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**ICT in the classroom – Gaps between policy and practice?
TIC en el aula inglesa – ¿huecos entre la política y la práctica?**

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Resumen:

En el aprendizaje de las lenguas extranjeras, obligatorio para estudiantes de 8 a 14 años según el Currículo Nacional Inglés, la necesidad de integrar la tecnología en los métodos de enseñanza ha sido evidente: “las escuelas deberían utilizar una gran variedad de recursos, incluyendo TIC, para acceder a la información y comunicarse en la lengua meta” (Departamento de Educación, 2007). El estudio muestra los motivos por los cuales los profesores hacen uso de la tecnología así como su impacto en la motivación del alumno. Descubre también una clara tendencia de usar TIC para presentar el idioma en lugar de para promover un aprendizaje autónomo y personalizado. Los alumnos expresan una satisfacción subjetiva ante la tecnología utilizada en el aula de lenguas modernas así como el deseo de hacer uso de dicha tecnología de una forma más independiente. La tecnología gira, según este estudio a pequeña escala, alrededor de la figura del profesor, quien se encarga de su uso, y son escasos los ejemplos de las posibilidades comunicativas de naturaleza autónoma descritas previamente. Las conclusiones derivan de los cuestionarios realizados por 60 estudiantes y (sus) 2 profesores, así como de las conversaciones con los profesores de dos escuelas públicas inglesas.

Palabras claves:

Motivación; TIC; currículo nacional; aprendizaje de lenguas

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Abstract:

In foreign language learning, required by the government's National Curriculum for children in England aged 8 to 14, the integration of technology into teaching methodologies has been explicit: "schools should use a range of resources, including ICT, (Information and Communication Technology) for accessing and communicating information in the target language" (Department for Education, 2007). This research investigates the role of ICT in language learning inside two English classrooms - a primary and a secondary - in order to explore the nature of motivation in educational technology from both the student and teacher perspective. The study elicits teachers' reasons for deploying the technology along with their emphases on the motivational advantages of ICT. It finds a marked tendency to use ICT for presentational, rather than autonomous or personalised learning. Children express subjective satisfaction with technology deployed in language learning and a desire to operate the technology more independently. The technology is, from this small scale study, teacher-led and teacher-driven, with few instances of the more autonomous communication possibilities outlined above (Department for Education, 2007). Field research findings derive from questionnaires of 60 pupils and (their) 2 teachers, as well as semi-structured interviews with teachers in two mainstream English school settings.

Keywords:

Motivation, ICT, National Curriculum, language learning

1. Introduction

The English school system formally recognises the use of classroom technology as “a twenty first century skill” (Trucano, 2005), and for this reason Information and Communication Technologies (ICTs) have been incorporated into the English National Curriculum since the year 2000. *“It should equip them with the essential learning of the skills of literacy, numeracy and information and communication technology”* (National Curriculum, Department of Education, 2000).

Moreover, the use of the technology should also serve as a support for the teaching of all subjects included in the curriculum: *“...provided explicitly through the subject of ICT and through pupils’ use of ICT across the curriculum”* (NC, 2000).

Numerous studies from the beginning of this century confirm the role of technology in enhancing the motivation to learn a foreign language in the English school population: (Becta, 2004; Cox et al, 2003; Harrison et al, 2002; Palmen, 2011; Passey et al, 2004; Pittard et al, 2003)). It is therefore generally accepted by teachers that ICT applications of all types are effective as well as popular, in the context, especially, of a school population whose first language is a globally dominant one and whose motivation to learn another may be compromised by this fact.

In the English education system, the use of technology for the teaching of foreign languages emphasises the dynamic and personalised potential of digital learning. Virtual Learning Environments, standard in most secondary schools, offer the potential to incorporate databases, quizzes, questionnaires, surveys and other assignment formats, subject content, video, and audio - all adaptable to the modern language classroom (Buck & Wightwick, 2013). In some schools, software such as Skype is used to enable pupils to contact and interact with speakers of the foreign language face to face and via spoken word; other written-word electronic exchanges of information and opinion between schools also encourage language learning and intercultural

understanding. Language teachers are encouraged by government advice to use evidence-based research, to enable their learners to record their own progress, create their own materials, and identify their own strengths and weaknesses by means of technology (Ofsted, 2011). Classroom presentational tools such as interactive whiteboards (IWBs) aim to encourage a new methodology, emphasising active participation, individualised progress and assessment. Education Minister Michael Gove has expressed the potential of digital change for the curriculum and the inability of schools to keep up with this change: "It's clear that technology is going to bring profound changes to what and how we teach. But it's equally clear that we have not yet managed to make the most of it" (Gove, 2012).

