The debate about the use and justification of ICT in schools has been replaced by a discourse of inevitability where schools of the future are presented as technology rich sites of learning. Yet despite this faith in the technology there appears to be a vagueness about what role ICT will actually play and more specifically what way its inclusion will enhance the learning experience. A possible reason for such vagueness could be as a result of the pace of technological change where a lack of specificity future-proofs policy statements, prolonging their shelf-life while enabling them to embrace not yet developed technologies (and future pedagogies that may come into vogue). Alternatively, it could also be argued that another reason for such vagueness lies in the unquestioned belief in all technology. The ‘space’ created within this inevitable discourse enables schools to construct their own vision free from any guiding pedagogical or philosophical framework. In this context it is worth exploring how schools respond to the ICT agenda and how such responses are viewed by the school inspectorate.

This paper reports on a study which examined school inspection reports from a sample of post-primary schools in the Republic of Ireland (n = 75) from September 2013 to June 2014. The research aimed to identify the references made to ICT, and where present, examine what was reported and how its use was evaluated. In the absence of explicit policy and within an environment where all use is perceived as positive, such evaluations are arguably the articulation of vision of expected use. These evaluations also reflect the values and assumptions about the technology that are often masked by the rhetoric of policy statements and the ‘regime of truth’ presented within the media.

The research found that, where mentioned, reference to ICT was characterised by a vagueness which gave little indication of how the technology was actually used. Where descriptions of use were provided, they tended to reflect the use of the technology as a presentation aid for the teacher and limited reference to student-centred use was found. The paper discusses the possible reasons for this type of reporting (and the nature of use reported) and examines the implications for future ICT developments in the post-primary sector.

1 INTRODUCTION

There is little doubt that technology in education has captured the imagination of the wider public. Technology in schools, be it laptops, tablets or traditional desktop devices, is seen as a sign of innovation and progress. As far back as 2000 Blackmore et al. (2000) noted that images of good schools were ‘closely associated with teachers with laptops and students clustered excitedly around pods of computers’ (p. 18). Such is the extent of this unquestioned faith in the technology that a culture of inevitability has developed around ICT usage. This inevitability manifests itself in different ways.

It can firstly be seen in the emphasis given to hardware acquisition. Acquiring ‘critical’ levels of ICT infrastructure is seen as a vital aim of schools and educational systems in general. International comparisons of computers-to-pupil ratios or comparisons of overall expenditure on ICT infrastructure are evidence of this focus. Further evidence of this emphasis on hardware acquisition is apparent in the attention given to technology-rich schools that possess higher than average ICT resources. These schools are often presented as models of ‘best practice’ and as schools that have ‘progressed’ further than others along the inevitable technology journey. These schools are often given significant attention in local and national media cementing the belief within the wider public that ‘progressive’ and ‘modern’ schools are ICT rich sites of learning. The attention on schools with very high levels of ICT
resources also plays on the anxieties of parents concerned that their children will be ‘left behind’ in the competitive educational marketplace. As Ferneding (2003) notes, ‘investing in computers is, so parents are told, a way of investing in your children’s future’ (p. 25).

A significant omission from this discourse is any detail in relation to the actual nature of usage. This is perhaps based on the belief that the presence of the technology in the schools is automatically a positive development limited only by the financial capacity of the system or local community to purchase more technology. Yet this blind faith in the educational merits of the technology is questionable. While research within the Irish educational system into the nature of ICT usage is sparse, evidence does point to limited ICT usage and where presented is quite different from the rhetoric painted within the national psyche. Research suggests that the technology remains used primarily to support traditional teacher-centred approaches (DES, 2008; Judge, 2013) and far from the constructivist image presented in much of the optimistic discourse (Hammond, 2014).

The culture of inevitability is also legitimised within the organisational architecture of the schooling system where prioritisation can be given to ICT hardware acquisition above other areas of investments, whether that is sport, music, art or other facilities central to the schools mission. This can be particularly so if legitimised at higher levels within the hierarchal structure of the system. Evidence of this is often found in national ICT policy and in school inspections and evaluation reports. In Ireland ICT policy reflects the techno-centric optimism replete with the now familiar concerns about economic competitiveness in global markets and equipping the youth with the ‘skills of the future’ (DES, 2009). The discourse regarding ICT is further evident in the literature where countries with poor ICT skills might not form part of the “knowledge economy” (Egea, 2013) and that an education without ICT represents a “deprived learning context” (Kompf, 2005).

