



NATIONAL REPORT ON ELEARNING IN THE UK NO LIMITS

Introduction

For the purposes of this report, it is important to first understand the meaning of “elearning”. Definitions abound, but the following statement appears to adequately define the topic:

eLearning is...

“The delivery of a learning, training or education program by electronic means... E-learning can involve a greater variety of equipment than online training or education, for as the name implies, "online" involves using the Internet or an Intranet. CD-ROM and DVD can be used to provide learning materials.”

Derek Stockley, HRD and Performance Consultant

Wherever possible this report will address elearning as it pertains to schools. However, in order to best understand elearning in education, one must look at the elearning industry first.

The eLearning industry

eLearning in the UK is a dynamic sector that is dominated by several big players, *Epic* being the most influential of these. *Epic* has been operating for many years, but there are numerous additions to this market every year. There is even a monthly elearning magazine dedicated to all things elearning (on a global and national scale) – *e.learning age*.

Epic conducted a survey in 2003 that looked at the future of elearning over the next three years. The results are proving prophetic.

The survey asked which markets would see the greatest growth in elearning between 2003 and 2006; schools were fourth on the list after Tertiary Education, Corporate and Government sectors. Schools were considered to be a ‘confusing market’ as most online school age learning was accessed from home. Lifelong learning was thought to be the slowest area of growth.

The survey showed that elearning is seen as a way of providing greater access to learning and increased flexibility in learning; however, it is not seen as a means of providing more effective learning. It is also considered vital to maintain tutor led learning rather than leaving learners to progress through courses on their own. This is to allow more personalised and interactive forms of learning than potentially the classroom or workbooks.

Since this survey, enormous advances in elearning have occurred, mainly in the areas predicted by the survey. One area that was not explored in the survey was the idea of cities being “Centres for Excellence” in elearning. Companies in Brighton hold more than ten percent of the UK’s elearning market share (the equivalent of London). As a result, the Council for Brighton and Hove is making a bid to become the European Centre for Excellence in elearning. The Brighton eLearning Alliance has a strong focus on improving elearning skills and standards. In addition, innovation and demonstration of the benefits to a wider audience will be a core function of the Alliance.

Education

eLearning in the field of education is “confusing” according to the 2003 *Epic* survey. A further research paper written in 2004, “An Introduction to eLearning: A Study of the Current State of e-Learning in the United Kingdom” (Gizella Dewath – Researcher) indicated similar concerns.

“In spite of the enthusiasm and commitment being shown by the UK government, there is still considerable apathy, confusion and scepticism about e-learning amongst teachers, students and academics alike. Although most recognise that e-learning has the potential to enhance greatly learning and the learning experience at all levels, many feel that its drawbacks are currently still too great to commit so heavily to it.”

Cost

In “Big Business” the approach is to call in external companies to deliver a training package that is bespoke to their business. These packages are considered ‘disposable’ – they are developed quickly to address a particular training need and are considered obsolete soon thereafter. Seldom are they updated, rather they are replaced. Learning in these organizations is considered dynamic and as elearning is predisposed to

change, it is a favoured medium. Large sums of money go into researching and developing elearning systems that can easily be adapted to meet disparate corporate needs, at a reasonable cost considered the transient nature of the training package. Although this research paper was published about 18 months ago, it still holds true that schools are reluctant to invest heavily in elearning solutions as this restricts their budgets in other areas.

Instead, the elearning that most schools have engaged in has been based on teacher research and use of resources that they have found on the Internet. There are hundreds of sites that offer free lesson plans to teachers (in every subject), but there are far fewer that offer 'online learning' for use in the classroom.

Quality

There are a plethora of educational products on the market by way of CD-Rom, however it takes time to review these products to ensure that there is merit in both the content and educational approach adopted. In the last five years elearning companies looking to increase their business and reputation in the education field have employed curriculum design specialists that work within the National Curriculum parameters.

Lack of Direction

Perhaps another reason why elearning in education has not progressed in the way of big business is down to a lack of clear direction. Large corporations take a strategic view of their business and allocate resources as required. Education until recently has not enjoyed this focus. ELearning is not new; it has evolved through the use of video presentations in the classroom to what it is today, but it has never had a clear 'champion'. The Department for Education and Skills has tried to address that. The DfES recognizes the fact that there is far more potential in ICT than is currently being tapped.

“Technology has been used in education for many years. It has not yet transformed teaching and learning, but it has made a major impact in many schools, colleges and universities. It has also made information more accessible and administration more efficient.”

The Department's latest e-strategy, 'Harnessing Technology: Transforming learning and children's services' (March 2005) provides a clearer aim than previously.

The strategy sets out to achieve four objectives:

- transforming teaching, learning and child development, enabling children and learners of all ages to meet their highest expectations
- connecting with hard to reach groups in new ways
- opening up education to partnerships with other organisations
- moving to a new level of efficiency and effectiveness in our delivery.

