

**A study into innovation within an
educational context including teachers'
perceptions of innovation within their
own schools**

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Abstract

This project is a study into innovation within an educational context. By looking at current literature it will inform the reader about the amount of innovation in schools currently within the UK. In addition to this it hopes to develop a deeper understanding of the complicated nature of innovation, which is cause for much debate. The research conducted in this study take the form of qualitative interviews with two teachers to gain their personal perspectives of what innovation means to them and their practice within their school.

Introduction

To begin the research we must try and understand what 'innovation' is. As there are multitudes of definitions; we must try and find one that relates to an educational context. A variety of definitions make it clear that innovation is not a simple term to interpret. The Oslo Manual produced by the OECD (2005, 3rd Edition) argues "*innovation can involve either a new or improved product whose characteristics differ significantly from previous products*". The Oslo Manual suggests there is a need for innovation by utilizing new technologies, knowledge or materials. This message is relevant as the growth of technologies is so rapid that there is a need to revisit old products to see if they can be improved. However the Oslo Manual draws a distinction between 'new' and 'improved' and suggests that improvements purely creative or aesthetic should not be considered as innovative. This makes a very strong assumption and does not consider that products can be improved through incremental improvements, which are more likely to be produced in education through innovation by pupil-generated ideas.

This definition therefore is more focused and relates to the improving of a product in a business context. Therefore it is not particularly relevant for the broad context of innovation in education as only certain subjects allow innovation through improving a product. It does not consider how innovation can be used in other subjects such as religion for an example. Whereas the Department of Education United Kingdom run a scheme to promote innovation in schools called Futurelab that have produced a document (*Promoting transformative innovation in schools*), which states a relevant definition which is a stark contrast to the Oslo Manual definition above: "*Innovation is not about incremental improvement, it is also a process, which breaks down existing patterns of mind and develops new ways of doing and seeing things.*" This definition is a polar opposite when it comes to the idea of 'incremental improvement' as it calls for a changing of the structures of education to allow new ways of doing things. Critically however it can be seen as an ideology, how can education with limited resources and political restrictions perform such a monumental task? Innovation started as an idea in the business sector and is now seen as a fundamental part of economic growth, however within education is it comparable to utilise innovation with an already over saturated curriculum and growing demands on teachers with limited resources?

This research will look at how innovation is approached within the current education system in place in the UK and whether it allows room for improvement. In particular it will focus on

BEEGAN: A STUDY INTO INNOVATION WITHIN AN EDUCATIONAL CONTEXT INCLUDING TEACHERS' PERCEPTIONS OF INNOVATION WITHIN THEIR OWN SCHOOLS

the level of innovation in a sample school and Teachers' perceptions of *'innovation'* for a more qualitative understanding and method base. Therefore there will be a focus on the practitioners within the UK education system, by looking at their perceptions and as well as looking at the strategies highlighted in government documents and relevant literature to promote innovation and critically evaluate them on how they can actually be brought into the classroom by teachers. The reason I chose this as a topic for research is due to the growing interest in modern education, focusing on the Department for Business, Innovation and Skills, *Strategy Document* (2010), which contends that *'innovation'* is a skill for *"sustainable growth"*. From this document it is clear that society currently finds a need for people to be creative and come up with new ideas in order to overcome the challenges that may appear from our rapidly growing world. Therefore it is up to educators to achieve *'innovation'* within their pupils to fit the needs of industry and the community that may arise in the future and address the economic, environmental and social crises.

Research Questions

- What are teachers' perceptions of innovation within their school?
- What innovation is currently within schools in the UK?

