

Northumberland Church of England Academy – ICT Vision

Introduction

Northumberland C of E Academy will be a school for learners aged 4 to 18, including nursery children operating over four sites. The Academy will have a shared vision, values and aspirations under the leadership and management of the same principal and leadership team. ICT will play an integral role in enabling us to implement our vision for learning. It will dynamically transform communication and it will contribute positively to transition. Most of all though it will enable us to implement our education vision around the 3 central themes: Investing in My Future; Investing in My Community; and, Investing in My Environment.

The specialism of Design and the Built environment will pervade the work of the Academy and this will be supported by a clear focus on technology and its contribution to our specialism.

We strongly agree with Jim Knight, the Minister of State for Schools and Learners, when he said at the Harnessing Technology – ICT for Education conference 3rd July 2008 that 'technology is no longer optional'

We believe technology will contribute to the culture of learning, high expectations, aspirations, challenge and inclusion that will pervade all aspects of Academy life. It will bring the physically separate Academy sites closer together by offering a wide range of virtual communication tools – video conferencing, online communities, instant messaging, an advanced telephony system and a wide range of electronic communication tools (email, blogs etc). Our students and workforce will feel 'digitally connected'

Through a process of consultation with the sponsors of the Academy a clear vision for ICT in the new Academy has been developed. This ICT vision builds upon and enhances the Vision Statement approved by the Programme Steering Group in July 2008

ICT at the heart of learning

We recognise that ICT is now an integral element of 21st century life. Whether used for learning, social reasons or communication, ICT will form a powerful part of the life of the students and staff in our Academy. We wish to utilise and build upon this.

We endorse the vision for ICT outlined in DfES documents – “Harnessing Technology” (2005) and “Fulfilling the Potential” (2003).

“ICT needs to be seen as a key, integral element of the school reform agenda: freeing up time and energy to help remodel the school team; enabling efficient knowledge management within schools; supporting knowledge transfer between schools and outreach to parents and the community; as well as being a hugely powerful medium for transforming teaching and learning.”

1.1 Implementing 21st Century Technologies

Through the use of a fully managed ICT service ICT will be available to students and staff where and when they need it. This will not be limited to the Academy as we wish to support parental and community engagement by enabling ICT to act as a powerful tool to develop the positive relationship with families, carers and the local community.

We wish to put the power of ICT into the hands of our learners. We will seek to provide learners with an appropriate ICT device that will enable mobility and flexibility, access to learning and their resources where ever they maybe. We realise that technological

developments can have an impact on the design of the learning spaces that our Academy will contain. We wish to make these as flexible as possible to enable safe and secure access, innovation and creativity that is sustainable into the future. We think this policy will enable students in our Academy to reach higher levels of achievement because we are putting the power of technology into the hands of learners.

We want to take advantage of the latest developments of converged technologies in managing our building and the activities that take place within it. We will seek the latest technologies for enabling the smooth running of our Academy. These will include Video conferencing, Wireless access to aid mobility across our sites, CCTV for security and behaviour management, access control to improve safety and develop confidence, cashless catering, smart cards to monitor learning resources both educational and social and attendance monitoring. Given the nature of our Academy sites we will aim to provide excellent integration with potential third party systems that are already in place.

We want technology to make learning easier and more effective. We are conscious of our environmental responsibilities and we will utilise technology to enable our buildings, across all sites, to make a positive contribution to the environment.

1.2 Realising the benefits of 21st Century technologies

We believe in particular a greater focus on technology will bring real benefits for our Academy.