The e-Strategy also has the following six priorities:

- an integrated online information service for all citizens
- integrated online personal support for children and learners
- a collaborative approach to transforming teaching and learning
- a good quality training and support package for practitioners
- a leadership and development package for organisational capability in ICT
- a common digital infrastructure to support transformation and reform

Perhaps this will provide the very necessary boost for elearning in schools to become more in tune with and appropriate to its learner market.

Many schools have developed their own elearning systems, and this report does not wish to ignore this progressive work. However, the report must acknowledge that elearning across the curricula is not the norm – yet. True elearning in education is still in its infancy.

Elearning - Art

This report, having put elearning into a national context, will now focus on the development of elearning in Art. This aspect of the report has proved difficult to research as there is so little information available on the topic. As a result, findings may be anecdotal or based on limited information.

The opinion of some Art teachers is that the use of computers to create Arts is as far as 'elearning' should go. Fortunately, this is not the case in many classrooms where e-resources are used as teaching aids and research tools.

It appears that museums and galleries have taken the lead in providing elearning experiences for scholars, and understandably most of this is around the topic of Art – perhaps as it is so visual and most elearning currently available is largely visual. It also seems that most of the information available is on the History of Art rather than the teaching of it. Whilst researching this report I came across several websites that exist only to provide links to other Art elearning websites. The majority of these (as you will see from the attached list – see Appendix 1) are best used as research tools or visual aids.

The majority of teachers feel that the elearning that is available is too theoretical (ie: History of Art) and that there is little that actually addresses the practical side of the subject. Some products (mainly websites aimed at the general public rather than schools) are interactive, but this is not as widespread as one would have hoped. And, many of these are not UK-related sites so do not cover the curriculum topics required for the National Curriculum.

Case Study

Djanogly City Academy in Nottingham, UK, is fortunate to be a Future Visions 2005 Prize winner and as such has benefited enormously from extra funding and sponsorship to be able to create an extreme futuristic school. Students have access to electronic ‘tablets’ for 80% of their lessons and teachers have full use of a school-wide wireless network. The new look building was only opened in June 2005, but elearning was in use well before this date. The Art Department, benefiting from previous technology (ie: whiteboards, laptops and projectors) and the IT skills of one of its teachers used to introduce every new topic with a PowerPoint presentation – covering theory and practical aspects of the section. In addition, technique videos loop on the screen during the lesson as learners engage in practical tasks. This has proved enormously popular, and ensures that learners are given the same information no matter who teaches them. More recently though, the Djanogly Art Department has gone one step further – creating an interactive workbook for learners to use at home or in school. This workbook covers the same theory and techniques as the PowerPoints but in a more personal and directed manner. Through its will to embrace elearning, the Art Department had already achieved a high level of learning provision before the new building was created; it will be interesting to see what they can do with the sophisticated systems now available to them.

Conclusion

Further Education and Big Business are leading the way in elearning provision. However, Primary and Secondary Education has realised the potential benefits of elearning and has started to embrace this medium as a means of engaging learners more effectively. This researcher doubts that 'virtual classrooms' will take over from 'real classrooms' in the near future, but elearning is definitely seen as a way to boost the learning experience – as teaching resources, teaching aids or interactive experiences. And as teachers become more comfortable with the technology and more aware of what is possible, more focused and subject-oriented work will emerge that is deemed useful by classroom practitioners.

Sources:

The Guardian newspaper (online)

The DfES website

The Epic website

"An Introduction to eLearning: A Study of the Current State of e-Learning in the United Kingdom" (Gizella Dewath – Researcher)

e.learning age (magazine)

Djanogly Art Department

Spartacus Educational website

Several other websites and schools provided background reading and research

Appendix 1

An example of the online Art Resources available (courtesy of Spartacus Educational website)

[Art History Resources on the Web](#): Christ Whitcombe, Professor of Art History at Sweet Briar College, Virginia, has produced a valuable directory of art resources on the Web. Whitcombe lists the resources under the headings: Prehistoric, Ancient, Middle Ages, Renaissance, Baroque, 18th Century, 19th Century, 20th Century and Non-European. Lists of museums and galleries for each of the major countries are also included.

[British Artists: 1750-1900](#): Biographies of 22 artists, illustrators and cartoonists working in Britain between 1750 and 1900. This includes artists such as James Gillray, Thomas Rowlandson, George Cruikshank, John Leech, John Doyle, John Tenniel, Phil May, Linley Sambourne, Bernard Partridge, Frank Holl and Luke Fildes. There are also entries from the journals that employed these artists such as Punch Magazine, The Graphic and the Illustrated London News.

