Paper 1:

Information Technology and Social Exclusion

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Summary

- For individuals to play a full part in the expanding information society requires them to have the skills and knowledge to use information and communication technologies (ICT). However, a large part of the adult population although aware of ICT do not perceive it as beneficial to themselves. How can the initial experience of ICT be provided to adults so that they are willing to take part and have an effective experience? A key factor in aiding attendance is the location. Adults will attend a familar location if it is acceptable to them, nearby and the events are scheduled to meet their needs. A wide range of approaches including outreach, taster sessions, drop-in facilities and conventional courses can be effective in improving their confidence and overcoming their initial anxiety.

Adults are motivated to attend events for several reasons but one critical factor relates to their children. The desire to help their children or simply to keep up with them is a major reason in their desire to attend. However, the fear of being left behind by the world is also important as is simple curiosity.

Basic courses are often heavily influenced in their design by funding restrictions and this may result in learners' experience being limited to a particular course of study no matter what their needs are.

Introduction

- The National Institute for Adult Continuing Education in partnership with the National Council for Educational Technology undertook an investigation of approaches to raising individual awareness of Information Technology. The project was supported by the Department of Education and Employment and aimed to inform the attempts of government and others to raise levels of IT awareness and confidence amongst the general public, especially groups in danger of social and economic exclusion.

Groups who are at a social or economic disadvantage are at risk of being marginalised and excluded from the life of the community. Among factors which increase this risk are unemployment, age, domestic situation, ethnic origin and geographical location. Information Technology has the potential to contribute in overcoming social exclusion and assisting disadvantaged individuals to take an active part in the community and to support their learning (IBM,1996). Yet, equally, it has the potential to further disadvantage and exclude people if they are not able to take advantage of technological developments. Taking advantage of this opportunity assumes that the adults have the opportunity to develop the knowledge and skills of information technology. Without a soundly based competence in information technology adults will be unable to play an active role in the information society.

The IT for All survey (DTI, 1996) contrasted the difference between individual awareness of technology and its perceived usefulness to the individual. Ninety-two per cent of the sample had heard of personal computers but only 52% perceived them as personally useful. Ninety-two per cent knew the Internet existed but only 25% saw it as useful to them. Evidence from other surveys suggests that individuals do believe that information technology is important to Britain. Microsoft (NOP, 1997) found from a telephone survey of business people, teachers, teenagers and housewives that 88% thought that technology was critical for the future of Great Britain. Computer studies is currently one of the most popular subjects being studied by adults in the United Kingdom and adults have also indicated this is a major study area for the future

(Sargant et al, 1997). These contrasts perhaps demonstrate some aspects of the problem and the need for research.

Adults at a social or economic disadvantage are often unable or unwilling to take part in formal educational and training programmes. However, they are often able to take part in alternative, more flexible, learning approaches which are provided locally. Poor learning experience can lead to adults who decide that Information Technology is beyond their abilities and choose to take little or no part in the Information Society. The national working party on social inclusion (IBM, 1997) recommend that 'measures are needed urgently to raise awareness and to provide access to information technologies, particularly for people on low incomes and for those who are neither in employment nor in education'.

Methodology

- An open invitation was issued to organisations involved in the delivery of basic IT education and training to take part in the project. This asked organisations to submit a proposal based on extending their existing approaches to providing basic IT education and training to groups at a disadvantage; 154 proposals were received. The proposals were assessed by the steering committee and 12 were chosen to take part in the project. This was later extended to 13. These covered 13 geographically remote sites such as the Shetlands as well urban housing estates and learners based at home. The sample represented formal educational institutions, private training providers, community based organisations, Training and Enterprise Councils, telecottages, local authority adult education and commercial companies. The approaches taken included tasters sessions, drop-in centres, distance learning, conventional courses, outreach and centre-based provision.

Information was gathered using a number of methods including:

1. Individual learner questionnaires;

2. Tutor questionnaires;

3. Observation of events;

4. Interviews with learners and tutors; and

5. Feedback from the pilot organisation.

In addition to this focus on the pilot sites, a wide range of other organisations were visited to identify current practice and issues facing providers and learners.

