March/April 2010

Digest of Articles and Websites of Significant Interest

Libraries in the 21 St Century

The American Libraries in India

<u>The American Library</u> Gemini Circle, Chennai - 600 006

Library Director: Mr. M.K. Jagadish Reference Desk: Tel. No. 91-44-28574000 ext. 4017 & 4089 Fax: 91-44-28574307, Email: chennairefdesk@state.gov Web Address: <u>http://chennai.usconsulate.gov/irc.html</u>

The American Library

38A Jawaharlal Nehru Road, Kolkata - 700 071

Library Director: Dr. Sushanta Banerjee Reference Desk: Tel. No. 91-33-39846398/99 Fax: 91-33-22882445, Email: kolkataamlibrary@state.gov Web Address: <u>http://kolkata.usconsulate.gov/irc.html</u>

The American Library

4 New Marine Lines, Mumbai - 400 020

Library Director: Ms. Usha Sunil Reference Desk: Tel. No. 91-22-22624590/92 ext. 2204 Fax: 91-22-22624599, Email: libref@state.gov Web Address: <u>http://mumbai.usconsulate.gov/airc.html</u>

The American Library

24 Kasturba Gandhi Marg, New Delhi - 110 001

Library Director: Ms. Kala Anjan Dutta Reference Desk: Tel. No. 91-11-23472115/16 Fax: 91-11-23329499, Email: libdel@state.gov Web Address: <u>http://newdelhi.usembassy.gov/americanlibrary.html</u>

Online catalog for The American Libraries in India

http://amlibindia.state.gov

CONTENTS

Focus Section: Library in the 21 st Century	3
Business & Economics International Political Relations & Security	15 16
Communication & Information	18
Global Issues	19
U.S. Society, Values & Politics	20
Science & Technology	22

Articles listed in *Article & Web Alert* are available at The American Library nearest to you. Should you wish to receive photocopy of any of the articles, please fill in the attached reply-paid card with your request and mail it to us. We shall mail you the requested articles. For your convenience, addresses of the four American Libraries in India are given on the inside front cover.

As always, we welcome your comments and suggestions. Please send your feedback to Mr. Steven P. Kerchoff, Information Resource Officer, Public Affairs Section, U.S. Embassy, The American Center, 24 Kasturba Gandhi Marg, New Delhi 110001.

Note: Internet sites included in this publication, other than those of the U.S. government, should not be construed as an endorsement of the views contained therein.

Researched, compiled and edited by Sanjay Kumar Bhagat, Public Affairs Section, U.S. Embassy, New Delhi. Email: BhagatSK@state.gov

Library in the 21st Century

"Why do we still need libraries and librarians when everything is available online?" Librarians are often asked some version of this question. Many people wonder if the proliferation of widely-available electronic resources will render libraries obsolete. In fact, libraries are continuing to play a critical role in providing access to information resources, including both online electronic resources and traditional print materials.

Libraries have stored and preserved our shared cultural heritage for millennia. Today's libraries continue to preserve these resources in their traditional formats, while simultaneously making them available digitally. The American Memory project, a Library of Congress initiative started back in 1990, provides online access to materials documenting the American experience; these materials include sound recordings, motion pictures, prints, photographs, pamphlets, sheet music, and maps. The World Digital Library, currently being developed by the Library of Congress and UNESCO in partnership with libraries around the globe, offers digital resources which highlight cultural heritage. Many university libraries and public libraries are also engaged in digitization projects, thus providing worldwide access to their unique collections.

Libraries also provide free public access to these digital resources, particularly for individuals who might not otherwise have Internet access. Public libraries across the U.S. provide Internet access for patrons who may be seeking social services, health benefits, or employment information. In the state of Louisiana, for example, 57% of the population does not have Internet access at home, but in every single county there is a public library providing free Internet access. The American Library Association has affirmed the library's role in bridging the digital divide, stating that "no one should be denied information because he or she cannot afford the cost of a book or periodical, have access to the internet or information in any of its various formats. Every community and constituency has a stake in open access to information in all its forms."

Contrary to popular belief, not all digital information is free. Some of the most useful online resources are only available through commercial subscription databases. Libraries purchase access to these services on behalf of their users. An academic library, for example, may subscribe to several online databases F O C U S

on behalf of the university's faculty and students. The American Libraries in India subscribe to several online databases, including EBSCOHost, Factiva, Lexis Nexis, and Proquest, thus providing our patrons with access to articles from thousands of journals.