[Artlex Dictionary of Visual Art](#): This dictionary of visual art has been created by Michael Delahunt, a teacher of visual arts at Sonoran Sky Elementary School, Scottsdale, AZ. What began as a short lexicon in the spring of 1996 has grown into a massive dictionary. So far Delahunt has produced definitions of 2,600 terms. Entries usually include illustrations, pronunciation notes, quotations and links to other resources on the Web. Delahunt is still working on the project and plans to add lessons and assessments that teachers and students can use.

[Art Lover's Guide to Britain and England](#): An excellent directory that enables the visitor to find paintings being exhibited in 650 museums and art galleries. The Art Guide is organized by artist, by museum and geographical area. The artists are listed in alphabetical order and once you reach their home page, you will be provided with a list of their paintings and the places where they can be seen. Each of the art museums has a list of the main paintings in their collection, contact details and links to other museums in the region.

[Life of the People](#): During his life the New York garment manufacturer, Ben Goldstein, collected works that stirred his very personal interest in the city of his birth, the American people, and the human condition during the first half of the twentieth century. Goldstein assembled outstanding holdings of works by creators who shared his social concerns. Among these artists were women, African Americans, and the Mexican muralists who were so influential at the time. Life of the People, created by the Library of Congress, is an online exhibition of Goldstein's collection of prints and drawings.

[Web Gallery of Art](#): The Web Gallery of Art presents over 3,500 digital reproductions of European paintings and sculptures created between 1200 and 1700. Visitors can browse the collection from the Artist Index (an alphabetic list of artists) or by using the website search engine to find particular paintings. There is a biography of each artist (usually taken from Encarta) and a list of their paintings in the database. As well as the picture itself, details are provided of its size and where it is being displayed. Guided tours are provided that attempt to help the visitor understand the artistic and historical relationship between different artworks and artists included in the collection.

[Arts Reference Library](#): BUBL Information Service, based at Strathclyde University Library, is a searchable database of Internet resources of academic relevance. The websites are organised by Dewey Decimal Classification and is browsable by subject or class number. The Arts main page has fourteen main categories that include: The Arts: General Resources, Fine and Decorative Arts, Art Galleries and Museums, Civic & Landscape Art, Drawing, Painting and Paintings and Graphic Arts. Each website listed has a brief review with information on the people and organisations that have created the website. This is an impressive site that fully deserves the large number of visitors it receives every day.

[Louvre Museum](#): The Louvre Museum houses more than 6,000 European paintings dating from the end of the 13th century to the middle of the 19th century. The paintings are organised into national schools. This includes: the French school, the Italian School, the Flemish, Dutch and German Schools and finally the Spanish and English Schools. A selection of the paintings from each gallery can be seen on the website. The website also provides information on the formation of the Louvre Collection.

[Leonardo da Vinci](#): Exploring Leonardo has been produced by the Museum of Science in Boston. The website is an attempt to provide a cross-curricular approach to Leonardo DA Vinci's work. The website has four main content sections: What, Where, When? (biography of Leonardo DA Vinci with images); Inventor's Workshop (a look at some of Leonardo's futuristic inventions); Leonardo's Perspective (Renaissance techniques for representing the 3D world on 2D surfaces) and Leonardo: Right to Left (explores Leonardo's habit of writing in reverse). An excellent teacher section has five lesson plans for hands-on classroom activities and three opportunities for students to communicate their ideas electronically. The site also has ideas on how to make the best use of the four interactive galleries.

[Vincent van Gogh](#): David Brooks of Toronto in Canada has produced a marvellous website for all students of Vincent van Gogh. The images of paintings and drawings are listed chronologically and by subject. Each one contains details of when and where it was produced and its current location. Other sections include portraits of Van Gogh by other artists, an On-line Forum, Books and Films, Van Gogh Exhibitions and Cultural Events, In the News, The Fakes, and Frequently Asked Questions. Easily one of the best art websites on the Web.

[Hieronymus Bosch](#): Hieronymus Bosch is one of the most intriguing artists in history. Only about forty of his paintings have survived and as none of them are dated it is therefore impossible to provide an accurate chronology. His life is also a mystery as records of friends, patrons, teachers, or any other source material that would help us understand his paintings have not survived. Although the basic themes in his paintings are usually quite simple, they are also heavily embroidered with subsidiary narratives and symbols. With this website Janos Dohanics has attempted to use his detailed knowledge to explain three of Bosch's most famous paintings: The Hay Wain, The Temptation of St. Anthony and The Garden of Earthly Delights.

[Pieter Bruegel](#): Pieter Bruegel is one of the greatest artists of the 16th century. His well-observed and truthful renderings of peasant life make his paintings a useful starting point for cross-curricular work. One of the best places to see his work is at the Paris WebMuseum. Created by Nicolas Pioch, a teacher at the Ecole Polytechnique, this website won the BMW Foundation Prize in 1995. A brief biography of Pieter Bruegel is followed by thumbnail images of his paintings that can be viewed in large format. Each painting includes its date, size and current location. Paintings featured on the site include the Peasant Wedding, The Triumph of Death, The Hunters in the Snow and The Beggars.