By:

- Ensuring learners are equipped to meet the challenges of today's knowledge society
- Complementing the process of change, enabling teaching staff and young people to transform the way they work.
- Offering provision, from the users' perspective, that is simple to use, and integral to the school environment.
- Developing young people and our learning community to be competent users.
- Developing personalisation.
- Creating learner-centred environments that enable any-time, any-place, any-where learning.
- Promoting inclusion
- Promoting social cohesion and community involvement
- Developing our Design and Built Environment specialism

2 ICT to transform learning and teaching

2.1 Widening Access

ICT will provide access to learning resources that will support the personalised learning aims of the Academy. Through a learning platform (VLE, communication and MIS) we will seek to enable learners to develop their own learning journeys. We will do this by developing a fully managed learning platform that can easily gather data on performance and provide information to support the learner. It will provide choices that will enable students to select from a broad range of content. Students will be able to select the appropriate choices in an informed and supported way, and their learning and development will be challenged in an appropriate manner at the correct pace. We will support this journey by the most appropriate interventions at times that support and challenge the learner. These interventions may take place in the virtual or the physical environment.

Learners will be able to access resources at a time and place that suits their individual learning needs. This will enable a new approach to teaching where the location will not dictate the teaching and learning opportunities available. We feel this is very important given the geographical spread of our sites.

We will develop and provide learning resources that staff will be able to access in a place and at a time that suits them. They will be encouraged to contribute to research around developing learning strategies for different types of learner within the community.

This developing dynamic will be supported through the implementation of a learning platform across the Academy. This will be available when and where needed to our learners and increasingly to our community. Much of a learners' work will be completed and assessed online and they will maintain with the support of staff an e-portfolio as a record of progress. This will be complemented by their e-learning plan accessible through their personal e-space within a Managed Learning Environment (MLE).

The Learning Platform will also support collaboration with other partners locally, regionally and further afield. Important messages about the learning day and activities will be posted online with the expectation that older students will develop the organisation skills required to manage their time and activities effectively.

We feel this approach will impact positively on our approach to the implementation of the 14 – 19 reforms. We realise that learning post 14 will become increasingly co-located. We will support this development with our robust infrastructure, our open access policy and our effective strategy of developing relationships with partners in our community.

We will actively seek to support the use of ICT in the home to support learning. We wish to engage with our community to support the learning journeys of our students. We will implement cost effective ways for homes to acquire access to ICT. This may be purchasing and/or leasing schemes or where appropriate working with our community to develop access to ICT in community locations.

We recognise the need to work with our local education providers and our local authority building on the best practice already in place. We see our Academy as becoming an ICT rich resource that can be utilised as both a 'test bed' of innovation and a regional best practice resource for the use of ICT.

The innovative drive behind the Academy's creation enables us to build upon current educational institutions which have a strong track record in the use of technology.

2.2 Promoting inclusion

Inclusion is at the heart of our vision and ICT will support this. We will be offering regional provision for up to a 100 students with complex learning needs. The implementation of inclusive technologies will enable us to support the needs of these learners and other learners. Students will be able to access resources, tailored to their age and stage of development, from across the Academy. Through the implementation of a cross Academy learning platform all learners will be given the opportunity to utilise accessible resources.

We will aim to become a centre of excellence for supporting the inclusive needs of learners. We will achieve this by a robust analysis of need and ensuring we procure systems and devices that fit this need. Building on the best practice already in our current schools we have a unique opportunity to make a step change in our provision for these learners by adopting intelligent procurement routes and developing strategic learning partnerships with providers of inclusive technologies.

2.3 Promoting attainment

We will utilise ICT through our learning platform and the device implementation strategy to develop both soft and hard skills. In terms of soft skills we will ensure ICT improves motivation and engagement with learning by putting technology into the hands of our learners. We believe that this will have a positive impact on behaviour and motivation by making technology available and relevant to the needs of individual learners. This, we believe, will have an impact on standards of attainment, as learners will be more engaged with learning and that learning will be personalised to their needs. We will use access controls and attendance monitoring to promote and reward good attendance. We will use our learning platform to celebrate achievement across our Academy sites and within our local and regional communities

We will also ensure our investment in ICT has a real impact on our core vision of improving literacy, numeracy, thinking, problem solving skills and the other key skills. We will achieve this by detailed curriculum planning and a real understanding of the impact of technology on our workforce through a carefully targeted, strategic development plan.

ICT will enable coherent intervention strategies to be developed, based on timely and relevant information provided by the learning platform – gathered and partly analysed by the learning platform, delivered to support the learner at the right time and place.

