WHAT IS VEF?

Virtual Educa Foundation is a not-for-profit, U.S.-based organization. VEF encourages innovation in education with the use of technology as a tool for social inclusion. Our goal is to raise the level and quality of education for all, to better adapt educational systems to current and future needs of the production sectors of national economies.

VEF is a platform drawing on more than fifteen years of experience in Latin America and the Caribbean, assessing and building public-private partnerships, and bringing shared data and knowledge to other regions in the world.
FOREWORD

How do different regions (Latin America, Caribbean, Africa, Asia, Middle East) see the future of education? What might be areas/themes for collaboration?

The UNDP Millennium Development Goals (MDGs), established in 2000 for a 2015 target date, listed eight goals, the second being access for all to primary education. A recent report on MDG claims that measureable progress resulted in four areas, including primary school enrollment. The number of school-age children not enrolled in the primary school dropped from 102 million world-wide to 57 million. These numbers tell a story, though a very incomplete one.

Replacing the MDGs in 2015 are the Sustainable Development Goals, now numbering seventeen, where education ranks fourth. The UN General Assembly has adopted the SDGs as an “inclusive and transparent intergovernmental process open to all stakeholders, with a view to developing global sustainable development goals to be agreed by the General Assembly.”

It was further agreed that SDGs must be:
- Action-oriented
- Concise
- Easy to communicate
- Limited in number
- Aspirational
- Global in nature
- Universally applicable to all countries while taking into account different national realities, capacities and levels of development and respecting national policies and priorities.

Beyond the UNDP, anecdotally and statistically, education outranks other sectors in development and social stability. All cultures appear to value it as their highest goal and responsibility.

In developed nations, the sector remains imperfect, too often failing to match educational practice and curriculum to workplace human resource needs. This is particularly painful in a shrinking world economy. In developing nations and among development experts and observers, the sector often takes first place in the urgent challenges faced by countries with population pressures and precarious economies. In an admittedly decentralized system, the United States spends four per cent of its federal budget ($141 billion) on education. Compare Rwanda, with five per cent of its central budget, or 17 per cent of GDP. Thailand and Australia outspend the United States, with measurable results as reflected in recent OECD studies.

The noble and daunting task of delivering education to ever larger populations requires attention to the following areas:
- Delivery of services
- Modernization of content and availability of information to all
- Curriculum reform to meet the needs of work force development
- Analysis of results (“monitoring and evaluation”)
- Enhancement of teacher input and pedagogical renewal
- Scientific data on how learning is transmitted (now lacking)
- Consideration of the educational process for social equality and stability
In all of these areas, the world and its governments (no exceptions) fall short of meeting the needs of this most important sector. Rich and poor nations struggle to stay abreast as demographic pressures undo modest advances. More than ever, concrete examples of success and failure become the best tool for the sector, as science lags far behind in detecting what learning is, or how to achieve it.

The current year, 2015, is the Year of Big Data. In the United States, the 2011 Department of State/USAID planning tool, the Quadrennial Diplomatic and Development Review (QDDR) emphasized the urgent need of traditional and new forms of diplomacy for facing existential security threats. By contrast, the 2015 QDDR is all about data, and a new ethos of sharing it. Development agencies used to favor and their own data over that of field NGOs (for accountability). http://www.state.gov/s/dmr/qddr/2015/index.htm

Now a new era emerges, where data is freely shared -- and also received and considered valid -- by development agencies. More data than ever is made available to the public, by the World Bank, IMF, U.S. Government, UNDP, EU, OECD and others. This makes information much more available to humankind, while also increasing the burden of all – public and private sectors – to be vigilant of their findings, seek accuracy rather than advocacy, and embark on a learning process which remains at a primitive state world-wide. What is education? Why is it needed? How is it delivered? How does it work? What resources are already available to advance its goals? Scientific data, though rapidly increasing in volume, largely fall short of answering these questions fully.

Information and Computer Technology (ICT) is crucial in developing a more energetic education delivery system world-wide, with broadband an essential tool and potential social equalizer. However, it is not a panacea or sole solution. In addition, repeated commentary indicates that especially in traditional societies, information is transferred by individuals, in what some call the “campfire colloquy.” The elder “teaches” the young through use of narration and stories with metaphors. This tradition should never be discarded in entirety.