Literature review

In order to better ascertain what innovation is, we begin looking at literature that focuses on innovation as a concept not only in education. One of the most prominent writers about innovation is Drucker (2007), who contends that: "Innovation is the only way to convert change into opportunity". With this statement, he summarizes the power that innovation can wield, in order to keep up with changes it is important to adapt and innovate to better develop. He also argues that digital technology is rapidly changing the way businesses have to operate and therefore, it is their adaptability and forward thinking that helps the successful business to strive and get better. Education is arguably an investment in human capital that needs to adapt and change as much as a business does in order to meet the needs of the users who are the pupils. However it could be argued that the business world has a lot more resources and dedicated time to spend on promoting innovation, with most big companies now having flexible teams of people working on research and development with innovation at the forefront of their ideas. It is unfair to link this type of innovation with the education system, which has reduced budgets and higher demands for better performance. In addition to this, as Jefferies argues in his article 'Innovation in education: are we ready for change?' the inclusion of digital technologies within education can be seen as a shortcut to effective teaching and a panacea of all issues. Often, a major issue when embracing new technology in schools is that they invest all the money into software but invest no time or money into training teachers on how to develop and utilise it. Doug Belshaw, a researcher at JISC infoNet, which provides resources promoting good practice and innovation within the education sector, states that:

When people spend so much money on the hardware and software, the advice would be you need to spend at least the same amount of money on staff training and development, otherwise you're never going to get any effectiveness from it.

A major document when it comes to innovation and education by Cachia, Ferrari, Ala-Mutka, Punie (2010) is 'Creative Learning and Innovative Teaching: Final Report on the Study on Creativity and Innovation in Education in the EU Member States' which was constructed as a major study by the European Union. Interesting ideas gained from looking at this document include the five headings where effort and improvement are needed to create a more innovative and creatively rich education. These are: "Curricula, pedagogies and assessment,

BEEGAN: A STUDY INTO INNOVATION WITHIN AN EDUCATIONAL CONTEXT INCLUDING TEACHERS' PERCEPTIONS OF INNOVATION WITHIN THEIR OWN SCHOOLS

teacher training, ICT and digital media, and educational culture and leadership." It could be argued that these are the key areas for development when it comes to teachers and innovation as in the study they found that the vast majority of teachers agree that ICT has improved their teaching (85%) and that it could be used to enhance creativity (91%). Therefore they see that their teaching is being improved and it is enhancing creativity however the difficulty lies in education's ability to change. Education has a strong ethos of control and discipline and they favour hierarchal relationships. Therefore it fundamentally discourages divergence. From the architecture of schools to the traditional learning styles, education is prescribed.

The document suggests that many teachers would agree that curricula may be over saturated with content and not enough attention is paid to allowing teachers to explore new ideas and innovate with their pupils. The focus from this is to move towards a more collaborative educational system where shared understanding of quality and vision in education and creativity and innovation are encouraged. This means including parents in discussions, teachers collaborating across subject boundaries and a revision of the curriculum. Issues arise when we consider the added implication this means for teachers. Realistically teachers are confined by being trained usually within their subject knowledge and often feel un-motivated to move outside this. In addition to this, the curriculum may be changed and reformed; however teachers' practice may not change accordingly. The curriculum cannot be effective if there are no supportive structures backing them up. The document contends that:

If teachers are not trained on how to allow creative approaches from learners, to identify creativity when it happens and to take into account transversal competences in their assessment, things will remain unchanged.

Therefore the '*pedagogies and assessment*' of education can be dramatically improved through the use of innovation. From the European Union study we can clearly see that teachers speak highly of the integration of innovation as it encourages learning activities, which enable pupils to build upon their skills.

Despite this however, from the teachers surveyed in the report they found that only 70% believed that creativity could be taught and only 50% thought it could be assessed. It can also be argued that teacher centred learning has worked in a great majority of schools for many pupils as the education system is directed towards assessments and results, and this is the easiest way to deliver a wide curriculum to a lot of pupils. Furthermore, the article argues that assessment can be a barrier to change. In addition to this, teachers' lack of skills and confidence in new methods is a hindrance to introducing innovative techniques to pupils. Contributing factors within the secondary school context include; tight timetables, overcrowded classes, lack of support and overloaded curriculum.