In Ireland inspection of schools is conducted through the Whole-school evaluation (WSE) process. This is a process of external evaluation of the work of a school carried out by the Inspectorate of the Department of Education and Science (DES). The process is designed “to monitor and assess the quality, economy, efficiency and effectiveness of the education system provided in the state by recognised schools and centres for education” (Education Act 1998, section 7 (2)(b)). The process involves a review of school documents, meetings and interviews with various stakeholders, observations, interactions with students and evaluation of student work. The process pays particular attention to the management of school resources and the quality of teaching and learning (DES, 2006).

This research aimed to explore the references made to ICT within whole-school evaluation reports (WSE) issued by the inspectorate and in particular to analyse how the use of ICT was reported and evaluated. Such WSE reports can not only provide an insight into the nature of ICT usage in schools, they can also provide an insight into the expectations of department inspectors in relation to ICT usage. In effect they are the articulation of policy representing the ‘official’ view of the inspectorate. Such an insight could be quite illuminating given the relatively vague nature of ICT policy that presently exists in relation to educational use in schools.

Two key research questions guided the study:

- In what way is ICT usage reported in the Whole-School inspection reports?
- What appears to be prioritised in relation to ICT usage?

2 RESEARCH METHODS

The research reported on in this paper is part of an ongoing study exploring teachers’ attitudes towards ICT. As part of a larger research project, the research reported on in this paper examined all published whole-school evaluation reports from post-primary schools in the Republic of Ireland (n =
between September 2013 to June 2014. As part of the whole-school evaluation process all reports are published online and freely accessible to the public. Therefore all published reports in the previous year were downloaded and analysed.

The research aimed to identify the references made to ICT, and where present, examine what was reported and how its use was evaluated. Firstly all references to ICT were isolated from each report. When all reports with no references to ICT were omitted from the study there were 73 reports remaining for analysis. Having identified all references to ICT each extract was analysed. Two researchers independently read all extracts and identified tentative themes emerging. Comparisons in the themes were then made before agreement on the common themes was determined.

3 RESEARCH FINDINGS

3.1 Management of School Facilities

The first section of the inspection report deals with the management of school facilities. In this section of the 75 reports examined there was reference to ICT in 53 of the reports. Where mentioned, comments related to ICT tended to focus on ICT resources in the schools often commending the schools on their levels of ICT infrastructure. In only two of the 53 entries was reference to good ICT resources not mentioned;

*There has been good investment in information and communication technology (ICT) throughout the school.*

*There has been significant investment in information and communication technology (ICT) in recent years and all classrooms are now equipped with computers and data projectors and most classrooms have internet access.*

*Classrooms are well equipped in terms of information and communication technology (ICT), and in recent times the school has invested heavily in an upgrade to the computer room. Almost all parents believe that the facilities in the school are good.*

The second aspect to emerge from the *management of school facilities* sections was the nature of the usage reported. There was a number of references to the use of ICT for administrative purposes - where the schools were commended for introducing some ICT element to their administrative systems, such as attendance or record keeping (mentioned 8 out of 53 entries). There was also several references to schools use of the technology in communicating to the wider community and parents via the use of a website or some other ICT (mentioned 9 times from 53 references to ICT). However, the vast majority of references to ICT use in this section of the analysed reports referred to the use of ‘enhancing’ teaching and learning (mentioned 28 out of the 53 references). Despite these numbers of references the usage was quite vague with references on many occasions to ‘integration’ without providing detail. For example;
Management is to be commended for prioritising the integration of ICT into learning and teaching.

Innovative integration of ICT into teaching and learning was evident as was a very good

It is well equipped with a wide range of resources, including ICT, and these resources are well utilised to support students’ learning.

appropriate use of ICT as a teaching and learning tool was a consistent feature of lessons visited during the evaluation

Specialist rooms are well maintained and the information and communication technology (ICT) infrastructure has been well integrated into the school.