With the amount of online information increasing at a dizzying pace, researchers often have difficulty in locating the specific information which they are seeking. A Google search for "American history" or "American literature" yields tens of millions of results, some of them highly relevant and some utterly useless. Librarians are now applying their expert research skills in this new digital environment. Already familiar with such traditional resources as dictionaries, encyclopedias, almanacs, and indexes, librarians have expanded their research toolkit to include search engines, online databases, blogs, wikis, and e-books and e-journals. Librarians are the navigators through the sea of information, regardless of the information's format.

Finally, in addition to providing information resources in both print and electronic formats, today's library often serves as a hub for cultural and educational activities. Library patrons may attend a concert or lecture or book launch, participate in a book discussion, see a play, or view a film. Children and teenagers can find resources and activities appropriate to their ages and interests. Today's libraries play an integral role in the cultural life of the communities they serve. Here in India, the American Libraries support the cultural programming of the Embassy and Consulates. We invite you to enjoy the wide range of resources and programs and activities which we offer.

We welcome you to the libraries of the 21st century!

Steven P. Kerchoff Information Resource Officer India, Bangladesh, Sri Lanka, Nepal Embassy of the United States of America New Delhi, India

Webliography

America's Story from America's Library http://www.americaslibrary.gov

American Library Association (ALA) http://www.ala.org

The American Libraries in India: Online Public Access Catalog (OPAC) http://amlibindia.state.gov

The American Library, Chennai http://chennai.usconsulate.gov/resources.html

The American Library, Kolkata http://kolkata.usconsulate.gov/irc.html

The American Library, Mumbai http://mumbai.usconsulate.gov/americanlibrary.html

The American Library, New Delhi http://newdelhi.usembassy.gov/americanlibrary.html

Arlington Public Library http://library.arlingtonva.us/departments/libraries/librariesmain.aspx

Blue Ribbon Task Force on Sustainable Digital Preservation and Access http://brtf.sdsc.edu/index.html

The Eisenhower Presidential Library and Museum http://www.eisenhower.utexas.edu

Environment Protection Agency (EPA): National Library Network http://www.epa.gov/natlibra/

ePub Bud-Publish and share your own digital books in the open ePUB format! http://www.epubbud.com

Federal Bureau of Prisons Library http://bop.library.net

Federal Depository Library Directory (FDLD) http://catalog.gpo.gov/fdlpdir/FDLPdir.jsp

Federal Depository Library Program (FDLP) http://www.fdlp.gov

Federal Library and Information Center Committee (FLICC) http://www.loc.gov/flicc/

Franklin D. Roosevelt Presidential Library and Museum http://www.fdrlibrary.marist.edu

Frederick Scientific Library (National Cancer Institute) http://www-library.ncifcrf.gov

George Bush Presidential Library and Museum http://www.georgebushfoundation.org

Gerald R. Ford Presidential Library and Museum http://www.fordlibrarymuseum.gov

Hanford Technical Library http://libraryweb.pnl.gov

Harry S. Truman Library and Museum http://www.trumanlibrary.org

The Herbert Hoover Presidential Library and Museum http://hoover.nara.gov

Institute of Museum and Library Services (IMLS) http://www.imls.gov

Jeannette Rankin Library Program http://www.usip.org/library

Jefferson National Expansion Memorial Library http://www.nps.gov/jeff/historyculture/library.htm

Jimmy Carter Library and Museum http://www.jimmycarterlibrary.org

John F. Kennedy Presidential Library & Museum http://www.jfklibrary.org

Library of Congress http://www.loc.gov

Library of Congress Listservs http://www.loc.gov/flicc/listsrvs.html

Library Statistics Program http://nces.ed.gov/surveys/libraries/ Los Alamos National Laboratory Research Library http://library.lanl.gov

Lyndon Baines Johnson Library & Museum http://www.lbjlibrary.org

Military Educational Research Library Network (MERLN) http://merln.ndu.edu

NASA: Glenn Technical Library http://grctechlib.grc.nasa.gov

NASA: Goddard Space Flight Center Library http://library.gsfc.nasa.gov/public/

National Agricultural Library http://www.nal.usda.gov

National Archives and Records Administration (NARA) http://www.archives.gov

National Center for Atmospheric Research Library http://www.ucar.edu/library/

National Defense University Library http://www.ndu.edu/library/

National Endowment for Democracy: Democracy Resource Center (DRC) http://www.ned.org/research/democracy-resource-center

National Geographic Society Library http://www.nationalgeographic.com/resources/ngs/library/

National Institute of Standards and Technology (NIST) Virtual Library http://nvl.nist.gov

National Institutes of Health (NIH) Library Online http://nihlibrary.nih.gov

The National Library of Education (NLE) http://ies.ed.gov/ncee/projects/nat_ed_library.asp

