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THE VITAL PROGRAMME:  
TRANSFORMING ICT PROFESSIONAL DEVELOPMENT

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*“Teachers need to learn from other teachers”*  
Michael Gove, UK Secretary of State for Education, Oct. 2010

**Abstract**

Developing a model for effective large-scale continuous professional development (CPD) for teachers remains a significant obstacle for many governments worldwide. This paper describes the development and evolution of Vital – a CPD programme designed to enhance the teaching of Information Communication Technology (ICT) in state-funded primary and secondary schools in England. The paper concludes that the success of the programme comes from its innovative ‘bottom up’ response to reconceptualise CPD as being more than just externally-designed courses. The programme encourages and responds to teachers’ reflective practice matching the teaching and learning demands of the 21st century.

**Background**

In July 2009 the Open University launched Vital, funded by the United Kingdom Department of Education (DfE) to the sum of £5.6 million for the first phase of 21 months. The success of the programme, described in this paper, led to a successful refunding in March 2011 for a further 12 months to the sum of £2.5 million. Vital is a programme of CPD that aims to help teachers in England use ICT to add value to lessons and find new ways to engage their pupils. This includes both the teaching of ICT as a specialist subject and the use of ICT across the curriculum. Vital actively acknowledges teachers’ existing expertise and experience in using ICT to support learning across subject areas.

The Vital programme’s approach consists of a mix of online and face-to-face learning and support. It was developed in response to current CPD research and knowledge of varying school contexts across England. The programme builds on existing communities of teachers and providers of CPD alongside practitioners’ use of, and innovation with, technologies for teaching and learning with and through ICT. This paper begins with a review of literature that reflects, and continues to inform, Vital’s ethos and approach to CPD. An analysis of preliminary evidence from the programme is then presented to explore the effectiveness of the model. Drawing on the data, the paper argues that an

effective model of CPD must focus on teachers' reflective practice to be relevant and effective for the teaching and learning demands of the 21st century.

### **Vital's model of CPD and its articulation with the literature**

Vital recognises effective ICT CPD is essential for the successful integration and sustainability of ICT in primary and secondary education (Culp et al., 2003; Davis et al., 2009; Haydon & Barton, 2007; Somekh, 2008). Vital also recognises that staff competence in ICT in schools must be improved (Hollingworth et al., 2008; UNESCO, 2008) to avoid 'patchy and often informal provision' (Hollingworth et al., 2008, p. 17). Vital also views effective ICT CPD as grounded in reflective practitioner research (Selwood & Twining, 2006). This view sees teachers as active 'enquirers' of their classroom contexts who, through reflective practice, become motivated as they uncover relevant findings to improve their practice. This critical reflection then leads to increased confidence and the embodiment of practical ICT knowledge through the interplay of self-enquiry and engagement with academic and policy research (Stenhouse, 1979).

The relationships between enquiry and CPD are explored through teachers' understandings of them by encouraging them to be reflective practitioners. On a macro level this interplay impacts on teacher education, teacher learning and the policies that influence them. Murchan et al. (2009), reporting on a large-scale programme of professional development in the Republic of Ireland, confirm similar findings. Like Vital, they view "teacher learning/knowledge acquisition and the change process as being dependant on an interwoven mix of factors, including teacher, school and policy-level contexts and characteristics" (Murchan et al., 2009, p.455).

Vital's model of CPD is predicated on the notion that when teachers engage in reflective practice around their use of ICT, their new knowledge and understandings can be used to contribute to the professional development of other teachers to promote similar practices and inform or increase awareness (Selwood & Twining, 2006) of what might work in different classroom contexts. This approach to ICT CPD is grounded in providing learning spaces, both online and face-to-face, where teachers can share their experiences, knowledge and examples of increased student learning with peers. Vital also believes that ICT CPD works well when teachers are given opportunities to support their colleagues following ICT CPD from external ICT specialists (Cordingley et al., 2007). This is because teachers are given support in developing their own skills in tandem with ongoing peer support. Vital also views working with newly qualified and trainee teachers and observing colleagues teaching using ICT, provides tried and tested examples of using ICT CPD strategically to positively affect or change practice (Daly et al., 2009).