This, we realise, will be a challenging step for some of our staff and we will support moves to a new relationship between learner and teacher. Learning resources will be made available that extend and enrich learning, facilitating learners to take some ownership of their learning pathways and to develop as independent learners.

Staff will be engaged in a strategic and detailed development programme that will enable their knowledge, skills and understanding to be regularly improved to a level that allows them to gain benefit from the implementation of a transformational ICT strategy. A Framework for ICT Technical Support (FITS) programme will be implemented to demystify the management of ICT. This programme will contribute to the change management strategic plan of the Academy.

Whilst realising ICT is only a 'tool' for learning we are convinced that with a strategic view, effective implementation and careful management, ICT can positively impact on standards in a wide range of subjects directly or in-directly.

2.4 Developing our Specialism

We are passionate that our specialism will contribute to the future economic prospects of our learners and our community. We want technology to promote the understanding of our specialism and its importance to our local community. We will apply technologies that will deepen that understanding and knowledge for all who visit the Academy both physically and virtually. Our online presence will promote the specialism through its design and content and our business partners will be involved in enabling a greater knowledge of their contribution to our learners through interactive technologies (touch screens, display technologies) sited both in the work place and the Academy. The relevant learning and social spaces within the Academy will promote our specialism through the learning and display technologies that are available.

We will promote the use of ICT to engage learners in Design and the Built environment. Technology plays a major role in these areas through designing, modelling and the drawing of schemes and plans. We want our learners to be equipped with the required technical knowledge, skills and understanding so they can consider the professional aspects of the specialism such as for careers in Architecture, Engineering, Surveying or Land Management.

Technology will enable us to develop our aim of enhanced work related learning by enabling us to be able to develop clear communication channels with the businesses that support our learners and by giving us the opportunity to make learning environments relevant and complementary to work environments.

We will give our students opportunities to engage in work related learning with cutting edge technology. These opportunities will be both virtual and real. Our technology will bring virtual resources from the World Wide Web to our student's devices enhancing the real life opportunities we will offer them. We want our students to experience and learn about, and from, architecture, tourism, specialist restoration skills, hard trades, geology, service industries etc. All these disciplines, we feel, can be enhanced by technology. This could be by the use of video conferencing, enhanced communication tools (blogs, wikis) or by utilising the same technologies as used in the work place (cad, data capture etc)

The strategic implementation of technology to enhance our specialism will, we feel, strengthen and ultimately transform the life chances of our students. We will be offering to them cutting edge opportunities that are reflective of the industries they may be employed in. This will make them attractive to future employers, either in our area or elsewhere. They will also be able to develop aspirations for entry into higher education where they will be able to develop their education still further.

Our specialism will create a real focus on the use of technology to solve problems and create solutions. This learning will be utilised in other curriculum areas such as Science and Mathematics. We will seek to develop close relationships with Land Based Industries, Design Practices and Engineering firms in our community.

2.5 Promoting social cohesion

Through the development of our open access learning platform policy we will develop cost effective ways for our families to gain home access to ICT to support family learning and parental engagement. We want to promote social cohesion and community diversity. We see technology as giving us the opportunities to enable greater social diversity by offering, in the first instance 'virtual' opportunities to connect with other learners and communities regionally, nationally and eventually globally. Our community

learning platform will offer these opportunities for virtual dialogue that will 'open the door' to a wider understanding of communities and eventual physical engagement with others.

The Academy will be in an area of some social disadvantage and we will focus our efforts on raising the aspirations of the communities we serve. We feel our technological solution must be able to address some of the regeneration issues of our community. We will seek to place technology into the community, we will develop an open access policy that will help to promote engagement and give our community the opportunities to become involved in life long learning activities. Our extended school policy will help address issues of digital inclusion by making technology available to learners who otherwise may not have access to learning resources and on line communities.

We will work closely with other providers of 'public space' (libraries, surgeries, cafes etc) to place technology into these spaces to enable our community to have open access to community learning resources.

