

Appendix C Learning Opportunities in the Home Survey - Analysis

Introduction

As described in Appendix B Consultation and Consensus Forming Process various target groups were invited to complete the online survey through a link available on the t-learning Study web site. As respondents had to specifically opt-in to take part in the survey they were self-selecting and clearly only those who had an interest in learning opportunities in the home choose to take part. As an incentive to take part respondents were informed that they would be sent the final results of the survey.

Purpose

The purpose of the survey was to try to get an understanding of the views of those who were already interested in the potential of increasing learning opportunities in the home. During the early stages of the study, during informal discussions, it became obviously that a key issue amongst potential key policy and decision makers in education and training – was their general lack of awareness of developments around the use of the various technology and service configurations for interactive digital TV.

Therefore, the survey aimed to get a state of the art view of current thinking amongst the potential key players who were already interested in new developments in this area. They are potentially an important first target group for this report.

Results and Analysis

Profiles of Respondents

A total of 140 people took part in the online survey from 30 countries throughout the world with just over 32% from the UK and nearly 16% from the USA and surprisingly just over 7% from Greece. Participation rates for each of the remaining of the other countries were less than 3% per country (between one and four responses per country).

The respondents were generally representative of key educational stakeholders who might actually be involved in advising or the implementation of learning services to the home. 18% said they were at advisory/ policy maker level within a government dept or an agency at national level, regional/local or a senior management within an educational or training organisation. Another 11% said they were at middle manager/Head of Department level within an educational or training organisation.

Initially it appears that educational broadcasters were perhaps under represented with 4% at senior manager or advisor/policy maker level and another 5% as producers of educational broadcast services. However, the likely small numbers of such persons compared to other types of advisors and policy makers it could be argued that they were well represented.

It is interesting that 15% claimed to be independent consultants – who could be considered to be an important facilitators or catalysts for such developments and most of the 25% of those who put themselves in the “other” category, potentially are important stakeholders in such developments although less like to be key decision makers.

There was also 16% who described themselves as practitioners – primarily involved in teaching/tutoring.

Of those that gave an answer 51% said they were involved in distance learning in any way and 33% said they were not.

36% of respondents said they were mostly in higher education, with 20% saying they were involved in lifelong learning and 11% in professional training/updating and 8% in general adult education. Perhaps not surprisingly the other educational sectors that tend to be more institutionally based were under represented (secondary education 5%; Primary education 3%; Vocational Training 5%).

33% have access to interactive Digital TV in their own homes compared to 55% of respondents who said they did not have access. This is certainly a higher percentage than would be expected of an average population, but may reflect the high percentage of UK respondents completing the survey (32%) particularly as 40% of UK households also have interactive digital TV.

Also 48% of respondents have broadband Internet-enabled computer access in their own homes compared to 41% who did not. Also 11% stated that they do have use a personal digital video recorder to save TV programmes in their own homes compared to 79% who said they did not. 13% also stated that they could access TV programmes via a broadband service through a telephone compared to 79% who could not. 18% also said they could access video-on-demand TV programmes in their own homes. This seems to suggest that most respondents have been early adopters and are aware of the range of solutions that are becoming available in the home.

This is further confirmed by their interest in educational technology developments. 76% stated that they had considerable interest with another 23% stating they were interested or quite interested. Only 2% stated they were not interested at all.

Making learning opportunities more accessible in the home

When asked whether there should be more ways of making learning opportunities more accessible from the home 90% of respondents strongly or generally agreed, with another 7% agreeing. Only 1% generally disagreed.

However, when asked whether they think that access to learning opportunities through an Internet-enabled computer will meet most peoples' needs for accessing learning opportunities in the home. 51% strongly or generally agreed with another 23% agree. 22% generally or strongly disagreed.

Deeper analysis of the results has not been done on how these responses matched with the profile of the respondent as the relatively small numbers would raise questions on the validity of the results, but as more than half were already involved in distance learning, they may be keen to see that more opportunities should be made available through an Internet-enabled computer.

However, when asked whether current video-based learning content through an Internet-enabled computer provides an adequate learning experience views were split evenly with 47% either strongly or generally disagreeing and 31% strongly or generally agreeing with another 16% agreeing.

Using television in its traditional mode for encouraging active and engaged learning

When asked whether television - in the traditional mode for watching programmes – encourages active and engaged learning, only 14% strongly or generally agreed with this statement and another 11% agreed. However, 70% strongly or generally disagreed.

