

RSC Northwest News

JISC Regional Support Centre of the Northwest



INSIDE THIS ISSUE

<i>Curriculum Update</i>	2
• <i>Ferl Practitioners Pilot Programme</i>	
• <i>Subject Mentors Hit the Road</i>	
<i>xreferplus</i>	3
<i>RSC Hosts Online Inspection and ILT Debate</i>	4
<i>Use of ILT in Colleges</i>	5
<i>Focus on KnowUK</i>	6
<i>Technical Update</i>	7
• <i>To Subnet or not to Subnet</i>	
• <i>Providing Onsite DNS Services</i>	
<i>News in Brief Events Roundup</i>	8



Geoff Murcott and Paul Mather of Tameside College presented at the recent RSC event "Utilising ILT in the ICT Classroom"

JISC RSC Northwest,

Blackpool and The Fylde College,

Ashfield Road, Bispham,

Blackpool, FY2 0HB

Tel: 01253 504070

Fax: 01253 504072

email: support@rsc-northwest.ac.uk

www.rsc-northwest.ac.uk

Video Conferencing:

01253 350877

Looking forward to the future of RSC NW

Welcome to another issue of our regular newsletter. If you have been following the history of the RSC you may remember that we were established initially with 3 years funding. I am pleased to announce that our bid to continue to host the RSC NW has been formally accepted by the JISC. Following final funding council approval a contract will be signed by Blackpool and The Fylde College assuring the continuation of the RSC. The second round will bring about a number changes for us, including new accommodation and some new faces joining the RSC. Watch this space for further details.

In this issue of the newsletter you will find details of the FERL Practitioners Programme Pilot that has been running in the region. Thanks to the 21 colleges taking part for their commitment to getting this important staff development programme off the ground.

We also introduce you to some of the NLN subject mentors that will be working amongst colleges in the North West. The mentors are already busy filling their diaries, so if you haven't asked them to visit your college yet, you had better get your skates on!

The RSC has been supporting the work of Becta on the subject of ILT and Inspection. Further to our online debate we summarise some of your responses and provide further comment through the words of a "Managing the Learning" Becta working party member.

Finally, a date for your diary. Our annual conference will be held this year on June 27th at the Reebok Stadium, Horwich. Watch out for full details of this event coming soon.

Jonathan Day - RSC Manager
jday@rsc-northwest.ac.uk

New NLN materials website goes live

Users, developers and promoters of the e-learning materials available through the National Learning Network now have access to a new website offering more information and support than ever before.

The site, which went live on 14 February 2003, has been created by the NLN Materials Development and Implementation Team (NLN-MDIT) at Becta, and can be found at www.nln.ac.uk/materials.

Joyce Martin, Head of the NLN-MDIT said, "The new Materials website focuses exclusively on the e-learning materials available through the National Learning Network partnership programme. What we have created is a 'one-stop shop' for anyone using, developing or promoting the NLN materials, providing them with information and support. The site divided into sections, each aimed at meeting the needs of specific user groups through distinct user areas. We hope that it proves to be a valuable resource and helps to embed the materials into the post-16 curriculum."

Anne Fessi - Becta
anne.fessi@becta.org.uk

RSC NW Annual Conference 27th June 2003 Reebok Stadium



Ferl Practitioners' Programme Pilot

The Ferl Practitioners' Programme, managed by Becta, is being implemented in partnership with RSCs across England and Northern Ireland. The Programme has been created to equip individuals involved in the teaching and learning process in colleges with the skills essential for harnessing the potential of ILT. It is designed for delivery within colleges, facilitated by college staff, using materials designed by the Ferl team at Becta.

The pilot phase ran from October 2002 to March 2003, with evaluation findings soon to be published and the full programme being launched in late spring 2003. To date there are 116 colleges involved in the pilot with 961 practitioners registered in total.

Ferl have established a useful Ferl Practitioners Programme area within their website which in turn accommodates an 'Administration Area' for use by FPP Guides (key contact within college), practitioners and RSC's.

Within the North West region there are 21 colleges involved with 191 practitioners registered, 96 of whom are actively accessing the Administration area.

The RSC has supported this program through 3 events:

- Briefing Day - Aimed at FPP Guides and Senior Managers where the main focus of the day was an overview and implications of implementation.
- Two Trainers Days - aimed at Guides and Trainers and materials and delivery were covered in more detail during these sessions.

