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# 1 INTRODUCTION

## 1.1 Background

In January 2004, the Scottish Executive Education Department (SEED) commenced funding the SCRAN Early Years Project under the Future Learning and Teaching (FLaT) Programme. The project, which was intended to run for sixteen months, proposed the development of a web-based resource for early years by the charity, SCRAN, in conjunction with HMIE and Learning and Teaching Scotland (LTS). Integral to the project would be the piloting of the resource in up to twenty pre-school centres in a range of locations across Scotland.

A summary of the SCRAN proposal is presented below and forms the basis for the design and development of the evaluation strategy, which is the subject of this report.

## 1.2 Intended Project Outcomes

The overall outcome of the SCRAN Early Years Project is a fully tested and evaluated Early Years section of the SCRAN website, containing pictorial resources for practitioners and children that can help to enrich the early years learning environment and delivery of the Curriculum Framework for Children 3 to 5.

Specifically, the project has been designed to take forward the innovative use of ICT resources in the pre-school sector, in line with the ICT Strategy for Early Years, the intention being to:

- facilitate the successful embedding of ICT into the curriculum;
- enable practitioners to plan, effect and record activities involving ICT;
- develop their ICT skills;
- gain confidence in the use of ICT and the approaches outlined in *Early Learning, Forward Thinking*.

It was anticipated that, through their participation in the project, early years practitioners would not only assess the suitability of the materials prepared by SCRAN but would also make a valuable contribution by providing ideas and suggestions for the development of the resource. In this way, the approach taken could be said to be one of action research.

The consequence of this approach has been that some of the decisions and events occurring in the later stages of the project came about as a direct result of the learning gained from previous actions. Similarly, the materials themselves evolved to take account of recommendations made by participants as the project progressed, particularly following completion of Phase 1.

In summary, the following components were seen as integral to the achievement of this outcome:

- Development, trial and revision of pre-school education specific resource materials;
- Development, trial and revision of a practitioner training programme;
- Development of a draft implementation plan for national roll out (pending outcome of external evaluation);
- The external evaluation of the materials and training to inform future policy decisions.

(Source: SCRAN Early Years Pilot – FlaT Fund Application)

### **1.3 The SCRAN pilot centres**

During the pilot project, a total of 26 early years institutions were involved – of which 6 participated during Phase 1 (March to June 2004) and a further 20 participated during Phase 2 (August to December 2004). Important factors in the selection of centres and regions included existing provision of ICT, willingness to participate, a mixture of urban and rural environments and representation from a cross-section of different early years settings. Table 1 illustrates the types and number of different settings involved by region.

Centres were selected by the SCRAN Development Officer in consultation with LTS and SEED. They were originally intended to be located in four regions only; namely, the Highlands, West Lothian, Aberdeen and Orkney. However, following a request from the area Early Years Advisor for ICT, 6 centres in North Lanarkshire also joined the project as a discrete group working with KidSmart computers.

	PHASE 1: HIGHLANDS	PHASE 2: ORKNEY	PHASE 2: ABERDEEN	PHASE 2: W. LOTHIAN	PHASE 2: N. LANARKS
nursery attached to primary school	4	2	1	2	6
independent nursery	2	1	1	1	
childminder		2	1	1	
children's centre			1		
special needs nursery			1		
pre-school playgroup				1	
nursery school (education)				1	
<b>TOTAL OF PARTICIPATING CENTRES</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>6</b>	<b>6</b>

*Table 1: Early Years settings involved in the SCRAN project*

During the pilot phase, the centres agreed to:

- identify a named person to have oversight of the programme and to liaise with the Development Officer on a regular basis;
- send at least one member of staff on a formal SCRAN training session;
- test out the SCRAN resource for early years by using at least one of the activities suggested by the Development Officer and/or by creating an activity of their own;
- experiment with the resource within the SEED Strategy Guidelines;
- evaluate and reflect on the experience;
- provide – per participant – a written evaluation of the resource, the training and the activities undertaken, using forms supplied by the Development Officer.

#### **1.4 The role of SCRAN**

The specific role of SCRAN has been to devise and develop the Early Years section of the SCRAN website, to which all pilot early years centres have enjoyed continuing free access. A Development Officer was appointed for twelve months from February 2004 (extended to the end of March 2005). Through her, the organisation has offered assistance to participating early years practitioners by:

- Providing an initial training session for practitioners and other interested adults, including parents;
- Producing an Early Years Practitioner's Workbook and other support materials;
- Developing a set of activities to support exploration of the SCRAN resource;
- Offering further training tailored to the needs of individual centres;
- Offering support to centres via telephone and email during their involvement;
- Providing additional ICT resources on a loan basis.

## **2 THE EVALUATION**

### **2.1 Terms of reference**

The Centre for Education and Industry (CEI) at the University of Warwick was commissioned by The Scottish Executive to undertake the external evaluation of the SCRAN Early Years Project. The main focus was to assess the extent to which desired project outcomes have been achieved; namely:

- the overall impact of the SCRAN Early Years project on the participating pre-school practitioners;
- the impact the project has had on the embedding of ICT within the curriculum;
- the effectiveness of the training programme and materials supplied;
- children's views on, and attitudes to, the SCRAN resource.

An interim report was presented in July 2005, setting out the findings of the evaluation at its midway point. The purpose of this final report is to draw conclusions from the findings of the evaluation in its entirety.

### **2.2 Methodology**

The research adopted both quantitative and qualitative methods in order to collect a wide range of evidence from participants in the project. The design included:

- desk research, including review of the project structure and background documentation, the SCRAN resources, the training programme and evaluative feedback received from participants;
- discussions with SEED, SCRAN and LTS;
- in-depth interview with the Project Development Officer;
- preliminary visit to a participating nursery accompanied by the Development Officer;
- self-completion practitioners' questionnaire (26) sent to all participating early years settings;
- in-depth interviews (10) conducted at a sample of participating settings (n=9) with centre managers/head teachers, nursery teachers/assistants/nurses, a playgroup leader and an early years ICT advisor;
- follow-up telephone interviews (4) conducted with a sample of practitioners at participating settings (n=4) involved in the interviews;

- observation of and informal discussion with children (n=8) using SCRAN materials with adult support at 2 sites;\*
- comparison of the SCRAN Early Years section with a range of similar web-based resources.

\* It was not possible to observe activities in more than 2 sites as only 3 of the 9 centres visited stated that they were currently using the resource. Of these, only 2 were able to organise activities for the interviewer to observe. Equally, the possibility of gathering children's views on and attitudes to the SCRAN resource was extremely limited due to the length of time that had elapsed in most settings since they had last used the resource.

## 2.3 Description of the sample

### 2.3.1 Respondents to the Questionnaire

In March 2005, questionnaires were sent out from CEI to the early years centres that had been involved in Phases 1 and 2 of the SCRAN project. Sixteen questionnaires were completed and returned by staff (response rate 72.7 percent: n=22). Table 2 presents their positions within the early years settings, the region where the organisations were based and the types of organisation.

Title	No.	Region	Type of Organisation
Acting Head Teacher	1	Aberdeen	Education Nursery
Childminder	1	Highlands	
Nursery Coordinator Teacher	1	Highlands	LA Nurseries
Nursery Support Teacher	1	Highlands	Nursery
Nursery Teacher	1	Highlands	Nursery
Owner	1	Highlands	Private Nursery
Senior Play leader	1	Highlands	
Early Years Worker	1	North Lanarks.	Nursery
Nursery Teacher	1	North Lanarks.	Nursery Class
Manager	1	Orkney	Nursery
Nursery Nurse	1	Orkney	3-5 years old pre-school class

<b>Title</b>	<b>No.</b>	<b>Region</b>	<b>Type of Organisation</b>
Play leader	2	Orkney	Nursery
Head Teacher	1	West Lothian	Pre-School
Nursery Teacher	1	West Lothian	Private Nursery
Teacher	1	West Lothian	Nursery
<b>TOTAL</b>	<b>16</b>		

*Table 2: Background information on questionnaire respondents*

### **2.3.2 Centres visited**

During Stage One of the evaluation, it had been agreed that in-depth interviews and observations would take place at a total of eight settings (two per region) between May and June 2005. One centre per region would then receive a follow-up visit in the autumn term. Centres would be selected on the basis of willingness to be visited – as indicated in their questionnaires – location and type.

Six respondents to the questionnaire were willing to be contacted by a member of CEI's evaluation team with a view to being visited. However, as responses did not provide a sufficiently varied sample of early years practitioners – although they were evenly distributed geographically – two additional centres were approached based on their use of the SCRAN resource. Both agreed to be visited, as did the Early Years ICT Advisor for North Lanarkshire who could provide an overview of all six centres in her region. Table 3 presents a summary of participants in the qualitative survey, showing regional location, type of organisation and the type of activity involved.