Interactive learning services through television

Respondents were then informed that technology solutions and new services are starting to emerge that could enable video-rich interactive learning materials to be used via a television in the home. They were then posed the question “If it is possible to request and access interactive learning materials through a television do you consider that this method is more likely to be used than through a computer?”

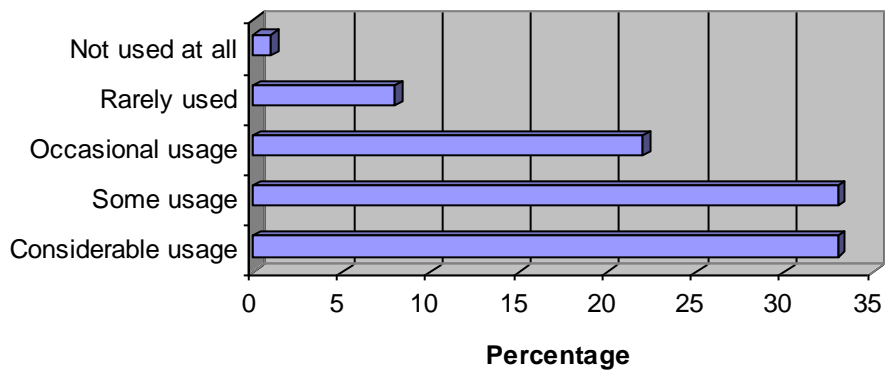
The results revealed that 49% strongly or generally agreed with another 23% agreeing. Only 22% generally or strongly disagreed.

Types of learning materials likely to be accessed via interactive TV

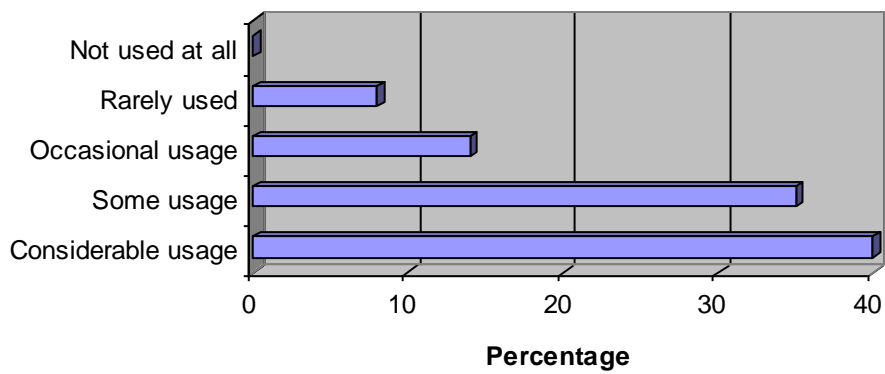
Respondents were then asked to give their option on the different types of learning materials that are likely to be accessed and used via interactive television if this was possible.

When looking at the results (see below) of all the suggested different types of learning materials respondents considered that between 55% and 80% would have considerable or some usage if available through interactive TV. Even for an undergraduate degree course in Humanities 60% of respondents considered that learning material via an interactive TV solution would be either of considerable usage or of some usage. The lowest response was for “soft skills” development with 55% considering that it would have considerable usage or of some usage. The highest response was for foreign language learning at 80% considering that it would have considerable usage or of some usage.

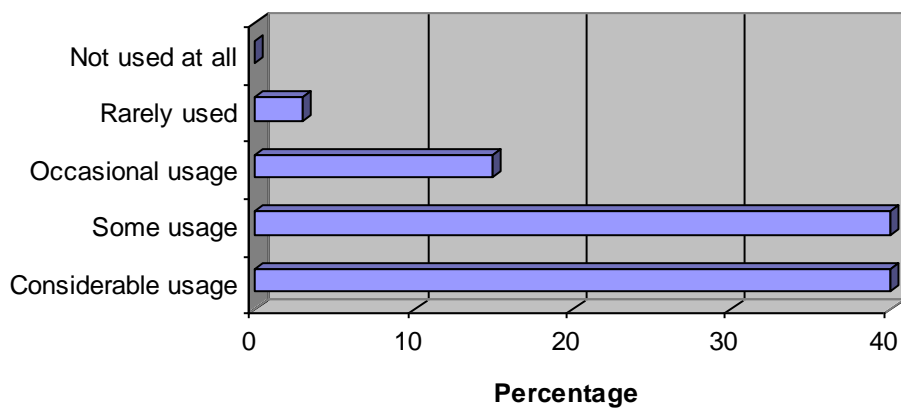
Leisure learning activity like gardening or playing golf



