classroom circumstances to form the three sides of the Triangulation, Woods (1996) was to use: questionnaires for quantitative research; interviews for qualitative research; and reflective notes made by me immediately after each contrasting lesson. I had intended to use peer interviews with regard to my on-line pre-class video and/in class observation but time constraints both for myself and my colleagues proved too daunting.

I researched software that I could use to record my own online lesson without the need of outside help as time was of the essence. I was recommended Camtasia that other educationalists had recommended in online 'flipped classroom' forums I had joined for the purpose of research. I began a free month long trial only days before I was due to teach my class. The online tutorials though clear were too complex to learn quickly as it also involved editing your recordings within the software, a skill I am not too adept at. I enlisted the help of a technically proficient second year Film and Television student to produce my short online lesson on Sound in Film without which there would be no 'flipped classroom' and no Education Project.

Due to pressure of time I quickly wrote the script/lesson in the two hours before I was due to film and record it. I had to write the lesson as well as adapt it for viewing purposes. We recorded the lesson in one hour late one evening in the classroom where I would actually be presenting the lesson two days later. It was a simple mixture of in vision pieces to camera and PowerPoint pages interspersed with what I hoped was an entertaining presentation involving my son's musical keyboard as a key prop and lesson 'tease' and various textual interruptions by me of expected reactions from students, "no don't switch off, there will be handouts for the History of Sound". To break the PowerPoint up I used an anecdote from a film director (Hitchcock) and a physical demonstration of a sound experiment punctuated with a sarcastic narrative about the students continual avoidance of pre-class reading, "you remember this, yes it's a book! You can get one of these in a Big Room downstairs, it's called a li-bra-ry". The student edited it the same night and I was able to put it up on Moodle the next morning.

This is the link to that 12-minute online preparatory lesson.

<https://www.youtube.com/watch?v=-6D5dL7EPis&feature=youtu.be>

On the day of lesson my usually full class of 15 students was depleted to 8, which was disappointing, but they had phoned to say there had been an accident on the motorway delaying/preventing students travelling from Manchester and others were involved in filming for another project, which had become last minute.

When the class arrived they were brimming with excitement declaring that the online video was 'brilliant', 'so entertaining' and so on. There was a palpable air of excitement in the room (see my reflective research as part of the triangulation). That said the proof would be in the delivery of the two contrasting lessons. Sound in Film which the students had seen the 12 minute online introduction then have more detailed class tuition and one to one consultation on any points they needed more explanation - the guide on the side - and Music in Film which I was teach the traditional way – the sage on the stage – the guardian of the gateway of knowledge, imparting information at one pace, one size fits all. I conducted both classes and after a break asked the students taking part to fill in a questionnaire consisting of 20 questions. 17 were multiple choices and in the remaining 3 questions I used the Lickert scale ranging from 1 (for strongly disagree) to 10 (strongly agree).

As the final part of the triangulation I asked them to fill in a research interview form. I spoke with students about the experience then asked him or her to write down their conclusions in response to a series of questions. This qualitative approach allowed more detail about their observations to be accommodated. This is a summary of those findings:

Part 1 of the Triangulation – The Quantitative Research Questionnaire

The responses were overwhelmingly positive in respect of the usefulness and appeal of the flipped classroom practice. It is clear that they all fully understood what a flipped classroom was (Qs 1-4) and appreciated being invited to take part (Q.5). Most had seen the pre-class video (Q.6). In Q.7 I tried to ascertain whether not seeing the video before class made a difference but the three options provided by me proved confusing and that is marked as void. As is Q.9 where I left one of the multiple choice options open-ended making it incompatible with quantitative research. Creating the questionnaires was a challenging and rewarding part of the process and a steep learning curve. 100% agreed that the video was good preparation for the class (Q.8) and engaging in an educational way (Q.10). Nearly all agreed around 9-10 on the Lickert scale that it was engaging, that I was more extrovert than usual in the video (Q.12) and that in relation to humour that (Q.13) 'C: It was about right' in the lesson and yes it did help remember facts and/or concepts (Q.14). This was an exciting find and one, which I will explore further, in my teaching practice. They were unanimous that they learned more than usual about a subject, Sound in Film (Q.15) but did find it hard to compare with the being taught Music in Film in the traditional way. That said they were again unanimous (Q.17) that they would have learned more about Music if it had been taught through flipped classroom. Most strongly agreed that they would like to be taught by this method again (Q.18) and with me as the lecturer (Q.19). There was a mixed response to other lecturers doing so but more favourable than not (Q.20).