[Paul Gauguin](#): The United States Modern Gallery of Art is responsible for this well-designed and easy to use website. An overview of Gauguin's life and career is followed by seven of the artist's paintings: Landscape at Le Pouldu, Self-Portrait, Haystacks in Brittany, Words of the Devil, By the Sea, The Bathers and Delectable Waters. Each one is accompanied by detailed notes on the painting. For example, we discover that Landscape at Le Pouldu was painted from memory. As Gauguin explained: "Art is abstraction; draw art as you dream in nature's presence, and think more about the act of creation than about the final result."

[Edgar Degas](#): Produced by the Metropolitan Museum of Art, this website is dedicated to the work of Edgar Degas. As well as Degas' own work, the website also provides details of the artist's private collection of paintings. The website also contains a very good Teachers Centre that includes a variety of educational experiences that involve the images of work at the Metropolitan Museum. For younger children there are games and for older students the website has more complex activities.

[George Rarey's Sketchbook Journals](#): George Rarey was drafted into the US Army Air Corps in 1942 and eventually became a member of the 379 Fighter Squadron. Rarey was also a commercial artist and until he was killed in France in 1944 kept a cartoon journal of the daily life of the fighter pilots. This very impressive website, produced by his son, includes George Rarey's drawings, with explanatory text contributed by surviving members of the 379th Fighter Squadron. The website also features excerpts from Rarey's letters and his wife's memoirs.

[JMW Turner Archive](#): In 1856, nearly five years after Turner's death, his estate was settled by a decree in which the works found in his studio that were considered to be by his own hand were accepted by the nation as the 'Turner Bequest'. This comprises nearly 300 oil paintings and around 30,000 sketches and watercolours (including 300 sketchbooks). Turner left instructions that they had to be kept together in a special gallery. It was never built and although an extension was added to Tate Britain to house the collection, it could only display a fraction of it. However, after a 150 year wait, the entire Turner bequest has now gone online at the Tate gallery website.

[Hieronymous Bosch](#): The Museum Boijmans Van Beuningen in Rotterdam have created an adventure game on the life and works of the painter Hieronymous Bosch. The website, which won a Euro-Prix 2001 in December, also includes sections on Bosch's Works, Bosch's History and Bosch's Influence.

[Access Art](#): This website is run by Paula Briggs and Sheila Ceccarelli of the Arts Education Exchange, a non-profit making organisation based in Impington. Access Art has created a series of animated online workshops illustrating ideas from artists working in England. The online workshops are aimed at all ages and include sections on drawing, making sculpture and photography. New workshops are planned for later this year on colour and architecture. Aimed at people of all ages, the resources are highly visual and interactive. Each workshop contains advice for teachers who want to use the material in their lessons, or tips for people to take away from the computer and have a go at the technique themselves.

[Art History Resources](#): An impressive directory website of Art History resources on the web. The material is organized under the following headings: Prehistoric Art, Ancient Egypt & Near East, Ancient Greece and Rome, Art of the Middle Ages, 15th Century Renaissance Art, 16th Century Renaissance Art, 17th Century Baroque Art, 18th Century Art, 19th Century Art, 20th Century Art, Prints & Photography and Research Resources.

[Political Cartoonists](#): A website that contains the biographies and work of 152 cartoonists who have commented on important political and social issues over the last 300 years. Artists featured include Cornelia Barnes, George Cruikshank, Victor Deni, Will Dyson, Daniel Fitzpatrick, James Gillray, Olaf Gulbransson, Thomas Heine, Joseph Keppler, Rollin Kirby, John Leech, Robert Minor, Thomas Nast, Louis Raemaekers, Boardman Robinson, John Tenniel, Eduard Thony, F. W. Townsend, Boris Yefimov and Philip Zec.

[Red, Yellow, Blue](#): The latest resource created by award-winning AccessArt that enables young children to explore colour and colour mixing. The resource was created by Paula Briggs and Sheila Ceccarelli from AccessArt (both of whom are graduates of the Royal College of Art Sculpture School), and based upon practical teaching which took place at Greenhedges School in Cambridgeshire. Red, Yellow, Blue is

designed to be used by children, even those with a limited experience of IT. Text is limited - the resource is navigated by colour, sound and object based animations. Each child can create his or her learning pathway - there is no right or wrong route. Just as importantly, there is no end; the journey is cyclical and children can spend as long as they like with the resource. The interactive animated resource is also accompanied by a text-based printout which introduces teachers and parents to some practical methods of exploring colour in the home/school or community.