The ages of children attending these settings ranged from 0 to 8 years, with the majority (seven organisations) dealing with children between 3-5 years. The total staffing numbers for those organisations represented in the qualitative survey amounted to 59 full-time and 38 part-time staff.

### **2.3.3 Further contact**

Following discussions with SEED, based on the findings in the interim report, it was agreed to conduct informal telephone interviews with a small sample of practitioners during Stage Two of the evaluation in preference to further visits. Seven centres were approached, of which practitioners at four were willing to be interviewed: one each from the Highlands and Aberdeen regions, and two from Orkney.

<b>Title</b>	<b>Type</b>	<b>No.</b>	<b>Region</b>	<b>Description</b>
Centre A	Independent	1	Aberdeen	Interview
Centre B	Independent	1	Highlands	Interview
Centre C	LEA	1	North Lanarks.	Interview Observation
Centre D	LEA	1	North Lanarks.	Interview
Centre E	Independent (playgroup)	1	Orkney	Interview
Centre F	LEA (pre-school)	1	Orkney	Interview
Centre G	LEA	1	Orkney	Interview
Centre H	Independent	1	West Lothian	Interviews 1 and 2 Observation
Centre I	LEA	1	West Lothian	Interview
<b>TOTAL</b>		<b>9</b>		

Table 3: Background information on centre visits sample

### **3 MAIN FINDINGS FROM THE EVALUATION**

As the size of the samples involved in both the quantitative and qualitative surveys is comparatively small, this section reports the findings from both sources. Findings are presented for consideration under key headings and are illustrated by comments taken from the data sources identified in Section 2.

#### **3.1 Overall impact on participants**

This section considers what the SCRAN resource for early years has provided that could be considered new or different for practitioners and the extent to which participation in the project has assisted them in their work. N.B. As it had only recently been launched, very few of the respondents to the questionnaire (including only three of the ten practitioners who were interviewed) reported that they had actually seen or used the revised website at the time they were contacted by CEI.

##### **3.1.1 Management and organisation**

In the majority of settings, responsibility for the SCRAN project lay with a designated nursery teacher, manager or owner who had attended the training session. In a very small number of cases, this was the only practitioner using the SCRAN resources; for example, childminders. However, it was more usual to find that other staff members (as many as nine in one private nursery) and even parents had also been involved.

Reasons for participation varied but generally related to a desire to improve overall ICT awareness and skills levels, both for adults and children:

*'It was a good vehicle for us as we were trying to extend our ICT, just to have the one thing to concentrate on.'*

Practitioners had first heard about the project through a variety of means; for example, from a colleague, Local Authority (LA) Advisor or via the SCRAN Project Development Officer. The fact that all centres were visited personally by her to explain the project is likely to have contributed to their willingness to join the project and the generally high levels of enthusiasm at the outset:

*'I don't think just a phone call would have done it because they need to make a connection with you.'* (Project Officer)

Even so, for practitioners in both Phases there was a lack of clarity in the way that the aims of the initiative were communicated to them, particularly regarding the purpose of the pilot project and the objectives of the evaluation:

*'I don't think we were ever really told why we were doing it. It was a case of you're doing this pilot just to see if it's any good. There never seemed to be any clear aims and objectives of what they wanted to achieve from it and we were never given a list of: "This SCRAN pilot is being run because we want to find out that, for example, images encourage children's imaginations or larger images or images dating back ... support primary 1 or nursery learning." ... If you'd been given a clear objective you would have almost had an answer for the question ... (for example) "Do the images on SCRAN develop 3-5 years imagination and support their learning?" And you would have had a yes or no answer and you would have been able to substantiate that.'*

*'...we knew if possible to try and do 3 (activities) ... It would have been better to say to use it (the SCRAN resource) on 3 occasions and then describe how you did use it, and the value to the teaching and learning.'*

Moreover, evidence suggests that not all practitioners in Phase 2 fully understood the shift that had taken place at SCRAN management and Steering Group level away

from perceiving the SCRAN resource as being primarily for child-initiated use. This naturally influenced their evaluation in terms of its effectiveness.

Research findings indicate a correlation between practitioners' confusion regarding what they were expected to do and why, and uncertainty at an organisational level about the role of the Project Development Officer and the purpose of the resource. In addition, the early version of the resource appeared to require a considerable amount of updating to fit with what early years practitioners would actually want:

*'Right at the beginning, there was no product there if you like, for me to sell...'*  
(Project Officer)

Timing of the project was affected by a delay on the Project Officer's appointment to February 2004 which in turn delayed the selection and recruitment of early years settings. Consequently, following a programme revision, Phase 1 took place during March-June in one region followed by Phase 2 from August/September-December in three regions (plus North Lanarkshire).

Practitioners commented on the difficulties encountered as a result of the limited notice prior to becoming involved - especially important for private nurseries where managers needed to argue for more resources in good time. Moreover, although the trial period had an obvious starting-point in terms of the training session, no clearly definable structure was given to the remaining time and no real 'end event' was organised in any region, such as practitioners coming together to share outcomes. Some settings did not realise that they were entitled to access the SCRAN website beyond the project's conclusion:

*'It just sort of fizzled out basically. The middle of the project was kind of 'woolly' and the end, well ... I think that was the problem.'*

Most of the sample considered the project timescale too short for enabling them to get to grips with the resource, given the baseline in terms of staff knowledge, skills and the support infrastructure.

In both Phases, practitioners were asked to return completed evaluation forms regarding their overall experience of the SCRAN resource and the training, together with feedback on any activities they had tried out. However, the timing caused

problems both for the centres and also for the Project Officer, particularly at the end of Phase 2:

*'December is not a month to try to get any teacher to evaluate anything.'* (Nursery manager)

In all, eighteen evaluations were returned from the six Phase 1 settings, but only sixteen were returned after Phase 2. As these are anonymous, it is not possible to ascertain which of the settings they came from. However, almost all settings in North Lanarkshire and the Highlands returned activity feedback forms. Three other settings in West Lothian and Aberdeen returned forms, but none were received from Orkney.

Several centres believed that the evaluation process could have been more rigorous, with clearer criteria and a variety of methodologies such as practitioners being observed using the SCRAN resource with children. Some centres also felt that because no particular external pressure was being exerted on staff, this caused a drift away from and lack of commitment to the project. Unlike a Local Authority advisor, the Project Officer could only maintain limited contact with the centres and therefore exerted little authority.

Although all centres were encouraged to arrange follow-up training/support visits with the Project Officer during the trial period, some practitioners found this difficult to build in at a mutually convenient time given the pressure of their daily workload. Nevertheless, the majority were visited at least once and contact was maintained with the Project Officer, albeit spasmodically, via phone, fax or email.

In the majority of centres parents were informed of the SCRAN project and where appropriate invited to get involved. Some practitioners circulated progress reports in nursery newsletters and in one case, a slideshow of SCRAN images was run during a parents' evening:

*'And I think some parents were glad to see that we were using something just a bit different and a bit more educational. The children were enjoying it, too.'*

### **3.1.2 Curriculum impact**

In most settings, it is difficult to assess the extent to which use of the SCRAN resource could be said to have made a measurable impact on the curriculum, given

the limited timescale of the project and the fact that only a few practitioners made sustained use of it in a variety of ways.

Where practitioners elected to run SCRAN activities demonstrated during training, such as Story Box or Dominoes, it was necessary to adjust existing curriculum plans in order to accommodate the session. However, in a number of cases the approach taken was more in line with the Early Years ICT Strategy in that the practitioner attempted to embed the use of the resource “within the learning environment” rather than treat it as a separate entity.

Feedback from the sample suggests that in using the resource, greatest curriculum impact was made in the areas of children’s Communication and Language and Expressive and Aesthetic Development:

*‘For example, with the Road Safety topic this morning, they’re able to look at the images on the screen and talk about that. We got a lot of good language out of them this morning, and then they’re doing their own pictures for display, so they’re drawing and expressing their thoughts, so there’s Communication and Language there.’*

The SCRAN Early Years section was intended to be a cross curricular resource in order to facilitate the implementation of the ICT Strategy and many practitioners commented on its value and versatility in this respect. Even so, one user commented:

*‘I suppose at the time we were using the SCRAN website and evaluating it, the Early Learning Forward Thinking training was in its infancy and staff were only beginning to think cross-curricularly. Well, they did use cross curricular resources but using ICT in a cross curricular fashion... at that particular stage, our thinking wasn’t sophisticated.’*

### **3.1.3 Pedagogy and practice**

In virtually all cases, participation in the project was especially useful for encouraging staff to discuss the value of the website and its pros and cons in terms of content, accessibility and potential learning application. In this respect, the project process promoted the *Early Learning, Forward Thinking* principle that early years practitioners need to engage in a reflective process if they are to use ICT to its greatest potential, and thereby develop effective pedagogy.