The programmes, feedback and evaluations are available on our website <http://www.rsc-northwest.ac.uk/FPP/index.htm>

The RSC have also established a FPP Email Forum and an area of the website has been dedicated to the FPP Pilot. This includes details of participating colleges, contacts, VLE's and the materials from supporting events.

Feedback so far has generally been good and implementation strategies and delivery models were put into place pro-actively and with good awareness of the level of support required to ensure success in both the long-term and for the short-term pilot.

Subject Mentors Hit the Road

Six Subject Mentors have all been recruited by the National Learning Network (NLN) as ILT Subject Mentors and are already working closely with RSC Northwest to promote e-learning in the region.

Alison Trimble, Neil Dunn, Graeme Sutherland, John Whalley (pictured right), Andrew Wilson and Dave Sugden are all out on the road, visiting FE colleges to raise awareness of new interactive, e-learning materials and showing how they can be used to enrich lessons.

The six are spreading the word about the free e-learning resources available through the NLN and how they can be used in the classroom, and other resources too, including those available from the JISC.



They are part of a national team of mentors chosen to cover specific subject areas and regions, and once recruitment is complete there should be 30 in total, providing support for tutors across England.

The ILT Subject Mentors are all college practitioners, each with a subject specific focus, who will continue to work for their college half time, promoting e-learning and the NLN materials in particular across their local region the rest of their time.



Alison Trimble NLN Mentor

If you're involved in delivering key skills or basic skills in an FE college in the North-West, Alison Trimble would love to hear from you. Alison has been appointed NLN ILT mentor for basic education in the region, and will be happy to visit you to demonstrate the materials and discuss how you can integrate ICT in your teaching. She is based at West Cheshire College in Chester. You can email her at a.trimble@west-cheshire.ac.uk. There's no cost at all to you - her time and the NLN materials are free of charge.

JISC Regional Support Centre of the Northwest

xreferplus

www.xreferplus.com

Is a picture worth a thousand words?

When we started xrefer three years ago we excluded images from our service. So there are hardly any images on our free showcase service www.xrefer.com, which as it happens will soon be discontinued. However when we started to build xreferplus we decided that we would not only include illustrations when they are available, but that we would actively seek out reference titles with a high percentage of illustrations. There are now several atlases in the service and we expect to add many more Atlases and are increasingly looking at ways that the illustrative content of our reference service can be improved.

We have also now added a feature to the standard xreferplus search interface which allows users to seek out images. With every hit-list from an xreferplus search the user has the option to click on a link which shows 'Results with images preferred'. Small 'thumbnail' versions of the images will then be displayed in the results list.

Since I demonstrate xreferplus at least once a week, I have developed some standard search examples. One that I often use is the term 'laser'. As well as finding some entries in technical reference works and general encyclopedias this term has the advantage of throwing up some useful images when the 'images preferred' option is taken. I have also used the 'laser' example when explaining how xreferplus is different from and not really comparable with Google. Don't get me wrong, I am a great Google fan, its just that as an information service it can't be relied upon to get you trustworthy, relevant and authoritative definitions and explanations. For example, searching for 'laser' on Google garners a lot of hits, but very little on the first page that could be of use to a student of electronics.

I was working on this example with a group of college librarians a couple of weeks ago, when one of the group showed me that a search on 'lasers' on Google yielded more promising results. Sure enough, at eight on the list there is a site (from the University of Aberdeen) which gives a good amount of pretty technical information about lasers. There are also some diagrams and useful photos, although I would suspect that this resource is more specialised than would be helpful to many students. But as we looked at the list I noticed that higher on the Google listing there is a link to the 'Britney Spears guide to Semiconductor Physics'. Since it came higher up the list we decided to take a closer look.

I can report that it has some very authoritative and reliable-looking photographs of Britney Spears, and it appears to have some authoritative and informative pages about lasers. But in a clear way this site proved my point. How do we know that a site that is authoritative on Britney Spears is going to be reliable on lasers? Is it simply academic bias to assume that it may not be as reliable on lasers as on Britney? The site clearly garners a lot of attention on the web (so Google ranks it highly), but there has to be at least a doubt about its reliability and authoritativeness on semi-conductor physics.

So pictures may well be worth a thousand words each, but in using them it is pretty important to know where they come from and why they are being used.