National Library of Medicine (NLM) http://www.nlm.nih.gov National Library Service for the Blind and Physically Handicapped http://www.loc.gov/nls/

National Oceanic and Atmospheric Administration Central Library http://www.lib.noaa.gov

National Radio Astronomy Observatory Library http://www.nrao.edu/library/

National Transportation Library http://ntl.bts.gov

Nimitz Library (U.S. Naval Academy) http://www.nadn.navy.mil/Library/

Nixon Presidential Library & Museum http://www.nixonlibrary.gov

Northwest and Alaska Fisheries Science Centers' Library http://lib.nwfsc.noaa.gov

Patent and Trademark Depository Library Program http://www.uspto.gov/products/library/ptdl/index.jsp

Pentagon Library http://www.whs.mil/library/

Presidential Library Brochure http://www.archives.gov/presidentiallibraries/about/brochure.pdf

Ralph J. Bunche Library (U.S. Department of State) http://www.state.gov/m/a/ls/

Registry of U.S. Government Publication Digitization Projects http://registry.fdlp.gov/?flag=searchp&st_3=R

Ronald Reagan Presidential Foundation and Library http://www.reaganlibrary.com

Smithsonian Institution: Collections Search Center http://collections.si.edu/search/

U.S. Department of Commerce: Library and Information Center http://www.osec.doc.gov/lib/

U.S. Department of Education http://www.ed.gov

U.S. Department of Justice: Photo Library http://www.justice.gov/css-gallery/

U.S. Department of the Interior Library http://library.doi.gov

U.S. Fish and Wildlife Service: Conservation Library http://library.fws.gov

U.S. Geological Survey Library http://library.usgs.gov

U.S. Government Gadget Gallery http://www.usa.gov/Topics/Reference_Shelf/Libraries/Gadget _Gallery.shtml

U.S. Government Printing Office (GPO) http://www.gpo.gov

U.S. Government RSS Library http://www.usa.gov/Topics/Reference_Shelf/Libraries/RSS_L ibrary.shtml

William J. Clinton Presidential Library http://www.clintonlibrary.gov

Wirtz Labor Law Library http://www.dol.gov/oasam/library/

World Resources Institute: Library and Information Center http://www.wri.org/about/library



1. 21st-CENTURY INFO EXPERTS

By Chris Hayhurst. Career World, v. 38, no. 3, November/December 2009, pp. 14-17.

In response to changing demands, libraries are changing rapidly and so are librarians. The job of a librarian is becoming increasingly technical over time. The Bureau of Labor Statistics predicts that over the next decade most librarian jobs will be in nontraditional settings where librarians. Librarians will be analyzing and organizing information. The jobs are expected to be highly technical in the future. Many of the conventional titles would require reclassification as system analysts, database specialists and trainers, webmasters or web developers.

2. ENCOURAGING THE NEW LIBRARIAN

By Debbie Schachter. Information Outlook, v. 13, no. 6, September 2009, pp. 41-42.

This article advocates weaving together the passion, fresh ideas, and technical expertise of young librarians with the experience of more seasoned librarians. This will foster an environment that welcomes and challenges the new librarians into the noble profession of information management. The author appreciates the desire of the new professionals to offer something new to the profession and identifies their fear about lack of experience. On the other hand, some of the veterans feel threatened by the changes incited by the new ideas. The author advises developing relationships with the superiors and colleagues to have a lasting impact on new professionals' overall success. Counting on her experience, she offers some practical suggestion for new librarians to improve their jobs and careers.

3. THE FUTURE OF READING

By Tom Peters. Library Journal, v. 134, no. 18, November 1, 2009, pp. 18-22.

The range of media for reading materials has expanded from printed books and journals to include e-journals, e-books and audio books. Libraries must prepare to accommodate the resulting shift in reading habits. Kindle versions of some best-sellers now outsell traditional hardcover and paperback editions. The publishing industry and libraries will both need to develop a business model that works in this new scenario. Libraries must support and defend the rights of digital readers and become part of this reading revolution.

4. GIFTED READERS AND LIBRARIES: A NATURAL FIT

By Rebecca Haslam-Odoardi. Teacher Librarian, v. 37, no. 3, February 2010, pp. 32-36.

This article discusses how the library and the teacher-librarian can meet the extraordinary demands of high-ability learners. Encouraged and challenged by the teacher-librarian, the library can become the gifted student's most favorite place in the entire school. The discussion is broadly based on Utah Advanced Readers At Risk (ARAR) program, which demonstrates that advanced readers often find library a friendly, open, and engaging place where opportunities are limitless. The article further illustrates various components of ARAR reading program and discusses topics like selecting books for advanced readers and helping advanced readers to continue love for reading.