[Letters of Vincent van Gogh](#): Archive of the complete letters of Vincent van Gogh. Most of the letters are from Vincent, some are to him, or among other people. Search by word, or browse by topics such as alcohol, appearance, attitude, food, health, phobia and state of mind. The website is currently expanding the number of annotated subjects.

[Feast of the Gods](#): Around 1512, the Duke of Ferrara commissioned Giovanni Bellini to paint the Feast of the Gods. Dosso Dossi subsequently decorated a gallery for the Duke, and, in 1522, painted over half of Bellini's canvas. Seven years later, Titian repainted the Feast of the Gods again. What did the earlier versions look like? How much of each artist's work do we see today? What motivated these unprecedented changes? For centuries these questions remained unanswered. In the last fifty years, technical innovations in conservation science have enabled specialists at the National Gallery to obtain X-ray, infrared and cross-section data. This information has proved crucial in dispelling the mystery surrounding this painting. This website provides a highly interactive examination of this painting.

[Rodin-Web](#) is the world's largest Website on Rodin, with an overview of 220 Museum collections containing Rodin's work; an Image Database with over 100 historical photos; biographical links, extensive book list, email network, etc. Rodin-Web is run by Hans de Roos from Germany and is a not-for-profit, academic initiative.

[Drawing Together](#): As part of the Big Draw 2002, The Campaign for Drawing and AccessArt have collaborated to create an online drawing resource entitled "Drawing Together". Accessible from both the Drawing Power web site and the AccessArt site, Drawing Together aims to engage directly with children and to enthuse and inspire them with ideas which will enable them to explore drawing in a variety of ways. Drawing Together will present ideas through a highly illustrative, animated and interactive digital resource which will appeal to children aged 8 and upwards. The main aim behind the resource is to encourage children to draw, to make mistakes, learn new techniques, show ideas to friends, swap methods, experiment and most of all have fun!

[Draw a Story](#): The Draw a Story for Me project, organized by Patti Weeg, helps children as they begin global communication and recognize and celebrate their cultural diversity. Participating students are encouraged to share drawings and images, and text if possible, that tell the stories of their every day life. Students may join the project at any

time of the year and all languages are welcome. To find out more about the project, visit the project's webpage.

[FitzWilliam Museum Online](#): The Fitzwilliam Museum was founded in 1816 by the bequest of the VIIth Viscount Fitzwilliam of Merrion to the University of Cambridge and contains magnificent collections of works of art and antiquities of national and international importance. These include antiquities from Ancient Egypt, Greece and Rome, Roman and Romano-Egyptian, Western Asiatic and Cypriot Art; applied arts, including sculpture, furniture, clocks and rugs; coins and medals; illuminated manuscripts and printed books; paintings, drawings and prints. The Fitzwilliam Museum has so far provided online access to information on 10% of its collections.

[American Indian Paintings](#): In 1960 Mrs. Avery, an Arizona native now living in Texas, purchased a painting by Navajo artist Beatién Yazz. She became hooked. By 1999 her world-class collection of original works by American Indian artists grew to over 500 paintings. With the help of the Arizona State Museum she has created an online exhibition of her collection. The website also contains stories about her collecting methods of the last forty years and the relationships or connections she built with the artists.

[Papalnk Children's Art Archive](#) is a non-profit organization dedicated to the art of youth. Papalnk's activities encompass the exhibition of works by young artists, the archiving of historically significant children's art collections and the building of communities that support children's creative endeavors. Through open archival access, Papalnk seeks to "grow the audience for children's art and reinject the creative spirit of young people into human experience."

[Henri de Toulouse-Lautrec](#): Despite his notoriously dissipated lifestyle, Toulouse-Lautrec was a dedicated craftsman. His work, with its bold and arresting forms, was one of the most important influences in gaining acceptance for both lithography and the poster as major art forms. This website, run by the San Diego Museum of Art, enables you to look at this large collection of Toulouse-Lautrec's posters.

[Graphic Witness](#): This website dedicated to social commentary through graphic imagery by artists working from the turn of the 20th Century to the present, with related bibliographic and biographic data. The two newest sections of Graphic Witness are Taller de Gráfica Popular, the noted Mexican collective graphic workshop, and The Illustrated Enemy, a look at how the combatants in World War I (and some from World War II) viewed one another, by illustrated post cards and magazine caricature.

[James Gillray](#): In 1775 James Gillray began selling his engravings to London print shops. Three years later he became a student at the Royal Academy where he studied under Francesco Bartolozzi. Gillray set himself up as a portrait painter in Little Newport Street but he did not obtain many commissions. Therefore Gillray was forced to continue

producing engravings for print shops. Gillray's first prints were chiefly devoted to social subjects but by 1782 he began to concentrate on political caricatures. After 1791 Gillray worked exclusively for Hannah Humphrey and helped her become London's leading print-seller. This website run by Bucknell University provides forty-four examples of Gillray's best work.

