# Chapter 6
# Images of Educational Practice: How School Websites Represent Digital Learning

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**Abstract** What does school life and learning *look* like? One way of addressing this question would be to consider the images that educational institutions employ to represent the activity of their students. In this chapter, we report the results of applying such an approach to 151 websites of English primary schools. They were randomly selected from a government database of such schools. Photographic images found on these sites were then classified into 18 base categories according to their principle content. Images of the school 'environment' (the building, classroom), 'sport' activities and 'personality' images of children (presenting individual or groups of children) dominated this corpus. The principle themes tended to show children variously involved in exercise, performance, visits to external sites or different forms of active inquiry. Involvement with any type of digital resources was found to be a very infrequently represented form of student activity. This low profile of digital engagements was reinforced by an audit of after-school clubs advertised on the websites which showed that less than 5 % of the clubs were technology-related. These findings are discussed in terms of a tension between the rhetoric and investment associated with technology-enhanced learning and the extent to which it is publically and visually celebrated by educational institutions.

**Keywords** School websites • Digital learning • Digital culture • Primary schools • Market-oriented • Environment • Schooling • Pupil invention • Creativity • Connected • Digital tools • School App • Student experience • Digital learning

## Introduction: The Imperative of Digital Learning

A failing system of education is often invoked when societies are reflecting on their various troubles and disorder or, most commonly perhaps, their sluggish growth into prosperity. Formal schooling has weathered a history of social criticism—from

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Dewey (1929) through Freire (1986) and Illich (1971) to the engaging challenges of high-profile commentators such as Lord Puttnam[1] and Sir Ken Robinson (2006). When it then comes to addressing how educational practice might be repaired or reinvented, it is not surprising that, right now, there is much interest in the juggernaut of digital technology.

There have been various arguments that converge on the imperative for schools to embrace this technology. First, it is clear that digital media is ubiquitous. It pervades a wide range of representational, expressive and interpersonal cultural practices. Many routine but important transactions of everyday life are now mediated by this technology (shopping, job applications, personal accounting etc.). Therefore, actively cultivating media literacy in early life must seem a priority. A related and second argument for schooled confidence with digital media arises from the growing political focus on student employability. Often a misalignment is identified between the toolsets of employment and the toolsets of education (e.g. Fuller & Joynes, 2015). It is because "knowledge work" (Solow, 1994) has become so central within the pervasive "knowledge economy" (Drucker, 1992; Lundvall, 1992) that there has grown a pressure on schools to have students embrace new technology as a solid foundation for work. This pressure comes from both employers and politicians. For instance, former UK Education Secretary Michael Gove commented in a keynote speech: "Our school system has not prepared children for this new world. Millions have left school over the past decade without even the basics they need for a decent job. And the current curriculum cannot prepare British students to work at the very forefront of technological change" (Gove, 2012). However, the status of technology in everyday school life remains poorly understood—as does the extent of any "digital divide" between schools.

Michael Gove's speech introduced a new UK curriculum requirement. One that required students to engage with computer coding from 5 years of age and onward—a significant challenge for early education practitioners (Brown, Sentance, Crick, & Humphreys, 2014). This initiative not only identified a significant response to concerns about preparing students for technology-rich workplaces, it also signalled a belief that acquiring creative confidence with digital tools empowered young people's imagination and invention: "By its very nature, new technology is a disruptive force. It innovates, and invents; it flattens hierarchies, and encourages creativity and fresh thinking" (op. cit.). Of course learning is typically a creative commitment and this "tool-of-creativity" vision of technology can be coupled with a more familiar "tool-for-learning" approach. All of the major theories of learning within Psychology have each embraced the potential of digital technology to support cognitive development. From behaviourism (Skinner, 1965) through constructivism (Papert, 1980), into socio-cultural theory (Crook, 1994) and cognitive science (Lajoie & Derry, 1993): all the major theories of learning have offered manifestos for the transformative potential of these tools when suitably embedded in educational contexts.