At one centre, a nursery assistant explained that her involvement with SCRAN had made her think critically about her own role in promoting children's learning:

*'It makes you more aware that for these children, this is their future - so I've had to brush up more on my skills as well ... I find it makes me more aware of the skills I'm lacking and I try and do something in that area.'*

One nursery teacher commented:

*'I think it's really made us use ICT in different ways; I don't know how far ICT would have come if we hadn't had a focus.'*

Even so, the research has found limited evidence that practitioners have actually changed the way they teach because of their experience with SCRAN. There are a variety of reasons for this reluctance, including lack of confidence in using the resource, its inaccessibility to children for the purpose of independent learning and perceived inappropriateness of images available on the website:

*'I would like a wider variety of modern and relevant pictures for the children to talk about. This would have helped me assess both language and concept development.'*

*'...if you want an image of an autumn tree, you go there (Clipart) and you get a nice image of a tree and the children know what it is without the distractions. It is just a tree... If you're just trying to get them to understand one concept, you don't want to throw in six concepts and confuse them.'*

For those practitioners with greater experience of ICT, the SCRAN website is one of many resources available:

*'... we would look for pictures, we would ask for artefacts from home, we would look through our CDs and we would also surf the net and the SCRAN website would be one of the resources we would use.'*

*'I think we would use it as a resource if we were stuck for what we've got at our fingertips but I wouldn't say we'd use it as a resource at any other time.'*

*'And if it is an archive, to give SCRAN its true label, if we're doing Houses and Homes or Where I Live or All About Me and we're taking a walk round the environment and we're looking at houses from the past and houses we live in now, then let's look at the website and see if we've got pictures of different types of houses. Then we've got a valuable resource because we've got castles and cottages and people living in farms and we're then using the resource in the way I think it was probably intended.'*

### **3.1.4 Resourcing**

Because SCRAN is a web-based resource, all participating settings had to have access to the internet. However, very few were on Broadband which meant that for most practitioners, accessing and downloading materials took longer than anticipated. In addition, internet access was not necessarily available in the classroom, which restricted access for both staff and children:

*'We had to use another area of the school to access the site and this was not always suitable.'*

One centre in the sample had exceptionally inadequate ICT resources at the early stage. Another centre commented that having only one computer in a classroom is not really enough for it to be used effectively as a teaching medium. The Project Officer was aware of these limitations and tried to assist centres:

*'But part of the thing is that that is how it is. So I devised ways of circumventing those problems ... by putting images onto CDs.'*

Most centres visited appeared fairly well equipped with ICT resources though few had yet purchased interactive whiteboards or smartboards and only a small proportion had introduced laptops for children or staff. Some had robots and logi-bricks and had used them in conjunction with SCRAN activities. The Project Officer had offered to loan hardware to some centres and this had happened in one setting. However, the practitioner had not been explicitly requested to use the equipment provided for the purpose of testing and evaluating SCRAN materials.

It was assumed at the start that centres would all have access to (and know how to use) Acrobat Reader and Word but this was not actually the case. Prior to revision of the website, this caused major problems in accessing resources for these centres.

Although some of the settings were concerned about such issues as the cost and quality of printing, the main resourcing difficulties expressed by most practitioners related to:

- Lack of suitable space for children to gather round the computer;
- Amount of adult support required for children using the resource;
- Insufficient time for preparation of materials;
- Lack of a local ongoing support mechanism.

Most respondents indicated that a CD ROM of the SCRAN Pathfinders for early years would be helpful – perhaps with an accompanying *'Introduction to SCRAN'* CD, explaining how to use the website:

*'Things like that would be good because then you can use them on a laptop and you don't need it all the time - you've got an idea in your mind and you think, right I'll get the CD ROM.'*

## **3.2 Impact on embedding ICT within the curriculum**

### **3.2.1 Impact on children's access to and use of ICT**

At the time of completing the questionnaires, the number of children on roll at the centres ranged from 6 to 185, with the majority (9) catering for between 20 and 65 children. Of the sixteen settings responding to the questionnaire:

- six indicated that the age group of children involved in the project was 3-5 years;
- for another two organisations, the age group was 3-4 year olds;
- one used it with 4-5 year olds.

In terms of enhancing the children's understanding of ICT, six (40.0%) indicated the resource was good, while four (20.0%) stated it was poor (see Figure A). Comments included: *'Good idea but could have better early years pictures, as some children wandered away after a short time due to lack of interesting pictures in many areas.... Suitable for older children.'*

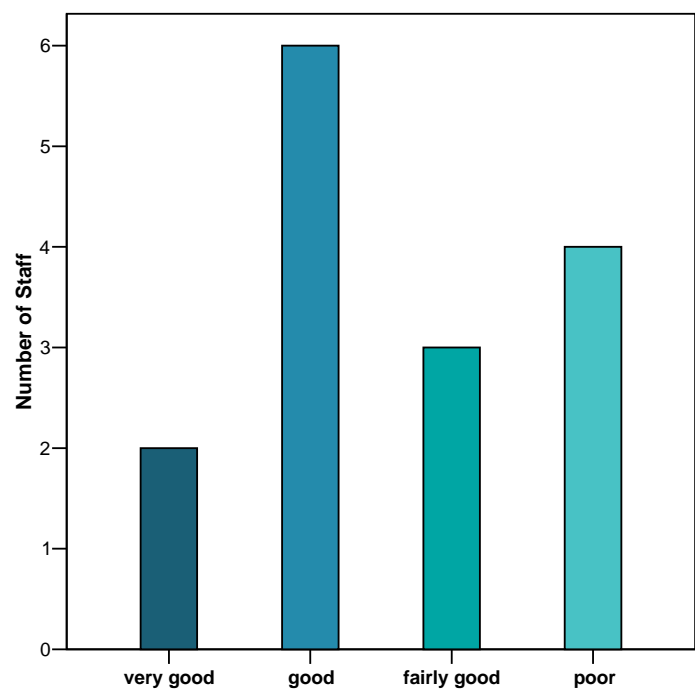


Figure A: Enhancing children's understanding of ICT

For a variety of reasons, most settings reported that participation in the SCRAN project had only had a minor effect on children's access to and use of ICT:

*'Because it does need so much adult support, the fact it isn't interactive, children really couldn't co-operate together and make a decision about who will do such and such...'*

However, during a telephone interview one practitioner reported the increased use of the internet by children at her centre when seeking visual images. This she attributed directly to their involvement in the SCRAN project. Centre staff also make regular use of the internet for research purposes, both in preparing resources and with the children; for example, as part of a fundraising project they found out about people's living conditions in lands affected by the tsunami.

Most centres commented that although the SCRAN resource did promote equality and inclusivity, there was limited evidence of specific impact in this respect:

*'It needs so many skills that children at that stage haven't really achieved. Therefore, it becomes exclusive to those who can read... From the parents' point of view, it can't*

*include them if they haven't had experience of accessing the internet or experience with the computer...'*

*'...the KidSmart computer is to increase access and availability to all children and although we were using that particular PC, the SCRAN website didn't help us with that aim at all.'*

One centre commented that as voice recognition and the use of spoken instructions are valuable inclusive tools for some early years children, these features would be worth introducing onto the SCRAN website:

*'...using the whiteboard and smartboards, the children are completely engaged with the websites, because they're listening to the instructions; they can follow them and they're clear.'*

The variety of media was welcomed and considered important when engaging very young children:

*'It was good ... because the images are very diverse so in nursery it allows you to look... but then it's a shame that none of the images really move. Because anything with video images I think the children would be a lot more transfixed.'*

Some practitioners felt that children would be more engaged if animation was available on the site, although the latter should be treated carefully to avoid a stereotypical, 'cartoon-like' approach which might undermine the existing quality of the resource.