In primary education, the curriculum document Key Stage 2 Framework for Languages (2007), underlined the importance of oral, literary and intercultural skills, all of which could be developed by the pupil through the creative and extensive use of ICT. In addition, ICT has great potential in the language classroom due to its capacity to include pupils of all abilities in classroom activities. Those with cognitive difficulties as well as physical constraints are 'enabled' by technology to play a full role, which is a key objective of the English national curriculum. Present day emphasis on autonomous use of the technology is intended to unlock the potential of many children with additional needs, providing a new and fresh forum for success (Kuegel., in Leask, and Pachler, 2014).

The value of integrating technology into the foreign language classroom was earlier confirmed by Pittard et al., 2003:3, reviewing a range of studies into the impact of classroom technology. The advantages included raised levels of achievement, as well as, separately, an increased motivation on the part of learners. Indeed, it was in modern languages above all other school subjects that these results were noted. The government agency Qualifications and Curriculum Authority (QCA) (2007) endorsed these findings, underlining the most positive features of digital learning, such as contact with foreign countries and

with speakers of other languages, and access to authentic materials.

2. This research

In this investigation, the gap between governmental and academic advice on the one hand, and everyday practice in the school on the other, is explored. The research attempts to identify the motivation for using digital applications, on the part of both teachers and pupils. We investigate the ICT methods presently in use in two English schools, both representative of their surrounding area and population; and the reasons for the teachers' choice of technology. The question presented by Evans, (2009) is relevant "*Does teaching produce new language learning processes or only facilitates and support processes that already exist in conventional learning contexts?*"

By eliciting the opinions of teachers and pupils, albeit in a small sample, the relationship between the child and his or her use of the technologies becomes apparent, as does the teacher's own rationale for using it. A qualitative methodology based on responses from teacher interviews and learner dialogues supplements the quantitative material derived from questionnaires. The objective is to uncover the level of motivation of the pupil as well as the motive of the teacher in her choice of ICT application as educational material. The evaluation of these results can lead to a realistic understanding of the role played by ICT in a classroom, and enable its comparison with national and governmental education policy, the findings from literature, and the actual potential of the technology.

3. Research context:

Modern language teaching in schools offers many opportunities to fulfil communicative objectives. The promotion of the theory of visual, auditory and kinaesthetic learning, (Fleming, 2006) continues to influence the Anglo-Saxon education system. However, the evidence base for learning-styles theory –

which holds that individuals are suited to different styles of learning and instruction - has been questioned, along with the methodology of most learning styles studies (Pashler et al, 2008; Coffield et al, 2004). Yet it is attractive to educators because it appears to fit well with the active, child-centred learning models implied by the National Curriculum (NC), and with multimedia ICTs. The active engagement of the child in his or her learning via linguistic acts generated by a need to communicate, is central to the communicative approach (Richards, Rodgers 2001; Celce-Murcia, 2001) which still underpins modern language teaching in the English school system today.

Communicative language teaching, however, may not be as communicative as its name implies. Macaro (2014) suggests its focus is the teaching of explicit vocabulary and the reproduction of set phrases, rather than authentic communication. An explicit emphasis on the 'four skills' of reading, writing, listening and speaking (NC 2014: "learners should hear, speak, read and write in the target language regularly and frequently within the classroom and beyond") has made digital processes attractive and necessary to achieve these ends: (NC 2014: "learners should communicate in the target language individually, in pairs, in groups and with speakers of the target language, including native speakers where possible, for a variety of purposes"). The pronunciation of 'foreign' words and new sounds is made more possible by a multisensory approach (Stanley, Jones, 2002). The typical classroom in England makes use of visual aids, games, videos, audio, and presentations for the teaching of foreign languages, all enabled by the planned use of technology. Boys, whose measured performance in foreign languages is often inferior to that of the girls who share their classroom, are helped to achieve by language lessons 'with computers' (Palmen, 2011), who notes boys' improvement in marks as well as motivation.