Vital understands that effective CPD must clearly identify intended outcomes that not only take into account teachers' previous knowledge and expertise, but also

model effective teaching and learning strategies. This is because effective CPD is best delivered through active learning and reflective practice (Duncombe et al., 2004; Bolam & Weindling, 2006). Vital also understands that quantifiable measures are rarely found in research, or that they are associated with the evaluation of CPD activities by providers or schools themselves (McCormick et al., 2008). The Training and Development Agency for Schools (TDA, 2008) found that for providers of Postgraduate Professional Development (PPD) there was a lack of pupil learning measures to evaluate CPD provision. In order to address this gap and uncover quantifiable measures, the Vital model places an intentional emphasis on the socio-cultural aspects of developing teaching, learning and CPD (Fraser et al., 2007). Vital looks to the contextualised realities of the teachers, schools and pupils to better understand the needs and drivers for CPD. Thus, drawing on teachers' reflective practice, Vital puts teachers and their contexts (school and classroom) at the centre of the effective design of CPD. In this sense, Vital's model of CPD works to incorporate both on and off-site school dimensions; provide teachers with more choices about their CPD; provide more time for teachers to work with peers; and to make use of "collaborative, interactional techniques... rather than lectures to large groups" (Coolahan, 2002, p.27, cited by Fraser et al., 2007, pp154-5).

The Vital team's theoretical stance around courses, events and activities is 'socio-cultural' (Twining, 2009) and based on the belief that practitioners/teachers are the people with the greatest expertise in teaching, particularly around ICT. Teachers engaged in practitioner research within Vital do so with the explicit intention of feeding back to the wider community and informing a wider professional and collective knowledge base. This resonates with the need for CPD to be collaborative, experimental & reflective (Coolahan, 2002; Fraser et al., 2007; Baumfield et al., 2008; Hall, 2009; Murchan et al., 2009; Williamson and Morgan, 2009; DfE, 2010).

### **Vital's model of CPD in ICT**

Vital's model took into account the desirable aspects of CPD design and the state of current practice highlighted in the literature. The United Kingdom's Department for Education (DfE, 2010), which funded the Vital programme, required Vital to demonstrate a clear link between CPD in ICT and achievement by pupils through the use of external expertise linked to school-based activities. As a result, Vital was conceptualised to provide scope for teachers to identify their own CPD focus while concurrently emphasising peer support and collaboration. Thus, Vital's model encouraged, extended and structured reflective practice and professional dialogue, giving teachers time to embed new ICT practices into their classrooms. This enabled teachers to measure the impact of changes in practice across three domains: the individual teacher or practitioner, the school (or classroom) and/or the learner.

Driven by contractual obligations from the government funders, Vital initial provision was of online courses with optional face-to-face support. Courses were seen by Vital as only one aspect of CPD, however. The programme sought to widen the scope of what is seen as professional development beyond simply 'the course'.

The unit of measurement for teacher engagement was the 'training day' (TD) with one TD equating to five hours of participation in Vital activities and/or events. TD equivalence was also defined in terms of referrals to other providers' CPD. An online registration function enabled tracking of participants as they attended courses and events and/or collaborated to access and share resources. In the first phase of development, up until January 2010, Vital's emphasis was on course production and implementation, which were then made available online with face-to-face support through the Open University's (OU) regional offices in nine decentralized locations across the country. E-skills UK, the sector skills council for IT and Telecoms in the United Kingdom, was sub-contracted to also design and deliver specialist IT courses and related activities on behalf of Vital.

Vital was consistently committed to working with (rather than on) the profession, other providers and the wider education community. This reflected Vital's understanding of the need for CPD to be strategic (Goodall et al., 2005; TDA, 2007; McCormick et al., 2008; Murchan et al., 2009; Williamson & Morgan, 2009) and relevant to the wider educational and ICT contexts (Fraser et al., 2007; Hall, 2009; Murchan et al., 2009; DfE 2010). Thus the Vital website also hosted spaces for the marketing of other ICT provision. Vital also provided online spaces for practitioners to find and share useful information and their expertise. These spaces also allowed practitioners to take part in courses and other scheduled and facilitated CPD activities and events outside the school day. Unique to Vital were the ways practitioners and teachers can design, facilitate and host their own events. Tools were provided through the Vital website to enable this collaboration, experimentation and reflection. These included the use of Moodle (for hosting courses), forums and wikis, Drupal (for content management of static resources) and Elluminate Live! to provide open access video conferencing.

The core commitment to facilitate sharing of practitioners' knowledge, often generated through reflective practice was manifested by making all website materials, including course materials, available on a Creative Commons licence. This is because it recognized the importance of participants being able to take ownership of the website. To this end Vital provided access for any member of the community to create a space where they can share information with others. This was all supported through a network of 18 Vital staff based in nine regional offices across England which provide local, face-to-face support.