One teacher felt there were "*limitless permutations through such a resource which would give children a great deal of choice.*" However, the children found it hard to use and needed substantial support which was too time-consuming:

*'...they're developing their independence and they're having free choices and it seems a shame to suddenly not give them that choice when it comes to the computer and have to guide them through things which on other programmes they can do really simply.'*

*'I think it's definitely increased their benefits to it because ... there's a lot of just*

*playing games on the computer so it's a different way to use it and a different media... I'm not sure how much they're getting out of them apart from using the computer.'*

It was also important to recognise the limited concentration span of early years children and their limited fine motor skills which make it difficult to use small icons:

*'They needed to type in words, they needed to be able to read words, and the pictures weren't always really, really clear... There wasn't even a little print icon, there were the words. If it was set up for the 3-5s it would have a wee little picture and they could just print it.'*

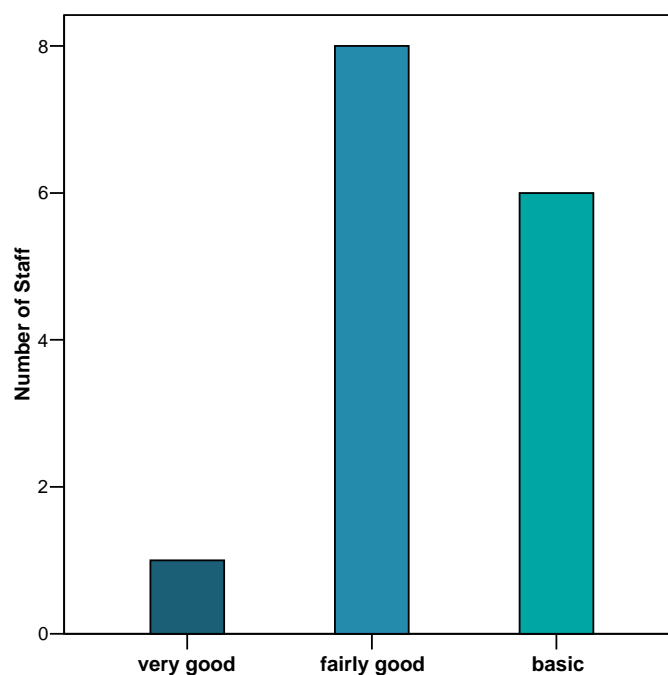
Although she had noticed substantial improvements in the revised site, especially the Pathfinders, the same teacher commented:

*'... but when you get into it, it's not as easy for the children to use as it first kind of sounds. You can click on a folder and the pictures are quite clear, and you go in and then it's what do you do now?'*

### **3.2.2 Improving the ability of adults to access and embed ICT**

The research used the questionnaire to explore the extent of practitioners' ICT skills by asking them to rate their ICT knowledge and skills levels (see Figure B).

*Figure B: Level of Knowledge and Skills*



Of the sixteen respondents, eight (53.3%) indicated a fairly good level, six (40%) stated basic, while one rated themselves as very good (see Figure B). When asked to rate the extent to which participation in the project had enhanced their understanding of ICT, six (40%) described this as good whilst four (26.7%) indicated it was very good.

With regard to other ICT training received prior to the SCRAN project, of the sixteen respondents, thirteen (81.3%) had already received Early Years Training from a local authority, whilst three (18.8%) had received none (see Figure C).

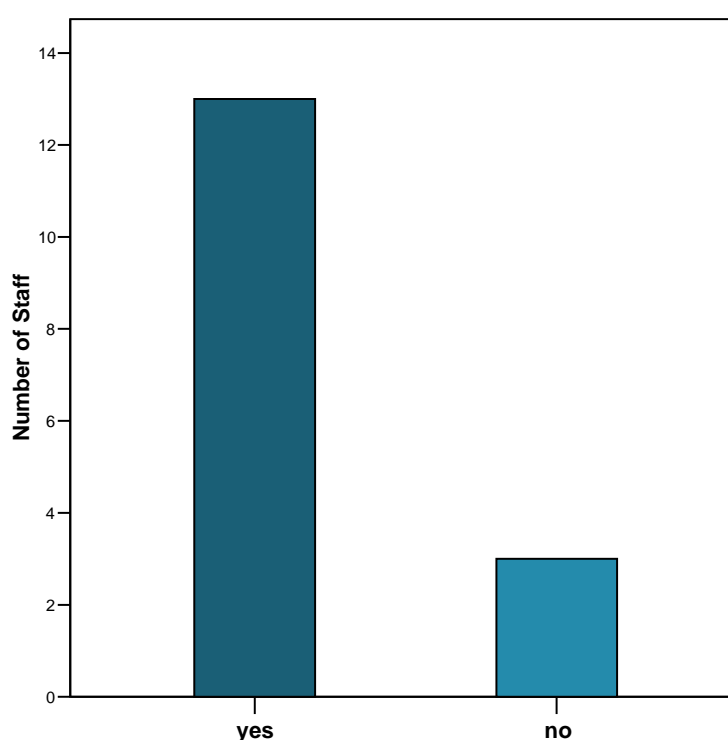


Figure C: Number of Staff taking additional training on ICT and Early Years from the Local Authority

Of the thirteen who had received training: ten indicated they had attended the training course *Early Learning, Forward Thinking*; one attended an *Early Years Masterclass*, and one had attended *Training the Trainers*.

Responses from the sample of settings visited indicated a very mixed picture regarding the impact of the SCRAN project on participants' ICT skills levels, although prior experience was clearly a key factor in this:

*'I still find aspects a little tricky to negotiate but that could be my lack of skill.'*

*'I think using the SCRAN resource, using the computer and loading it onto disks and things, that's my personal development and I've found that useful because of things that I've learnt to do that I haven't done before.'*

*'I didn't think it taught me or any of my staff anything we didn't know already. The world wide web is a fairly simple thing to use and SCRAN is pretty much an identical copy of using any of a hundred search engines, so it's nothing new to any of us from what we've used before.'*

The frequency of practitioners using SCRAN materials with other ICT equipment apart from the computer and printer has been fairly limited, despite the active promotion by the Project Officer of its potential for linking with resources such as digital cameras, programmable toys, touch screens and whiteboards. However, this is not necessarily due to lack of ability or opportunity but rather to the short duration and lack of focus of the trial period.

In all, eleven (68.8%) of the pre-school settings indicated they had not shown the SCRAN resource to or discussed it with parents, while five (31.2%) stated a positive response. Thirteen (81.3%) of the respondents stated that parents had not been involved in the SCRAN project; three (18.8%) indicated that they had.

The involvement of parents/carers in the project was far more limited during the pilot phases than anticipated. Reasons included:

- lack of availability during a working day;
- general lack of interest;
- the impact of Disclosure Scotland which meant some parents had to withdraw.

One centre reported that they had been unable to introduce parents to SCRAN as they felt themselves to be so inadequate. They believed they would not be able to convince parents since they weren't skilled enough themselves:

*'That's why we lost the pupils' interest as well - through teachers making mistakes repeatedly.'*

However, one centre did manage to do so with some success:

*The parents – a group of them - did get involved and they made those materials. They accessed them from the SCRAN project and made them and used them with the children... they looked at the trees, because it was autumn, and made jigsaws. ... They were accessing the site and because they were working away, they didn't initially involve the children. But the children became curious and said 'Why are you here and what are you doing?' and then they said 'Come on and we'll show you what we're doing'. The children became involved and then the parents sat down with them and talked about what they were doing.' As a result of this, the children offered to make the 'pockets' with the parents to store the jigsaws.'*

Another centre encouraged a parent to access the internet with her child at home by providing her with their SCRAN password.

### **3.3 Effectiveness of the resource, training and support provided**

#### **3.3.1 Key factors for consideration**

From a total of sixteen responses to the questionnaire, eleven (68.8%) practitioners indicated they had used the SCRAN ICT Resource in their settings. Five (31.3%) had not (see Figure D).

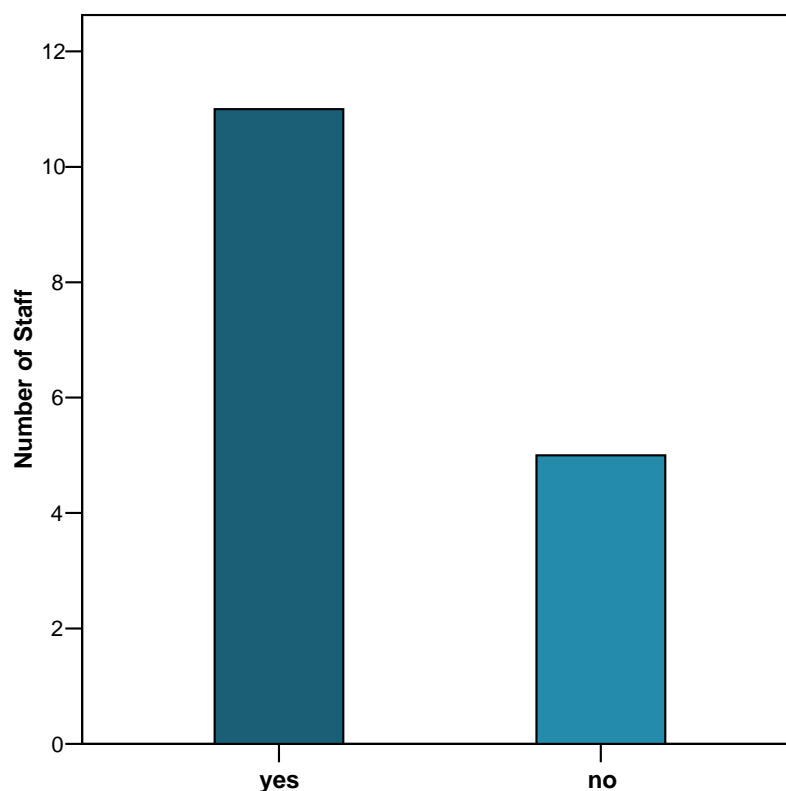


Figure D: Number of Pre-School Settings using SCRAN ICT Resource

Of the eleven practitioners who **HAD** used the resource:

- Seven pointed out it was an attractive resource;
- Five stated it enhanced their ability to work with the children in a creative way;
- Three indicated that material was suitable for the age range of the children;
- Eight stated it had helped the children to learn about ICT;
- Eight pointed out it had helped staff to practise their ICT skills;
- Three had found it easy to use.