However, there exists a disparity between government investment in school technology, and its investment in pedagogically-driven training of the teaching workforce who will operate and adapt this technology. There are

teachers who do not fully understand the process of interactivity (Jones, Coffey 2006; Walker, 2008), preferring exclusively digital activities that are passive rather than actively communicative; even activities with a degree of functional interactivity - for example, filling in gaps, completing wordsearches, matching and pairing text and pictures and looking at (rather than sharing) information on the Internet – are non-communicative.

Research suggests that the most important factor for the success of ICT resources in learning is the teacher him or herself (Cox, Webb, 2004; Jones and Coffey, 2006). Teachers who lack confidence in using a new resource, or who do not see the benefit of using it, will stick to what they know and the methods they are familiar with, and are therefore unwilling to exploit new resources (Becta, 2006; Jones and Coffey, 2006). Hawkes (in Evans, M., 2009) describes resistance to the integration of technology in school language departments, which was overcome largely by a pedagogic focus on 'active learning' that exploits digital learning forms. She proposed that regular and routine integration of interactive whiteboards, slide presentations, and computer based practice and presentation activities can make teaching easier, with a greater focus on individualised pupil needs and spontaneity. Slaouti and Barton (2007) identified the impact of the 'school ecology' on a beginning teacher's confidence and competence in using technology effectively in their classroom - this feature varying inevitably from school to school.

Ofsted, the National Inspectorate for England and Wales, identified most recently in its 2011 report, the role of technology as an integrated feature of language lessons, enabling 'authentic voices' (in French, Spanish, German, etc) to be heard, by children whose teachers were not confident speakers of their foreign language – especially in respect of pronunciation and intonation. The inspectors also commended the use of interactive whiteboards for enabling involvement of all pupils by full class participation, and the use of authentic sites on the Internet, whereby tasks can be carried out using real foreign language sources. (The inspectors cite a French toy shop website,

where the English children compared prices for standard UK and French games, later presenting their findings). Government advice such as this is intended to determine classroom practice, and not just reflect it, given that regular inspection of schools is predicated on such examples as these.

Thus far, well-integrated ICT applications in the classroom are desired and in terms of national policy, desirable, although variable according to schools, their teachers, their training and motivation.

4. Materials and methods

The research field comprises two English state, government funded schools, both selected for representativeness and comparability on the basis of their social composition. One, a primary, taught girls and boys from ages 4 to 11. The other, a secondary, taught 11 to 18 year olds. The latter was a boys' secondary school. Each school taught children from a range of social backgrounds, but would be characterised as socially disadvantaged in a national context. The FSM (free school meal) index, a marker for low family income, is similar for each school, (37% and 41% of the children qualified for free school meals respectively: Ofsted, 2012) these percentages being significantly higher than the national English average (22% Ofsted, 2012), but not departing significantly from the local, city figure of 30% (Liverpool City Council, Lord Mayor's Report, 2012).

A random sample of 30 children in each school, drawn from the same year group, was chosen for investigation, so as not to affect the external validity or level of bias (Tullis and Albert, 2008; Mitchell and Jolley, 2012). Thus, thirty children from the primary school's Year 5 (aged 9 to 10) and thirty from the secondary school's Year 8 (aged 12 to 13) were the subjects of the research. This was important as one of the researchers was a trainee teacher of some of the children in the school, and therefore in the sample, and it was intended that this fact would have minimal impact on results.

The research set out to investigate the use of and rationale for ICT in

foreign language lessons, which in the case of each school was French. French is part of the required curriculum for both age ranges, taught for two hours per week in the secondary school, and one in the primary.

The research took two forms:

First, in order to elicit the responses of children to their use of ICT applications, questionnaires were deployed as a fast and inexpensive way of collecting data (Mitchell and Jolley, 2012). The wording of the questionnaires required additional oral support for a few children with low reading levels in the primary setting. The objectivity of surveys as described by Milne (1999) meant findings were not elaborated on, but yielded succinct and as far as possible unprejudiced quantitative information. Children were asked which ICT applications they used, which they *would like* to use, their favoured classroom activities (including ICT and non-ICT resources and applications) and their reasons for these choices.