Finally, there is an imperative for technology in schools arising from a faith in the idea that these tools must have a potential to *motivate* learning. This is claimed in

[1] http://www.davidputtnam.com/education.

response to the conspicuous appeal of these technologies for young people: albeit an appetite that is sometimes celebrated (Prensky, 2001) and sometimes regretted (Palmer, 2015)—with all such judgements still being hotly contested. The simple refrain that rises above such controversies is that if these so-called "digital natives" are so comfortable (and inventive) in their recreational application of the technology, then we must design activities that recruit its appeal into more classroom applications. This observation and the others made above converge on the expectation that digital learning is being actively cultivated in even the earliest years of education.

This chapter only investigates the reality of such expectations in the UK and only in the primary sector of education. However, international surveys suggest educational policy, practice and outcomes in the UK do not depart strongly from, for example, European norms (OECD, 2015). In terms of investment, the expectation of a strong digital presence in schools certainly seems well met. Investment began in earnest in 1999 when a "New Opportunities Fund" of £230 m was used to provide ICT training for teachers. Curriculum Online was launched in 2001 involving £50 m of e-learning credits. In 2003 this was increased to £230 m over 3 years. This was followed by a £100 m "Laptops for teachers" initiative and in 2008 a "Harnessing Technology Grant" provided £639 m to help schools and their local authorities improve such services as broadband infrastructures and learning platforms. Moreover, investment continues to grow. BESA (the trade association of British educational suppliers) report a 2013 survey involving over 700 primary schools: these schools predict that their expenditure on ICT in 2014–2015 will be higher than any other time on record.[2]

Taken together, the observations above assemble into a strong expectation of vigorous ICT-mediated activity in primary schools. Politicians, employers, and learning theorists voice encouragements for this direction of travel. Moreover, the distribution of government funding into this area must mean that digital tools have simply been the major form of (non-staff) learning resource investment for the school system. Yet it must be acknowledged that, despite these apparent imperatives and these generous investments, commentators have often diagnosed a very slow pace of adoption and change in relation to digital learning (e.g. Livingstone, 2012).

There are grounds for caution in how such concerns are interpreted. Their diagnoses tend to be based on outcome studies and these often dwell on merely relating attainment to simple (digital) resource counting. Moreover, some commonly cited studies linking ICT adoption with attainment in this way need to be refreshed for present circumstances (e.g. Harrison et al., 2003). In terms of method, many of them are based on self-reporting surveys some of which, again, need to be updated (Selwyn, Potter, & Cranmer, 2008). While others make coarse grained observations that may conceal telling diversity. For instance a recent cross-national attainment survey (OECD, 2015) builds its sceptical conclusions on interrogating computer use but it fails to define "computer" in its questionnaires (p. 47). This surely would have left respondents uncertain about the status and use of such digital resources as

[2] *ICT in UK State Schools*. Retrieved October 30, 2015, from http://www.besa.org.uk/news/besa-press-release-besa-releases-ict-uk-state-schools-research.

whiteboards, smartphones, e-readers and tablets. There is certainly a lack of more ethnographic and longitudinal studies of technology use in schools—studies that might identify patterns and modes of teaching and learning practice rather than simply access to resources. The reports of government inspectors, while hardly ethnographic, do involve close observations and they tend to diagnose a slow and fragmented style of adoption (Ofsted, 2009).

## The Website as Window into School Life

Outcome studies (relatively common) and large-scale classroom observations (relatively rare) are just two windows onto the digital culture of schools. In this report we consider a different kind of window: namely, the school website. It is less often considered yet it is one that might provide a different and distinctive snapshot of how digital resources are embedded in typical school life. So we are considering here how digital learning and communication are projected as photographs on school web pages. For a focus of that kind there clearly is a dimension of national context—government, custom and practice may dictate different expectations and approaches to what is published in such places. In the case of the UK there is, first of all, an expectation that primary schools should all have a website. Moreover, there are then clear guidelines as to what schools must publish online—somewhere.[3] In particular, they must make visible various documents and reports relating to curriculum delivery, performance, behaviour and arrangements for admissions. They must also detail various policies on expenditure of government income and make a statement of institutional vision and ethos. One way in which the national inspection agency (Ofsted) will determine if these requirements are being met is by making a visit to an institution's website. This has made such sites much more significant for schools. Previous advice was little more specific than the tentative suggestion that: "Parents could see more about what their children are learning in school through a school's website" (Becta, 2008, p. 5).

