

An Evaluation of the Do-Be Teach-IT Resource

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About the Centre for Rural Childhood, Perth College UHI

Based on a commitment to the UN Convention on the Rights of the Child, the Centre for Rural Childhood undertakes research and consultancy on all aspects of childhood, including from a rural dimension; offers teaching and training courses at undergraduate and postgraduate levels; offers CPD and other professional training opportunities and contributes to policy and practice through evidence-based research.

About the author

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Teach-IT Evaluation

Executive Summary

Through analysis of the data generated throughout the research, the following key findings emerged:

- Across the board, Teach-IT is agreed to have increased confidence in using ICT technologies in the classroom.
- Across the board, Teach-IT is agreed to have facilitated the delivery of the new curriculum.
- Satisfaction in the Teach-IT resource is extremely high among teachers with access to it and there is desire to make greater use of the Teach-IT ideas.
- Especial praise is given for the simplicity of the step by step format of the Teach-IT approach and for its value in saving teachers' time in identifying innovative resources.
- Likewise, praise is given for the value of the resource and training in financial terms and for its linkage to free internet resources.
- Promoted staff with ICT responsibilities find the Teach-IT resource an effective way to enhance the confidence of non- or less-ICT literate staff.
- The Teach-IT training provided by Do-Be is instrumental in engaging initial interest in the Teach-IT resource on the whole, although teachers with a pre-existing confidence/interest in ICT technologies would be happy to explore the resource without training.
- The volume of ideas within the resource can be considered off-putting by some teachers yet is praised by others. Teachers indicate a desire to fully embed or exploit the Teach-IT resource before moving on to new ideas.
- Promoted staff indicate that while Teach-IT helps facilitate the new curriculum, the speed of curriculum change demands that Teach-IT should be introduced gradually and is at its most effective when planned at structural level (e.g. as a part of a whole school initiative).
- Following from the above, the ideas or 'toolkit' approach of Teach-IT was welcomed by teachers as offering diverse applications in lessons of all types (including where pupil access to ICT technologies may be limited); however some teachers wanted to see more explicit or detailed links to the curriculum to aid the embedding of the approach at structural level.

Introduction

Following a three month research process carried out in Autumn 2011, this report evaluates 'Teach-IT', one of a range of teaching products and services produced by Do-Be, a Scottish based company who promote the use of ICT and new media technologies within education settings. The research was funded through the Knowledge Exchange scheme of Perth College which is part of the new University of the Highlands and Islands (UHI).

The aim of the research was to evaluate the perception and efficacy of the Teach-IT resource as a means of improving teachers' confidence in using ICT within the classroom, particularly in meeting the needs of a rapidly changing curriculum (Curriculum for Excellence in Scotland and National Curriculum in England) in which pupils' own digital literacy, competence and confidence is frequently characterised as outstripping that of the previous generation.

The aim had been arrived at by Do-Be personnel as part of their ongoing commitment to scoping new products and services under their company ethos of inspiring creative teaching, but also reflects the trend of the company's third-party sponsors and funding bodies to seek a qualitative evaluation of the impact of investment. To this end Do-Be sought a fully independent evaluation, to be carried out by staff of the Centre for Rural Childhood, Perth College UHI.

Research Questions

The research questions addressed by this study were:

- To what extent does Teach-IT help to increase teacher confidence in using ICT within the classroom?
- In what ways does Teach-IT aid in the delivery of the new curriculum?
- What improvements might be made to the Teach-IT resource and training in light of the above?

Methodology

The study used a mixed methodology of qualitative research methods chosen to provide a rounded picture of teachers' perception of the resource within the constraints of time and access:

- Internet survey of teachers known to have access to the Teach-IT resource (76 participants across Scotland and England recruited from the Do-Be database)
- Follow-up interview with teachers and educators who had used Teach-IT extensively (8 participants across Scotland and England recruited via the online survey and also via training sessions)
- Observation of a range of Teach-IT in-school training sessions (2 twilight sessions and 2 half day sessions, all in Scotland, chosen from Do-Be's training calendar)
- Classroom observation of the resource in action in a primary school and secondary school (both in Scotland, recruited via the training sessions)
- Participant observation at the Do-Be promotional event at the Scottish Learning Festival, September 2011

The research was designed and carried out by Lynn Whitaker of the Centre for Rural Childhood, Perth College UHI, under the directorship of Professor Rebecca Wallace. The independent nature of the evaluation meant that all contact with teachers was made directly by Dr Whitaker within a clearly advertised, neutral academic framework: no teacher incentives were given by Do-Be.