5. THE GOOGLE LIBRARY PROJECT: IS DIGITIZATION FOR PURPOSES OF ONLINE INDEXING FAIR USE UNDER COPYRIGHT LAW?

By Kate M. Manuel. CRS Report for Congress, November 27, 2009, 16 p.

This Congressional Research Service (CRS) report analyzes the well-known Google Book Search Library Project, which was announced in 2004. The project raised a legal dispute between Google and rights holders of the books. While the rights holders alleged infringement of copyrights by the company, Google maintained that allowing rights holders to "opt out" of having their books digitized or indexed kept its proposed uses from being infringed. However, the questions resulting from this argument remain unanswered and the parties are seeking to settle the litigation over this project.

6. LIBRARY DATA IN A MODERN CONTEXT

By Karen Coyle. Library Technology Reports, v. 46, no. 1, January 2010, pp. 5-13.

Since the origin of modern library cataloging practices, the world has witnessed waves of change that have transformed the world socially, technologically, and intellectually. These changes brought about the related evolution of libraries and library catalogs. The card catalog, which came about at the time of the Industrial Revolution, resulted in increased production of printed materials. Computer technology led to the Online Public Access Catalog (OPAC) in the 1980s. Cataloging rules have undergone changes to address the new types of materials that libraries needed to catalog. Coyle explores how the modern library has continually transformed itself in response to the needs of its contemporary users.

7. METADATA MODELS OF THE WORLD WIDE WEB

By Karen Coyle. Library Technology Reports, v. 46, no. 2, February 2010, pp. 12-36.

The transition from Syntactic Web (syntax-based web) to Semantic Web (content-based web) has revealed the importance of metadata used in the library world. Although the two worlds have significant overlapping in the topics covered, they remain two separate and distinct information spheres because they use different technologies. While the Web primarily depends on search engines and keyword searches, the libraries create metadata in a library-specific record format called MARC (MAchine-Readable Cataloging). A connection between the two worlds could be established through development of metadata solutions that are compatible with web-based technology and can be used both by libraries as well as on the open Web.

8. MOBILES IN LIBRARIES

By Rurik Thomas Greenall. Online, v. 34, no. 2, March/April 2010, pp. 16-19.

The continuing growth of mobile technology has opened new avenues for librarians and information scientists. It offers good opportunity for them to create applications and develop web pages that can deliver content on patrons' mobiles. Mobiles can deliver different kinds of resources like streamed video and music, written and spoken literature, travel directions, games, sports scores, photos, and thousands more. Many libraries have already identified this opportunity and have started offering services like short messaging service (SMS) for updating patrons about loan and catalog information. If libraries are to keep pace with their patrons, they must continue to develop applications for this medium.

9. MUSEUMS, LIBRARIES, AND 21st CENTURY SKILLS

Institute of Museum and Library Services, 2009, 40 p.

This Institute of Museum and Library Services (IMLS) report supports museums and public libraries in envisioning and defining their roles as institutions of learning in the 21st century. It offers enhanced understanding about the integral roles museums and libraries play in creating an engaged citizenry and competitive workforce. Libraries and museums can chart promising new directions by providing services to people of all ages in their pursuit for a diverse range of learning experiences. With 17,500 museums and 123,000 libraries across the United States, the nation stands to benefit from the leadership of these institutions.

10. THE PARALLEL INFORMATION UNIVERSE

By Mike Eisenberg. Library Journal, v. 133, no. 8, May 1, 2008, pp. 22-25.

Eisenberg discusses recent changes in information technology and the resulting impact on libraries and library services. He talks about Web 2.0, social networks, blogs, and cellular phone downloading. He calls them a parallel information universe and offers an assessment of these technologies from libraries' point of view. He evaluates how libraries can take advantage of the technological advancements and lead in this parallel information universe. While some libraries have already begun working in this direction, the library world as a whole must engage with these developments and determine how modern libraries will meet the users' information needs.

11. PUBLIC ACCESS TECHNOLOGIES IN PUBLIC LIBRARIES: EFFECTS AND IMPLICATIONS

By John Carlo Bertot. Information Technology & Libraries, June 2009, v. 28, no. 2, pp. 81-92.

This article offers insights into the issues and challenges associated with public access technology (PAT) in public libraries and provides recommendations for further exploration of the same. The analysis is based on case studies conducted at thirty-five public libraries in five geographically dispersed and demographically diverse states. It explores the level of support PAT requires within public libraries, implications of PAT on public libraries, current PAT support practices, maintenance and support of PAT structure of public libraries, and identifies factors that contribute to successful PAT practices.