In addition to their role in quality management and accountability, websites have therefore become very effective ways to reach out to parents (Laffier & Laffier, 2014; Piper, 2012). One group of researchers in Australia scrutinised such sites and suggested criteria that schools might work to in order to achieve an attractive and effective presence (Taddeo & Barnes, 2016). Cultivating such aspirations has meant that schools no longer depend on an enthusiastic classroom teacher to define their presence: guidance and production is more likely to be entrusted to professional website designers.

While parents of students in a school are one significant audience for this presence, websites are not for them alone. These sites are also reaching out to another constituency: namely, those families who will be *future* users of the school. In an

[3] *What maintained schools must publish online - Detailed guidance*. Retrieved October 30, 2015, from https://www.gov.uk/guidance/what-maintained-schools-must-publish-online.

increasingly competitive atmosphere of school choice, the marketisation and commodification of school is apparent. Web designers are stressing the importance of this marketing role to their school clients. As one company puts it: "We recognise that the job of marketing a school has changed dramatically over the last 5 years. Technology continues to drive an ever-growing expectation amongst parents".[4] While another closes the gap between schools and the marketing of more familiar consumer products: "Schools can use marketing techniques to give parents confidence in where they are sending their children. This can be achieved through utilising the school website and local publications to spread good student news—it all enhances the value of a local school as a brand".[5] In short, it is likely that many schools accept how: "A professional, interactive website could make all the difference when parents are deciding where to educate their children".[6]

Others have considered how the rhetorical strategies applied to school prospectuses and brochures work for schools to manage the necessary modern discourses of identity, success and privilege. However, such analysis is traditionally applied to the *text* of these documents (cf. McDonald, Pini, & Mayes, 2012), rather than any other expressive modality they employ. In this chapter we wish to give more attention to the use of *visual* representations—photographs—when constructing meaning on these websites. There are good reasons for this decision. The recent prescriptions of institutional inspection have rendered school websites rather bureaucratic in format—heavy on standard text at the expense of content that asserts individual identity. The browsing viewer of these sites is surely more likely to be engaged by the photographs and thereby take from them a strong sense of the culture and everyday life of a school. Arguably, this has become the main device whereby a school can project the distinctive character of its activity.

Therefore, in diagnosing the digital culture of early education represented through the "window" of school websites we shall:

- First, characterise the student experience as manifest in published photographs of school activity. What is of special interest is the extent and representation of digital learning in these photographs.
- Second, we will consider how far children's digital work is celebrated through its publication in this school medium.
- Third, we will consider the site as itself a digital tool for communication and ask how far schools are using the design features of web pages to create a vivid and engaging encounter with their audiences.
- Fourth, we will consider a further form of school practice identified on these sites—one that also sits outside of statutory required information—namely, reference to extra-curricular activity and clubs and, in particular, the visibility of digital interests as a theme within those activities.

[4] Retrieved October 30, 2015, from http://www.schoolwebsite.co.uk/.

[5] Retrieved October 30, 2015, from http://www.greenschoolsonline.co.uk/services/school-branding/.

[6] Retrieved October 30, 2015, from http://www.phenixeducation.co.uk/website-design/.

Therefore in the remainder of this chapter we describe our findings from analysing a significant sample of UK primary schools in relation to the above four themes. In the next section our method is outlined, this is followed by a summary of results and, finally, some consideration of their implications.

## Sampling School Websites

The UK government publishes a list of all schools in England. In order to create a sample for investigation, we selected the website URL for every 100th "primary school" in that list. This provided a 1 % sample, or 167 schools. For reasons that are not clear in relation to the construction of this official list, there were a number of schools with repeated entry and other that had apparently closed. These were excluded, leaving a sample of 151. In cases where a URL was not given, the next available published URL in the list after that school was used as a replacement.

Two coders (the authors) independently considered a selection of sites in order to negotiate a set of thematic categories that would allow a confident content analysis of the photographic images found on these sites. Such coding involves attaching interpretative codes to individual photographs in order that a quantitative summary can then convey the "landscape" of representational practice.

The 12 resulting codes are shown in Table 6.1 along with their definitions.