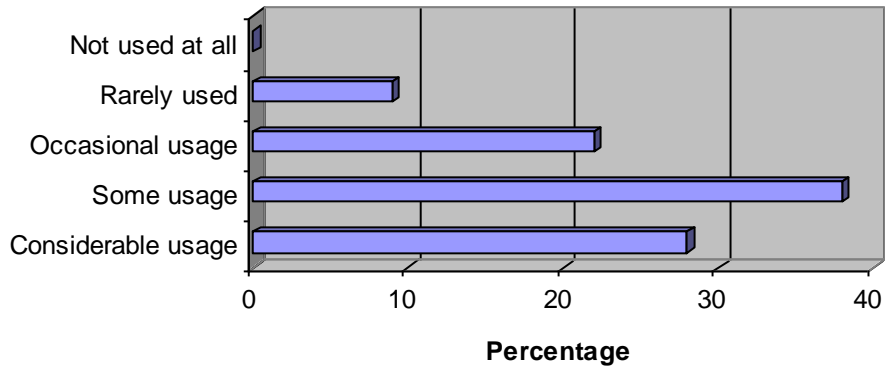
A "do it yourself" (DIY) learning activity like how to repair a blocked drain or how to paint a house



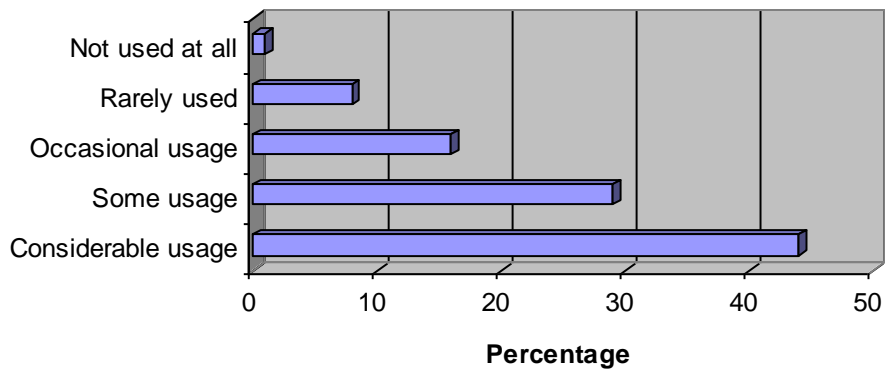
For foreign language learning



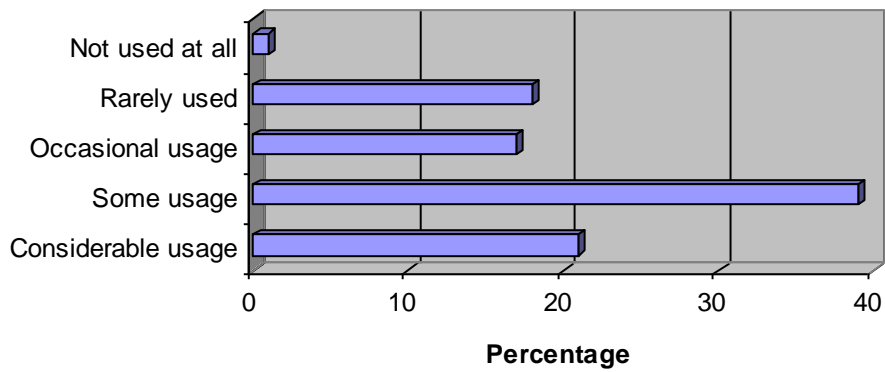
For maths or science learning by a secondary school student