Licence Fees for xreferplus Institutional

Band	Year 1	Year 2	Year 3
E	£520	£832	£936
F	£380	£608	£684
G	£275	£440	£495
H	£200	£320	£360
I	£145	£232	£261
J	£113	£180	£202

Licencing fees are shown inclusive of JISC subsidy. A full list of bandings is shown at www.jisc.ac.uk/dner/collections/newbanding.html

Search result on "laser" on xreferplus with "image preferred" no snaps of britney here!

Adam Hodgkin
Managing Director
xrefer.com Limited

RSC Hosts Online Inspection and ILT Debate

The Raising Standards Initiative is a project started by Becta in November 2001 as a forum for neutral debate between the inspection agencies and key bodies within the sector. More recently college practitioners have combined with some of these key agencies, including RSC's to form a number of working parties looking at establishing guidelines that aim to assist colleges preparing for inspection. Becta have synthesised many of the outcomes of these discussions into a guidance document entitled "Managing Inspection and ILT" which has now been distributed to colleges.

We very much wanted to help highlight some of these issues and bring them to the attention of the colleges in the North West, many of which are preparing for inspection for the first time under the new OFSTED regime. Along with a new area of the RSC web site dedicated to the issue of ILT and Inspection we decided to host an online debate.

The debate took place over a four-day period focused on a number of key questions taken from the Becta guidance documents. The way in which colleges responded to the questions provided some very useful insights, highlighting many of the challenges facing colleges that wish to integrate ILT more effectively into teaching and learning.

Tuesday - Teaching

How can ILT be effectively planned to:

- *Ensure appropriate balance of teaching methods?*
- *Provide appropriate enhancement to the students learning?*
- *Respond to the preferred learning style of the individual?*

Responses suggested that tutors are beginning to respond to learners needs with a variety of teaching methods including:

The use of a VLE, supportive lesson notes, multiple choice question tests, drag and drop tests, group work in a computer area, research requiring the use of the Internet at home or college and using OHT material where computers are not available with content gleaned from the web.

Suggestion of how ILT can provide suitable enhancement to student learning included: VLE materials - Ideal for students taking re-sits or timetabled lessons are not available.

Learning Styles: Using a variety of media for learners that respond better to visual or auditory stimuli. Materials on a VLE that are always available can support learners with different paces and abilities. Assessment of learning styles can help a student take responsibility for the way they learn and can provide the impetus for teachers to implement different methods.

Other comments included support for the FERL Practitioners Programme and a need to help with the implementation of ILT and teaching and learning strategies across a college so that barriers to implementing ILT are overcome.

Wednesday - Supporting Learning

How can technology be used to ensure that individual learning needs are accurately and rapidly assessed to ensure that learners have access to additional support appropriate to their needs?

The debate started by looking at some of the cultural challenges such as a perceived threat that technology may serve to replace the teacher. There was reference to the strengths that technology can bring in terms of providing differentiated learning, but there are still logistical problems associated with the application of the technology. Poor implementation can lead to a jaundiced view of the potential that the technology has to offer.

Thursday - Learning

How can the college make effective use of online peer and tutor communication and conferencing facilities? Is this technology capable of extending the learners personal and academic development beyond scheduled sessions?

Opinion was split during this debate with some responses indicating a very positive experience of online communications and others the opposite. Skills need to be developed to manage this form of communication effectively and the context in which they are used may have a significant bearing upon their successful application.

Friday - Managing Learning

How can ILT be managed so that it becomes an integral and embedded part of a college's Teaching and Learning Strategy?

Infrastructure deficiencies are still a problem, particularly the lack of computers in classrooms. Colleges need to encourage a culture of embracing ILT so it becomes the norm rather than the exception. The need for senior management to be seen to be leading this culture shift was also highlighted.

The forum is still accessible on the RSC website. To review the discussions for yourself, visit www.rsc-northwest.ac.uk/inspection

Jonathan Day
RSC Manager

The use of ILT in colleges - some comments for inspection

Steve Smith, ILT Manager for Runshaw College was involved in a Becta national working party called 'Managing the Learning' which considered the impact of ILT on the way learning is managed and how the Common Inspection Framework evaluates this.

"The final document has been presented to the LSC and is due to appear as guidelines for inspectors. I think the final paper seemed quite summative compared to the contributory papers submitted by the group members, possibly in order to apply to the widest possible range of institutions, and to take into account the (possible) variance in experience that inspectors may have towards the evaluation of ILT in colleges at this stage.