12. THE RIPPLE EFFECT

Part 1: Extending the library's reach By Tom Storey. Next Space, no. 13, September 2009, pp. 4-9. Part 2: Extending the library's circle of influence By Tom Storey. Next Space, no. 14, January 2010, pp. 4-10.

> Libraries have had to extend their reach beyond traditional boundaries in order to better reach users in new and compelling ways. Connecting with users is essential to the mission of libraries, but

building civic, commercial and governmental support is key to their survival. The ripple effect needs to come full circle, touching everyone who is involved in the success of libraries and helping to show the links between support and service. To achieve this, the author says, there are four essential components–Passion, Planning, Partnerships, and Promotion.

13. A STRATEGY FOR ACADEMIC LIBRARIES IN THE FIRST QUARTER OF THE 21ST CENTURY

By David W. Lewis. College & Research Libraries, v. 68, no. 5, September 2007, pp. 418-434.

This article is provides a strategy for academic libraries to sustain their existence through the digital revolution. Digital technologies have heavily influenced scholarly communications. The availability of web-based digital contents is rapidly increasing. With Google's powerful search results, authority control and classification are no longer the only, or the best answer to seeking information. Academic libraries must find and articulate their roles in the current and future information ecology.

14. WLANS FOR THE 21st CENTURY LIBRARY

By Cal Calamari. Teacher Librarian, v. 37, no. 2, December 2009, pp. 40-42.

Wireless Local Area Networks (WLANs), which are extensions of the Local Area Networks (LAN), have become a critical service delivery medium for library users. The WLAN should provide strong authentication for controlled network access, high quality service to support various media types and devices, and be capable of scaling to dense user environments with hundreds of users at any one time. Calamari explores how WLANs can facilitate seamless access to library resources and services. He also elaborates on WLANs and illustrates what are the prerequisites for wireless LANs in the 21st century libraries. He advocates networks that are reliable, fast, and friendly, and that support the number of users that need to be working simultaneously.

15. THE WORLD AT YOUR FINGERTIPS

By Gail Fineberg. Library of Congress Information Bulletin, v. 68, no. 5, May 2009, pp. 87-91. http://www.loc.gov/loc/lcib/0905/wdl.html

On April 21, 2009, Librarian of Congress James Billington launched the cultural-heritage website World Digital Library (WDL) to an international audience at UNESCO's headquarters in Paris. Ahead of the launch, UNESCO members were invited to encourage their cultural institutions to participate in the project. One of UNESCO's mandates is to promote the free flow of all forms of knowledge in education, science, culture and communication. WDL contains cultural treasures that twenty-five institutions in eighteen countries contributed to this new global library. This site features some 1200 digital items, including content about all 192 UNESCO member countries. WDL contains works by many noted poets, mathematicians, theologians, philosophers, astronomers, cartographers and historians in addition to rare books, maps, and manuscripts. It also includes works in more modern formats, such as films, sound recordings, prints and photographs. The WDL interface is in seven languages–Arabic, Chinese, English, French, Portuguese, Russian, and Spanish.

BUSINESS & ECONOMICS

16. RESTORING AMERICAN COMPETITIVENESS

By Gary P. Pisano and Willy C. Shih. Harvard Business Review, v. 87, no. 7/8, July/August 2009, pp. 114-125.

The authors, both affiliated with the Harvard Business School, believe that decades of outsourcing has left U.S. industry without the means to invent the next generation of high-tech products that are key to rebuilding its economy. Many high-tech products can no longer be manufactured in the United States because critical knowledge, skills, and suppliers of advanced materials, tools, production equipment, and components have been lost through outsourcing and faltering investment in research. Many other products are on the verge of the same fate–nearly every U.S. brand of laptop and cell phone is not only produced but designed in Asia. To address this crisis, government and business must together to rebuild the country's industrial commons, the collective research and development, engineering, and manufacturing capabilities that sustain innovation.

17. THE ROOT OF THE FINANCIAL CRISIS

By Arnold Kling. Policy Review, no. 158, December 2009/January 2010, pp. 21-33.

The author, a former economist at the Federal Reserve, notes that there is no single chief villain in the financial crisis of 2008; what characterized it was the magnitude of the self-deception in all parties concerned. The crisis was both a market failure and a government failure. Financial executives had too much confidence in their risk-management strategies, and government regulators did not question the soundness of the oversight measures in place. Says Kling, "there was a widespread gap between what people thought they knew to be true and what was actually true." The failure to prevent the crisis was caused by key policymakers' lack of knowledge. If they realized that the housing bubble was posing a risk, or that the market was becoming distorted away from direct lending and toward securitization, they could have issued rules to banks to reduce their exposure or restrict the issuance of mortgage securities several years earlier.