Of the five practitioners who had **NOT** used the SCRAN ICT Resource:

- Two indicated they had found it unsuitable for use in their setting because they did not have access to the Internet;
- One indicated it was unsuitable for the age of their children;
- One indicated the staff did not have the confidence to use ICT;
- One indicated they did not see a need for the resource;
- Two indicated they had found it difficult to use;
- Four thought it did not contain the sort of information that they wanted.

Practitioners were asked how often they had used the resource. Of the sixteen respondents, seven (58.3%) indicated less frequently than monthly, and three (25.0%) used it monthly (see Figure E).

When asked where they used the resource, six (66.7%) stated at work, two (22.2%) indicated both home and work and one stated at home.

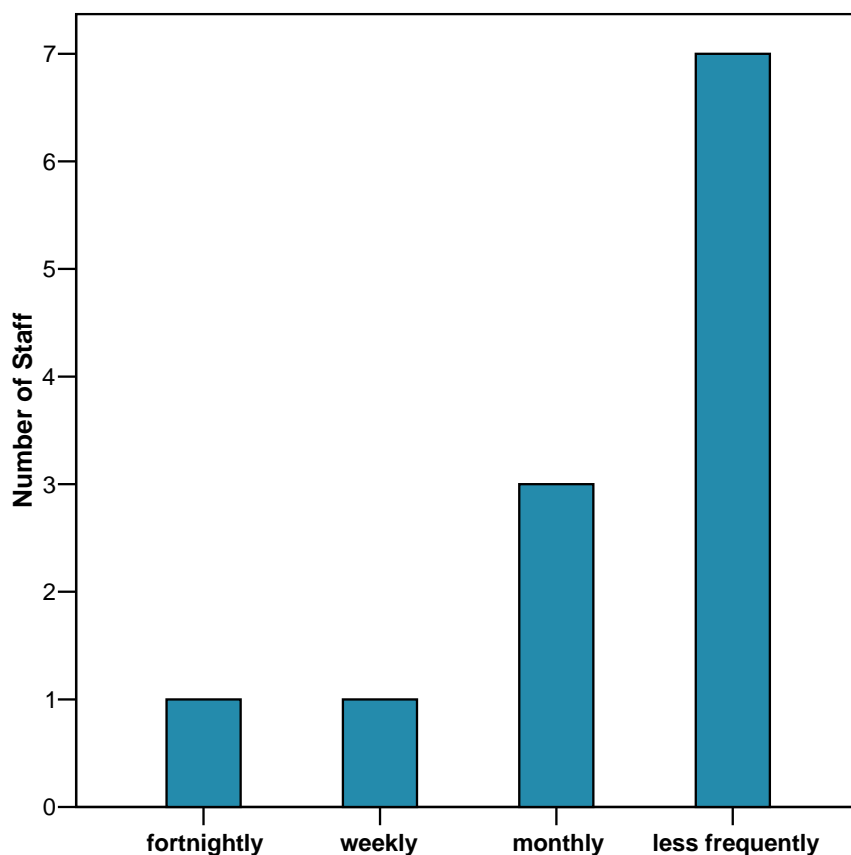


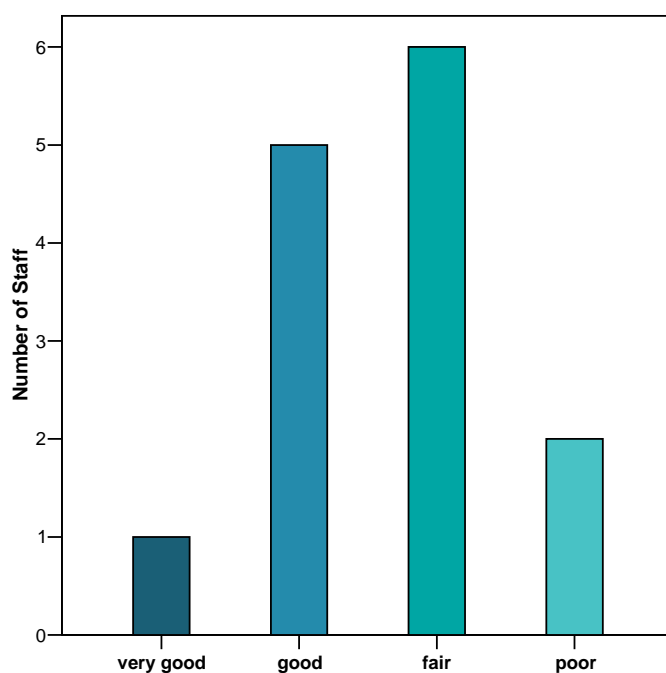
Figure E: Frequency of use amongst staff of the SCRAN ICT Resource

### 3.3.2 The SCRAN resource for early years

In the questionnaire, respondents were asked to rate certain aspects of the SCRAN ICT Resource, on a scale of very good, good, fair or poor.

Of the sixteen respondents, six (42.9%) rated the appropriateness of the SCRAN Resource for early years settings **in terms of its content** as fair; five (35.7%) indicated it was good (see Figure F).

Figure F: Appropriateness of the SCRAN Resource for Pre-School Settings



When asked to rate the appropriateness of the resource for pre-school settings **in terms of level**, fifteen respondents were evenly distributed with five in each group indicating good, fair and poor. One respondent made the comment that:

*'Some of the pictures were very good, others were not suitable – finding what you wanted was time consuming.'*

Quantitative survey findings were reinforced by practitioners in the sample interviewed. It was apparent that for the majority, the content was very attractive but that their initial enthusiasm was undermined by the difficulties encountered in accessing and using images quickly enough:

*'There are good ideas and everybody acknowledged that but ... if we could just get them easily. But they weren't that easy to get. The pictures certainly were excellent and I think that was the bit that had interested me in the beginning.'*

*'The enormous number of images is Scran's downfall – finding suitable pictures and going through lots of similar images is very time consuming.'*

**In terms of specific elements** of the SCRAN early years section:

- **Pathfinders** – the most popular resource, and more so since its revision; but topics could be improved by further evaluation and inclusion of practitioners' ideas;
- **Ideas bank** – potentially good but in practice this has not involved practitioners in contributing to the way the resource could be used, which was what they wanted;
- **Create functions** – it is likely that the Create facility would have made a substantial difference to the project if it had been available from the outset:

*'The whole pilot project would have been totally different if I had had that Create tool on the website where you just click... If I had had it earlier, people would have been so much more positive. It was only developed for the relaunch of the website in October/November.'* (Project Officer)

N.B. It is important to point out that, due to the developmental nature of the pilot project, the Create function came about as a solution to a specific problem identified by participants during Phase 1.

However, for some practitioners:

*'The children would much rather make calendars and make birthday cards... put their own ownership to it. They don't have the same ownership to picking a picture as they do to drawing a picture... The computer printing even something they've done ... they're looking at it and thinking 'That's not what I've done'.'*

- **Starters** – after a generally positive response in Phase 1, of the 16 evaluation forms seen by CEI from Phase 2 settings, only 5 respondents reported finding them useful and 6 had not used them at all. This may be because they require a higher level of either adult support or adult ICT skills than is generally available in many nurseries. With children, using the icons proved difficult:

*'They're just too small. When you look at (other) children's programmes, the icons are either colour coordinated or happy/sad faces and 3 times the size of what they need to be.'*

- **Traditional stories** – again, the lack of interactivity and sound made these less attractive to children and to practitioners:

*'...it's not interactive enough in terms of what children's expectations of learning are now.'*

- **Albums** – the process was found to be unwieldy for some practitioners and resulted in disappointment. Some found it impossible to create an Album and then transfer it onto CD.

**In terms of the images available**, one centre commented on the *'excellent range of images'* on the site, although another felt that: *'there is far too much information for nursery education use'*. However, for a child minder involved in Phase 2, the site had a distinct value:

*'The SCRAN site is a valuable asset for research about Scotland and has many valuable images which would be hard to accumulate as an individual.'*

Criticisms related in the main to the large number of black and white images on the site, together with the amount of archive material that did not relate to the world familiar to the children or to present day society. However, both these issues have since been rectified to a large extent within the early years section. Practitioners also mentioned that they would have liked more audio resources; for example, collections of simple sounds linked to images which could be accessed by the click of a button. The sounds and music available on site for early years were too long, not sufficiently relevant and took a long time to download.