Second, semi-structured interviews were conducted with a teacher for the primary school (Year 5) class, and a teacher for the secondary school (Year 8) age group. Both teachers taught most of the children in the sample group. Teachers were asked to answer the following questions, and encouraged to talk around the topics:

- Do you use ICT applications to teach modern languages?
- Which ones, and what for?
- Which are most effective?
- Are there any drawbacks to these?
- What makes you choose these?

5. Results

Questionnaires to elicit present use of ICT applications, and attitudes to these:

The questionnaires were fully completed by 43 of the secondary school pupils, and by all 60 of the primary children. It needs to be considered that all of the secondary school pupils were male. The primary children completed theirs by

means of the teacher asking the participants the questions out loud in turn, to ensure their full comprehension and co-operation with what may have been, for some, language and instructions with which they were not familiar.

100% of all correspondents were found to be using some form of ICT in their language lessons in both cases. Presentational tools such as computer displays, interactive whiteboards and projectors were most commonly experienced, by over two thirds of the children in the secondary school, and a great majority in the primary. Foreign language websites were deployed by around a third of the secondary school children, either demonstrated by the teacher or used independently as homework. Most children were using word-processing software for production of writing in the foreign language, to make posters, write letters, poems or short stories.

There were, however, *no* children in either survey who had used tablets, mobile phones, voice recorders or video conferencing with foreign counterparts – all features recommended as enabling communication and good practice by the government and educational literature, eg. Ofsted, (2011), Hawkes (2009). Significantly, these feature among the “*what I would like to use*” applications identified by the children.

Half of the secondary group reported using video cameras to record foreign language conversations and role-plays – a recent development by all accounts.

Children in both sectors expressed a desire to use the following (“which ICT applications would you *like* to use?”): mobile phones, conferencing with foreign partners, using laptops themselves (rather than the teacher using hers for presentations), online games in the foreign language. iPads were the most coveted ICT resource, with twenty five out of forty three participants wanting to use these, (but not having used them), for foreign language practice. Forms of this practice were not specified in the research, but it is imagined they include accessing French sources, carrying out tasks in French sources, hearing and possibly even communicating with French speakers.

Children in the secondary school all preferred using the keyboard or screen writing over traditional writing methods. They often opted for on-line translator facilities. Their on-screen activity was most commonly a language games site, Linguascope, used for reinforcement of structures already taught. A few children in the survey expressed 'boredom' with the presentation software around the interactive whiteboard "it's the same in every lesson". Three quarters of the children in both schools expressed a clear preference for 'being on the computer' rather than learning at their desks.

"I'd like to speak to real French children" (and its variants) was cited by over half of the primary schoolchildren, when asked to suggest freely their favourite activity for a language lesson. Secondary children, all boys in this instance, suggested "using iPads and tablets" as their preferred 'wish' for the language classroom.

Primary children had less access to keyboards themselves; they did not always have an ICT component to their lessons. They largely 'wanted' to use keyboards for themselves, in language learning. They enjoyed visual and kinaesthetic activities, delivered without technology, but most expressed a desire for technology to be integrated into their lessons, beyond the presentational aspects of the interactive board.

Teacher interviews:

The primary teacher reported using ICT applications, with Powerpoint and IWB presentations being routine in the classroom. She pointed out the usefulness of Google Earth to demonstrate concepts of distance and geography and to enable intercultural understanding. Powerpoint and Youtube clips were favoured resources for demonstrating spoken French language, encouraging language repetition and participation by the children. Lessons were, she claimed, 'more interactive' with lively presentations.

The primary school teacher was nervous of using more technology, in case of potential technical failure and the consequent behaviour problems

that would ensue. The secondary school teacher also pointed out 'behaviour issues' that would arise from pupils' use of the internet and the need to check and monitor her pupils' screen behaviours and access to sites.