[Artist Toolkit](#): Artists use visual elements and principles like line, colour and shape as tools to build works of art. On this imaginative website you can learn about these concepts in a variety of ways. This includes watching animated movies demonstrating the elements and principles. You can also watch professional artists Ta-Coumba Aiken and Judy Onofrio create original compositions to see how artists use the visual elements and principles.

[Art Educate](#): Educate's art section complements the QCA Primary Schemes for Work for Art. A full unit of work is provided: weekly lesson plans, worksheets, interactive resources and assessment. Topics include printing patterns, collecting natural lines, drawing around shapes, experimenting with textures by making clay tiles, imaginative painting, looking at textures, looking at colour and simple paper collage.

[Painting the Weather](#): This online exhibition draws together the most striking weather-inspired works housed in collections around the UK. The website features 100 paintings by 80 artists including Monet, Dürer, Degas, Renoir, Reynolds and Van Gogh. There are special in-depth commentaries on 15 key works and routes into the show by theme, artist and where you live. You can examine the paintings in detail with a high quality zoom and send e-cards. Visitors can also listen to an audio tour conducted by Neil MacGregor, Director of the British Museum.

[Salvador Dalí Museum](#): This museum is the permanent home of the world's most comprehensive collection of the renowned Salvador Dalí's work. Compiled by the A. Reynolds Morse and Eleanor Morse over a 45-year period, it is celebrated for its 95 oil paintings, and features excellent examples from Dalí's four major periods - Early (1917-1927), Transitional (1928), Surreal (1929-1939), and Classic (1940-1970s). With oils spanning from 1917 through 1970, the collection provides an excellent overview of Dalí's major themes and symbols. Characterized by its diversity, it includes the Impressionist and Cubist styles of his early period, abstract work from his transition to Surrealism, the famous surrealist canvases for which he is best known, and examples of his preoccupation with religion and science during his classic period. In addition to the 95 oil paintings, the collection includes over 100 watercolors and drawings, 1,300 graphics, photographs, sculptures and objects d'art, and an extensive archival library.

[Artist Toolkit Encyclopedia](#) is an in-depth guide to learning more about the building blocks of composition. Here you will see many examples of works of art that illustrate the visual elements and principles. Subjects covered include Line, Shape, Colour, Space, Texture, Balance, Emphasis, Movement and Rhythm.

[Museum of Contemporary Art: Website Insights](#) is a searchable database of MCA Collection highlights. At present, the MCA holds almost 6,000 objects, works representing trends in art after 1945 in all media and genres: paintings, sculpture, works on paper, photography, video, film, installations, and artists' books. Among the greatest strengths of the MCA Collection are surrealism of the 1940s and 1950s, minimalism of the 1960s, conceptual art and photography from the 1960s to the present, recent installation art, and art by Chicago-based artists. The search engine allows visitors to search by artist name, nationality, title of work, medium, and the decade in which the work was produced.

[Artyfactory](#) is a free online workshop for artists of any age. The website is building a growing resource of ideas and techniques designed to improve artistic skills. The workshops are carefully designed to meet classroom needs. Convenient bites of information are comfortably navigated on pleasantly stylised interfaces. Artyfactory currently host comprehensive courses on Ancient Egyptian Art, African Mask Design and Pencil Portraiture. Each workshop has an interactive quiz or games associated with its theme. Artyfactory enhances the practical side of each workshop with appropriate background knowledge of its theme.

[Leonardo da Vinci](#): Even though he did not finish many of his paintings, you could not call Leonardo DA Vinci lazy. In his lifetime, he worked as an artist, scientist, architect and inventor. He painted the world's most famous painting and designed flying machines hundreds of years before anyone got round to building them. This BBC website on Leonardo DA Vinci provides a detailed biography with examples of his paintings.

[Teacher Resource Exchange](#): This website is designed to help teachers develop and share ideas for activities and resources. Contributions take the form of simple ideas and questions, to complete lesson plans or schemes of work, which will enable other teachers to use these resources within their own lessons. This section covers Art. You can browse and download resources without registering. You will, however, need to register if you would like to submit new resources and add comments or materials to existing resources.

[Art and the First World War](#): The Western Front was a short train journey away from central London. The British government took advantage of this by commissioning the leading artists of the day to make eye witness accounts of the events of the war. Initially, the intention was to reproduce images for propaganda purposes, then to commemorate and record the service and events of the war. This BBC website enables you to explore the battleground terrains through artists' eyes and to find out how events of international significance were recorded.

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[Acquavella](#) is a family-owned gallery founded by Nicholas Acquavella in 1925. The gallery first specialized in works of the Italian Renaissance, but in 1960, when William Acquavella joined his father, the focus of the gallery expanded to major works of the 19th and 20th centuries, including masters of Impressionism, Post-Impressionism, Cubism and Surrealism. The entire scope of the 20th century is now represented, including Abstract Expressionism and Pop Art. The Acquavella website includes several online exhibitions.