**With regard to level**, one centre highlighted the value of being able to access more sophisticated materials for young children:

*'I think sometimes, the pre-school sites you go into are very simple and I don't think that always does justice to our children actually, because they're a lot more complex wee beings than you realise and it's really good to move them on...'*

**In terms of accessibility**, centres encountered problems of differing types. Some could not enlarge images for projection, PowerPoint and printing without affecting their quality. This problem may have been to do with the resolution of the image or with a lack of understanding regarding the system. Nevertheless, it acted as a deterrent for some practitioners who might otherwise have used the site on a regular basis. In one case, it prompted frustrated nursery assistants to go back to 'cutting and pasting', using pictures from magazines instead.

Another access problem related to the search facility available which respondents found difficult to use. One suggested that their activity planning for Expressive Arts would have benefited greatly if there had been a facility for narrowing down their search into either photographs or paintings.

**With regard to the use and purpose of the resource**, it was noted that on the whole the material had to be used in planned activities and that children were not able to act independently as the respondent had envisioned:

*'I think the main problem or difficulty is that the SCRAN website in itself, I presume, was designed as a resource - an archive resource - and as such, it's very good. But the problem with then using it for teaching and learning with early years is it was kind of contrived.'*

One respondent gave her overall consideration of the resource:

*'I would think (the SCRAN resource) is much more relevant to the older age group in the way they would be looking for materials and resources in an archive and it's limited in use for early years.'*

Nevertheless, in the quantitative survey, eight (57.1%) of the respondents stated they would recommend the use of the SCRAN resource for other staff working in early years settings, while six (42.9%) indicated a negative response. Two did not respond.

**In terms of making future use of the resource**, of the nine centres visited, three (33.3%) said they would definitely be using it again, two (22.2%) might do so and four (44.4%) would definitely not do so. One practitioner commented that she found the new site a lot simpler than the previous version and that it now had the potential to be used with *'child-led methodology in order to facilitate their imagination'*. She liked the easy access to Pathfinders and felt that the system is more organised in the way in which it leads her through the material. So, for example:

*'I didn't realise there were puzzles you could do..... I felt that the whole thing drew me in better..... I think it will be easier for the children to set up the screen and to link with the pictures that they're interested in.'*

Only one centre had firm intentions of involving parents. Their Parents' Committee had decided to create dominoes sets using SCRAN resources as part of their fund-raising scheme for extending nursery internet connections. Each pack would be printed with digital photos of individual children and sold to their own families.

### **3.3.3 Training programme**

The quantitative survey found that fifteen of the sixteen respondents had attended a training session run by the SCRAN Development Officer. When asked how useful they had found the training in helping them to understand how to use the resource in

early years settings, thirteen (86.6%) had found it fairly useful or very useful (see Figure G).

Prior to the commencement of Phase 1 (March 2004), it was stated that the content of the training would:

- Complement the ICT Strategy for Early Years
- Take into account the participants' current ICT skill level
- Be informed by participants' experience with differing types of ICT
- Be informed by the resources/products coming from the project.

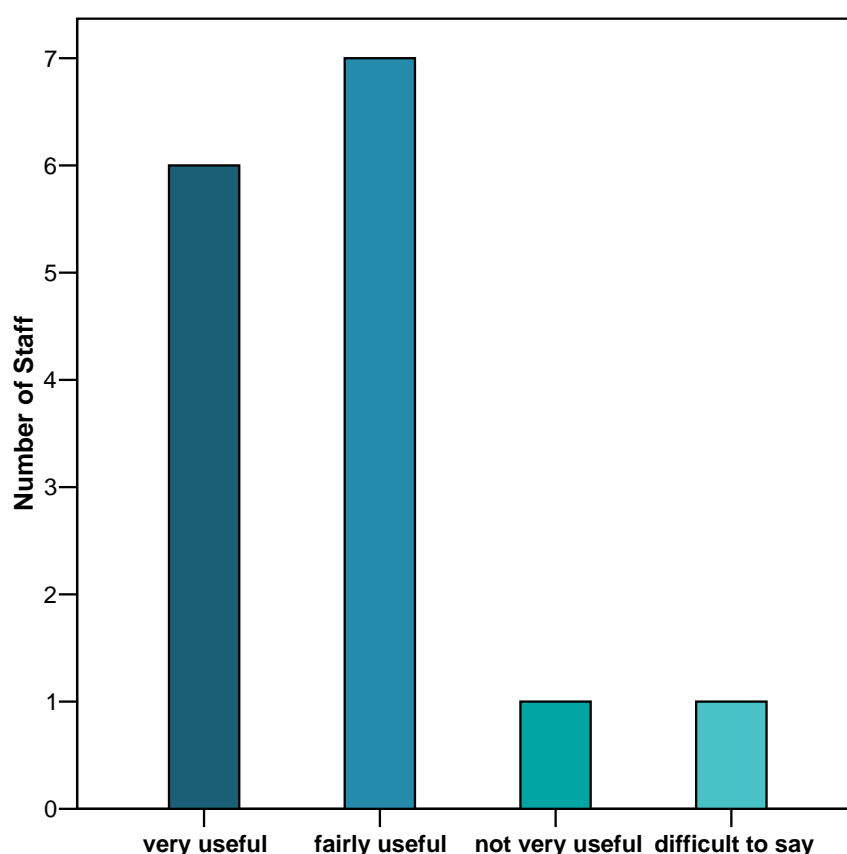


Figure G: Opinions on value of training provided

The programme was designed as an introduction to the website and the pilot project itself. Participants were shown how to access the site, the different types of resources and images available there and how to create Albums of selected images. They were also introduced to learning experiences they might wish to trial and techniques for creating their own resources using SCRAN:

*'I encouraged them to look at what I'd done, to hold it, feel it, and then try and get them to generate ideas that might be appropriate for their setting. They knew what their planning involved for the next term so we did a little brainstorming around it.'*

(Project Officer)

Following completion of Phase 1, the Project Officer reported that 23 participants had received training with each setting receiving a minimum of 3 hours training excluding any follow-up time. Although some Phase 2 settings had less time, in at least one case, nursery staff received a full day's training.

In both the quantitative and the qualitative surveys, the training was seen as an essential component of the project. In almost all settings it was considered a valuable asset and an enjoyable, worthwhile opportunity. Generally, people felt they had gained from it and that it was *'fun'*.

One point raised by a participant was that the training programme did not really support professional development in line with the Early Years ICT Strategy:

*'It's not broad enough because we would be looking at staff skills on an individual basis.'*

Moreover, practitioners were more likely to be shown examples of activities than given the opportunity to try things out at first hand. Some practitioners felt they needed clearer direction and that more time could have been spent on training staff to cope with specific 'early years' demands.

The format tended to be prescriptive and therefore not in line with the Policy Framework:

*'We were looking at a set of activities and how to do them and we generally don't work like that any more in early years.'*

As a result, not enough time had been allowed for exploration of the site itself. This was seen by many practitioners as a fundamental gap in their preparation for working with the resource. There was a need for:

*'...more time for exploration before you started to use it - to really understand how you could use it and evaluate it for early years... If you're being responsive to children's learning you really have to be familiar with that piece of software or the website.'*

Some practitioners felt that the training would have been better as a whole day course in order to allow sufficient time for fully engaging with the materials and for action planning.

Technical problems disturbed the smooth running of a few sessions, including wrong passwords issued for the site and malfunctioning hardware. The lack of sufficient PCs was a problem where centre-based training took place. In one case, the practitioner observed that:

*'...in terms of the Story Boxes. Certainly we were using artefacts that were easily accessible to children but I just thought it could have been more attractive and more polished in terms of showing you the finished resource or the likely possibilities...'*

However, it would appear that the greatest problem – which was really beyond SCRAN's control – was that unless participants already had sufficient basic ICT skills and understanding of underlying techniques, their ability to gain much from the training was severely limited. This was particularly problematic for some parents/carers. In addition, ever-optimistic assumptions were made about levels of practitioner competence, the range of abilities present and ICT equipment available:

*'The SCRAN training provided good ideas on how ICT could be used to make resources and enhance children's work, i.e. art and story making/telling but it was difficult to put into practice. Not having internet access in the playroom added to this problem.'*

Many centres expressed the opinion that there was a need to arrange a more formal programme of follow-up training, rather than leaving it to individual settings to plan their own sessions. This would have created a sense of structure and purpose to the whole project. For example:

*'...if there had been a follow-up training session to use the newer bits, that would have been valuable because then you would have had time to sit and actually do it.'*

*'...sometimes you need somebody to come along and say you need to think outside the box and actually challenge what you think.'*

(It would have been valuable if): *'they had hauled us back and looked at our progress.'*

*'You could even have a (subject-related) course... and you could really focus in to 'Here we're going to be looking at how we'd use SCRAN to develop expressive and affective development...'*

The research team found little evidence that the training had addressed one of its original aims within the National Priorities (Values and Citizenship); namely:

*'... practitioners will be trained to help children use ICT in a way that develops social skills and interaction.'*

In most cases, key practitioners who had been on the training cascaded the learning to other members of staff. However, this did not necessarily include actual access to the website but only to a selection of images and activity ideas taken from it.