Students from all backgrounds will attend our Academy. An important group we will support are our traveller community. Building on the best inclusive practice that has been identified by Becta and others we feel it is important to seek a technical solution that will enable ICT to support the education of this group, both in terms of enhanced communication and learning support but also the procurement of ICT solutions that can be placed in traveller homes.

2.6 Ensuring sustainability

We will aim to put the power of technology into the hands of our learners. We will do this by adopting a policy of personal ownership. We believe by each student having a device available to them easily this will begin to change the learner/teacher relationship. We will seek solutions that are inclusive. We will adopt a policy of wider access to ICT through increased parental engagement. The Academy will be designed to include areas where families and the community will be given access to ICT. Our vision is access for all.

Our approach to the use of ICT will be flexible and we will seek options that are sustainable and scalable for the future. We will adopt a sustainable approach to the integration of ICT into all aspects of the Academy. We realise that this is more than just the procurement of technological solutions. We will build ICT sustainability into recruitment, training and development and community and family engagement agendas. Our sustainable solution will enable our multi-site Academy to be unified by enhanced use of communication tools.

3 ICT to transform management

3.1 Improving information management

ICT will support all relevant aspects of the Academy's organisation and management. We want our technology to provide relevant and effective information to support the learner, and we want the gathering of that data to be as easy and pain free as possible.

ICT will be effectively deployed to:

- Support the management and interrogation of data – through the learning platform
- Contribute to the effective management of teaching and learning by providing learning resources when and where required – through the implementation of a robust managed service
- Manage effective continuity of learning – through the implementation of a sustainable solution agreed with our partners
- Ensure effective deployment of staff and resources – through a robust audit of need and agreed training and development plans
- Enhance communication – through the wide use of technology supported by a robust managed infrastructure
- Enable the buildings to be managed effectively – through appropriate building management systems and solutions
- Manage the deployment of space – through an intelligent management information system that supports real time decision making
- Manage security and access – through an converged, intelligent infrastructure
- Improve the work life balance of our staff – through a change management programme with the effective use of technology at its core

3.2 Enhancing staff effectiveness and communication

We will utilise the power of technology to manage and interrogate data. We will make available widely, the detailed assessments to support learner progress and achievement. We will achieve this by embracing the aims of the Schools Interoperability framework (SIF). Through our MIS and learning platform this information will have the potential to impact on students' learning journeys. We will aim to utilise our technology to the full to make learning interesting, challenging and personalised.

The Senior Leadership Team (SLT) will benefit from a more efficient information flow within the Academy. This will allow more effective communication with outside partners e.g. DCSF, LA, and other providers) Learning teams will be able to track student performance, attendance, behaviour and individual target setting data both through the Learning Platform, the MLE or the MIS.

A single data base will enable the SLT to link all aspects of the admin and management. Managers at all levels, through the functionality of the MIS, will be able to access data on students and staff for promoting good practice and monitoring progress and achievement. This will be available at all sites through a single sign on.

Staff will gain access to a wide range of e-learning resources through a learning platform. This will be accessed with a single password. The platform will allow collaboration and

communication with colleagues and a place to share ideas. It will provide access to approved, standards based lessons and a calendar of all the relevant teaching-related events. This is key to our success so we can enable all staff to readily utilise technology no matter what site they are working on.

3.3 Enhancing Student effectiveness and communication

Again through the learning platform students will be able to access what we will call 'my programmes and work' irrespective of their location. They will gain access to on line help and relevant learning teams. They will be able to see who is online and decide on any collaborative learning approaches. The platform will promote the positive aspects of the specialism, nurturing high levels of skill, knowledge and understanding about the specialism. The online space will be personalised to the users' requirements and present the user with an on screen environment that will motivate and engage.