3.2 Quality of teaching and learning

The second section of the WSE reports examines the ‘quality of teaching and learning’. Of the 75 reports analysed 60 made reference to ICT in this section. While specific details in relation to ICT usage was lacking within the first section of the report, it was envisaged that due to the emphasis of this section of the report more detailed descriptions and evaluations of ICT use would be evident. However, in analysing the entries in this section, the majority of the references to ICT could be described as vague in their description. 25 of the 60 entries could be categorized in this manner.

Examples include:

ICT resources were used in many lessons. Effective use was noted in a small number. The full scope of ICT should be explored as teachers’ confidence and skills develop.

It was evident from the lessons observed that the integration of ICT into the teaching of all subject areas is very good.

Some very good use was made of ICT to enhance learning. However, its potential as an effective teaching and learning tool should be further utilised in some classes.

ICT was integrated into most lessons and, in a majority of these, enhanced learning for students.

There is clear evidence of the impact of management’s efforts to increase the use of ICT in lessons, and where this was used it was an effective aid to learning.

Where details of the nature of the use of the technology was provided an emphasis on its use as a visual display tool by the teacher dominated. Leaving aside the vague statements about ICT use described above, the use of display technology was by far the most referred to use in this section (mentioned 24 out of the 60 times). A selection of some the examples below provides an overall flavour of these descriptions;

Frequently, the use of ICT resources was integrated seamlessly into lesson activities mainly through the use of visual and audio clips to clarify understanding or to illustrate the application of theory to practice.
A very good range of resources supported learning across all lessons. Very good use of information and communications technology (ICT) was observed to show short films clips and Power Point presentations. The effective use of a visualiser was evident in a few lessons.

The extensive use of ICT as a resource to support teaching and learning was observed in most lessons. However, ICT was mainly used by teachers with few students having an opportunity for hands-on or in-depth engagement with the resource.

The final example presented above is one of a very small number of examples of where the overuse of visual display technologies was commented on. Normally this use was not presented in a negative light.

In only 3 of the 60 entries identified in this section was there specific mention of some form of student-centred teaching.

Very effective use of ICT was evident in many lessons. In one lesson, a very good example of a student-led activity was observed when ICT was actively used by students making a presentation to their peers.

While ICT was used in most lessons, in only a small number was effective use made of it to improve learning. In a very good junior cycle lesson, students demonstrated their knowledge and skills to the class, using ICT.

4 DISCUSSION OF FINDINGS

In considering the findings of the study there are several issues that merit discussion. As the findings revealed, schools were praised and commended for acquiring good levels of ICT resources, comments in relation to the nature of its use were less prevalent. At one level it could be argued that the emphasis on acquiring more ICT equipment and resources is understandable and indeed prioritised due to the relatively low base that many schools have come from. In this context it could be argued that it would be pointless examining usage when levels of resources have not achieved the ‘critical mass’ required to facilitate large-scale adoption. On the other hand, it could be argued that the emphasis on hardware reflects the fact that ICT remains within its ‘novelty’ stage within schools where all use is seen as worthwhile and therefore to comment or assess the value of its use would seem unwarranted.