Table 6.2 gives further example photographic content for each category. The principle problem encountered was the practice of schools presenting "sets" of photographs depicting modest variants of the same event. For example, if a class is doing dressing-up role play then it is probably judged appropriate to publish a photograph of every student involved in this activity. Similarly, a football match might be photographed repeatedly to share highlights. When encountering these sets, we coded the images as a single case. Also, when it comes to the category "our work", we coded the variety of photographed artefacts rather than counting every individual image (a particular poster, a particular art style etc.). Otherwise, presenting category counts would inflate activities that naturally invite equitable representation of participants or that demand multiple perspectives on the same content. Therefore the findings reported here might be considered a snapshot of content "themes". It seems like that users of a website would themselves construct meaning from images in this way—particularly as these "sets" were often embedded in slide shows with a single cover image to the set which needed then to be opened.

Sites were often generous in their use of photographs. In one case the number was so large (thousands) that it was decided to randomly sample the content of each page. On the other hand, every site had at least some photographs. Other coding practice was as follows. Archived material was not considered, only that which was current. Neither were photographs considered that might be concealed within documents such as Word files or PDFs to be downloaded. Although in principle it is possible for a single photograph to depict multiple themes, we did not experience tensions of this kind in practice. It is likely that published photographs were conceived with a clear

**Table 6.1** Codebook for content categories applied to images, highlighting the category of particular interest here

| Category | Definition |
|---|---|
| Exercise | Showing children in sport or other physical activity, alone or in a group |
| Personality | Individual children or groups addressing camera directly |
| Performance | Performing through role playing, simulations, dance or dressing up |
| Music | Individuals or group making music (playing instruments or singing) |
| Site visit | Out of school, exploring a structured environment, exhibition, or event |
| Visitor | Sharing experience of individual visitor or representatives of community service |
| Fieldwork | Collecting or scrutinising material or nature in a place outside school bounds |
| Environment | Highlighting the space or material resources of the school |
| Reading | Engaged with text, alone or with others |
| Discussing | Peer conversation located in some school learning space |
| Teaching | Teacher addressing individual student or group in structured encounter |
| Inquiry | Manipulation of materials or symbols for problem solving or investigation |
| Computing | Interacting with some item of digital technology |
| Making | Manipulating materials in order to construct artefact or representation |
| My work | Student displaying personal work to camera |
| Our work | Group presentation of own work, or direct images of that group artefact work |
| Other school | Relationship with other school |
| Metaphor | Representing something other than its content (pictures symbolising something) |

understanding of what themes they were illustrating. In short, it was not felt difficult to read intended meanings associated with these images.

The sites were also scrutinised for a number of other issues relating to digital learning. In particular, the following questions were asked.

1. **Clubs**. Does the site indicate the existence of extra-curricular school "clubs" or interest groups? If so, what were they and did they include digital learning or interests. These informal school groups were categorised in the following way (Table 6.3).
2. **Digital artefacts**. Does the site publish examples of student work created with digital tools? Evidently a web page is a perfect location to share such student creativity and invention. We therefore looked for (and counted) examples of student video, sound recordings, graphic designs and animations.

**Table 6.2** Example cases for the content categories applied to images, highlighting the category of partcular interest here

| Category | Examples of depictions |
|---|---|
| Exercise | Gym, race, football, skipping, playground game |
| Personality | Class photo, posed moment within ongoing activity, smiling children portraits |
| Performance | School play, costume posing, adopting a role, dancing |
| Music | Instrument practice, choir, concerts, drum session |
| Site visit | Museums, galleries, worksites, cultural institutions, special "Day" at school |
| Visitor | Distinguished person, discipline expert, local fire service |
| Fieldwork | Collecting flowers, collecting weather data |
| Environment | Empty school spaces, lab equipment, materials, pets, school garden |
| Reading | Solitary attention to book, group work with books in book corner |
| Discussing | At-desk debate, pair conversing at shared material |
| Teaching | One-to-one encounter with teacher, teacher addressing class |
| Inquiry | Science lab, doing calculations in maths |
| **Computing** | Controlling robots, writing on interactive whiteboard, using a tablet, computer |
| Making | Making pictures, building models |
| My work | Holding up painting, presenting finished model |
| Our work | Classroom displays, collections of constructions |
| Other school | Activities at partner school |
| Metaphor | Symbolic representation of some goal or virtue |