3.4 Enhancing parental effectiveness and communication

From any site authorised parents and carers will be able to utilise the learning platform to engage with learning and the aims of the Academy. They will be able to gain knowledge of their child's progress and the progress of the Academy. This we feel will begin to promote home and family learning. Next steps in learning will be available as will progress reports, termly learning plans, behaviour reports, attendance records and advice on how to promote learning and good behaviour. These developments will enhance the face to face regular contact the will take place

3.5 Enhancing community effectiveness and communication

We will seek to place technology in the community and give access to areas of information to the community that will promote both the work of the Academy and the integration of the community with it.

We will use our online communications to broadcast Academy news, promote extended school activities, develop and promote chaplaincy links and activities and strengthen our links with local parishes and churches. We will, where relevant, enable the wider community to benefit from the considerable investment we plan to make in technology

3.6 Improving continuity

We will use technology to enhance the continuity of learning we offer ensuring that when learners move institution and/or learn from different places and/or Academy sites their experience is seamless and coherent. We will engage our partners in the process seeking to have common standards of information requirements.

Improved communication, enabled by ICT, will help our students move and learn across our sites. The complex nature of our admissions and potential placement of students will be enabled by a robust technology infrastructure across our sites that make continuity easier and avoid any un-necessary duplication.

The learning platform will enable learners to access their learning easily and where appropriate gain the necessary accreditation of their learning.

3.7 Enabling flexibility and increasing utilisation

We want the technology to inform the strategic direction of the Academy demonstrating to us where we are doing well and not so well. We will use our Management Information System (MIS) to enable effective deployment of staff and resources enabling us to increase the utilisation of the space within our institution.

As we move towards more flexible learning spaces the technology will need to be smart and be able to easily predict and manage how spaces will be used. This will be crucial in breaking down the historic reliance of specific spaces to deliver specific learning. The proactive management and deployment of learners through ICT will contribute, going forward, to our vision of variable class groups. This we feel will enable the diverse nature of the learning spaces our sites will offer to be utilised appropriately.

We are very conscious that the ICT we implement must have a positive contribution on the work life balance of our staff. It must enable them to work more effectively and produce better results without being a burden. We will invest in ensuring our staff have the basic skills needed to benefit from technology so they are skilled enough to deploy it as and when they see fit.

We will enable technology to contribute to a flexible working policy. We will achieve this through a thorough audit of our current situation and resources. We will deploy staff resource, supported by technology where appropriate, to effective positions to deliver our strategic education vision.

3.8 Promoting community involvement

Developing our relationship with parents and carers and the wider community will be complemented by the implementation of a clear communications strategy supported by ICT. We believe ICT can transform this relationship enabling increased ownership of learning. Making available information that historically has not left the confines of the school to a wider audience can, we believe, with careful and sensitive management, enhance the learners' journey. For example having relevant information available to parents on students' achievements on demand will increase, we believe, parental engagement with learning.

We will work with a wide range of partners to develop a cost effective ICT solution. We recognise that Northumberland LA currently provide many of the services we will require. We will work with them to develop a solution that fits our vision.

We also recognise that a wide range of ICT services may be available in our regional business community. Through dialogue we will seek to source the best sustainable solution for our Academy. This solution may utilise some current resource enhanced by new partners or may build on and develop already tried and tested solutions that can be implemented into a new transformed learning environment.

3.9 Promoting safety and excellence

We will adopt robust policies to enable online safety and child protection. Technology will enhance the learning experience of all our learners enabling them to feel safe and fulfilled and give them opportunities to make positive contributions. This we will achieve through the personal, safe access to technology when and where appropriate.

We will adopt an acceptable use policy for our technology and will put in place practices that enable any abuses to our system to be easily identified, tracked and dealt with. We will also aim to work with our students developing positive behaviour in terms of electronic communication so as to alleviate the possibilities of cyber bullying and harassment.

We aim to build a significant building in terms of educational transformation and design. We will implement smart technologies to manage this building. We will aim to make these 'learner friendly' so learners can learn in, and from the building. This we believe will contribute to our specialism and demonstrate 'real time' management of the building for the benefit of its users and the environment. These 'smart technologies' will also manage security and access to and within the building. This will enable us to provide a secure environment for our learners and give us the ability to manage the deployment of people across our sites.