Results

Participants

- Over 1000 adults took part in the project of whom 539 completed evaluation questionnaires. Approximately two-thirds of the participants were women and a third were men with 9% reporting that their ability to study was affected by illness or disability. Eight percent of the learners identified themselves as belonging to an ethnic minority group with approximately a third stating that English was not the language spoken in their homes. Women tended to be younger than men with 59% of the women participants being under 45 years old while 58% of male participants were over 44 years old. The response throughout the project to the offer of a free or very low cost opportunity to learn about IT was healthy with demand often exceeding supply.

A large proportion of the learners (72%) had previously used a computer although for many of them this was little more than a few minutes experience on a friend's machine. Even those indicating a lot of use frequently meant that they used computers as part of their work but only had a limited experience of a narrow application (e.g. simple data entry). In contrast, participants had little practical experience of communication (12%). Individual interviews and discussions indicated that even individuals who have regular access to IT do not regard themselves as aware of the benefits and applications of IT. More than half (57%) of the sample had access to personal computers at home, at work or elsewhere. However, only 18% had access to communication technologies at home, at work or elsewhere.

Adults were motivated to learn about IT for three main reasons. The first was a desire not to be left behind by new technology. The second was to help their children study with and about IT or to simply keep up with them. The third was to help them get or keep a job. Learners were keen to develop their knowledge and skills although often lacked initial confidence. However, a major outcome of the initial session or event was an increased confidence that they could learn about IT.

The learners were asked what they intended to do at the end of the first session or event they attended. Their response showed that they intended learning more about IT. They indicated they wanted to return for more sessions, enrol on IT courses, teach themselves or buy a computer. Twenty-two percent indicated they would do some other course which may indicate that the confidence building is not confined to IT. These results were similar to those reported by the evaluation of the BBC's Computers Don't Bite campaign.

Location was identified as a key factor in determining who would participate. An event held at a primary school will tend to attract the parents of children attending the school and in most cases, the child's mother. In order to target a particular group it is therefore critical to find a suitable location. Learners are not willing to travel far to attend an event and this is probably limited to walking distance of their homes. Timing of events needs to meet the needs of the learners (e.g. school hours) and is probably limited to no more than a maximum of 2 to 3 hours. It is more difficult to suggest a minimum time but probably 30 minutes is needed to allow some hands-on experience.

Approaches

Taster Sessions

- Taster sessions are highly flexible and combined with portable computers can take the experience to a wide range of target groups. During this project, taster sessions were successfully provided at a wide range of locations including holiday play schemes, supermarkets, libraries, schools, community centres and work places. Taster sessions were found to be

an effective approach in motivating adults to seek further education and training. A taster event could be used as an effective means of recruiting for longer courses of study. A number of providers have confirmed that a high proportion of adults will commit themselves to a course following a successful taster event.

Many venues are willing to host IT taster events and frequently interest is extensive with many adults motivated to take part. The nature of the event is often affected by the venue with some sites encouraging adults to spend only a few minutes studying the applications on offer (e.g. supermarket) while at others adults often stopped more than an hour (e.g. primary school) . Since taster events are an effective means of recruiting for longer study programmes, they should be linked to other provision. Adults should not be left at the end of the event without knowing what options are available to them.

Day centres and care homes

Access to IT equipment with suitable support is an effective means of providing learning opportunities to clients of day centres and care homes. However, it requires the active support of the local management. Staff can also benefit from the resources, which is an added benefit since many of them work shift patterns which make attending formal educational programmes difficult.

Outreach

The location of IT education and training events and programmes for groups at an economic and social disadvantage is clearly a powerful influence on who attends. In order to target these groups it is critical that the location is acceptable to them. This is probably initially more important on their decision to attend than the content of the event. The pilot has demonstrated that IT education and training can be successfully provided in a wide range of locations (e.g. libraries, supermarkets, play schemes, day centres, community centres, primary schools and village halls).