**Table 6.3** Codebook for identifying variety of extra-curricular categories of club activities

| Category | Exemplar definition | Example |
|---|---|---|
| Sport | Team games or personal exercise | Football, yoga, gymnastics |
| Hobby | Cultivating craft or skill of sedentary game | Sewing, cooking, chess |
| Music | Practising individually or group | Choir, orchestra, guitar |
| Performance | Group rehearsal or personal skill mastery | Dance, school play |
| Art | Representing in traditional media | Painting, sculpture |
| Academic | Curriculum subjects | Maths, history |
| **Computer** | Any reference to using digital tools | Coding club, ICT |
| Language | Foreign languages | French, Mandarin |
| Homework | General studying support | Homework club |
| Film | Cinema material or topics | Film club |

3. **Digital communication**. Does the site make use of digital tools or representations to permit richer interaction with its users? For instance the school may invite feedback via message or email text boxes, it may advertise the use of social media or it may use visual devices (animation, panoramas, etc.) to enrich image representations. Consideration was also given to whether or not a school offered links to websites that might support their students' out-of-school learning with digital resources—or do so via the encouragement of parents or caregivers who see these links. The occurrence of such features were noted.

## Scrutinising School Websites

We turn next to the findings from viewing and categorising the student experience themes outlined above and as represented on this sample of English primary school websites. The average number of coded image items on each site was 32. For each site, the total number of coded themes was calculated and then the count for each individual coded theme on the site was transformed to a percentage of that total. For each school this, therefore, provided a proportional profile of content conveyed by images. The mean value of these percentages across the whole sample is shown in Fig. 6.1. This shows the relative presence of each theme in what is a whole-sample profile. Because of our special interest in it here, the "computer" category is highlighted.

A similar analysis was performed for the data on extra-curricular clubs and their topics of concern. The results of this analysis are shown in Fig. 6.2. 60 % of schools advertised these clubs and described their topics. The Figure therefore shows for each topic category the mean percentage of all clubs in a school that feel into that category. This therefore is, again, a *profile* diagram: one that is constructed from the averages of investment patterns in named activities within each school's total portfolio in that area (i.e. the area of extra-curricular support).

Examples of student work based on digital tools was extremely rare. Six of the 151 sites had videos that were made by students. Three sites had podcast feeds to materials, some of which were made by students. In the large image category "our work", it was very unusual to see examples of material that had been digitally constructed or rendered.

The institutions themselves were also reluctant to describe themselves through digital representations. Only seven schools included a video presentation of their school site and/or some of its representative activities. Sixteen schools (10.6 %) presented blogs. These were often associated with individual classes. However, there were many pages where a "blog. " was advertised but the content turned out to be some form of teacher diary. We have taken an authentic blog to be a diary-like structure of postings where comments to postings are allowed. Seventeen schools (11.2 %) advertised a twitter feed. Much more common was a feedback template which allowed visitors (perhaps typically assumed to be parents) to send an electronic message to the school. 38 % of schools offered such an opportunity. In general, novel and engaging presentation devices were rare. Six schools used a panorama feature that allowed 360° exploration of some aspect of the site. Five schools used page turning publishing formats to enhance the reading of a newsletter or prospectus.

Finally, 36 % of schools published links to web-based learning material that students or family might engage with at home. However, it became clear that in most cases, these were sets of discipline-specific links that were recommended by web designing companies. Therefore often these had been included as a component in the design contract and the selection did not typically appear to be edited or appended.