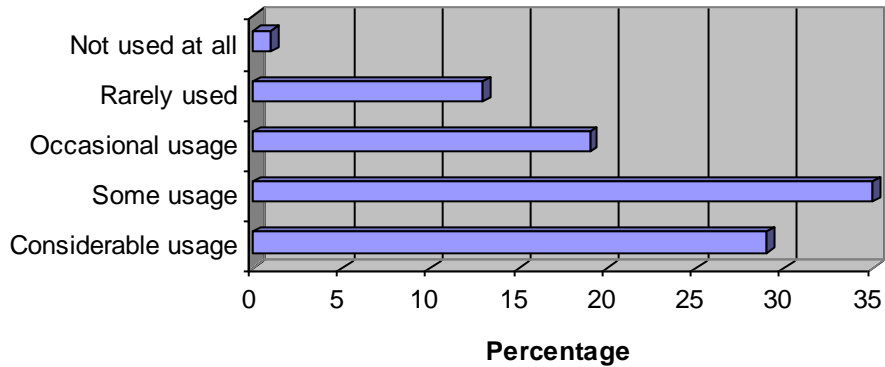
For development of pre-school learning skills for under-fives



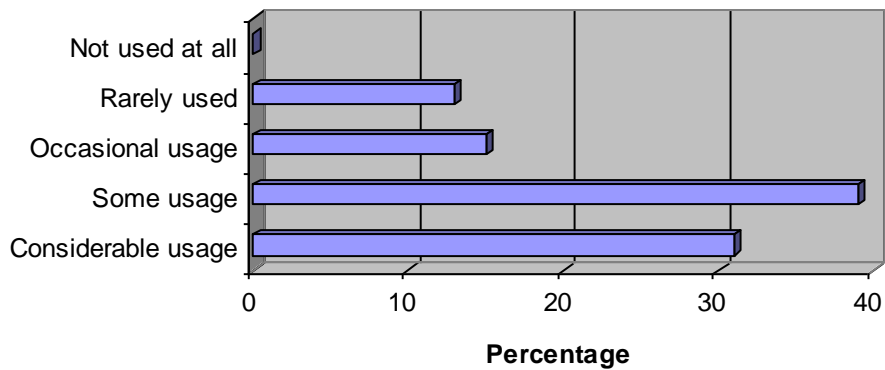
For an undergraduate degree course in Humanities



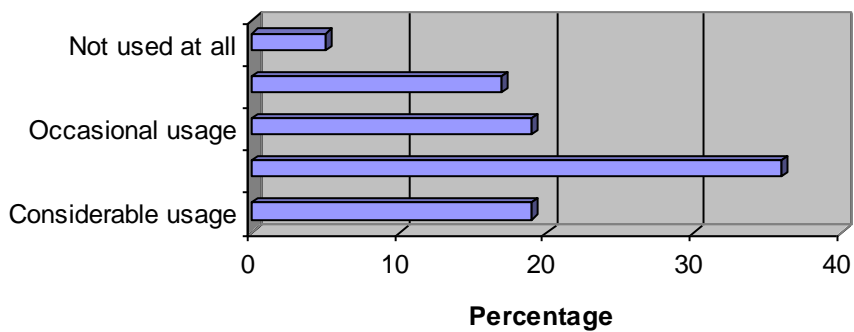
For continous professional development for teachers or doctors

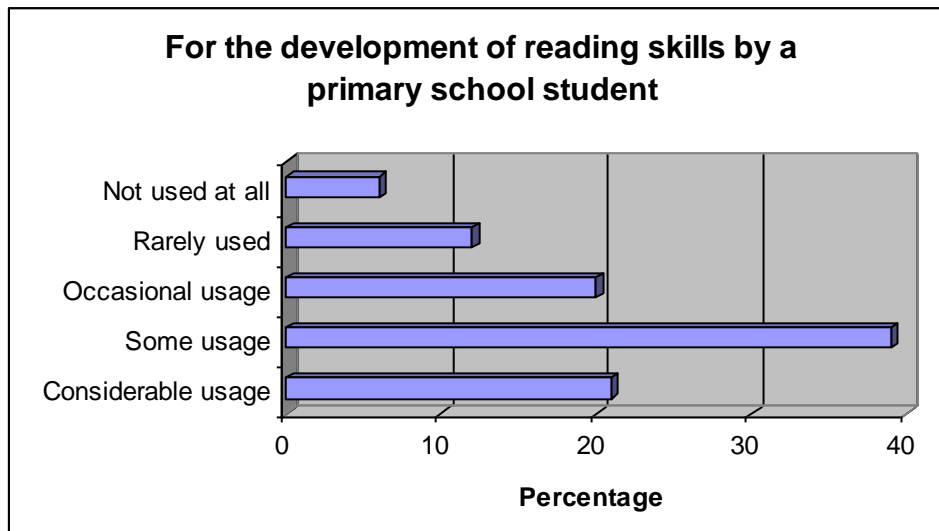


For improving and developing basic skills in numeracy and literacy



For “soft skills” development like answering the telephone, dealing with a difficult customer or managing a team in the workplace