While ICT is essential to education’s future, the legendary “inherent talent” of the young to manipulate computers and data is not a given, but depends on close instructional guidance and calls on the key role of the teacher – in the future, as in the past. http://www.ecdl.org/media/TheFallacyofthe%27DigitalNative%27PositionPaper1.pdf

Clearly a successful endeavor must draw both on new and traditional methodologies. We know more about the effects of the latter, less the former. The purpose of this survey is to provide some anecdotal material and stimulate a discussion among those who care about the future of their countries’ youth. The demographic youth bulge is immense particularly in Africa, which provides both promise and challenge. See, in the next page, chart from the UNICEF, 2015.

While universally appreciated, the educational sector’s needs are most urgent in countries with larger percentages of 15-19-year-olds. They also represent a six per cent economic growth rate, growing middle classes, and an unprecedented ability to pay for services. The opportunities, and the responsibilities, are immense.

The 2015 VEF Survey gather anecdotes, narratives, and data from Australia, Brazil, Cameroon, China, Germany, Ghana, Haiti, Libya, North Africa, Peru, Poland, Spain, Somalia, South
Africa, Uganda, and the United States. It is by no means a scientific sample or verified data. It is offered to Virtual Educa as an agenda item for discussion, presenting innovative thinking from a finite group of trusted colleagues. It serves as a cross section of opinion (qualitative, more than quantitative data) from some who consider education their highest calling and most urgent task.

This study could not have been completed without the dedicated and generous collaboration of six remarkable university students:
- Caroline Filippi
- Kara Hericks
- Jeffery Hodgkiss
- Silke Schoch
- Lelyzaveta Shchepetylnykov
- Vannia Zelaya

Special thanks, also, to advisors Molly Gibson, Katja Hering, Ed Kemp, Kari Jaksa, Adam Powell, Asuncion Sanz.

Grateful acknowledgement to survey participants, especially to James Bullock, Noluthando Crockett-Ntoga, Robert Gosende, Heitor Gurgulino de Souza, Luis Salvador Hernandez, Alvaro Klasse, Gunnar Micheel, Lillian Moore, Ramon Morales, Taya Louise Owens, Mamphela Ramphele, Willair St. Vil, Taiyi Sun, Mathias Tientcheu, Angelika Trzesala, and Ndaeyo Uko.

I offer this effort with my thanks, praise, and gratitude to the individuals above.

DAN WHITMAN
COORDINATOR, 2015 SURVEY
VIRTUAL EDUCA FOUNDATION
WASHINGTON, DC
USEFUL REFERENCES

PRESS CLIPPINGS

Food for thought, gleaned from articles published in 2015 on challenges in educational development. This list is by no means exhaustive, but reflects a growing interest and increased quantity of reporting in the Anglophone media.

**ECONOMIST, MARCH 14**

**The log-on degree**

College in America is ruinously expensive. Some digital cures are emerging. [Average fees for public universities $10,000/annum, private $33,000/annum]


**ECONOMIST, APRIL 25**

**The pioneering continent**

Innovation is increasingly local.” Africa leaps ahead in cell phone use, with an average of one per individual. “Apps and e-learning schools are no match for the best state or private ones, but only a tiny elite has access to those. Compared with the run-of-the-mill schools that most Africans attend, they look impressive. The main advantage of using technology to each is that it reduces the impact of two common failings in many ordinary schools in Africa: teacher absenteeism and minimal adherence to the curriculum. .. Africa’s innovation revolution is still in its infancy. But it is likely to gain pace, not least because new models and forms of financing start-ups are also being developed.


**WASHINGTON POST, MAY 11, JAY MATHEWS**

**Deep tutoring: a key to success of AVID college readiness program**

Advancement Via Individual Determination, providing mentoring and advice to secondary school students seeking tertiary education. “AVID tutors don’t answer questions. They instead ask questions that help student think through the problems themselves.”


**ECONOMIST, APRIL 25**

**A bolly good read**

India’s Bollywood films helps with India’s literacy rate, which increased in 2011 from 52% to 74%.


**THE AMERICAN INTEREST, MAY/JUNE, 2015, WALTER RUSSELL MEAD**

**The Paradox of American Democracy Promotion**

Nothing can guarantee the triumph of democracy worldwide...Still, experience tells us that building good colleges and good schools that offer an ethical as well as a practical education, offering student and teachers the opportunity to travel and study abroad...are the measures most likely to promote both economic and political development.