18. THE SECRETS OF STABILITY: WHY TERRORISM AND ECONOMIC TUR-MOIL WON'T KEEP THE WORLD DOWN FOR LONG

By Fareed Zakaria. Newsweek, v. 154, no. 25, December 12, 2009, pp. 54-60. http://www.newsweek.com/id/226425

The author notes that despite hard times, there has not been a global economic collapse, because the current global economic system is inherently more resilient than commonly thought. One of the reasons is that peace among major powers has minimized bloody military conflicts and instability. Inflation, which can be more socially and politically disruptive than a recession, is under control. Technological connectivity and the diffusion of knowledge allow for greater opportunities for wealth creation at every level of society. "Clear-thinking citizens around the world," Zakaria writes, "are determined not to lose these gains by falling for some ideological chimera, or searching for a worker's utopia."

INTERNATIONAL POLITICAL RELATIONS & SECURITY

19. AMERICAN GRAND STRATEGY AFTER IRAQ

By Sarah Kreps. Orbis, v. 53, no. 4, Fall 2009, pp. 629-645.

Kreps identifies the elements of a grand strategy for American foreign policy, pointing to the international distribution of power, American bureaucracy, and public as the key sources of constraint and opportunity. She then shows how shifts in these factors-comparatively less U.S. power, an overstretched military conducting counterinsurgency operations in Iraq and Afghanistan, and a weary American public-produced a shift in grand strategy that predated the 2008 election and that remains consistent with the current strategic setting.

20. FIGHTING RADICALISM, NOT "TERRORISM": ROOT CAUSES OF AN INTERNATIONAL ACTOR REDEFINED

By Ömer Taspinar. SAIS Review, v. 29, no. 2, Summer-Fall 2009, pp. 75-86.

Taspinar asserts that while debate over the root causes of terrorism rages in the West, extremists continue to lure destitute radicals to their cause. Efforts at counter-terrorism must focus on the breeding grounds for these impoverished sympathizers. He believes that a new strategy as well as a new method ought to be adopted to prevent radicals from becoming a threat in the form of terrorism. Fighting radicalism with social and economic development should become the new long-term objective for a smarter effort at strategic counter-terrorism.

21. THE LOGIC OF THE NUCLEAR ARSENAL

By Adam Lowther. Strategic Studies Quarterly, v. 3, no. 4, Winter 2009, pp. 8-21.

Lowther says that the nuclear weapons of the Cold War possessed by the United States and the Soviet Union served to prevent conventional conflict between the two countries. He speculates that Japan may become the next U.S. ally to develop a nuclear weapons capability, if the U.S. nuclear arsenal declines and its nuclear deterrence credibility diminishes. Lowther, a defense analyst with Maxwell Air Force Base's Air Force Research Institute, maintains that the nuclear-weapons deterrent effect cannot be duplicated by conventional capabilities. Among existing nuclear powers, he points to Pakistan as presenting the greatest nuclear proliferation risk. The author says diversity of thought on nuclear issues may be divided into two categories–the modernizers and the abolitionists. He maintains that collaboration between the two is possible.

DEMOCRACY & HUMAN RIGHTS

22. OUT OF EDEN

By Andrew Lawler. Discover, v. 30, no. 11, December 2009, pp. 64-68.

Cambridge archaeologist Joan Oates had dug in Iraq and Syria for five decades when, in 2006, she and her team discovered artifacts at Tell Brak in Syria that told the story of a sophisticated, urban culture dating back 6000 years. They uncovered hundreds of human bones, remains of an ancient massacre or terrible battle. The finding puts urban living about 1000 years earlier than previously thought. It illuminates "both the creative and violent tendencies of humanity" and opens a new perspective on the evolution of urban centers earlier than Sumer, located in today's Iraq.

23. WHERE ARE THE OTHER WOMEN LEADERS?

By Jenna Goudreau. Forbes.com, November 11, 2009. http://www.forbes.com/2009/11/13/women-leaders-white-house-project-forbes-woman-powerwomen-chief-executive.html

Although most Americans are comfortable with women leaders across industries, women account for only 18 percent of the nation's top leaders. Women are still only making 78.7 cents to every dollar earned by a man, according to a study released by the *White House Project*. American women are earning the majority of college degrees and make up more than half of middle managers, yet very few are reaching senior management level. The report recommends setting targets and timelines for the number of women needed in top positions, focusing more on powerful women role models in the media and increasing flexibility in workplace structures.