Building on the key findings from the literature, Vital developed a practitioner research cycle that extends the notion of reflective practice to include learning

from and sharing with the wider educational community. The goal was to provide CPD in ICT that was directly relevant to practitioner’s needs; informed by research; collaborative, experimental and reflective. The model of practitioner research used in the design of Vital’s CPD provision is shown in Figure 1. This model includes a reflective practice cycle and extends this to sharing and reviewing with peers. Thus there is an enhancement of both the individual teacher/participant’s knowledge base and of the shared knowledge of the professional community. This practitioner research cycle explicitly underpinned all of Vital’s courses, with the intent of taking participants through all stages of the model. Vital’s courses were designed around this model and are offered in three different formats: short online courses (up to 20 hours); online courses with optional face-to-face support and blended courses that were essentially face-to-face with online support.

The courses focused on teachers developing the use of technology in their classroom rather than being training in the technology per se. Thus courses on wikis, blogs etc. focused on the pedagogical affordances of the tools, not the mechanics of the software itself. Later courses required teachers to develop a project in their classrooms based on a common interest (e.g. e-safety or games in the classroom). This change was as result of findings from focus groups and feedback from evaluations as described below. Pedagogically, this represents a change from externally-defined activity to participant-defined activity. This mirrors the development of special interest groups, which also engaged teachers on their own terms. The programme moved from being centrally directed to being one which was ‘owned’ by its participants.

Facilitators were drawn from the community and their training was also a form of CPD offered by the programme. While the materials for courses were freely available, the course fees enabled access to this support and to others in a cohort. Vital believes that it is this learning and reflecting together, with a facilitator, that is at the heart of effective ICT CPD. Materials on there own do not constitute a course, merely the resources to support interaction and shared learning.

Figure 1: Vital’s Practitioner Research Cycle



In developing and reconceptualising ICT CPD, Vital took into account the time constraints on teachers, particularly in the light of a new 'regulation' commonly referred to as 'Rarely Cover'. Rarely Cover (starting 2009) restricted the extent to which teachers could be asked to provide cover for other staff. This had the effect, particularly in secondary schools, of making it difficult for teachers to get released from their teaching duties in order to attend staff development during the school day (House of Commons Children, Schools and Families Committee, 2010). This difficulty was also reported in focus group feedback. Thus, Vital's provision included a large set of resources on various ICT topics that teachers could access in their own time.

Courses, and supporting resources, were designed by experts in the field. The online 'project' courses required engagement with the resources, followed by planning, implementing and reflecting on a project in the classroom. The project was completed as part of their normal day-to-day work. This was supported through engagement with the others in the cohort resulting in a shared review and enhancement of the group's professional knowledge base, in line with the practitioner research cycle.

Vital designed innovative forms of easily accessible ICT CPD. Vital first introduced "15-minute CPD", online structured and facilitated staff development opportunities in 'bite-sized' chunks. Initially these centred on the development of 'springboards' and 'case studies', online resources designed by teachers to share and learn with, and from, their peers. These were built with online functionality, through wikis and Moodle course spaces, for others to add to them.

Having established these online resources they were then supplemented by 'TeachShares'<sup>i</sup>. These involved using an audio/video conferencing system, Elluminate Live! that enabled practitioners to provide a live demonstration of innovations in their teaching practice with and around ICT. TeachShares were synchronous events, which were then followed by an audio discussion between all of the participants. The session was recorded so that it could be downloaded at a later time by practitioners who were unable to attend the live session.

These online video conferencing events were designed on the model of face-to-face TeachMeets<sup>ii</sup> which are outside the scope of this paper as they are not a Vital 'product', although they were also supported by the programme. The final element of the CPD provision from Vital was the establishment of special-interest groups. These had 'champions' (paid individuals) whose task it was to draw together a community of participants with a similar profile (e.g. primary teachers) to share, develop and discuss resources, events and activities of common interest.

## **Evidence of success of Vital's model of CPD**

A range of different strategies and methods were used to collect data to understand the effectiveness and scope of the Vital's CPD model. Quantitative data focused on system data and recorded levels of engagement with the Vital website. This data was collected on a monthly basis and reported to the DfE quarterly. Qualitative data was obtained primarily through questionnaires, participant evaluations and informal interviews.