Ireland does not appear to be unique in this context. Ferneding (2003) observes that when adopting new technologies, ‘educators often focus on simply acquiring the technology, leaving fundamental pedagogical issues to a mere afterthought’ (p. 3). However, what is perhaps unique in this study is the duration of this ‘honeymoon’ period within the Irish context. Given the long history of ICT integration and use in Irish schools the absence of a critical perspective towards its use suggests an absence of leadership in relation to defining the vision and role of ICT in the learning process. It is perhaps understandable that teachers, parents and the wider public are drawn into the lure of new technologies and the techno-utopian dreams they represent (Ferneding, 2003). Nevertheless without a strong pedagogic vision and effective leadership the education system will remain constantly distracted by new and emerging technologies without any critical questioning of their value. Within this ‘technological somnambulism’ (Winner, 1986) a certain inevitability exists where the adoption of ICT and the ‘technification’ (Egea, 2014) of schools is seen as a normal evolutionary process, it is critical that this constructed norm is interrogated but as Schostak and Schostak (2013) remind us ‘the social construction of the ‘normal’ is very often hard to see’.
The second significant finding to emerge from the study was the lack of specificity when describing the nature of ICT use observed by the inspectorate. Continued references to good integrated use of ICT without providing much detail in relation to this leaves many questions such as, what is this ‘good’ integrated use? On what basis is its use being evaluated? Are such vague statements about the nature of use intentional, perhaps masking the uncertainty that exists about what constitutes ‘good’ use? Or are these vague descriptions a result of the ‘regimes of truth’ (Foucault, 1997) that surround ICT adoption in schools? A possible reason for such vagueness within the discourse could be as a result of the pace of technological change where a lack of specificity future-proofs policy statements, prolonging their shelf-life while enabling them to embrace not yet developed technologies (and future pedagogies that may come into vogue). Alternatively, it could also be argued that another reason for such vagueness lies in the unquestioned belief in all technology. Subscribing to the ‘regimes of truth’ surrounding ICT does not necessitate a justification for their integration since this position assumes a value in all ICT related use. Without specifically stating what is deemed to be good use of ICT in the reports examined in this study how can one school learn from the report of another? And if these reports are not meant to guide and perhaps influence other schools in how they are set up and run, why make them available online. McGarr & McDonagh (2012) described the isolation felt within schools when integrating ICT into the classroom and reported on how schools had seen the value in sharing of information and collaboration.

Where the nature of ICT was described it presented a picture that is far removed from the policy rhetoric prevalent in the current discourse. Hammond (2014) for example notes that ICT has become associated with collaborative and authentic learning and there is a strong association between its use and constructivist teaching methods. However he also notes that ‘the research literature has provided copious evidence that ICT has not been used as frequently or as desired by the optimists’ (p. 196). The use reported in this study supports this assertion given that there was very limited reference to constructivist-type use of the technology and instead, where described, tended to present teacher-centred lessons where the technology simply supported the role of the teacher in imparting information to the students. This use reflects the findings of recent studies (DES, 2008; Judge, 2013) that point to an overemphasis on display technologies and the continuance of a traditional repository model of teaching. Hammond (2014) reminds us that teachers are constrained by the wider ecology of schools and in that context any ICT initiatives will always be defined within cultures of teaching (p. 198). Failure to recognise the powerful influence of prevailing pedagogies in schools and their conserving influence on initiatives that enter the classroom will mask the true impact of technologies of learning that could cement existing practices rather than act as a catalyst as is frequently presented in the discourse (Ferdending, 2003; Egea, 2014).

5 CONCLUSIONS

This research aimed to provide an insight into discourse of inevitability regarding ICT and its continued integration into the education system. Although the primary source of data for analysis for this study was provided by 75 whole school evaluation reports, the study also revealed further evidence from the literature that examined a discourse of inevitability and lack of clear pedagogical vision that describes how ICT can improve teaching and learning in the classroom.

The study makes reference to Winner’s (1986) ‘technological somnambulism’ which refers to the unquestionable acceptance of technological innovation. The findings presented in this study showed that ICT use was commended in whole school evaluation reports; these same reports for other schools recommended increasing ICT infrastructure and also commended schools that had improved their ICT infrastructure. However these same reports also allowed a vagueness to permeate surrounding ICT use in the classroom. This study has suggested possible reasons for this, such as the pace of technological change, however this vagueness does little to direct schools in integrating technology and allows the individual entrepreneurship of the teachers within the school to direct how ICT will be used (McGarr & McDonagh, 2013). This independent entrepreneurship could explain the repeated use of ICT for visual display and also explain why no examples were given in the reports that described innovative use of ICT in teaching and learning.
While one might accept schools being lured in by the latest technology, inspectors who are advising and guiding schools should provide a more critical lens before encouraging the purchase and adoption of technology. This critical lens, in conjunction with continued professional development, could remove the dissonance that exists between the reality of school life and the contents of policy documents, however without these changes the true value of ICT in the education system will remain untapped.

REFERENCES