Drop-in facilities

The provision of simple drop-in facilities is a popular and effective means of providing IT Awareness to adults. Drop-in services can be quite small and operate from what would seem to be inappropriate locations due to background noise or other distractions. Drop-in facilities often develop regular customers who return each time the facility is open. This can limit the ability of the drop-in centre to provide for new customers. It is therefore important that after the initial experience has provided sufficient confidence and awareness of IT, that learners are offered other services where time and space are not too limited. Learners have identified two key factors which make them drop out of this type of facility - a long wait for support and frequent changes in tutors. Learners need to have their questions answered promptly and be able to develop a relationship with the tutor. Tutors are likely to find supporting a busy drop-in facility demanding in that they will often be working with individuals across a wide range of abilities and interests for relatively short periods of time.

Independent learners

Some IT courses are constrained by the need to achieve focused outcomes to a precise timetable owing to the nature of their funding. The graduates of these courses are competent in the applications they have studied but may well have difficulties in using other applications or even different versions of the same software. They have become application literate but not computer literate. IT courses need to aim to develop confident users of computers and communication technologies, learners who are able to explore new applications without immediately needing assistance. Learners should be helped to develop a fundamental understanding and confidence of IT, that is, they should become independent learners.

Qualifications

- The design of IT qualifications was not considered in any depth during this project. However, many practitioners reported that existing qualifications were often focused on business or office skills

which were not directly applicable to the needs of some learners. Due to funding requirements practitioners felt constrained to offer these qualifications to all learners regardless of their suitability.

Tutors

- Tutors are very important to the successful introduction of adults to information technology. The tutors' role is to help reduce learners' doubts and replace them with confidence. This requires a considerable degree of interpersonal and teaching skills in addition to an understanding of information technology. During the initial IT event there is a need for a low ratio of students to tutors (i.e. 4:1) if the learners are going to get adequate support. At a later stage this ratio can increase (i.e. 10:1) as learners' knowledge and skills develop. Volunteers can provide valuable assistance providing they are adequately trained to fulfil their role. Equally, tutors need opportunities to maintain and develop their understanding of IT. The use of open learning packs or computer-based learning can assist and allow tutor student ratios to be higher (i.e. up to 25:1). However, this does impose limitations on learners and to some extent assume that the learners already have some IT experience.

Computers Don't Bite

- The BBC's Computers Don't Bite campaign was a significant influence on participation in the IT Awareness events in that 31% of learners heard about IT awareness initially from the BBC programme. This was particularly marked with older groups and men. Other participants heard about the events by simply visiting the centres for another reason, by word of mouth from friends and family, through a school if the event was school-based, from posters or leaflets and from a course prospectus or similar methods.

Funding

- The critical factor raised by every organisation which provides basic IT education and training is funding. Current funding for the provision of basic IT education and training forces providers constantly to balance the need to raise funds with trying to deliver their programmes. Funding is frequently not guaranteed from year to year and criteria often changed making long term planning difficult if not impossible. This can lead to haphazard and opportunistic development, rather than strategic, coherent, well-planned services for individuals most in need.

The nature of funding available to providers of basic IT education and training is often restrictive. It may specify precise outcomes which, in order to be achieved in a cost-effective way, require limitations to be placed on both the scope of the learning experience and the time available. In some cases, funding is provided from non-educational sources which can result in learning priorities taking second place to other criteria.

Conclusions

- A wide range of locations and organisations are able to provide basic ICT education and training events and programmes. Modern portable equipment allows many sites not designed for education to be used which allows events to be taken to the learners. The main restriction is the nature of funding to provide this type of programme. Funding is characterised by being short term, output related and constrained. This can result in everybody being offered the same course and having to undertake a qualification whatever their needs and interests.

Men, and in particular young men, were underrepresented in the project and appeared not to be attracted to this type of learning experience. There is a need to investigate this further in order to identify the reasons behind this reluctance to take part and consider approaches to reaching men and young men in particular.

Many IT education and training programmes concentrate on the traditional computer applications of word-processing, spreadsheets and databases. IT providers will need to widen this curriculum and in particular include communication applications such as e-mail and the Internet in order to provide a comprehesive learning experience.

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