The secondary school teacher used "lots of ICT" in her French lessons. She favoured dedicated language learning websites, such as Linguascope, and routinely set the children to work on word games, quizzes and vocabulary tasks on these. She was pleased with the recent video recordings made by children of their conversations and role-plays. This teacher also used the Promethean software for her IWB, having received specific training for this, "far more than the other teachers here do". She continued, reporting underuse of language learning software purchased by the school, "but we have all this software available to us and it is rarely used, seems like a waste. It's the same with the voting keypads."

The secondary teacher reported that clips from Youtube, especially rap and music exemplifying French grammar and language, were effective at motivating her learners, as "something the boys can relate to, obviously". Like her primary colleague, she welcomed models of authentic speech and pronunciation. Overall, the value of the ICT integrated into her lessons was motivational, ("they can be motivating for them, I mean they would rather do typing on the computer over using a pen and some paper"). The children she taught enjoyed using voting keypads, "it's physical, they like doing things like that and some of them learn really well from it".

Her main concerns were children's overfamiliarity with technology "some of them are just so used to using it, it's a shame really (...) they turn their nose up (...) they don't find Powerpoints interesting as they are used by all the other teachers in the schools in their lessons".

The teacher in the primary room spoke of the need to make an appointment to reserve lesson time in the school's computer room, feeling daily applications of technology outside of the whiteboard were difficult. The secondary teacher benefited from computers fitted around the teaching room,

but needed a high level of control to “avoid children going on unsuitable or recreational websites”.

6. Discussion

100% of children surveyed reported using ICT in their language lessons, demonstrating the incorporation of ICT into modern language teaching as per the national curriculum and government advice. All children reported wanting to use *more* ICT or different (more autonomous) applications of technology. The more dynamic use of technology favoured by Ofsted (2011), which gives children autonomy over recording their progress, voice recordings, and the shared communicative possibilities of VLE's identified by Buck and Wightwick (2013) appears to be matched by the aspirations of the children, rather than by the practice in the classroom.

The deployment of the technologies in the classroom would seem not to be proportionate to government expenditure on school ICT, estimated at over a half billion pounds sterling annually. (The Times Educational Supplement). Notably, teacher interviews revealed there were ICT applications within the school which some teachers were not trained to use, or were unsure of using due to technical breakdown and the need not to compromise classroom behaviour and order. The study corroborates Becta (2006), and Jones and Coffey (2006), who reported teachers' unwillingness to use only what they know, and what they are entirely familiar with. Such findings are also borne out by European research, with teachers lacking time, technical knowledge and perhaps most importantly, a positive predisposition to inventive and communicative use of digital educational technology (Gil Pérez, & Berlanga Fernández, 2013).

It was noted that iPads represented the most 'coveted' resource, with laptops and mobile phones close behind these. It may be that mobile phones are a good choice for a standard digital resource, involving relatively little additional cost, enabling the interactive use of the technology for contact with

native speakers, own voice recordings, immediate access to internet sources and even feedback in classroom situations. These are all features that appear in the literature promoting digital applications in schools. It is possible the coveting of iPads may centre on their desirability as consumer items rather than on distinct educational activities, although the research aimed to identify electronic resources that had been identified in the literature or government documents as equipment that could realise language teaching objectives. It cannot be discounted that the motivation and appeal expressed here is extrinsic, if also intrinsic.

Recent research by the University of Hull (Burden et al., 2012), investigated iPad use in a number of Scottish schools, concluding that iPad-resourced teaching and learning brought “many attendant benefits for learning, which include greater motivation, engagement, parental involvement and the understanding of complex ideas”. It concluded – somewhat tautologically – that access to personal mobile technologies “significantly increases access to technology”. The students were said to learn best when they ‘owned’ the iPad, and parents’ involvement with homework and daily learning was maximised with the ‘portability’ of the learning material. Significantly, teachers “engaged equally well”, needing little or no training or upskilling with what is a commonly used domestic apparatus. iPads remained with their owners as the children moved between classes and buildings, overcoming the logistical issues around computer ‘rooms’ outlined in the teacher interview in this research.