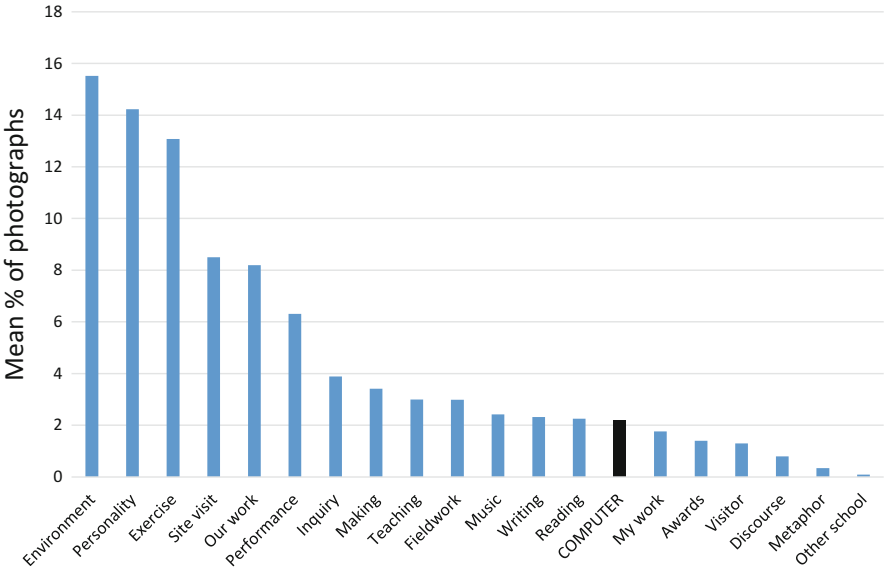


**Fig. 6.1** Sample averages for each coded theme, expressed as a percentage of all coded themes on the same site

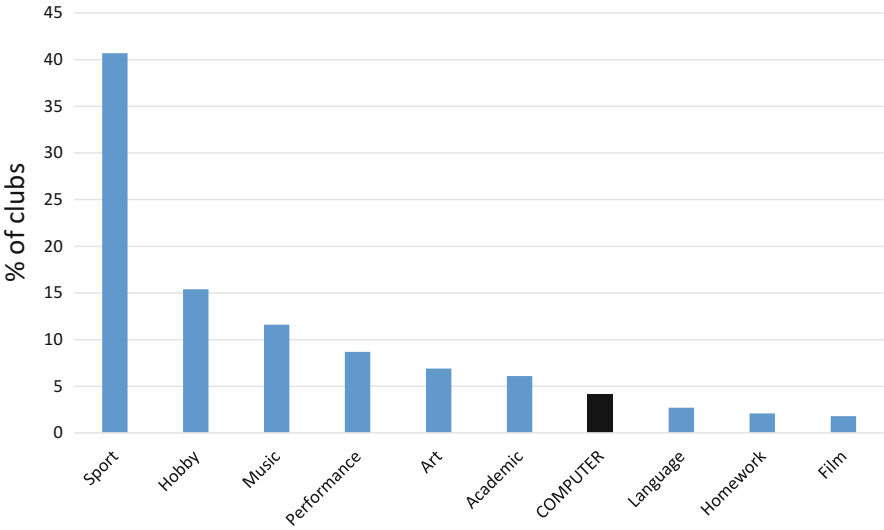


**Fig. 6.2** For sites that did identify clubs, the mean percentage of all clubs identified on a site that fell into the named category

## Summary of Digital Cultures Observed

The overarching impression that could be taken from this sampling of websites is that digital learning and digital representation are not highly developed or, better to say, highly prioritised in the culture of these primary schools. The purpose of this discussion is to develop further this conclusion and to consider whether it might need to be qualified.

In the introduction to this chapter, we note both the financial and teacher training investment that digital learning had attracted, and the various imperatives for schools to exercise and cultivate digital resources for education. It might therefore be expected that digitally mediated activities—their products and practices—must percolate up to website design. Yet in all the areas where we have looked for signs of vigorous digital learning or expression we find rather sparsely populated activities. Each of these areas may now be considered in turn.

First, in relation to representations of student activities, we have used website images as a barometer of student experience. This is not a well-worn procedure for characterising educational practice. Certainly, studies of the public representation of teaching and learning is more often approached through analysis of *textual* material (e.g. Alhamdan et al., 2014). It is less common to turn to public *images* as a basis for capturing the student experience (but see Wilkins 2012 for a critical study of identity and privilege management in images of private education). Yet it is reasonable to assume that in a context (the institutional website) which is broadly concerned with accountability and self-celebration, pictures should tell a complementary "story" to the various documents of performance and policy (that government dictates). In particular, they should tell a story that highlights a school's values and good practices.

The images we actually see are dominated by scenes stressing the agreeable and well resourced nature of the school site ("environment") and the good spirits of the students ("personality"). More specific reference to student experiences is then elaborated in terms of a strong emphasis on the *embodied* nature of schooling and the material fruits of its efforts. Therefore, we see many images of sport and physical games ("exercise"), out-of-school exploration ("site visit" and "fieldwork") and an acknowledgement of the artistic forms of active self-expression ("performance" and "making", along with its products as "our work"). Using digital tools is a rarely depicted theme.