The third idea to promote innovation and creativity explored in the European Union document is through teacher training. Through the training process it is imperative to address the issue of creativity and new digital media so that student teachers will feel better equipped to handle this new medium of education and better understand the relation to how "*new technologies are important for learning.*" In addition to this, the next idea builds upon this and calls for better inclusion of new technology and digital media. Technology is central in young people's lives with "*Approximately 87% of adults aged between 16 and 24, using social networking sites in 2012*", (Office of National Statistics, 2013). This shows that the high percentage of young people are fully committed to the digital age with digital

BEEGAN: A STUDY INTO INNOVATION WITHIN AN EDUCATIONAL CONTEXT INCLUDING
TEACHERS' PERCEPTIONS OF INNOVATION WITHIN THEIR OWN SCHOOLS

profiles being the new form of communication: *"Technologies play a crucial role in learners' lives and can act as a platform to foster creative learning and innovative teaching."*

The final idea they convey needs altered is the education culture and leadership: often-innovative teachers go un-noticed, as there *"personal classroom practice is not necessarily aligned with the culture they experience as their working context"*. Therefore school leaders do not see and reward their hard work and efforts. The educational ethos in Europe highlighted in the document is focused on control and discipline and therefore discourages divergent thinking by both pupils and teachers. This leads to a culture of fear and constraints on the classroom, which can hinder creative learning and innovation. The introduction of I.C.T is a dominant force for change in education, however it can be a struggle with lack of training involved for most teachers. In addition to this there is a call for change in assessment so that it takes into account not only the final product but also that the creative process throughout the body of work should be integrated into the formal education objectives.

The final report of 'Innovation and Creativity in Education and Training in EU27 (ICEAC)' concluded with a survey which describes teachers as having an all-encompassing view of creativity and they see it as being a cross curricular theme which, over stretches all subject areas. However, the definition and views of delivering innovation that Teachers' possess is not necessarily the most effective way to deliver innovation to pupils. The focus is on promoting creativity within their teaching through activities which show pupils how to learn. However this study conducted into teaching innovation found that the traditional idea teachers hold of activity based work to deliver innovation is not always effective. Strategies such as multi-disciplinary work and play were deemed less relevant by teachers even though they are strongly proven to improve young people's skills when it comes to creative thinking. We must question teachers' perception of innovation and the reality of it being implemented as many teachers reject the practices, which have been proven to promote it. The document concludes with the idea that *"creative practices should be institutionalised."* Therefore there is a call for educational policy to raise awareness of the benefits of creative teaching and learning by allocating time and space for creative practice. This means the teacher can become a reflective practitioner able to discern how their methods work with pupils both positively and negatively. However education policy is a complicated issue.

Cooper et al (2009) highlight many of the key issues when it comes to actualizing education policy and changing education practice. They state:

The field of knowledge mobilization is inadequately conceptualized. This is largely because there is very little empirical evidence on most of the issues. It is especially noteworthy that very little is known about practice organisations. Whether government, schools or school systems, find, share and use research. The lack of good research tools for this purpose is a particular problem. Many studies contend that changing practices is often a result of the interactions of informal teacher networks (NCL, 2005, a, b).

Therefore they are arguing that the system of policy change to educational practice is failing. They argue that there are no structures in place to create discussion and share feedback from research carried out by government to school or school systems. The view they argue is that the research they conduct is useless as it never actually gets actualized by the most part in schools and does not affect teachers practice. Another issue raised in the article is the slow progress it takes to get the government to change policy surrounding educational

BEEGAN: A STUDY INTO INNOVATION WITHIN AN EDUCATIONAL CONTEXT INCLUDING TEACHERS' PERCEPTIONS OF INNOVATION WITHIN THEIR OWN SCHOOLS

issues. It takes a depth of research before they will fund a new idea and it also needs to be easily quantified to see improvement. Therefore if it directly affects pupils' grades then it is more likely to be supported as they can see the changes. However important issues such as '*innovation*', which is difficult to measure, can be left behind and ignored.