COMMUNICATION & INFORMATION

24. ARE NEXT-GENERATION JOURNALISTS THE FUTURE FOR A PROFES-SION IN TRANSITION?

By Christopher Connell. Carnegie Reporter, v. 5, no. 3, Fall 2009, pp. 2-10.

News21, a multi-million-dollar experiment by Carnegie Corporation of New York and the James S. and John L. Knight Foundation seeks to determine if a new crop of journalists can awaken interest in news where older and more experienced journalists have failed. Connell believes that to do this, they first need to study such issues as liberty and security, the role of religion in American life, and America's dramatically changing demographics, and then produce stories with all the multimedia tools that the digital age has to offer. Connell notes that this effort is taking place in a news environment in which entertainment dominates, and during a recession that has seen the demise of several major newspapers and layoffs of reporters and editors.

25. THE DELUSION REVOLUTION: WE'RE ON THE ROAD TO EXTINCTION AND IN DENIAL

By Robert Jensen. AlterNet, Posted on August 15, 2008. http://www.alternet.org/story/95126/

> Jensen, a journalism professor at the University of Texas at Austin, notes that "our current way of life is unsustainable-we are the first species that will have to self-consciously impose limits on ourselves if we are to survive." The industrial revolution of the past two centuries has produced unparalleled prosperity and comfort for a portion of humanity, but at a great expense to the biosphere, threatening its ability to support life. Following the agricultural and industrial revolutions is what Jensen refers to as the "delusional revolution"-sophisticated propaganda techniques, in particular advertising, that have lulled the public in Western societies into believing that "unsustainable systems can be sustained because we want them to be". The future may turn out very differently from what we want it to be, Jensen says. We will need to develop skills for a world of less energy and fewer material goods. That means "abandoning a sense of ourselves as consumption machines, which the contemporary culture promotes", and developing a sense of community which is missing in modern life.

GLOBAL ISSUES

26. CORAL REEFS UNDER THREAT

By Alice McKeown. World Watch, v. 23, no. 1, January/February 2010, p. 15.

Coral reefs are under siege from climate change and from such human activities as overfishing and destructive fishing methods. Vital to fisheries around the world for the food and protection they offer marine species, coral reefs are increasingly endangered. An estimated one-fifth of the world's coral reefs have already been lost; an additional 35 percent may die in the next few decades. The most threatened are those in Asia and the Indian Ocean.

27. LESSONS IN A LAND OF WIND AND ICE

By Noah A. Strycker. National Wildlife, v. 48, no. 2, February/March 2010, pp. 22-29.

Strycker, a researcher and journalist, writes about his three-month stay at Cape Crozier, Antarctica, where he studied and photographed Adélie penguins. He relates that their behavior is influenced by changes in weather and ice patterns. The penguins are bellwethers of climate change. Adélie and Emperor penguins who breed on the region's ice shelves may face extinction unless they adapt to the shrinking ice.

28. UNDER THE WORLD'S GREATEST CITIES, DEADLY PLATES

By Joel Achenbach. The Washington Post, February 23, 2010, p.A01. http://www.washingtonpost.com/wpdyn/content/article/2010/02/22/AR2010022204828.html

In 1800, only one city in the world had more than a million people, Beijing. Last year, humanity reached a turning point, when more people lived in cities than in rural areas. Today, there are 381 cities with over a million residents each. Over 400 million people worldwide live in large cities that face significant seismic hazards. Achenbach writes that strong earthquakes, such as those that recently struck central Chile and Port-au-Prince, Haiti, will extract an increasing human toll due to this growing global trend toward urbanization. The author notes that it is not the earthquake itself, but also poorly constructed buildings, that kill people.

U.S. SOCIETY, VALUES & POLITICS

29. GROWING SEASON

By Mara Lee. The Washington Post, October 25, 2009, pp. 18-22.

The move toward sustainable agriculture has led some young adults to spend a season, or a lifetime, in the fields as they turn to small farms to make a fresh start, or as a new career. They are often young, educated, politically motivated workers drawn to farms that embrace humane and eco-friendly practices. Such operations are getting a boost from Community Supported Agriculture, a system that lets customers pay in advance for a weekly share of a nearby farm's crops. The number of people participating in CSAs has grown 50% between 2007 and 2009. The number of farmers' markets in the United States has jumped by almost 13% over the previous year and now even the White House has its own organic garden.