Of course, published images of a given activity are not the same as direct and audited observations of that activity. So digital learning may be a very common part of the student experience but one not catalogued in the manner of image records. For example, it might be suggested that the theme "students using digital tools" is simply not very photogenic and so would make dull copy. However, there are many pictures of "exercise" or "site visits" or many other themes that are not visually engaging either. Similarly, where they did occur, there is evidence that images of activity with digital tools *can* be visually compelling.[7] Therefore, we tentatively

[7] http://www.slinfold.w-sussex.sch.uk/computing.html.

conclude that there is a strong drive to present the student experience as active, physical, social, and "child centred" (note the scarce number of images in which teachers are portrayed in instructional work ("teaching")): images that do not suggest the experience will be passive, sedentary and screen-focussed. We shall return to evaluate this conclusion below.

However, first, the observations above need to be complemented with others that we have made through these sites: others concerning different indicators of digital invention and representation. So we have noted that the digital *products* of children's work in digital media are rarely represented (although "our work" in the form of wall postings of traditional material is very common indeed). Again it could be argued that digital products are not visually appealing. But where they do occur it is clear that they are readily displayed and that they can look good.[8] Video made by students should also be a low-cost format to share in this medium—either directly or though the services of a YouTube channel. Yet it is rather unusual to find it.

We have also observed that support for (or appetite for) digital activities outside of the core curriculum is not revealed in these findings. So of the schools that run such extra-curricular clubs, 72 % of them do not embrace digital activity as a special focus in their extra-curricular repertoires. Finally, despite the good marketing imperative identified in our introduction, most websites are limited in the dynamic of interaction that they offer to users in their design. It is striking that most schools (79 %) use professional designers and that the field of companies called on is very wide (we noted 55 different design companies used by these 151 schools).

## Evaluating the Projection of Digital Learning

One important fact to admit is that websites are not the only digital arena within which schools act. There are at least two others that need to be considered. So it can be assumed that most of these schools will have an active virtual learning environment (VLE). Moreover, it is possible that there is significant family engagement with this and that it provides parents and caregivers with a window onto the student experience. (Although it was not that common to find reference to these VLEs on websites.) Secondly, some schools encourage the use of smartphone apps that provide a more convivial means of keeping in touch with news, notifications and, perhaps, student in-school activity. The growing appeal (undocumented) of these apps is interesting in relation to the present results because it implies that there is an appetite in the sector for taking advantage of digital tools.

The availability of VLEs and school apps might suggest we consider the audience for which accountability is performed by school websites. Perhaps it is not for current students and their families but more for the benefit of other "outsiders": namely, (a) for inspectors and (b) for the parents of potential students. Insofar as the first category of audience is concerned much of the work done for them is actually

[8] http://www.st-andrews23.lancsngfl.ac.uk/index.php?category_id=16.

textual—documents that evidence good management and good performance outcomes. Yet it seems that images should effectively reinforce these messages and, if so, an orientation to digital learning would be one urgent theme to have reinforced. Regarding prospective parents, it must be in the gift of schools to judge exactly what they would regard as desirable or urgent for representations of learning experiences and we should respect that judgement. Yet the photograph does seem an effective and appealing way of communicating their judgement This is something that is advised by the consultant designers. For instance: "Our photographers consider every detail so you end up with a series of photos that portray the very best your school has to offer. From beautiful school grounds, to happy students, and even tablet-friendly 360′ virtual tours."[9]

If this marketing motive is a strong one, the photographic image is a useful carrier, and if schools are well motivated to impress … then the low website profile of digital learning might be understood in two ways. First, it may be that engagement with digital tools is now so much part of the daily routine of classrooms, that it is regarded as unnecessary to refer to it. Such learning is simply embedded in the background. This is possible but perhaps unlikely. First, where digital learning is portrayed it is not shown in the formats that such confident innovators might be expected to emphasise. Smartphones, data loggers and even tablets are quite rare in these images—which remain dominated by one or two students sharing a large computer screen. Moreover, the pervasive presence of technology and its comfortable use might imply the presence of more active school clubs developing it recreationally and more products of their activity shared online.