Key Themes and Research Findings

Demographic Observations

As survey participants were self-volunteered in response to an open invitation to schools known to have the Teach-IT resource, it is interesting to note the demographic spread of those who took part, particularly in respect of the length of teaching service:

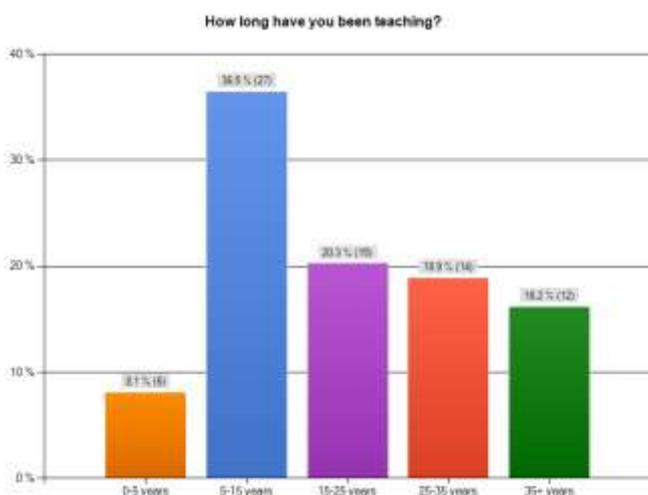


Figure 1. Length of teaching experience.

Figure 1 shows that the largest group of participants (over a third of the sample) have been teaching for 5-15 years, while the smallest group (less than 9% of the sample) have been teaching for less than 5 years. The other groups were fairly similar in their representation, comprising of 12-15 participants. Where this demographic may be of especial interest is in relation to the embedding of ICT within initial teacher training and how that might shape confidence in using ICT within the classroom, with one ICT co-ordinator suggesting that “there is not enough ICT training for newly qualified teachers – it really should be embedded earlier”. In follow up interview with a recently qualified teacher it was noted that the Teach-IT resource would have been appreciated at an early stage of teacher training as there was still a perceived gap in ICT skills training. In interview, several teachers, including a newly qualified teacher, spontaneously stated that the Teach-IT training was amongst the best and most useful ‘in-service’ training they had encountered.

You've got so much to learn that ICT can just seem like an 'extra' thing on top of all that when ideally it would be a core methodology or approach from the very start of your training.

Recently qualified teacher, Fife

Personal Use of ICT

In this study, the use of new media technologies for personal use is taken as a broad indication of general confidence in using ICT. Of 76 survey participants, 30 identified themselves as heavy users, 42 as average users and two as making little or no use of internet and new media technologies in personal life (note that two participants declined to indicate their personal use of new media technologies).

Again the data relating to recently qualified teachers taking part in the survey (i.e. the six participants in the 0-5 years teaching experience group) is interesting as, although the smallest group, all but one of the teachers within it considered themselves to be a 'heavy user' of the internet and new media technologies. While roughly a third of group members identified themselves as 'heavy users' in all the other groups, the greater indication of heavy use in the group with 0-5 years of teaching experience suggests that more recently qualified teachers are more likely to have a general confidence in using ICT.

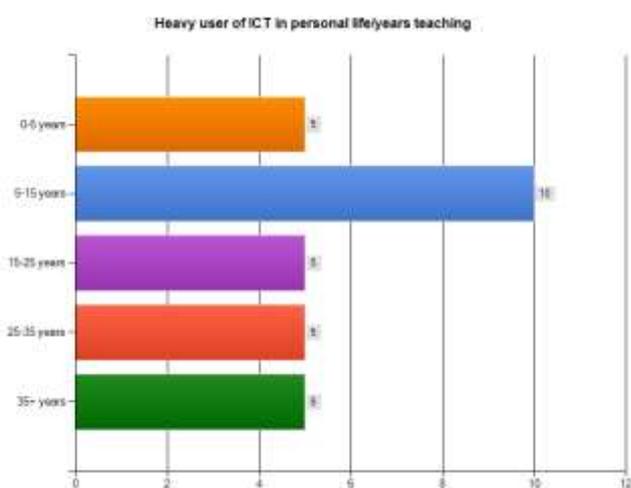


Figure 2. Personal use of ICT.

Mapping Personal Use and Confidence to Professional Use and Confidence

In treating usage in personal life as a baseline measure of general confidence in using ICT and new media technologies some striking themes emerge in relation to evaluating the Teach-IT resource and the confidence in using ICT in the classroom. The 30 survey responses of those who considered themselves to be heavy users were analysed in respect of a set of qualitative statements about the Teach-IT resource, as given in Figure 3.