30. LESTER YOUNG TURNS 100

By Jamie Katz. Smithsonian.com, August 25, 2009. http://www.smithsonianmag.com/arts-culture/Lester-Young-Turns-100.html

Jazz legend Lester Young, nicknamed "Prez," was among the most revered saxophone players of the Swing Era (1930s-1950s), yet the 100th anniversary of his birth has gone virtually unnoticed. Jamie Katz hails Young as a pivotal figure whose lyrical, flowing style changed the terms of jazz improvisation and deeply influenced such musicians as Charlie Parker, John Coltrane, Frank Sinatra and Antonio Carlos Jobim. Young was an innovator who "electrified the jazz world with his dexterity and imagination," says Katz. Raised in New Orleans, Young was born into a musical family and became familiar with a variety of music genres at an early age. Young brought a hip, freewheeling sensibility to his saxophone playing, and tilted his saxophone at a rakishly high angle during onstage performances, prompting Rolling Stone magazine to declare him "quite likely the hippest dude that ever lived." Yet for all his talent and ingenuity, Young "was sliding into a long decline by his early 30s." He died on March 15, 1959, a few months shy of his 50th birthday. Now, a half-century later, Young still remains a powerful influence on the jazz scene, with many contemporary saxophonists-including Wayne Shorter, Lee Konitz, Joe Lovano and Mark Turner-professing deep admiration for him.

31. WAGE LEARNERS

By Zach Patton. Governing, August 2009, p. 24.

Several big-city U.S. school systems serving underprivileged urban neighborhoods are experimenting with paying students to get good grades. Preliminary anecdotal evidence indicates that school attendance is up, pupils' academic performance has improved and there are fewer disciplinary problems. Furthermore, the students are not spending the money on frivolous purchases. Some detractors of the program are doubtful that extrinsic rewards can influence students' long-term eagerness to learn; they object to the moral aspects of paying some students and not others. The author notes that there have some instances of retribution against students receiving payments. The schools and other supporters of the program counter that well-off families routinely provide rewards for their children, and the payments-for-good-grades program is merely providing a similar opportunity for children from low-income families. Saying that "desperate times call for desperate measures", they hope that the extrinsic rewards program will keep kids in the classroom, where they might discover the intrinsic reward of learning for its own sake.

SCIENCE & TECHNOLOGY

32. BOOSTING VACCINE POWER

By Nathalie Garçon and Michel Goldman. Scientific American, v. 301, no. 4, October 2009, pp. 72-79.

Garcon and Goldman explore the possibility of tailoring vaccines to protect a specific population and target a precise pathogen. Contemporary research into immunology has led to a better understanding of the human immune system and has generated hopes for an ideal vaccine that would offer lasting protection against diseases. Scientists are looking into the possibility of adding ingredients that can supercharge old vaccines and make entirely new ones. These vaccines would be extremely effective at protecting us from disease, preferably with a single dose. They would work better and for more people and against a wider variety of illnesses.

33. SLIME CITY

By Wendy Orent. Discover, v. 30, no. 7, July/August 2009, pp. 60-65.

Most microbes live in a gelatinous substance they produce, known as biofilm or bioslime. This substance is present almost everywhere-from unbrushed teeth to rocks lining forest ponds. Bioslime hosts well-protected communities of diverse bacteria that thrive together, feed off community waste, and repel antibiotics. Since bioslime is becoming a major factor in hospital infections-on catheters, hip and knee replacements, and implants such as pacemakers-research is underway to discover how bioslime communities function and communicate. Bioslime "quorum sensors" that determine when a maximum bacterial concentration occurs in a host have been detected. These enable bacteria to release their toxins all at once, for greatest effect, killing or debilitating the host. Scientists interviewed include Princeton University geneticist Bonnie Bassler, Tufts University molecular biologist Naomi Balaban, and Randall Wolcott, a Texas physician, who pioneered new methods of combating bioslime infections in wounds.

34. WHAT NOW FOR NUCLEAR WASTE?

By Matthew L. Wald. Scientific American, v. 301, no. 2, August, 2009, pp. 46-53.

The U.S. Government has spent \$9 billion on the Yucca Mountain nuclear waste depository over the past two decades, yet this

proposed project has not resolved the nuclear waste problem. The Obama administration has turned down the plan to store nuclear waste at Yucca Mountain in Nevada. For now the spent fuels will be stored on-site at 131 locations around the United States. With Yucca no more the solution nuclear waste solution, all options for waste disposal are back into consideration including recycling, use in advanced reactors, and burial at other sites.

Printed and published by Michael Pelletier for the Public Affairs Section, U.S. Embassy, American Center, New Delhi. Printed at Rakesh Press, New Delhi.

05/10-6900