These figures are very interesting, as it appears that earlier in the survey respondents tended to consider that learning materials through an Internet-enabled computer tended to meet most needs. However, as awareness was raised of the potential new opportunities that are becoming possible through interactive TV technologies, respondents appear to be agreeing that a wide range of learning opportunities could be possible using this technology.

This appears to be born out by the response to a later question – “Do you consider that these new ways of using the TV could provide an important way of accessing learning resources?” 89% of respondents agreed or strongly agreed, with only 7% disagreeing and 4% have no opinion. Additionally, when asked towards the end of the survey, “Do you consider that accessing interactive learning resources via a TV will have advantages compared to accessing via an Internet-enabled computer?” – 64% agreed or strongly agreed compared to only 18% strongly disagreeing or disagreeing. 14% had no opinion.

Wide-ranging advantages were quoted. Ease of accessibility and usage appeared to be key points made by many. It was also considered to be cheaper although generally it was not clear for whom it might be cheaper. (For full details see Appendix D on “Learning Opportunities in the Home Survey – Questions and Complete Data Results”)

Personalising interactive learning content through interactive TV services

Respondents were informed that, “to a certain extent it is becoming possible to personalise interactive learning content to individual learning needs through online (computer-based) learning.” They were then asked, “If it becomes possible to do this via interactive TV services how would you rate the value of such a facility?”

55% considered this to be very useful, 24% considered it to be quite useful and another 14% considered this to be useful. Only 4% stated that it was not very useful.

Access to a live tutor through a television in the home

If it was possible to access a remote live tutor through a television in the home, respondents were asked if they considered that there is likely to be a demand for such a service. 79% considered that there would be some or considerable demand with another 11% considering that there would be occasional demand. Only 9% considered that it would be rarely used at all. A wide range of learning context suggestions were made in which a live tutor is most likely to be used. (For full details see Appendix D on “Learning Opportunities in the Home Survey – Questions and Complete Data Results”)

Government intervention

The followed question was asked, “Where households cannot afford to buy the equipment needed to access the various interactive learning services via a TV in the home, do you consider that government should assist in the provision of such services?” Views tended to be more widely dispersed on this issue with 45% generally or strongly agreeing and another 21% agreeing. 24% tended generally disagree or strongly disagree.

However, when a similar question was asked about whether government resources would be better spent on providing Internet-enabled computer access to the home – more respondents tended to disagree than agree compared to learning services via a TV as in the previous question. 24% strongly or generally agreed with another 21% agreeing. 38% strongly or generally disagreed.

Overall Conclusions

1. Although some of the results should be considered with caution the sample of 140 respondents across 30 countries worldwide is large enough to be considered generally valid. The survey does give a good indication of the views of those actively interested in educational technology developments in relation to learning opportunities in the home. Most considered that there should be more ways of making learning opportunities more accessible from the home.
2. The respondents generally appeared to be early adopters of new technologies but as they were self-selecting this is not surprising and would probably be considered an important aspect of their profession in needing to be up-to-date with the latest developments.
3. During the early part of the survey it appeared that most respondents considered that access through an Internet-enabled computer would meet most people’s needs for accessing learning in the home. However, later into the survey they appeared to become very positive about interactive TV solutions. This was after they had been made aware of technology solutions that were becoming possible, particularly

in the form of video-rich content and more personalised content that is becoming possible through the range of interactive TV solutions.

4. This appears to confirm that awareness-raising is a critical first stage when introducing new educational technology innovations.
5. Once there is an awareness of the potential solutions, a second stage is to identify which technology and service configurations are most likely to lead to appropriate learning solutions.
6. A third stage would be to develop and test and identify, appropriate models for sustainable and replicable services.
7. This overall t-learning study has aimed to take people through the first stage of awareness raising, move them to understand what might be appropriate technology and service configurations and take them to the third stage were more development and testing is needed to identify models for sustainable and replicable services – that can then be turned into fully operational and sustainable services.