### **3.3.4 Practitioner's Workbook\***

The Workbook was written by the Project Development Officer who intended that its contents should *"act as a catalyst to stimulate both the practitioner and the child, i.e. they are a beginning not an end!"* It contains:

- suggestions for planned learning experiences for children to use SCRAN resources in conjunction with ICT or other types of equipment;
- learning experiences that offer children the opportunity to choose to use SCRAN resources;
- ideas for practitioners to use SCRAN resources to create their own resources designed to meet an individual child's or groups needs;
- step-by-step technology guides for all of the resource preparation that require the use of a computer;
- a Practice Review Sheet template (although the evaluation team has not seen any evidence that this resource was used by practitioners).

Opinions differ on its quality and usefulness. Some centres were very happy with it and a small number used it as a follow-up reference resource, noting that the materials were well related to areas of early years teaching, were *'clear and methodical'* and appropriate for many staff:

*'It must have been very hard to write such materials, especially when they are for people who all have very different levels of skill in using ICT.'*

However, some practitioners found it fairly inaccessible and felt that it focused on only one type of learner:

*'We followed it at the time (during training) and it seemed to make sense... but we lost it very rapidly afterwards.'*

*'...it needs a couple of times to read over it. It's not very user friendly considering who they're giving it to. They're giving it to people who don't really have huge amounts of time to sit down and do reading ...'*

For most respondents, the layout was not attractive. Suggestions for improving the resource included: using bullet points instead of paragraphs; more images; being supplied on CD ROM; being closer in style to the learning resources provided by LTS as part of their training programmes.

\* Resources to support practitioners have since been incorporated into the revised version of the early years website has been revised, thus removing the need to produce a separate Workbook.

### **3.3.5 Project Officer support**

Practitioners welcomed the support provided by the Project Development Officer and all settings expressed the opinion that the role was extremely important for sustaining the project over the time period and for maintaining communication links between themselves and SCRAN. Many respondents also expressed their admiration for the Project Officer regarding the amount/range of work and number of settings she had to deal with in a very short period of time.

Following each training session, the Project Officer would make a follow-up phone call to arrange to visit each centre, either for further training or to provide technical support. The intention was not to run a formal training session but where it actually took place, to provide more of a one-to-one 'troubleshooting' or inspirational session. Most centres had found the support provided to be of a very good standard and were especially impressed by the Officer's rapid response to queries and her ability to find out technical information for them.

The Officer was also responsible for providing support materials and revising the early years website, in terms of selecting or commissioning more suitable images on the Pathfinders, creating the Starters nursery rhymes resources and the range of activities suggested to practitioners:

*'The activities that I created were designed to try and get over how people could use something like an image from SCRAN and incorporate ICT in quite a diverse range of things.'* (Project Officer)

Prior to Phase 1, it was stated that practitioners would receive:

- full training materials detailing curriculum links, learning styles and the use of a variety of different techniques;
- lesson plans with suggested outcomes and descriptions of the technology involved and how to effect the 'lesson';
- details on how to record the lesson and, as the pilot progresses, how to select appropriately and build it into a coherent course.

The Project Officer clearly intended that these resources should be retained and made available to download from the SCRAN website. However, following advice from the Steering Committee, the approach was abandoned for Phase 2 practitioners as it was considered over-prescriptive. Nevertheless, evidence exists to show that it had been well received during Phase 1:

*'I found the action plan useful to give me step-by-step instructions to follow and will use this as a guide in future, or for reference.'*

The Officer worked hard to sustain a relationship with a large number of differing types of settings across Scotland over a short period of time. She made every effort to be available by phone, e-mail or fax if she could not visit a centre and was very proactive, providing additional materials/equipment where appropriate. However, there appeared not to be a specific entitlement of time per centre and not all centres had follow-up visits. Some practitioners were reticent to ask the Officer, knowing the distance she had to travel to reach them and some felt awkward about asking her to come for a minor technical reason. Many centres commented that they felt the officer was 'too thinly spread' to achieve very much:

*‘She had to come back to us on a more sort of regular basis... it was too easy just to say, “Right. She’s not coming for another month, we’ll leave it just now...”’*

*‘She needed more than one problem, I think, really to come down and solve, whereas if it had been somebody local ... that would have been better. I don’t know whether we would have used it more or used it for different things if, for example, the officer had been popping in and out and saying ‘How’s it going? Have you tried this? Have you looked at this?’ Maybe it would have pushed you along a bit more?’*

One practitioner suggested the value of some kind of mentoring system for similar projects in future, using:

*‘Training for trainers, who could then have a co-ordinating responsibility in a specific catchment area.’*

### **3.3.6 Ideas for activities using the SCRAN resource**

Actual activities described or demonstrated in the training sessions and in the Practitioner Workbook are set out in Table 4, together with an approximation of the number of times each was tested during the two Phases.

<b>Activity</b>	<b>Tested in Phase 1 (6 centres)</b>	<b>Tested in Phase 2 (20 centres)</b>	<b>Total</b>
Story Box	3	2	5
Picture making	1	1	2
Games	0	4 (Dominoes x2, SCRAN Snap, card matching)	4
Book making	3 (language skills, Year Book, Spring Book)	3 (mini-book)	6
Projecting SCRAN images	1	1	2
Black Box	1	1	2
Sorting activities	1 (used seasons images for colour, shape, number)	2 (colour, shapes)	3
Drawing onto images	0	2	2
Children printing images	3	3	6
Making collages/displays	2	3	5
Picture talk	1 (contrasts of light and shade)	1	2
Robot Walk	0	1	1

*Table 4: Activities suggested for the SCRAN project*

Although one practitioner commented on her SCRAN evaluation form that *“the activities are enjoyable and worthwhile”*, the overall opinion appears to be mixed. In general, it was agreed that the activities were appropriate for the age range although some were avoided because:

*‘You don’t want to put something in front of the children which they’re just going to feel that they’re failing at because it’s not what they expect.’*

**Story Box** appeared especially popular with practitioners in both Phases because it was a flexible activity idea, easily adapted to fit in with existing curriculum plans:

*‘The ‘written word’ could easily be introduced by scribing the stories for the children. The children would gain all the technology skills if they were able to access their own choice from the computer.’*

*‘But sometimes with that kind of activity I find you get an awful lot of sameness with them - if the first person has a crocodile and a princess in their story, you’ll find the next three do too.’*

**Making collages** was also a popular means of using SCRAN images:

*‘We found a huge range of different kinds of pictures which the children discussed with each other. They then decided which ones to use for collage.’*

*‘This activity really took the interest of the children – Humpty being a familiar image. The children were delighted with the outcome and it sparked lots of singing with the children making up their own verses of Humpty for their own pictures.’*

Centres particularly warmed to the idea of using SCRAN for **Book making**, again because this was a familiar concept for early years practitioners and children. One practitioner made a booklet to aid language skills for one-to-one work:

*‘... the child was able to help with making his language aids.’*

However, other activity ideas appear less favoured. For example, **Dominoes**:

*‘This activity was probably the one that will last the longest but was the one that gave them (the children) least enjoyment.’*

Similarly, though the **Black Box** activity encouraged creativity, it was not seen as a useful learning tool for developing ICT skills. One practitioner commented on **Robot Walk** that:

*'Although I used SCRAN images for this activity, I felt it was contrived and could have been done just as well with existing nursery resources, e.g. shape mats, puppets or existing visual aids.'*

Activities developed from these initial ideas included:

- Autumn Jigsaws – a parent-led activity in which parents and children worked together; this helped to develop parents' own ICT skills and children's language skills and self-expression;
- Firework pictures – selecting and printing off the pictures from the website did help to develop children's ICT skills and also inspired them to make streamers for firework movement to music. This would have been an excellent opportunity for the images on the website to have a sound button with them.
- Religious Festivals – one centre ran a project on Buddhism and looking at the Muslim religion, the focus being on special clothing used on these occasions. Another looked at the Chinese New Year:

*'We had a slide show running including quite good images of children doing Chinese writing and the children were very keen to try that. So we did that within Communication and Language - they were all writing Chinese and we've actually got a wee girl who is Chinese and she did some as part of emergent writing.'*

However, very few centres were able to indicate how they had moved from one activity to another in a coherent manner, apart from a Phase 2 practitioner who had progressed from Story Boxes to Making Books. Evidence suggests that little or no consideration was given to enabling practitioners to work in a 'joined-up' way. The activities come across as discrete elements and practitioners were not given adequate advice on how to embed them into existing curriculum plans or to move on from them in terms of progressing learning objectives.