[Guggenheim Online](#): The Guggenheim collection online premiered in April 2001 with a selection of works of art from the New York museum's holdings. Currently representing 169 artists, the collection online encompasses both the classic and the new - from the Guggenheim's earliest work, an 1867 landscape by Camille Pissarro, through more recent acquisitions, a sculpture by Robert Gober. Each work may be viewed at small, medium, or large resolution, and is accompanied by insightful commentary. The site also includes additional scholarly and contextual information, such as artist biographies, definitions of art-historical terms, concepts on art, and suggested readings, all of which form a searchable database.

[Arts Alive](#): This website is the outcome of a QCA curriculum development project set up to identify ways in which the contribution of the arts to pupils' education can be maximised. It is designed for use by headteachers, arts subject leaders, school governing bodies and arts practitioners. The site invites schools to contribute their own work so that other schools can benefit. Schools interested in sharing their work should complete the case study template and send it to QCA with examples of their pupils' work.

[The Digital Palette](#) is the result of two and half years work and has been produced by art teachers. It aims to represent all phases of education and is intended to be a resource for teachers who want to use ICT in Art Education. The case studies provide exemplars of good practice. They demonstrate different approaches and use a number of techniques and processes, as well as a range of different software. The website is supported by a CDROM which will be updated as new case studies are submitted.

[Sodarace](#) is the online Olympics pitting human creativity against machine learning in a competition to construct virtual racing robots. Sodarace invites both human and artificial intelligences to compete. Humans, from young to old, use the sodaconstructor interface to learn to construct handcrafted virtual robots. Artificial Intelligences, created by researchers the world over, use the Sodarace API (Application Programming Interface) to learn to construct computer-generated virtual robots.

[Born Magazine](#) is an experimental venue marrying literary arts and interactive media. Established in 1997 the main objective of Born Magazine is to make sure original projects are brought to life every three months through creative collaboration between writers and artists. Currently the website features Story Problem, an interactive adaptation of a poem by Terri Ford and Blue Madonna by Molly Sokolow.

[V & A Learning](#): This experimental digital teachers' pack has been designed to support teachers using the British Galleries in the Victoria and Albert Museum independently with their classes. The resource is aimed at primary and secondary school teachers and will be of particular use to teachers of History and Art and Design. It includes suggestions for activities linked to the National Curriculum together with supporting historical information, downloadable worksheets, a facility to design your own worksheet and a forum for teachers to share their ideas on how to make best use of the galleries.

[Kinder Art](#): This website claims to have the largest collection of free art lessons on the Internet. What began in 1996 as a few helpful ideas for teachers and parents, has since grown into an enormous collection of resources featuring over 800 free lesson plans. The material is organized under the following headings: Architecture, Make an Art Book, Artists/Art History, Bulletin Boards, Crafty Ideas, Cross Curriculum Ideas (Math, Science, Geography, Language Arts), Drama, Drawing, Folk Art, Multicultural, Painting, Printmaking, Recycling (Art on a Shoestring), Seasonal Themed Ideas, Sculpture and Collage, Textiles and KinderArt Kitchen.

[American Art](#): This website provides details of artists working in America between 1750 and 1865. This includes Karl Bodmer, Gilbert Stuart, George Catlin, Thomas Cole, Fitz Hugh Lane, William Sydney Mount, John Trumbull, John Vanderlyn, John Faed, George Inness, Thomas Sully, George Caleb Bingham, John Frederick Kensett, John James Audubon, Samuel Finley Breese Morse, Asher Brown Durand, Charles Willson Peale, Raphael Peale and Rembrandt Peale.

[Sistine Chapel](#): Built between 1475 and 1483, the Sistine Chapel has originally served as Palatine Chapel. The chapel is rectangular in shape and measures 40.93 meters long by 13.41 meters wide. It is 20.70 meters high and is roofed by a flattened barrel vault, with little side vaults over the centered windows. The architectural plans were made by Baccio Pontelli and the construction work was supervised by Giovannino de' Dolci. Michelangelo was commissioned by Pope Julius II della Rovere in 1508 to repaint the ceiling; the work was completed between 1508 and 1512. This website allows you to take a virtual tour of the Sistine Chapel.

[Digital Palette](#): Research has shown that many art teachers are reticent to use ICT in their Art teaching - even where resources allow for this. The Digital Palette is intended to provide an active source of direct support to promote teaching and learning where new technology is used in harmony with traditional techniques in a creative context. The different

facets of this website provide sources of inspiration as well as resources (e.g. the Image Bank) for use in a number of cross-curricular projects. The Digital Palette is the result of two and half years work. It is a web site for art teachers and has been produced by art teachers. It aims to represent all phases of education and is intended to be a resource for teachers who want to use ICT in Art Education.