4 ICT to transform design

4.1 Developing virtual and physical spaces

With informed strategic thinking we believe technology has the potential to transform the spaces our young people learn in. We are very conscious that an increasing amount of learning activity takes place in a virtual space. This can have an impact on the physical space that was once the main stay of learning. This is a trend happening across all sectors and is not exclusive to Education. We want to utilise this trend to transform learning opportunities and spaces in which learning takes place. Our physical spaces will be enhanced by ICT and our virtual spaces will be developed around the learners' needs.

We will be based on many sites and we have a vision that learning should not be 'location specific' By this we believe ICT can contribute to enabling learners to access learning in a place and time to suit them. Our buildings will reflect this desire. So for example work can be begun in classroom with a set group but can easily be continued in another location within or outside of the Academy. Or conversely students will begin a task away from a designated space and come together to work collaboratively to continue or finish that task.

Our ICT infrastructure and device strategy will support this desire and our buildings and sites will be designed to make this vision a reality. Technology will enable us to design and build inclusive spaces so all our learners can be stimulated in a way that is appropriate to their age and stage of learning.

4.2 Implementing flexible learning spaces

Our ICT will be flexible enough to allow a variety of room configurations. Across all our sites we will use technology to enable us to make our learning spaces fit for purpose allowing us to re configure rooms to suit a range of preferred learning and teaching styles

We aim to be able to implement a strategy of variable group sizes, not restricting ourselves to set groups of students. To make this feasible our learning spaces will have to contain a large degree of flexibility that ICT will enhance.

Large spaces will require display technologies that enable all students to be engaged. Our learning spaces will also need to be flexible so people can move easily within them and through them. We want students to be able to benefit from the flexibility offered to them not be confused by it. A range of different teaching and learning styles will be supported and the technology will support emerging pedagogies.

Our learning platform implementation and an open policy on access will enable us to design flexible, generic spaces that we can 'stretch' to accommodate a range of learning opportunities. Our Learning Resource centre will be one of these spaces where the best in terms of designs for independent, personalised learning comes together. This will be a space we will make available to our community to support our parental engagement strategy.

Our Learning Resource Areas and open learning spaces will change as the nature of learning evolves and learners increasingly become more independent and learn to work together in teams.

While there will be a centrally staffed Learning Resource Space to enable access to specific expertise and resources at any time of the day the concept of learning resource

areas will be significantly wider than this. Each learning team or area will have access to space that can be used flexibly for learning. In some cases this may be a large space equipped with ICT; in others small group spaces to enable learners to work in teams or pairs. Learners and staff will recognise that resources take many different shapes and forms and can be used in different ways to produce different outcomes. We will aim for this to be implemented on all our sites to develop continuity

4.3 Creating a robust infrastructure

The ICT infrastructure built into our buildings to support our vision will be robust and effective. This will be managed so technology is seamlessly implemented into learning spaces and supports the activities within those spaces.

We want ICT to contribute to the safety and security of the learners in our Academy. Our building management system will improve access, transform security, save money and enhance the whole experience of being in any building on any of our sites.

By engaging in detailed dialogue with our community and business partners we aim to maximise the potential of our infrastructure by utilising a range of resources that may be available to us. We see technology contributing to the wider regeneration of Newbiggin, Hirst and Ashington and the infrastructure we build will need to support that regeneration by bringing new opportunities to the area.

4.4 Promoting environmental responsibility

In line with current and future thinking we wish our Academy to have a small carbon footprint. The careful choice of a technology solution will contribute to this. We will work with an ICT partner that can provide us with sustainability and may include a wide range of technical solutions.

We will build the environmental decisions into our thinking early so as to benefit from current thinking throughout the design process.

Further to this we wish the buildings and sites to be a learning resource for our students, so environmental concerns and the ability to impact positively on the environment become concrete in our students' minds. We want them to be able to monitor the buildings using technology and take informed decisions based on their observations. These observations could be monitoring heat gain from solar panels or rainwater harvesting levels and benefits through the use of digital display.