In both schools, a ‘lag’ between children’s aspirations to use technology, and the actual technology in use, was apparent. Such a lag may represent the evolving social landscape, wherein young people depend more and more on mobile phones for a seamless and constantly connected process of learning and living. Children’s expectations of communications and the role of communicative devices will not necessarily be shared by the generations engaged in teaching them. (Pachler, Bachmair and Cook, 2009; Traxler, 2010).

Earlier evidence of teachers' unpreparedness, identified in Cox and Marshall (2007), identified teachers' lack of knowledge and confidence impacting negatively on effectiveness, so teachers may not therefore bring about the improvements that are potentially possible. The findings of this study include teachers' readiness to use computers as a presentational tool, with the most commonly used features of technology being, equally, computers used by the teacher, interactive whiteboards used for presentation, projectors, language websites used for resource material, office applications for writing purposes, and online games (although these refer to games within a software package, for practice of vocabulary, rather than games played 'beyond' the classroom). Both teachers in interviews in this research emphasised the presentational and resource material uses to which they put their technology. Leask & Pachler (2013), describe the use of digital technologies as 'productivity tools, as opposed to creativity tools', citing the use of the IWB as a display tool as "missing the point". The point, in this case, may be the interactivity defined by Beauchamp, Kennewell (2008), as the ability to respond contingently to the learners' actions, and found interactivity in student teacher interactions in particular, namely questioning, reflecting, probing, suggesting, prompting, all of key importance in bringing about learning. Such activities are enabled by technologies, although not dependent on them. The earlier question by Evans "Does technology (...) support processes that already exist in conventional learning contexts?" appears to be borne out by the two examples in this study, wherein technology enables the existing methodology, rather than introduces newer communicative possibilities available with the same or similar existing technology.

The teachers' readiness to use technological models for pronunciation and authentic speech modelling emerged as a central finding – both citing this as helpful for correcting or enabling their own spoken language, as well as that of the children. This critical feature of technology is highlighted in a recent review (Golonka et al 2014), which suggests that the prime function of digital

technologies for language learners is the facility to train speech and extend language. Automatic speech recognition, as well as 'chat' and structured talk enabled by software and interactive technology, were the most effective language learning features in that research, significantly overtaking other forms, including mobile and portable devices.

The desire of the younger children "to speak to real French children" is one that could be accommodated by the present technology in the school, but is not (yet) realised. New pedagogies that connect learners across countries, sharing projects and resources in shared languages, are suggested in research such as that of Ernest et al (2013) which enabled graduate teaching students to deploy technology to foster collaborative teaching models. Citing new Web 2.0 environments as a means to increase peer interaction, collaboration and learner autonomy, in a project between the English Open University and the Universitat Oberta de Catalunya, teachers in England and Spain devised new classroom applications for connecting children for the purpose of learning. The researchers point out that such initiatives and experiences are not readily available to regular language teachers in either country, and suggest a future that routinely meets the desire of the English children in this research to speak to their foreign language speaking counterparts. Knight and Steed (2012), recommend moving from 'front of the room technology', whereby rows of seated children attend to whiteboards and projectors, or face screens individually in dedicated 'computer rooms', to a new and personalised model of learning. Children, equipped with mobile devices, "ask their own questions and find their own answers". Pachler's (2014) definition of 'old' ICT uses and new, active individualised applications, similarly emphasise the potential not yet realised in typical English classrooms.

Learning a foreign language is, in the words of the 2014 English National Curriculum, "a liberation from insularity". Classroom technology's ability to motivate language learners, and to present attractively, is established. Teachers and pupils in this research will benefit from investment into their

training and education, for a new and more connected language learning experience.