While the responses of the 'heavy user' group are overwhelmingly positive in describing the experience of the Teach-IT resource (e.g. expressed as a percentage of the group, almost 90% of the 'heavy user' group indicated that they were "keen to expand" their use of the resource and almost 80% would "recommend Teach-IT to

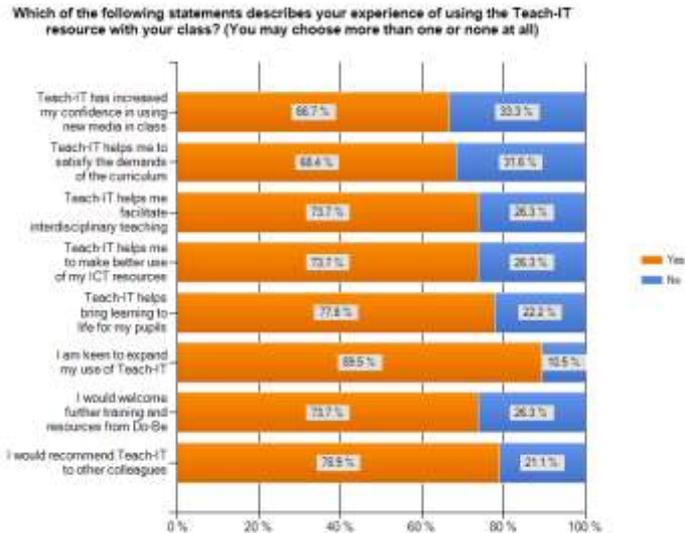


Figure 3. Experiences of 'heavy users' using Teach-IT in the classroom.

other colleagues”) it is worthwhile comparing their responses with teachers within the ‘average user’ group (which, with 42 members, is constituted by over half the survey participants).

As the responses of the ‘average user’ group is still more positive (and under the rubric that personal usage of internet and new media technologies gives a broad indication of a general baseline confidence in using ICT), it is possible to suggest that the Teach-IT resource is even more appreciated by those with average confidence than by those who have a higher degree of confidence and knowledge of ICT as an initial starting point (as suggested by heavy usage on personal life).

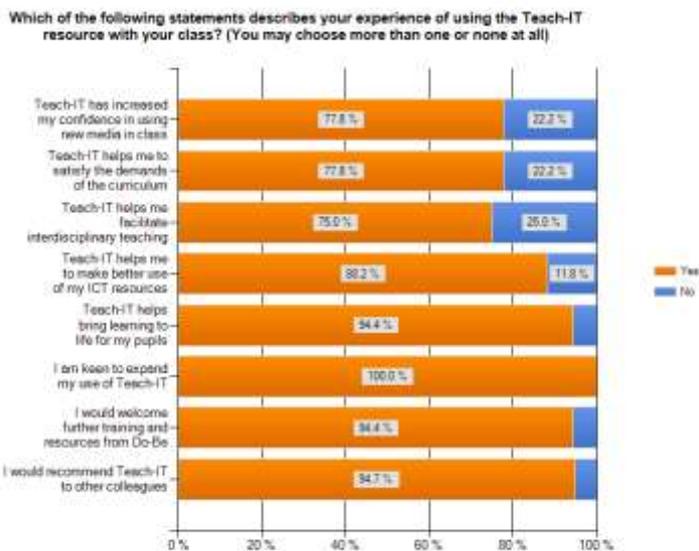


Figure 4. Experiences of 'average users' using Teach-IT in the classroom.

It is not however possible to extend this hypothesis to those who identify themselves as making little or no use of internet and new media technologies in their personal life as the two members of this 'no or low usage' group (one with 15-25 years of teaching experience, one with 35+ years of teaching experience) declined to answer the qualitative survey statements on the Teach-IT resource; it may be indeed that those with the lowest entry point of confidence and experience (as suggested by no or low usage in personal life) are especially resistant to incorporating ICT into the classroom. It should be stressed that, accounting for only 2 of 76 participants, such a low baseline of confidence and experience can be treated as exceptional although not insignificant.

Of particular note when comparing the perception of the Teach-IT resource between 'heavy' and 'average' user groups are the responses framed around the two key research questions relating to Teach-IT's ability to raise confidence in using ICT in the classroom and to facilitating the delivery of the new 'Curriculum for Excellence' curriculum. In heavy users the statement, "Teach-IT has increased my confidence in using new media in class" was chosen by approximately 67% of the group, and in average users the statement was chosen by approximately 78% of the group. Likewise in heavy users the statement "Teach-IT helps me to satisfy the demands of the curriculum" was chosen by approximately 68% of the group, rising to approximately 78% with average users.