I think the number one point for me is that ILT activity should be represented on all standard college evidence just like anything else - ILT references should not be 'absent' from planning/ quality documents, nor should it appear as a 'specialism'. I think the inspector will be looking for the college's ability to recognise the 'added value' ILT can provide to the learning process, while being effectively managed as part of any other college process.

These comments are my 'take' on the 'Managing the Learning' paper, and do not reflect any official interpretation or emphasis on a possible ILT inspection process. So, with that in mind, these are the aspects of the guidelines that I would consider prior to my college inspection.

1. Who would an inspector expect to be involved in the management of ILT?

(Of course any middle manager directly responsible for ILT provision but also consider the extent to which you can prove the involvement of);

- ILT champions/mentors/facilitators (different colleges have different names) - are they members of college working groups/ parties and do the minutes show this? Can they articulate the college ILT vision and strategy as well as their particular contribution to ILT development?
- SAR authors for any curriculum - they need to be able to recognise ILT 'good practice' where this is a strength and plan for action if it is a perceived weakness. This implies that they have a shared understanding of what is appropriate in terms of ILT in the curriculum.
- People who observe lessons - check their understanding of appropriate use of ILT - do lesson observation forms record instances of good use of technology?
- Staff development managers/coordinators/officers - how do they measure the staff ILT skill needs? What mechanisms are in place to support the ILT development of full time (and part time) teachers? Are teachers taking these up? How do they know what teachers think about the quality of support they are offered? (An ILT staff development strategy for up to 2005 would also be worthwhile).
- The students - particularly in their views on the wider learning that takes place, and the role of ILT in supporting and facilitating this.

2. Have a view on how ILT improves the quality of teaching and learning

- Inspection should be seen as an opportunity to showcase practice where ILT has made a distinctive contribution to the learning process.
- If the opportunity to showcase ILT does not happen at the time of inspection, have case study examples to offer (backed up with curriculum documents).
- Inspectors may also ask how the use of ILT is set in the wider context of teaching and learning - so they can gain a sense of your ability to recognise 'added value' and use ILT in a pedagogically sound way. It will help them recognise whether you see ILT as a 'bolt on' feature or whether it is part of a basic delivery ethos.
- Explain when asked how subjects consider the use of ILT at the curriculum design stage (references to ILT in schemes of work/ lesson plan proformas can help here).
- Explain how subjects use ILT to support independent study between class sessions, and how you know these strategies are effective.

3. Show how management of ILT is effectively shared and communicated across the college

- Inspectors know that it is very difficult for a single manager to achieve high quality ILT provision
- To what extent is the IT (network) manager involved in the curriculum design processes? To what extent can teachers and students affect the nature and features of their college network?
- To what extent is the library/learning resources manager aware of independent study needs by subject, and the software used in teaching and learning situations?
- How does the manager responsible for ILT staff development ensure they design training opportunities that enable a teacher to feel competent in the use of ILT in the classroom? How do they measure what the priority training
- Highlight the college ILT strategies from the strategic plan that link directly to the raising of quality of teaching and learning".

Steve Smith
ILT Manager
Runshaw College



Focus on ... KnowUK

KnowUK (<http://www.knowuk.co.uk>) is a general reference database, which provides vital information about the people, places, organisations, government and institutions of the UK. It contains over 90 high quality reference works, many of which are not available elsewhere online. It is available to FE institutions at a heavily discounted rate, thanks to a JISC agreement with the publisher.

KnowUK is an ideal environment for students to develop key research and IT skills. It is designed to be easy to use and to provide accurate and high-quality results, as opposed to general internet searches, which can provide thousands of irrelevant and misleading results.

KnowUK can also help to save research time for both students and teachers. Information that has previously only been available from a number of places such as libraries, voluntary organisations and government departments, can now be found easily in one single source. Students can print pages from KnowUK to include within their portfolios of work without any copyright restrictions.

KnowUK also has many uses outside the library as it contains such a wide range of information:

- Careers advisors can access UK Course Discover, The Which? Guide to Careers and British Qualifications.
- Student advisors can access details on local health and welfare services such as GPs and local advisory services through the UK Advice Finder.
- Fundraisers can use the wealth of biographical information in KnowUK including Who's Who and Debrett's People of Today to find alumni and prominent local residents.
- Administrative staff can find information on local government contacts from publications like the Municipal Yearbook.
- KnowUK also has leisure information that may be of interest to all staff and students - such as the Blue Guides, Good Food Guide, Good Hotel Guide, Good Walks Guide and the National Trust Guide.