The second interpretation of a low profile for digital learning might mean that schools do not share the full enthusiasm of those employers, politicians and academics that celebrate this technology. This in turn might arise from one (or both) of two attitudes. First, there may be a sense that research does not reveal attainment outcomes that are proportional to the investment of budget and labour that the technology demands (Livingstone, 2012; Reynolds, Treharne, & Tripp, 2003). In defence of teachers, Underwood and Dillon (2011, p. 327) comment: "Attempts to bed in new technologies necessarily involve some level of disturbance to the educational system. The degree to which these perturbations are tolerated will affect technology acceptance. This raises the question of whether the educational system allows itself to be transformed or not." Other observers have argued that educational systems are not easily transformed and tend, instead, to be concerned to reproduce their own "blueprints" (Lenartowicz, 2014).

A more extreme version of this reticence might be developed around the proposition that computers have developed a toxic reputation, owing to their association with the less welcome features of young people's enthusiasms—and, of course, the wider world of suspect activities among adults. To be sure, the popular press is ready to stoke these concerns with stories of excessive home use[10] or head teachers

[9] http://www.e4education.co.uk/services.

[10] Retrieved October 15, 2015, from http://www.dailymail.co.uk/news/article-3016596/Head-teachers-report-parents-police-social-services-let-children-play-Grand-Theft-Auto-Call-duty.html.

who doubt the value of these devices for learning.[11] Moreover, there is a long tradition of scepticism around the appropriation of popular media into classroom experience (e.g. Lambirth, 2003). At the very least it is likely that many teachers feel an ambivalence between the so-called "old" and "new" models of pedagogy and their prescription to make fuller use of digital technologies (Erstad, Eickelmann, & Eichhorn, 2015).

## Reflection

It is important to acknowledge a contested issue in separating and bracketing off as codes school activities. This can undermine any possible cross-curricular quality that these activities may involve. This bracketing was exercised via coding based on what was judged as represented in photographs but also drawing on the text and/or captions accompanying them, where appropriate. Only few schools had a distinctive cross-curricular character that celebrated some link, for example, between "science" and "art" activities. So in those cases it could be hard to identify clearly the content message of that which was represented. It is important to problematise the general representation of activities as so neatly bracketed into coded categories that reinforce their separation as subjects, as well as the separation of "fun" activities and "serious" learning. Typically, the accent on website representations is on the fun, whereas a more ethnographic insight into day-to-day school life would help to identify the extent of this separation probably to a greater level than shown in photographs. There are many photographs of highly playful activities and, of course, this can certainly be learning too, but it can not be clear from the websites how far this is how these activities are understood. The status of school visits may imply a similar problem. How are they related to the curriculum? More could be said about implications of this analytical exercise. But with limited scope here, others might open up further investigations based on this initial sketch of digital learning and its cultural context—as manifest on these websites.

## Conclusion

We endeavoured to open a rare window onto the digital culture of the primary school, via a focused exploration of school websites. Our intention has been to sketch the "landscape" of digital learning representations. We have recruited a neglected tool of inspection (images) to make sense of what we find. In the increasingly market-oriented and accountability-vulnerable world of schooling, it is worth

[11] Retrieved October 15, 2015, from http://www.dailymail.co.uk/news/article-2916322/Schools-stop-wasting-money-buying-iPads-shiny-gadgets-pupils-spend-money-8-000-teachers-says-leading-head.html.

seeing how identity and enthusiasm is made public (or marketised) in this way. Our findings were surprising (to us at least). We discovered a distinctly low profile for the experiences of pupil invention, creativity and connected learning around digital tools. We have discussed what such a lack of website representational focus on "the digital school life" might mean. In addition, we find that extra-curricular *digital* activities are not thriving as strongly in the school environment as they appear to be thriving in homes, streets, and playgrounds. Finally, despite the expertise of the professional consultants that sit behind these site designs, we find only limited engagement with digital tools for cultivating communication, interaction or even "immersion" with users. At the same time, we have noted the rise of the school app: ubiquitous and powerful in its influence elsewhere in our worlds, we can perhaps expect it to be part of a force that levers future transformations of learning, expression and communication into more digital formats. In sum, it seems that any enthusiasm around promoting digital learning is not well reflected on school websites. Perhaps the digital is dwelling elsewhere: in ICT suites and school bags but, either way, it is rather hidden from wider view.

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