Focus groups were held at the start of the programme in autumn 2009 and again in the spring of 2010. These consisted of teachers and school leaders in different regions of England. The findings from the first round of focus groups shaped the type of CPD Vital offered, but this was constrained by contractual obligations to provide 12 courses to be available by January 2010 and a minimum of a total of 25 by September 2010 (Vital actually produced over 30 such courses). Focus group interviews revealed teachers valued the time shared with peers, exposure to other practitioners' work and practical ideas/knowledge/learning that could be immediately implemented in their own classrooms. This feedback encouraged Vital to focus primarily on the needs of teachers to help them use ICT to add value to lessons and find new ways to engage their pupils.

At the time of the first round of focus groups, the policy requirements in England were moving towards requiring all teachers to take Masters-level courses through a Masters in Teaching in Learning (MTL) pilot. The change of government removed this requirement and so it was disregarded by the second focus groups, which called for shorter, bite-sized, ICT CPD provision.

The DfE required Vital to report only on those users who were employed in 5-19 state education in England. The data represents individual attendance on courses and events, referrals by the programme to other CPD activity and time spent in the website. At the start of the academic year 2010-11 Vital had accrued some 6,000 TDs but was behind its target of at least 18,800 by March 2011. Faced with a shortfall and a poor take up of the first set of 20-hour courses, the programme developed classroom project courses, made greater use of social media, increased emphasis on subject specific needs, introduced special interest groups and launched regular TeachShares. These changes led to an exponential growth in training days over the period September 2010 to February 2011, by which time the target had been exceeded, with over 20,000 TDs recorded.

In July 2010 only 28% of registered users were profiled as teachers or headteachers in England, with the others being consultants, other providers, outside of the English system or 'not known'. By November this had increased to 54%. With such an increase in the core members of the 6,000-strong community within England enabled Vital to engage in more local and contextualised peer-to-peer sharing. Other data that points to the growth of the Vital website and, by extension to the branding of Vital as an online ICT CPD community, is in



number of unique visits. Prompted by regular newsletters and regional communications, these more than doubled from 4600 per month in June to 9300 in November 2010. In turn this led to an increase in average page views per month, up from 69000 in June to 87000 in November.

The success of the programme as indicated by this quantitative data is mirrored by qualitative reports from the focus groups on the impact Vital was having on teachers. In particular they reported that the resources were of practical use, that they shared what they had learnt with their colleagues and they were encouraged to try out new strategies in the classroom. Evidence of the success of the programme is, perhaps, most apparent in the decision of the UK DfE to extend the funding of the programme into a third year (£2.5 million in financial year 2011/12) at a time of general reduction in central government spending.

### **Conclusion: Vital as a Model of Effective ICT CPD**

As the Vital programme neared the end of its first phase funding (March 2011) it had both met its external targets and had become a recognized feature on the landscape of ICT CPD in England. These two characteristics were only true for the last quarter of the programme's 19-month lifespan. Any new programme takes time to impact on its audience. For new programmes time is an essential factor in maintaining and keeping attention in the 'attention economy' (Lankshear & Knobel, 2003) of the 21<sup>st</sup> century. This is especially true in a school context where teacher CPD activity is planned 12-18 months in advance and is tied to performance management cycles.

Findings from the data above were used iteratively to rethink and redesign the model as it progressed. This is referred to above and represents the move towards a participant-centred programme. Furthermore the programme moved from courses designed at the centre and keynotes from "experts" towards courses where teachers designed classroom projects and online presentations by practitioners for their peers. The success represented in the data can be largely attributed to the approach and ethos of recognizing, and building on, the expertise of practitioners and developing an infrastructure to support 'bottom up' sharing of that expertise.

In developing a diverse model of CPD, Vital has moved beyond the paradigm of equating professional development to courses that was evident in the initial performance indicators handed to the programme. Courses, both online and with face-to-face support, are included in the model but it provides a much richer offering. In addition to taking a defined course of study, participants are able to access resources including the materials used in those courses. More significantly, Vital is built on the notion of a community of learners with pathways through learning. Teachers are seen as peers in the learning process rather than recipients of professional development. Thus all registered users of

Vital can upload and share resources, discuss ideas, take part in TeachShares and attend TeachMeets. Through collaboration and engagement, teachers move from being ‘users’ to ‘members’ of the Vital programme of CPD.