Fiona Davenport-White
fiona.davenport-white@proquest.co.uk
 KnowUK Development Editor

New Subject Guides available for KnowUK

Two new subject-orientated guides are now available for KnowUK. Both are pitched at GNVO Intermediate Level and aim to help tutors and students use KnowUK as an integral part of their teaching and learning. The two subjects covered so far are:

- Leisure and Tourism
- Health and Social Care

A further guide for BTEC Public Services will soon be available.

Both Guides are available from <http://www.learningbox.net> To access the Guides:

- go into "Box 1 Training Resources"
- select the "Further Education Resources" link at the top of the page
- click on the KnowUK logo.

Please contact knowuk-webmaster@proquest.co.uk if you have any feedback on the guides and/or if you have any suggestions for any other subjects you would like to be covered.



Aquinas
College

Aquinas College in Stockport is a Catholic Sixth Form college which provides students with a supportive learning environment based on Christian values and beliefs. The college offers a wide ranging curriculum for full time students and for adults who attend college in the evening. The college not only maintains strong links with secondary and partner catholic high schools but also with the local industry within the area.

KnowUK Workshop

As part of the Learning Resource Centre staff development programme, LRC staff delivered a workshop on the KnowUK online resource. The workshop was delivered during a morning session of an INSET day held at the college. At the time of the workshop KnowUK was offered to the college for a trial period and the aim of the session was to highlight its significance within the curriculum to provide justification for purchasing the product.

The session consisted of a quick demonstration of the package highlighting the range of resources contained within it. Following this, staff were allowed to experience the resource themselves by interrogating the database with a range of everyday enquiries. At the end of the workshop staff were given the opportunity to provide feedback on how they found the product.

Recommendations for good practice

- Keep the session as hands on as possible, letting potential users experience the resource for themselves
- Always link the workshop with existing provision and work within the LRC and the college curriculum

Kevin Sheehan
 Assistant Librarian
 Aquinas College

Providing Onsite DNS Services

The RSC has a new addition to the technical web site. Navin Panchal, one of the RSC Technical Advisors, has prepared some help and advice concerning DNS installation on a number of platforms. This will help in gaining familiarity with the Domain Name Resolution System and the common server implementation in use at college sites. There are some examples on setting up the DNS server on NT, W2000 and Unix platforms. The guide also contains some useful URLs, which should make the task of establishing and troubleshooting DNS servers a little clearer. Any comments will be more than welcome and can be sent to n.panchal@lancaster.ac.uk.

To Subnet or not to Subnet?

For many the issue of IP subnetting induces feelings of fear and anxiety at the thought of all that binary! So here is a short article which may help if you are finding it difficult to get your head around the thorny subject of subnetting.

The subnetting of IP-Addresses is useful to avoid a growing shortage of IP-addresses. This also allows IP-Networks to be divided into their own separate subnets.

Referring to the distribution of official IP-addresses, subnetting for example, opens the possibility to generate further separate IP-networks under an existing A/B/C-network address. The division into separate subnets has the advantage that local traffic will remain in the defined subnet and traffic to other subnets can be forwarded on demand.

The basic concept of subnetting is very easy and is based on the "Subnet Mask". This mask is used to define the bits that represent a network or a host within an IP-Address. A network is represented by a high bit (1), where on the other side a low bit (0) defines the host area.

The host (e.g. router, workstation) decides, depending on the subnet mask, if the destination IP-address is in the local network. If this is not the case, then packets to this specific address will be routed over previously defined routing mechanisms.

The following table displays 4 IP-addresses of a network (Class C) and their association to the subnet mask 255.255.255.224.

	Network	Host	
Mask	255.255.255.224	11111111.11111111.11111111.111	00000
Address (1)	193.98.44.34	11000001.01100010.00101100.001	00010
Address (2)	193.98.44.106	11000001.01100010.00101100.011	01010
Address (3)	193.98.44.129	11000001.01100010.00101100.100	00001
Address (4)	193.98.44.59	11000001.01100010.00101100.001	11011

The binary representation of the mask and addresses shows clearly in which subnet the IP-address belongs: Addresses 1 and 4 belong to subnet .32 (00100000), address 2 belongs to subnet .96 (01100000) and address 3 belongs to subnet .128 (10000000).