An opposing view to this is from Adam Frankel (2013), who used to be speechwriter for President Barack Obama and is now in the field of educational policy and a key person in 'Accelerating innovation within education' in the states. He speaks of potential for utilizing technology within education, not as an information source, but as a potential learning environment that empowers teachers, pupils and parents. He contends that there is availability to track pupils' development, not on a yearly basis as currently operated, but a review on a weekly even daily basis as data is so easily recorded and managed. This allows the teacher to review the pupils' ability and therefore intervene where and when assistance is needed. Although there would be many arguments against this, Frankel is a realist and discusses the issues of expanding this personal learning style. The challenge he sees is the ability to research this particular area. He also argues that there are many market failures when introducing technology in schools, as the 'district' does not always know the best technology to invest in. In addition to this he states the market is over saturated with big companies who may not have the best products but the most efficient money making products, therefore scaring off potential entrepreneurs who may have better educational products. Finally he argues that even if the correct technology is purchased, there are still pitfalls when it is being implemented, as teachers may not be provided with the support necessary to implement it. Examples of this include Smart whiteboards and iPad's; from my own experience both have been implemented but not utilized in an effective way by some teachers.

Methodology

Education is a research context that has many distinctive characteristics. When researching education there are five particular areas possible to focus on: pupils, teachers, parents, classrooms and schools. Each of these presents problems and opportunities when deciding what method to use. In this section, I will discuss the rationale behind choosing the right methodology to produce the most efficient and effective research I can.

When conducting research with young people it can be difficult in many ways. Many organisations such as UNICEF, Barnardo's and the National Children's Bureau have developed special codes of practice when it come to researching young people to protect them. These need to be followed to make the research safe for both the researcher and the young people involved. The main issue is a power imbalance; often pupils find it difficult to state their opinions openly against the hierarchal structure of education. In addition to this, there are ethical issues that arise such as gaining consent from both pupil and their parents. Also, given the vulnerability of school aged pupils, child protection is imperative. For example all personal data should be kept private and discarded after use. This issue is applicable to all research, however it is seen as more important when it comes to young people. In addition to this I would not have the time to partake in such detailed research.

Researching teachers is much simpler when compared to young people; however they have their own set of issues that can arise. Teachers are often overworked and therefore time and availability are the main points to consider. Getting teachers to dedicate time to research may be difficult as they could see it as useless and a waste of their time. In addition to this, teachers can be protective over their practice and therefore become defensive when asked intrusive questions. This may mean that questions posed to them must be kept brief

BEEGAN: A STUDY INTO INNOVATION WITHIN AN EDUCATIONAL CONTEXT INCLUDING
TEACHERS' PERCEPTIONS OF INNOVATION WITHIN THEIR OWN SCHOOLS

and too much scrutiny into practice may not be welcome. In addition to this, teachers are used to being on show and inspected by official bodies and head teachers. Therefore they are able to put on a show and create the best possible impression that they want the researcher to see. However when it comes to understanding education teachers often have the most hands on experience and have the greatest insights to share.

Teachers are not fully independent in their schools, governors, head teachers and parents can restrict what they may do. Often to gain access into the school setting there needs to be access granted by the gatekeeper who is usually the principal. Beynon and Atkinson (1984) noted that: *"The gatekeepers often steer the researcher away from sensitive situations, such as classes where the teacher has poor classroom control."*

When choosing the research methods for this research, it was important to be realistic and choose the most effective methods to find the correct type of information that would suit the data I wish to find. It is impossible to find the true measure of innovation within schools, as it is a vague area. One person's idea of innovation can differ from another's so it is difficult to quantify and there are so many people involved in education that it is impossible to gain everyone's opinions. Therefore I am going to focus on one school to see how the level of innovation is approached within it. This means looking at a sample school to gain primary data. The type of data received will be mostly qualitative as it gives a more in-depth understanding as well as more valid data. Qualitative research places great emphasis on *'human perception and understanding'* (Stake, 2010, p.11). The issues with these types of methods are that the research will not be replicable or representative as it will be a small-scale study. The limitations of this research are mostly practical, such as time and money. One person conducts all the research and methods within this study; therefore the relative inexperience and bias are natural concerns. I will try and be as objective as possible and reflect the views of the people that I have interviewed.