References Bibliographies

- BECTA (2004). A Review of the Research Literature on Barriers to the Uptake of ICT by Teachers. Available at http://dera.ioe.ac.uk/1603/1/becta_2004_barrierstouptake_litrev.pdf
- BECTA (2006). Review of Evidence on the progress of ICT in education. Available on http://dera.ioe.ac.uk/1427/1/becta_2006_bectareview_report.pdf
- BEAUCHAMP, G., & KENNEWELL, S. (2008). The influence of ICT on the interactivity of teaching in *Education and Information Technologies* 13(4), 305-315. Hingham, MA USA: Kluwer Academic Publishers.
- BUCK, J., & WIGHTWICK, C. (2013.) *Teaching and Learning Languages*. London: Routledge.
- BURDEN, K., HOPKINS, P., MALE, T., MARTIN, S., & TRALA, C. (2012). *The University of Hull "Ipad Scotland evaluation"* available at <http://www2.hull.ac.uk/ifl/ipadresearchinschools.aspx>
- COFFIELD, F., MOSELEY, D., HALL, E., & ECCLESTONE, K. (2004). *Learning styles and pedagogy in post-16 learning. A systematic and critical review*. London: Learning and Skills Research Centre.
- CELCE-MURCIA, M., & OLSHTAIN, E. (2001). *Discourse and Context in Language Teaching*. Cambridge: Cambridge University Press
- COX, M., ABBOTT, C., WEBB, M., BLAKELEY, B., BEAUCHAMP, T., & RHODES, V. (2003). *ICT and Attainment: A Review of the research literature*. London: DfES Publications.
- COX, M., & MARSHALL, G. (2007). Effects of ICT: Do we know what we should know? *Journal of Education and Information Technology* 12(2), 59-70.
- COX, M., & WEBB, M. (2004). *ICT and Pedagogy: A Review of the Research Literature*. Coventry/London: DfES Publications and BECTA.

- Department for Education National Curriculum 2000 available at <http://webarchive.nationalarchives.gov.uk/20130401151715/https://www.education.gov.uk/publications/standard/publicationDetail/Page1/QCA/99/457>
- DEPARTMENT FOR EDUCATION (DfE) (2007). *Modern Foreign Languages Curriculum: Key Stage 3*. available at. <http://www.education.gov.uk/schools/teachingandlearning>
- DEPARTMENT FOR EDUCATION (DfE) *National Curriculum* (2012). available at <http://webarchive.nationalarchives.gov.uk/20130904095348/https://www.education.gov.uk/schools/teachingandlearning/curriculum/nationalcurriculum2014/nationalcurriculum/b0075667/national-curriculum-review-update>
- DEPARTMENT FOR EDUCATION 2005. *Key Stage 2 Framework for Languages* available at [http://www.archives.gov.uk/20130401151715/https://www.education.gov.uk/publications/standard/publicationdetail/Page1/DFES 1721 2005](http://www.archives.gov.uk/20130401151715/https://www.education.gov.uk/publications/standard/publicationdetail/Page1/DFES%201721%202005)
- DEPARTMENT FOR EDUCATION *National Curriculum 2014*. available at: <http://www.education.gov.uk/schools/teachingandlearning/curriculum/nationalcurriculum2014/>
- ERNEST, P., HEISER, S., & MURPHY, L. (2013). Developing teacher skills to support collaborative online language learning in *Language Learning Journal* 41(1), 37-54.
- EVANS, M. (2009). *Foreign Language Learning with Digital Technology*. London: Continuum.
- FLEMING, N., & BAUME, D. (2006). Learning Styles Again: VARKing up the right tree! In *Educational Developments*, 74, 4-7.
- FLEMING, N. (2012). *Introduction to Vark*. Available at <http://legacy.hazard.kctcs.edu/VARK/introduction.htm>
- GIL PÉREZ, A., & BERLANGA FERNÁNDEZ, I. (2013). La interactividad en el aula. Un reto de la escuela 2.0 in *Edmetic* 2(2), 56-75.