ICT Confidence

In follow-on interview, members of both the 'heavy' and 'average' user groups were asked to elaborate further on their statements relating to their experience of Teach-IT in the classroom. A more in-depth picture was gained supporting the hypothesis that teachers' perceptions of Teach-IT is partly determined by their baseline confidence in using ICT technologies (as inferred from their personal use) and that those with average initial confidence stand to gain yet more from the resource than those with a higher degree of initial confidence. In follow-on interview, teachers from the heavy user group who had disagreed with the statement "Teach-IT has increased my confidence in using new media in class" explained that, as their confidence was already high, they could not honestly say that Teach-IT could contribute further to their confidence. However other teachers, including those with ICT co-ordination or advisory roles, also drawn from the heavy user group, indicated that the diversity and volume of ideas in the Teach-IT resource meant that it could be stated to enhance confidence even in the already confident teacher.

Because I am already so confident and familiar with using ICT, I could not say 'Yes, Teach-IT has increased my confidence.' But if you had asked me more generally how it worked with other staff I would say it has definitely allowed them to be more confident.

ICT co-ordinator (primary sector)

Understanding 'Increased Confidence'

Several themes emerged in interview as to what aspects of the resource could be considered as increasing teacher confidence in using ICT in the classroom. A strong discussion thread ran through all the interviews as to the success of the resource in terms of:

Ease of use

- Ease of access (both paper and online copies of the resource are available and each has its advocates).
- Simplicity of design – step by step instructions are given for each idea (this is repeatedly noted to be the key factor in teachers' positive perception of the resource).

Generating excitement

- Survey and interview participants expressed a sense of excitement in being introduced to the resource and a desire to explore the ideas further.
- The Teach-IT training provided by Do-Be was consistently stated to be “inspirational” and a key factor in engaging teachers' interest and enthusiasm for the resource. (This can be a double-edged sword however - one interviewee with a promoted post remit of ICT co-ordination and training was worried that the “slick” nature of the training might make the resource seem “gimmicky”).
- Several interviewees noted that the training was particularly effective as it was delivered by an ‘expert outsider’ to the school and that this increased the credibility of the resource and the excitement generated among staff.

Additionally, in participant observation in training and teaching situations, another aspect of ‘increasing confidence’ was noted, which might be regarded as the flexibility that the Teach-IT ideas-based approach offers to teachers in terms of:

Although I have a high level of ICT skills and experience the resource offered me many ideas I didn't know existed – and all gathered together in the one place.

Class teacher (primary sector), Fife

Allaying anxiety

- Creation of a 'can do' attitude – as in each of the training sessions observed there were technical difficulties with internet access on the school computer networks, the training incorporated practical examples of how teachers might work around such technical difficulties. This was important in showing teachers that even failed technology need not mean a failed lesson.
- During observation of the resource in action in a S2 class the teacher noted that, in incorporating ICT technologies into the classroom, “there is always a ‘Plan B’”. That Teach-IT was an ideas approach (as opposed to a series of lessons plans) was stated to aid in this flexibility.
- Do-Be training staff offer ongoing email and telephone support to teachers on a one to one basis as a free part of the training package. The ability to contact the trainer directly with any particular troubleshooting issue was considered to be a big attraction of the Teach-IT training and resource for less confident teachers.

It was important that the training was offered at grassroots level rather than to the 'whizziest of the whizziest'. We really feel we have support and shared vision with Do-Be – they come across as genuine and inspiring. They are passionate but it's not necessarily about selling the product: it's about their ethos and engagement and the personal service and support.

ICT advisor (primary, nursery and special schools), West Midlands

Delivering the Curriculum

As the combined survey results indicate that 73% of survey respondents agree that “Teach-IT helps me to satisfy the demands of the curriculum”, in follow-up interview participants were asked to elaborate further on what they understood by that statement. Several themes emerged:

Facilitating interdisciplinary approaches

- Approximately 74% of survey participants agreed that Teach-IT helped to facilitate interdisciplinary teaching. In interview, several participants returned to the idea of Teach-IT's cross-curricular application and specifically to the idea that the embedding of ICT (as a teaching/learning methodology as opposed to a discrete subject area) was, of itself, an interdisciplinary approach.