In order to better understand the level of innovation within a school it is imperative to get the views of the teachers, as they are the most informed people about the application of ideas within the classroom. The data that is most relevant will be their first hand opinions as this is highly valid and relevant which means it will give a true authentic picture of innovation within a school. In order to obtain this type of information from the teachers, the main method used will be semi-structured interviews. This means there will be a set of questions in common for all interviews however there will be freedom to probe for more information. Cicourel and Kitsue (1963) always followed up their questions with 'How do you mean' to gain further insight into the mind of their interviewees. In addition to this, semi structured interviews allow a rapport to be built with the interviewee building a relationship hopefully of trust and understanding. This will allow the teacher to give their own true opinion, good or bad, about the level of innovation within their school. Another advantage to semi-structured interviews is that the questions can be calibrated and flexible to make sure the interviewee understands the question. Often nerves can lead people to answer questions with little to no comprehension of the true nature of the question, therefore being able to go back over a question in simpler terms or more detail allows the researcher to make sure the data is conclusive and relevant.

Despite the advantages of semi-structured interviews, they also have their disadvantages, which have to be considered. The fundamental issue is that they are small scale due to practical reasons. They take a long time to conduct and examine when compared to questionnaires, which are numeric and quantifiable in their design. As so few interviews will be conducted, the research will therefore not be representative or replicable in other cases,

this is the main limitation of the research. In addition to this, the artificiality of interviews is a concern. As interviews are not normal conversations we must be doubtful of the answers given. In addition to this my own personal bias may be an issue, as a student teacher it would be easy for me to unconsciously sympathise with the views of a teacher. Furthermore my inexperience when conducting research may be troublesome as questions constructed may be accidentally leading and subconsciously affect the answers of the interviewees. In addition to this Pring (2000, p.40) considers that the analysis of the interview transcripts is '*filtered through*' the interviewer's own understanding and therefore the final result is a set of beliefs and interpretations which Pring (2000) believes is different from that of the interviewee.

Findings

The first interview I conducted was with a retired Technology and Design teacher who had 32 years experience including a head of department role. Although retired he still teaches as a substitute teacher in many schools on a daily basis. Therefore he may no longer be active in the full extent of schools currently but he has a wealth of knowledge and experiences to share. He also moderates for an exam board so he is well informed of current requirements of teachers within his subject. The majority of his career was spent teaching deprived students and he stated,

"The pupils in the school ranged from very weak to bright. Many of them came from a deprived area in Belfast. I firmly believe that I learned the skill of how to teach in this school because I had to adopt so many different ways to teach and approach pupils in ways, which I found got a positive response."

Therefore, the passion he held for his students was apparent and the fact that he was very much an innovative teacher, as he needed to overcome the struggles he faced in a deprived area. The evidence for him being an effective teacher was that his department was the most successful in the school getting the best results at both GCSE and A-level. His personal definition of innovation was; "*innovation is demonstrating the ability to do things in a new way*". His own definition was very focused on education as it was about 'demonstrating' which is a very teacher focused word typically found in schemes of work, learning objectives or success criteria. Therefore he is seeking pupils to show that they are approaching their work with innovation in mind; showing their ability to 'do things in a new way', which is a very simple definition of innovation. The focus however is not typical of a technology design teacher where it is about improving a product that the pupils are designing, although he mentioned this later in the interview, his immediate thought of innovation was that it was a much larger idea than improving a product. It was a broad definition, which called for improving anything in a new way similar to the Oslo Manual, which earlier stated there is a need for innovation by utilizing new technologies, knowledge or materials. It was apparent that this teacher was aware of the growing inclusion of digital technologies within education, maybe due to his age and experience he has seen the full extent of the changes and the effects they are having on education.