[Illuminating the Renaissance](#): Manuscript illumination, the quintessential medieval art form, enjoyed a final flourish during the Renaissance. In the wake of the invention of printing, Flemish illuminators created extravagant and lavish manuscripts in which their art was revitalized and given new direction. This brilliant new style resulted in some of the most colourful and luminous book illumination of the late medieval era and quickly gained patronage throughout Europe. Illuminating the Renaissance at the Royal Academy (29th November 2003 - 22nd February, 2004) is the first exhibition to bring together the greatest works produced by Flemish illuminators during this exceptional period.

[Buckminster Fuller Institute](#): In 1917 Buckminster Fuller discovered synergetic geometry. Over the next few years he experimented with structural designs, aimed at economical, efficient, trouble-free living, intended for mass-production. Today he is best remembered for inventing the geodesic dome, which he hoped would become a model for low-cost housing across the world. This website, created by the Buckminster Fuller Institute, features a great deal of his work, including his views on design science. The site is devoted to advancing principles articulated by Buckminster Fuller.

[Visual Media Center](#): According to the website the Media Center for Art History, Archaeology, and Historic Preservation at Columbia University "explores material culture, vision, media, and pedagogy in the broadest sense to connect faculty research and student learning through the creative application of technology." Featured projects include an interactive 360-degree tour of the Church of La Madeleine in Vezelay, France, and an entire site devoted to Frank Lloyd Wright's famed Fallingwater house.

[Archéire](#) is a collection of web sites focused on architecture in Ireland. It is intended to heighten awareness, and to foster debate both within Ireland and internationally. It is a diverse, growing collection of sites, with emphasis ranging from history and preservation to current architectural developments and issues. In addition the site contains original research and content dealing with the architecture and buildings of Ireland, architects Michael Scott and Kevin Roche, and designer Eileen Gray as well as a wealth of information on architects, awards, Irish architecture sites and competitions. The site is maintained by Paul Clerkin.

[Centre for the Study of Cartoons and Caricature](#): The catalogue contains details of over 90,000 British 20th century cartoon drawings. Most of the records in the catalogue are based on original cartoon drawings held by the Centre for the Study of Cartoons and Caricature at

the University of Kent, though some of the more recent records were catalogued from daily newspapers. You can perform straightforward searches simply by typing search terms into search box. The matching records are returned in date order, in pages of up to 12 thumbnails. The preview images are links to the full catalogue records.

[Seuss and the Second World War](#): Theodor Seuss Geisel was a life-long cartoonist. He is mainly known for his children's books but for two years, 1941-1943, he was the chief editorial cartoonist for the New York newspaper PM, and for that journal he drew over 400 editorial cartoons. The cartoons in this website are arranged in chronological order, by year, by month, by day. These images are also browsable by subject terms such as Hitler and Japan.

[Royal Academy](#). This organization has been involved in the cultural life in Britain for over 200 years. Its famous Summer Exhibition has been held every year since 1769. The Royal Academy is governed by the Royal Academicians, who are all eminent practising painters, printmakers, sculptors and architects. There are 80 Academicians, who are elected to one of the following categories: painting, sculpture and architecture. Its new website is under the creative direction of two notable Royal Academicians (Tom Phillips and Ian Ritchie) and allows you to look at the work of its members.

[Victorian and Albert Museum](#): Which museum can you find graffiti, Medici and Gucci, stained glass and fibre glass? Where else but the V&A, the world's greatest museum of applied and decorative arts. The V&A is home to amazing artefacts from the world's richest cultures, the V&A's unsurpassable collection has inspired and informed for over 150 years. The V&A aims to help teachers to use the Museum independently with their classes. To achieve this, we offer an annual programme of professional development for teachers, a range of publications both printed and digital as well as occasional taught programmes for schools.

[Curriculum Network](#): The Royal Society for the encouragement of Arts, Manufactures & Commerce (RSA) was founded in 1754. Curriculum Network builds on the success of the RSA's Opening Minds project, a study that looked at the need for government, education and society to introduce systemic change within the national curriculum, proposing that education be re-engineered to focus on a competence-based curriculum. This curriculum would change the way learning is organised in schools in order to make it more relevant to the demands placed on it by life in the 21st century. Curriculum Network maintains the momentum generated by Opening Minds and responds to recommendations made at the RSA's education conference in June 2003.

[Creativity Education](#): This National Curriculum in Action website gives practical ideas on how to promote pupils' creative thinking and behaviour. At the heart of these materials are examples of pupils' creativity across the national curriculum. One section looks at how teachers, senior managers and governors can promote and develop pupils' creativity. It asks three questions: How can teachers promote

creativity? How can teams of teachers promote creativity? How can senior managers and governors promote creativity? These questions are answered in some detail. There is another section that provides practical examples of creative work taking place in schools.