- GOLONKA, E., BOWLES, A., FRANK, V., RICHARDSON, D., & FREYNIK, S. (2014). Technologies for foreign language learning; a review of technology types and their effectiveness in *Computer Assisted Language Learning* 27(1) 70-105.
- GOVE, M. (2012). *Digital Literacy Campaign – “Michael Gove’s speech in full”* *The Guardian*, 11 January 2012, online, available at www.guardian.co.uk/education/2012/jan/11/digital-literacy-michael-gove-speech
- HARRISON, C., COMBER, C., FISHER, T., HAW, K., LEWIN, C., LUNZER, E., McFARLANE, A., MAVERS, D., SCRIMSHAW, P., SOMEKH, B., & WATLING, R. (2002). *ImpaCT2: The Impact of Information and Communication Technologies on Pupil Learning and Attainment*. London: DfES Publications.
- HAWKES, R. (2009) in Evans, M. *Foreign Language Learning with Digital Technology*. London: Continuum.
- JONES, J., & COFFEY, S. (2006). *Modern Foreign Languages 5-11: a guide for teachers*. London: David Fulton Publishers.
- KNIGHT, L., & STEED, M. (2012). ICT as a Catalyst of a Change in Pedagogy, *ISC Bulletin*, 27, 30-34.
- KUEGEL, C. in Leask, M., & Pachler, N. (2013). *Learning to Teach ICT in the Secondary School 120-132*. London: Routledge.
- LEASK, M., & PACHLER, N. (2013). *Learning to Teach ICT in the Secondary School*. London: Routledge.
- Data Report for the Mayor of Liverpool’s Education Commission, September 2012*: Liverpool: Liverpool City Council.
- MACARO, E. (2014). Grammar: The never-ending debate (108-120) in Driscoll, P., Macaro, E., Swarbrick, A. *Debates in Modern Language Education*. London: Routledge.
- MILNE, J. (1999). *Questionnaires: advantages and disadvantages*. Available at: http://www.icbl.hw.ac.uk/ltidi/cookbook/info_questionnaires/

- MITCHELL, M.L., & JOLLEY, J.M. (2012). *Research Design Explained*. Belmont, CA, USA: Wadsworth Cengage.
- OFSTED (2011). *2011 Report 'Modern Languages: Achievement and Challenge'*. London: HMSO.
- PACHLER, N., BACHMAIR, B., & COOK, J. (2009). *Mobile Learning: Structures, Agencies, Practices*. London/NY: Springer.
- PALMEN, R. (2011). Girls, Boys and ICT in the UK: An Empirical Review and Competing Policy Agendas (407-423) in *International Journal of Gender, Science and Technology*, 3 (2).
- PASHLER, H., MCDANIEL, M., ROHRER, D., & BJORK, R. (2008). Learning Styles: Concepts and Evidence (103-119) in *Psychological Science in the Public Interest* 9(3).
- PASSEY, D., ROGERS, C., MACHELL, J., MCHUGH, G, & ALLAWAY, D. (2004). *The Motivational Effect of ICT on Pupils*. London: DfES Publications/Lancaster University
- PITTARD, V., BANNISTER, P., & DUNN, J. (2003). *The Impact of ICT on Attainment, Motivation and Learning*. London: DfES Publications.
- QUALIFICATIONS AND CURRICULUM AUTHORITY (QCA) *Secondary Curriculum Review* 2007. Available at http://dera.ioe.ac.uk/7161/1/Secondary_curriculum_review_statutory_consultation_draft_summary_of_findings_050607.pdf
- RICHARDS, J.C., & ROGERS, T.S. (2001). *Approaches and Methods in Language Teaching*. Cambridge: Cambridge University Press.
- SLAOUTI, D., & BARTON, A. (2007). Opportunities for Practice and Development: Newly Qualified Teachers and the Use of Information and Communications Technologies (405-424) in *Teaching Foreign Languages in English Secondary School Contexts*. *Journal of In-service Education* 33(4). London: Routledge.

STANLEY, N., & JONES, C. (2002). Analysing and Developing your Knowledge of ICT in S. Kennewell, J. Parkinson and H. Tanner (eds), *Learning to Teach ICT in the Secondary School*. London: Routledge.

The Times Educational Supplement, 20 September 2013 ("Technology: Schools say yes to tablets as ICT expenditure soars") available at: <http://www.tes.co.uk/article.aspx?storycode=6358755>

TRAXLER, J. (2010). Will Student Devices deliver innovation, inclusion and transformation? In *Journal of the Research Center for Educational Technology*, 6 (1).

TULLIS, T., & ALBERT, B. (2008). *Measuring the user experience: collecting, analysing and presenting usability metrics*. Amsterdam: Elsevier/Morgan Kaufman.

TRUCANO, M. (2005). *Knowledge Map: Impact of ICTs on learning and achievement* available at <http://www.infodev.org/en/Publication.154.html>

WALKER, L. (2008). *The Essential Guide to Lesson Planning*. Harlow: Pearson.

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