An interesting response was given when asked about teachers' own perceptions of innovation and its effects on education as he contended that teachers are faced with twenty plus pupils who learn and react to what the teacher is teaching in different ways. He expressed an opinion that it is the teachers' responsibility to try and communicate as effectively as possible to all pupils. Therefore he saw it as a legal responsibility to be innovative as a teacher in order to best communicate with all pupils and meet their needs within the classroom. From his perspective he stated that he did not think any teacher came

BEEGAN: A STUDY INTO INNOVATION WITHIN AN EDUCATIONAL CONTEXT INCLUDING TEACHERS' PERCEPTIONS OF INNOVATION WITHIN THEIR OWN SCHOOLS

into school with the notion of being innovative and that it was more of a natural trait. He argued, *"It may well be the difference between a good and a poor teacher"*. Although this is just a suggestion, it may be too presumptuous by generalising teachers into two categories depending on one idea, however I do not believe it is possible to distinguish this one idea as being the deciding factor of whether or not someone is a good or bad teacher.

When asked about the policies / training that are provided surrounding innovation within schools he discussed the policy 'Sharing Good Practice' where members of staff demonstrate how they teach their subject. In addition to this as his role as moderator he said that he could almost tell from a schools building whether they were moving forward or stuck in the eighties. Therefore even the wider school substructures such as architecture, classroom organisation and design affect the innovation of a school.

The second interview carried out was with a Technology and Design teacher with a few years experience teaching. The differences in responses to the first interview were noticeable and arguably more reflective, maybe due to the fact that he is still constantly reflecting on his practice as a new teacher. The second interviewee spoke about the limitations of innovation when it comes to education, and stated, *"It is limited to a small number of subjects"*. He expressed how he felt comfortable on the topic of innovation as he was a young Technology teacher and when people think of innovation they usually think about modern technology, which he was familiar with. However older teachers whose subject area is not conducive to the use of technology might fear or disregard innovation. Arguably the use of interactive whiteboards, high-speed technology, and iPads et cetera make it easier by creating a new dynamic whereby pupils can learn. The ideas shared are more realistic; his perceptions are dependent on the personal ability of the teacher. When discussing innovation within a wider school context he expressed an opinion that it was rarely discussed at a whole school level. Instead it was usually discussed within departmental meetings of technology and design. A valid point he made was that Technology and Design offers a range of extra curricular opportunities for young people to be innovative such as; Young Enterprise, Lego League, Sentinus and STEM run schemes.

An intriguing response was generated when asked: would you consider 'innovation' as a relevant life skill to be taught to pupils? From his perspective he said *"No, I would not describe it as a life skill. That is not to say that I undervalue innovation. For me life skills are personal characteristics that a person should adapt. Adaptability and evolution are life skills that lend themselves to innovation."* Therefore he is questioning the relevancy of innovation as a life skill to be taught within education. Surely it is more relevant to teach adaptability that leads to innovation as a pupil's ability to adapt to different circumstances is far more relevant to a broader amount of pupils than the ability to innovate, which is relevant for only those who choose a field of work which allows innovation such as business or engineering.

Discussion and Conclusion

This study set out to find: 'what are teachers' perceptions of innovation within their school?' and also 'what innovation is currently within schools in the UK?' through a literature review and through conducting my own interpretative research. I believe I have accumulated an enhanced understanding on the topic, however I do not intend to state absolute truths and contend that I now have the answers to any questions surrounding innovation. Therefore I will contribute my own findings from this small-scale study and my personal interpretations of what it means. The study has flaws as an inexperienced researcher conducted it, the data can therefore be seen as risky. I found it difficult when conducting interviews, not to attach

BEEGAN: A STUDY INTO INNOVATION WITHIN AN EDUCATIONAL CONTEXT INCLUDING TEACHERS' PERCEPTIONS OF INNOVATION WITHIN THEIR OWN SCHOOLS

my own viewpoints onto what the interviewee was trying to state. This is similar to what I discussed in my methodology where Pring stated the interviews are filtered through the researcher's understanding. This is possibly the biggest issue I confronted when conducting the interviews. In addition to this the study was very small scale due to realistic time restraints and therefore the data is not replicable, as it cannot be reproduced anywhere else again the same way, and also the data is not representative of the entire school system. It is focused only on a few teachers' perceptions.