If the usual Class-C network standard mask 255.255.255.0 is used for this example, then the length of the network part would be 24 bit and the host part 8 bit. Through the subnet mask 255.255.255.224, the network part of the IP-address has a size of 27 bits and the host -part a length of 5 bits.

Subnetting is nothing other than an extension of the network part of an IP-address, where the host part is shortened. The number of available subnets and hosts are based on certain given IP-conditions:

- The number of available host addresses depends on the length of the host-part of the IP-address. A 5-bit host part can theoretically make up to 32 addresses. Because there are two reserved addresses in every IP-network (this also applies to a subnet), the maximum number of available addresses has to be reduced by 2 addresses. These host-addresses contain only ones. The first address is used for addressing the network, while the other address is used for broadcasts in that certain network.
- The number of used subnets depends on the length of the subnet-portion in the netmask. Here also, the theoretical total number of networks has to be reduced by 2.

Keith Wilson
RSC Technical Advisor
kwil@blackpool.ac.uk

News in Brief

News in Brief

JISC Collections folder

Learning Resources Managers should by now have received their free copy of the JISC Collections folder. This folder is packed with all you need to know about the JISC Collections portfolio of electronic resources, and how to get the most from it. We hope that it will assist you when thinking about ways to further the uptake and use of information technology in your Learning Resource Centre.

New RSC NW Steering Group Chair

We warmly welcome the new Vice Principal of Blackpool and The Fylde College Ruth Paisley as Chair of the Steering Group having taken over the role from David Robinson who retired at Christmas.



New E-Resource Packs

The RSC Northwest have been busy creating E-Resource packs in specific subject areas for tutors wanting to use ILT within their teaching. This is an ongoing project that will include subject areas such as hairdressing and beauty, electrical installation and health and social care.

You can download the packs from the RSC website www.rsc-northwest.ac.uk and they can be used freely across your institution. More subjects are being added all the time so please keep visiting the site.

If you want to include an article or a resource in these packs, then please contact Chrissie Mason (cm@blackpool.ac.uk)

Northwest Award Winners

Northwest Award Winners

Congratulations to all the recent award winners from our region.

Association of Colleges (AoC) Beacon Award Winners 2002-03

Tameside College - The Becta Award for Effective use of ILT to Enhance Teaching and Support Learning

Blackpool and The Fylde College – The Basic Skills Agency Award for Extending Partnership in Basic Skills

Burnley College – The Churches' Award for Sustainable Community Development (Highly Commended)

Bury College – The Edexcel Award for Lifelong Learning

Loreto College – The Learning and Skills Council Award for Innovation in Improving Quality and Standards

Wigan and Leigh College – The MENCAP, RNIB, RNID Award for Students with Learning Difficulties and / or Learning Disabilities

Becta ICT in Practice Awards 2003

Inclusion (post-16) Winner – Ruth Jones, Wirral Metropolitan College "Incorporating ICT in practice"

RSC Events Round-up - Spring 2003

Date	Event	Venue
April		
29th April	Effective E-Learning with VLEs (Netskills)	Manchester Computing
May		
14th May	ILT for Keyskills	Myerscough College
14th May	ILT for Basic Skills	Myerscough College
29th May	Effective E-Learning with VLEs (Netskills)	Manchester Computing
29th May	Using the NLN materials with a VLE	North Trafford College
June		
6th June	Plagiarism Advisory Service Workshop	Wigan & Leigh College
11th June	Finding & Using Images for Learning and Teaching	Myerscough College
20th June	ILT in Maths definitely adds up to something	North Trafford College
27th June	RSC Annual Conference	Reebok Stadium
July		
2nd July	Tools for interactive learning	Bolton 6th Form College
7th July	Using the NLN materials with a VLE	Tameside College

For further information or to book on a place on any of the above events please visit the RSC website www.rsc-northwest.ac.uk

JISC RSC Northwest, Blackpool and The Fylde College, Ashfield Road, Bispham, Blackpool, FY2 0HB

Tel: 01253 504070 Fax: 01253 504072

email: support@rsc-northwest.ac.uk www.rsc-northwest.ac.uk