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<sup>i</sup> Note that TeachShares are not connected to the website of the same name

<sup>ii</sup> <http://teachmeet.pbworks.com>

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### References

- Baumfield, V., Hall, E., & Wall, K. (2008). *Action research in the classroom*. London: Sage.
- Bolam, R. & Weindling, D. (2006). *Synthesis of research and evaluation projects concerned with capacity-building through teachers' professional development*. York: General Teaching Council for England.
- Cordingley, P., Bell, M., Isham, C., Evans, D., & Firth, A. (2007). *What do specialists do in CPD programmes for which there is evidence of positive outcomes for pupils and teachers?* London: The Evidence for Policy and Practice Information and Co-ordinating Centre, Institute of Education, University of London.
- Coolahan, J. (2002). *Teacher education and the teaching career in an era of lifelong learning: OECD education working paper, number 2*. Paris: Education Directorate, Organisation for Economic Co-operation and Development.
- Culp, K., Honey, M. & Mandinach, E. (2003). *A retrospective on twenty years of education technology policy*. Washington: US Department of Education.
- Daly, C., Pachler, N., & Pelletier, C. (2009). *Continuing Professional Development in ICT for teachers*. London: Institute of Education,
- Davis, N., Preston, C., & Sahin, I. (2009). Training teachers to use new technologies impacts multiple ecologies: Evidence from a national initiative. *British Journal of Educational Technology*, 40(5), 861–878.
- DfE. (2010). *The Case for change*. London: Department for Education.
- Duncombe, R., Armour, K. & Fraser, S. (2004). *Primary school teachers and the national PE-CPD programme for England*. Presentation given to the British Educational Research Association Conference, Manchester, 16–18 September 2004.
- Fraser, C., Kennedy, A., Reid, L. & McKinney, S. (2007). Teachers' continuing professional development: contested concepts, understandings and models. *Professional Development in Education*, 33(2), 153-169
- Goodall, J., Day, C., Lindsay, G., Muijs, D. & Harris, A. (2005). *Evaluating the impact of continuing professional development*. London: Department for Education and Skills

- Hall, E. (2009). Engaging in and engaging with research: teacher inquiry and development. *Teachers and Teaching*, 15(6), 669-681.
- Haydon, T. & Barton, R. (2007). 'First do no harm': developing teachers' ability to use ICT in subject teaching: some lessons from the UK. *British Journal of Educational Technology*, 38(2), 365-368.
- Hollingworth, S., Allen, K., Hutchings, M., Kuyok, K., & Williams, K. (2008). *Technology and school improvement: reducing social inequity with technology?* Coventry: Becta.
- House of Commons Children, Schools and Families Committee. (2010). *Training of teachers: fourth report of session 2009-2010. Vol. 1*. London: Her Majesty's Stationery Office.
- Lankshear, C. & Knobel, M. (2003). *New literacies: Changing knowledge and classroom practice*. Buckingham: Open University Press.
- McCormick, R., Banks, F., Morgan, B., Opfer, D., Pedder, D., Storey A., & Wolfenden, F. (2008). *Literature Review Report: Schools and continuing professional development in England*. London: Training and Development Agency for Schools.
- Murchan, D., Loxley, A., & Johnston, K. (2009). Teacher Learning and Policy Intention: Selected Findings from an Evaluation of a Large-Scale Programme of Professional Development in the Republic of Ireland, *European Journal of Teacher Education*, 32(4), 455-471.
- Selwood, I., and Twining, P. (2006). *Action research*. Coventry: Becta.
- Somekh, B. (2008). Factors affecting teachers' pedagogical adoption of ICT. In J. Voogt & G. Knezek (Eds), *International handbook of information technology in primary and secondary education* (pp. 449-460). Amsterdam: Springer.
- Stenhouse, L. (1979). Research as a basis for teaching. Inaugural lecture from the University of East Anglia.
- TDA. (2008). *PPD impact evaluation report*. London: Training and Development Agency for Schools.
- Twining, P. (2009). 'Educational IT' research methodology: Looking back and moving forward. In A. McDougall, J. Murnane, A. Jones, A. & N. Reynolds, (Eds). *Researching IT in Education: Theory, Practice and Future Directions* (pp. 153-168). London: Routledge.
- UNESCO. (2008). *UNESCO's ICT competency standards for teachers. Towards ICT skills for teachers*. Paris: United Nations Educational, Scientific and Cultural Organization
- Williamson, B. & Morgan, J. (2009). Educational reform, enquiry-based learning and the reprofessionalisation of teachers. *Curriculum Journal*, 20(3), 287-304.