The literature study shows that 'innovation' as a term is very convoluted when trying to define it. Often the term can be seen as a radical new way of thinking, which is needed for improving our modern world, backed up by my first interviewee who perceived innovation as being the difference between a 'good' and 'bad' teacher. However I found it was a blanket term for reflective practice, which is never really understood by two people the same way. Therefore it cannot be an effective term if it is not quantifiable and able to be understood by all. This means that asking teachers to be innovative in their lessons can be very challenging as one teacher may think one way of teaching is innovative and another teacher may think the opposite. There is no way to correctly judge either person as being right or wrong as it is a grey area. The justification and reasoning behind innovation I believe is where the real strength of a teacher comes from. Simply stating a teacher is innovative is meaningless, however if a teacher can reflect on a strategy and truly rationalise why it was innovative then the true value of innovation is reached.

From the findings, there is a better understanding of "teachers' perceptions of innovation" which was the research question stated at the beginning of the research. As the study was looking at perceptions it was interpretive and meant to gain insight into a few teachers personal reflections of what the term 'innovation' meant to them. The semi-structured interviews therefore were very helpful in finding their perceptions and gaining insights into their opinions, as it allowed room for discussion around a series of questions as well as room for elaboration if the teacher felt they needed to explain themselves more fully. The perceptions gained from the teachers were similar in places and also contradictory in other places. This could be due to the age differences and experience of the candidates interviewed or it could be seen as an additional indicator that 'innovation' is a complicated and multi-definitional word. The first interviewee expressed his perception of innovation as being a wide term used to demonstrate the ability to do things in a new way. From his perspective it was down to the teacher to utilise it in their lessons, as it was part of the legal requirement of a teacher to do so. However the second interviewee shared the perception that innovation may not be so relevant to education unless it is utilised correctly and this is dependent upon the ability of a teacher when using new digital technologies within their lessons.

When we compare the literature review to the findings from the interviews we can see certain comparisons and contrasts. Literature surrounding the area of innovation is often highly ideological and does not consider the realities of a teaching setting. This could be due to the people writing for education and that they have little to no experience actually teaching within a classroom, and for many this is obvious. The teachers spoke of a disdain for policies from government, as they can often be unreasonable and difficult to implement. Teachers already have so many demands that it can be seen as unreasonable to implement another strategy or idea upon them. Innovation as we have seen is now part of the curriculum to some extent and a legal requirement, however it is impossible to accurately assess a teachers' use of innovation. Therefore teachers can never really be improving their practice if they are unaware of their failings.

BEEGAN: A STUDY INTO INNOVATION WITHIN AN EDUCATIONAL CONTEXT INCLUDING
TEACHERS' PERCEPTIONS OF INNOVATION WITHIN THEIR OWN SCHOOLS

In addition to this, we can suggest that everyone sees innovation as relevant to education. As the interviewees state, it is imperative, especially with the inclusion of new digital technologies. Even the interviewee, who stated that it was not necessarily a life skill, prefaced it with the opinion that he would never undervalue the significance and importance of innovation. From my perspective after conducting the research, I would argue that innovation is not fundamental to education achievement however it is what educators should be aiming to achieve. In Maslow's hierarchy of needs, creativity and innovation are seen as the top level of achievement for a person. . Therefore educators should be aiming to reach this level of intelligence with their pupils so that they are not only 'contributors to society' as stated in the big picture (Northern Ireland Curriculum, 2007), but that they are benefiting and adding to society.

As this was a limited piece of research I did not intend to overcome any of these issues by creating solutions. The benefit of this research was to become better informed on the matter of what innovation meant from other people's perspectives. Considerably more work would need to be done in order to find a universal understanding of innovation and an easier way to implicate it within education. This information is highly relevant to me as a trainee teacher and I hope to use it to inform my practice in the future so that I can be an innovative teacher who is accessing all their pupils' abilities and allowing them to be creative and innovative.

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