'Pupil-led' learning

- Interview participants who had utilised the resource within a structured whole school plan were enthused by its potential for what might be described as 'pupil-led' learning i.e. a responsive and reactive learning ethos in which learners have autonomy. One interviewee indicated the way in which pupils had shaped the curriculum for the following session through their suggestion of a unit of work which followed on from use of Teach-IT in PSE. This pupil-led unit of work also provided primary-secondary liaison.
- In teaching observation, various aspects of 'pupil-led' learning were noted e.g. pupils devising their own extension tasks and collaborative learning/peer support approaches.
- The survey indicates that approximately 86% of participants agree that "Teach-IT helps bring learning to life for pupils".

Not all the responses to the survey agreed that Teach-IT helped to facilitate the curriculum and, in follow-up interview, two teachers, both with promoted responsibility for ICT co-ordination, felt that the curriculum links could be much more explicit within the Teach-IT resource and training.

We all know about the 'four capacities' of the Curriculum for Excellence, and that 'successful learners should be able to use technology for learning',¹ but teachers really want to see concrete examples of that in action so I have to show that Teach-IT can do that. The pupils 'get it' 100% but it is the staff who need to get to grips with it.

Secondary school ICT coordinator, (Classroom observation)

Other Indicators of Success

Survey and follow-on interview revealed additional aspects of Teach-IT that can be read as indicating teacher satisfaction in the resource:

Time-saving bank of resources and ideas

- Interview responses indicate that teachers believe the resource to save them time searching, finding and collating appropriate ICT resources.
- The step by step layout of each idea was considered to save considerable time when used as a 'how to' for staff and for the 'cascading' of Teach-IT training.

Value for money

- Following from the above, several interviewees commented on the scale of the resource and its volume of ideas as presenting excellent value for money. In participant observation of training sessions the regional ICT co-ordinators also stated that Teach-IT offered good value at a time when training and resource budgets were tight.
- The fact that the internet resources collated within Teach-IT are free was also prized by teachers – although annoyance was expressed at those resources which required additional subscription for advanced features.
- Approximately 80% of survey respondents agreed that “Teach-IT helps me to make better use of the new media resources that are available to me”. In interview many interviewees suggested that resources previously acquired by a school (such as a class set of Nintendo DS hand-held computer games; or a Nintendo Wii console) were underused before Teach-IT provided ideas to ‘get more out of them’.

The PTA bought a full set of Nintendo DS but we were really only using it for ‘golden time’: Teach-IT showed we could make use of it for learning and the kids absolutely love it.

Primary teacher, Fife

Suggestions for Improvement

While the overall response to the Teach-IT resource is overwhelmingly positive, this research aims to identify what improvements might be made to the Teach-IT resource and training. It should be noted that these suggested improvements, although taking close account of teachers' opinions, are based on the evaluative process as a whole, and represent the views of the research team at CRC:

- Given the step by step nature of the resource, additional linkage to the curriculum could be offered detailing further suggestions for use based on current best practice. This linkage IS made during training, and in the Blog section of the Do-Be website, and in Do-Be's monthly newsletter, but could be more explicit in the resource itself. Where training is delivered to individual schools this linkage could be specific to that school's development plan.
- Those resources or sites which carry any additional costs or subscription should be clearly marked as such. Where a 'workaround' is possible (as it frequently is) whereby the benefits of the site can still be utilised without additional cost, this should be explained as a step by step process.
- The Teach-IT resource contains some errors in spelling and grammar that require urgent correction.
- In planning future resources, Do-Be may wish to consider a different delivery mechanism that allows for a staggered release of materials and training that can be tailored to the requirements of the individual purchaser (whether an LEA or an individual school); this may also necessitate a different funding model for the resource. Negative survey comments regarding Teach-IT, although a minority of responses, spoke of the frustration teachers experience when sections of the pack (e.g. Google Earth) are not available in their authority: interviewees also noted that where ideas were not applicable to a school there is danger of the staff dismissing the resource before giving the other ideas a chance. There is also a sense that teachers remain overwhelmed by the volume of ideas within the pack and prefer to 'get to grips' with individual sections or ideas before moving on to a new one – a staggered dissemination would help to keep ideas fresh, new and relevant and may reach additional staff who, as yet, are not utilising the resource despite its availability in their school.

Conclusion

As a result of the evaluation process, the research staff of the Centre for Rural Childhood has no reservation in concluding that the Teach-IT resource produced by Do-Be is an effective tool in enhancing teachers' confidence in using ICT and new media technologies in the classroom, and is a positive step to embedding ICT methodologies within both interdisciplinary and pupil-centred learning as demanded by the curriculum. Improvements suggested for the resource itself are minimal, with the key suggestion – of a staggered and tailored delivery mechanism – applying more to future resources that Do-Be may develop.