## 4 CONCLUSIONS

Based on the findings presented in section 3, this section draws conclusions with regard to the impact and effectiveness of the project. However, it should be noted that were the project to be repeated using the current version of the resource, it is likely that responses would have been different.

### 4.1 Overall impact on project participants

- The project tended to lack a clear focus from the outset. In addition, the resource was expected to meet too many objectives for early years and became over-ambitious and complex.
- Phase 2 of the pilot started too early. In retrospect it would have been advisable to have waited until SCRAN had fully revised the Early Years section of the website. The new format and content could then have been introduced to participating Phase 2 settings during initial training.
- Greater linkage was needed from the outset between the SCRAN project and the aims of the various training programmes and initiatives taking place in ICT for Early Years. This could have helped clarify the purpose of the SCRAN resource for more practitioners and enabled them to access and use the materials more effectively. Equally, the SCRAN project might have been developed in closer partnership with other key stakeholders.
- The role of the Project Officer was vital to the project. However, the scale and complexity of the pilot scheme put undue demands on a single coordinator. There was limited support from some areas and organisations, centres were geographically too far apart and delays in project timeline caused operational difficulties.
- One key aspect that SCRAN has to offer which is different from other websites is its Scottishness – although this is evident on the site generally, it was not made explicit in the Early Years section. It is important to promote this within the context of cultural diversity.
- Practitioners needed clearer guidelines regarding exactly what they were expected to evaluate. The brief was too broad and underestimated what they could do.

- Evaluation forms were not attributable to specific centres, making it impossible to adequately track centre progress or to gauge to what extent responses were influenced by limited ICT experience or lack of resources.
- The project would have benefited if practitioners had been asked to keep a brief diary of their experience or create a portfolio of tasks undertaken, similar to the approach taken by LTS.
- It would have been valuable if the project could have specifically gathered examples of good practice to inform new centres interested in the resource.
- Many respondents asserted that the resource did not give them what they wanted. However, it was evident from responses that some practitioners found it hard to articulate their precise needs from such a resource and that they had not fully recognised its potential value.
- Many centres were hampered by limited or unsuitable ICT hardware which was often badly located for both adults and children. Lack of access to broadband was also an inhibiting factor. Staff had little time to organise materials and fully research the site.

#### **4.2 Impact on embedding ICT within the curriculum**

- Practitioners required a programme of training rather than a single introductory session. This would have enabled them to make best use of the resource and to develop skills and confidence in using it. They also needed more preparatory time for researching available topics to suit children's interests.
- Many practitioners were initially attracted to SCRAN because of its simplicity as a ready resource of high quality images. Any future developments of the resource should aim to maintain this simple approach and should involve consultation with early years practitioners, bearing in mind their preference for interactive activities that are bright, colourful, full of sound and easily accessible.

- If centres had been prompted to share their SCRAN password with parents and carers, this could have had a very positive result in raising parental awareness of the resource and encouraging them to access the site at home with their children.
- Low staffing levels meant that a number of centres found it difficult to commit to using the SCRAN resource with children on a regular basis, given that use of the internet was seen as necessitating supervision of relatively small groups.

#### **4.3 Effectiveness of the resource, training and support provided**

- In virtually all settings, practitioners endeavoured to work with the resource following training. Despite difficulties regarding accessibility, they were not antagonistic or negative at the outset. Many could see the potential for its use by children as well as adults, although aware that this would require:
  - more time for familiarisation with the site itself;
  - more training;
  - a more child-friendly approach on the site; resulting in
  - less need for adult intervention.
- In almost all centres, the SCRAN resource is seen as one resource amongst many and this may explain the limited continued use being made of it beyond the life of the pilot project.
- The project would have benefited from either the use of fewer pilot centres or greater geographical concentration of those used. More intensive support could then have been provided by the Project Officer, including team teaching, modelling activities with children or observing the practitioner. It might also have been possible to collect samples of video evidence to show how the resource was being used.
- Although the activities were a useful starting-point, they took up too much time in training and tended to deflect the practitioner's attention from the real point of the project – to test the resource itself.

- It might have been better to ask each practitioner to take a theme to develop using SCRAN resources and possibly using one of the activities as a starting point, rather than placing so much emphasis on the activities themselves.
- With regard to training and support, practitioners would have benefited from more time to explore the resource and a local system of follow-up support to encourage them to use it creatively.
- There was a need for a local system of follow-up support to encourage creative use of the resource. Regional networks could have helped practitioners to develop and sustain their interest and commitment; the website could have had a 'chat room' for participants which would have improved centre-to-centre communications and given a chance for them to further influence the resource development.
- Not all early years practitioners would understand the search facility guidance provided by the software. This needs amending.
- It would be useful to simplify the navigation of the site; for example, more users might be attracted by the Albums facility if it did not require a further password system.
- Because the range of images has been reduced in the different Pathfinders files, some images are repeated in several files. This could easily disappoint and demotivate practitioners.
- It would be useful to have a simpler range of sounds; the Sound and Feelings Pathfinder has proved inappropriate. Far too much information was provided with the sounds and they took a long time to download. Practitioners need to be able to click on the icon and hear the sound immediately as in other websites.
- For early years, dated images could be grouped under historical aspects of the early years curriculum rather than across random Pathfinders topics.

- A number of staff interviewed expressed interest in future training to help them get the best out of the revised resource and one said she would be keen to support the SCRAN team in further developing the site.

**SCRAN EARLY YEARS AND ICT EVALUATION**  
**Follow up Contact with Practitioners**

<b>Interviewer's name:</b>	
<b>Date of interview:</b>	
<b>Early Years Centre</b>	
<b>Interviewee's name:</b>	
<b>Role:</b>	

**At the start of the interview**

**Explain the purpose of the interview and protocols**

*i.e. As you know, Scottish Executive Education Department(SEED) has asked CEI to evaluate the overall impact of the SCRAN Early Years Project, including the effectiveness of the training programme and the extent to which the project has helped to embed ICT into the early years curriculum. So far, we have produced a substantial interim report based on the findings from our visits to participating early years centres and other key stakeholders.*

*Although no further expansion of the SCRAN website for early years will now take place, due to changes in the organisation, it is essential to capture any additional points regarding ICT in early years settings – and in particular, the use of internet websites. We would also like to include examples of good practice in the final report.*

*The purpose of this interview is to obtain an update on what is happening in your centre/area. It will last about 20 minutes. What you say will not be attributed to you, personally, or to the school. It would be helpful to tape-record the interview (to be transcribed for use solely by the evaluators. You may ask for the taping to stop at anytime. Are you happy to proceed on that basis?*

In the following questions, please leave time for the interviewee to respond in an open way before probing further to obtain details.

**1. How are you using the internet as a teaching and learning resource this year?**

*Please probe, regarding:*

- *Ways in which staff at the centre may be accessing website materials for preparing resources, gathering information, etc.*
- *Whether they are using the internet with children and, if so, how they are doing this – types of activities, types of websites accessed, purpose*
- *How teaching and learning styles may have had to adapt as a result.*

**2. How does this differ from what you did last year [and, if applicable, what factors may have prompted you to make these changes]?**

*Look for details, including:*

- *Any changes in ICT aims and objectives for the centre*
- *Greater involvement/skills development/increased confidence of staff due to training (e.g. Early Learning, Forward Thinking)*
- *Greater involvement of parents/carers in ICT-focused learning*
- *Improved hardware resources and/or greater accessibility for adults and children*

**3. In your opinion, what factors may help or hinder the use of the internet in early years teaching and learning?**

*In particular, probe to identify in what ways the following may be important and the needs/opportunities generated as a result:*

- *The specific early years setting, e.g. childminder, LEA nursery, independent centre*
- *Training provision*
- *Advisory support*
- *Technical complexities and/or weaknesses in a website*

**4. How are you addressing some of these needs in your setting; for example, through professional development opportunities?**

**5. Could you describe any examples of effective practice with regard to the use of the internet as a teaching/learning resource in your centre?**

*For example, for materials and activities development, with children in supported and independent contexts, for research and/or professional development purposes. Please probe to identify any key learning outcomes where relevant.*

**6. How do you see the use of the internet being further developed in your centre?**

**7. In what ways, if any, are you using – or planning to use – the SCRAN website/resources again this year?**

*If continuing to use SCRAN, please check the extent to which particular factors such as the following may be assisting its use:*

- *Recent staff training in ICT*
- *Greater familiarity with the resource*
- *Improved ICT resources generally and/or greater accessibility to the internet for adults and children*

*If continuing to use SCRAN, please probe to obtain details of any changes in ICT aims and objectives for the centre, greater involvement/skills development/increased confidence of staff due to training (e.g. Early Learning Forward Thinking), improved hardware resources and greater accessibility*

**8. Are there any other issues or comments you would like to highlight?**

**Thank you for your contributions**