Part 2 of the Triangulation – The Qualitative Research Interview

There was a very positive response to the video with strong compliments regarding the 'refreshing' humour of the video 'mixed with serious teaching' was just right. The entertainment and humour 'acted as a catalyst for research and discussion'. All agreed that the video lead to them looking forward to the lesson, "absolutely! because 'it [the video] sparked interest' and 'made it more exciting' because 'everyone was talking about the video' because 'it was amazing'. The video also allowed them to be 'more prepared for the lecture and had questions ready to ask', due to 'an enthusiastic take on a subject by a well informed individual'.

When asked for the negative aspects, some said none while any other comments mainly centred on the 'production values' of the technical sound and lighting deficiencies of the 'taking head' parts. A recurring critical comment was on the 'reliance' on PowerPoint slides and the fact they were 'not visually intriguing'. I agree with

this and it can be easily addressed in the future with a little more preparation and time.

Most students felt 'better prepared' for the in class lesson by being 'more focused' by having a 'head start on the Sound lesson and could grow in knowledge' but one student warned that while they agreed like all the students that they would like to try the flipped classroom again, the video element should be 'as a preparation for the lessons but not instead of the lessons'.

The students gave examples of how some but not all modules in their Media, Writing and Production degree course could be flipped. The ones that were mentioned as not being suitable were fiction writing based modules where the one to one tutorials are crucial and the 'the more practical kinesthetic modules' but flipped would work over all as 'it would benefit as we can keep going back [to the video] and referencing'.

Part 3 of the Triangulation – Self Reflection after Action Research practice

In the first lesson on Sound in Film, it was clear to me that (in answer to my first three self reflective questions) that the students paid more attention than usual and were more engaged, asking more questions than usual as they had come prepared with questions. All those aspects lent themselves to the 'positive' outcome of the experiment. There were no outstanding negatives but luckily I had prepared extra material because when we stepped through the video PowerPoint, they had so absorbed the information we quickly came to the end of it. I had prepared a longer PowerPoint on Sound in Film and so was not only able to step off the sage's stage and become a guide on the side for the pre-class video content but I then added extra material and information during the freed-up class time.

In the second lesson Music in Film, the lesson went well as a traditional lecture, which still involved the elicitation of answers from students and working them in pairs and threes. That said I could see that they were more passive than the previous lesson and asked less questions. I do not believe that tiredness played a part in this process but as this was the second hour of a two part, two hour lecture the students were not as alert as they were at the beginning of the first lesson.

In conclusion, I found that in my action research the 'flipped classroom' practice worked very well and the students' responses have confirmed this. Their positive responses exceeded my expectations however I know that I could not sustain an entertainment led video for every lesson and the 'novelty' aspect of the one off lesson might soon wear off over the course of an entire module. That said this experiment has had a great impact on my professional development as I now wish pursue this action research by flipping the same module next year for all the lessons and perhaps making it the beginnings of an EdDoc instead of a PhD in Film and Television.

This account has concentrated on the individual practice of action research. Beyond flipping an entire module I would thereafter seek collaborative action research with my Media colleagues as

...some writers about action research claim that the 'best' (by which they mean the most 'emancipatory') action research is collaborative in nature, involving groups of people exploring and challenging the constraints of their professional lives.

Elliott (1991)

During this process of action research I struggled with my intentions, values and beliefs, which are personal. Collaborating with colleagues would make the process easier and cross reference findings in a more transparent, less individualistic way.

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