**Economist, May 15**

**High flyers and sad failures**
France’s “Grandes Ecoles” provide fine training to elites, but fail to reach wider publics. “A misguided effort to fix a school system that leaves too many losers behind.”

**Washington Post, May 31, T. Rees Shapiro**

**How to engage kids at school? Video games, of course**
The U.S. Department of Education and the National Science Foundation see games’ potential and have invested millions accordingly. The Gates Foundation and the MacArthur Foundation have together committed $100 million to educational gaming.


**Washington Post, May 11, Amrita Jayakumar**

**Big data for employers’ big decisions**
Automatic Data Processing (ADP) provides data for 400,000 private companies, analyzing information on 24 million potential employees.
http://www.washingtonpost.com/business/on-it/this-start-up-is-helping-the-government-keep-track-of-social-media/2015/05/22/6107392e-fe4b-11e4-8b6c-0dcce21e223d_story.html

**Brookings Institution, June 12, Rebecca Winthrop and Eilkeen McGivney**

**Why Wait 100 Years?**
In the last 200 years, the number of children attending primary school globally has grown from 2.3 million to 700 million today, covering nearly 90 percent of the world’s school-age children. But the gulf in average levels of education between rich and poor countries remains huge. Without a fundamental rethinking of current approaches to education, it’s going to take another 100 years for children in developing countries to reach the education levels achieved in developed countries. Something needs to change.
http://www.brookings.edu/research/reports2/2015/06/100-years-gap-global-education-winthrop-mcgivney

**ACCESS TO THE NET**

Not the sole or ultimate solution, the Internet is essential in delivering education and educational products to the public.

Some institutions which can do so are schools, embassies, libraries, community centers.

The “Digital Commons” requires not only infrastructure, but also trained instructors able to teach computer and literacy guidance.

Lacking educational infrastructure, broadband alone will fail to provide solutions. “Just wiring people up is not the answer.”

Impact of social stratification on computer access – note that the underserved are twice set back: lack of broadband denies access to the Digital Commons. Industry upgrades exacerbate and accelerate the predicament of underserved communities: both hardware and software upgrades increase the digital divide.
Digital Commons delivers effectively: the Martin Luther King Public Library in Washington, DC, is immensely popular with individuals who do not own computers. Increase of 10-20 per cent usage in 2015.

Note that the push to put legal services on line increases the digital divide, and exceeds the capacity of the average person who needs connectivity, literacy, computer skills.

United States – the Internal Revenue Service exacerbates digital divide. By contrast, the Social Security Administration provides a good model, combining personal help and staffing with on-line access.

“The Big Three“ in Net Accessibility are access, updating, and teacher training.

An overlooked resource: libraries.

NOTE

**Opportunity for All: How the American Public Benefits from Internet Access at U.S. Libraries**

Over the past decade and a half, free access to computers and the Internet in U.S. public libraries evolved from a rare commodity into a core service...Internet access is now one of the most sought after public library services, and it is used by nearly half of all visitors.

THE STUDY

April, 2015, VEF approached 196 potential respondents with the following questionnaire:

VIRTUAL EDUCA FOUNDATION SURVEY, 2015

NAME ______________________   COUNTRY __________________ TITLE/AFFILIATION _________________

1 How is knowledge transferred in the geographic area(s) you are familiar with?

2 How can educational preparation best be modified to meet needs of the labor market?

3 Please cite successful, innovative projects which might be emulated by other systems? Any useful examples of failures?

4 “Blue Sky” – if resources were NOT an object, how would you invest in software and hardware for the future of education in your geographic area? And in what order?

5 On a scale of 1 (least) and 10 (most) kindly rank the relative importance of the following sectors in the future of public and private education in your country:
   a. Teacher training/empowerment
   b. Web connectivity/broadband
   c. Ability to quantify and measure results of pilot programs
   d. Pedagogy
   e. Continuity in policy formulation
   f. Innovation in policy formulation
   g. Humanities content and pedagogy
   h. Education for the purpose of improving civic society and citizen participation

6 How might educators measure/solidify/normalize/accredit impact in the sector?

RESPONSES

Responses to the survey came during May, 2015, assessing Australia, Brazil, Cameroon, China, Germany, Ghana, Haiti, Libya, North Africa, Peru, Poland, Spain, Somalia, South Africa, Uganda, the United States. Summaries of responses follow:

1 How is knowledge transferred in the geographic area(s) you are familiar with?

Across regions, respondents noted that knowledge is often transferred via both formal and informal means. In most cases, the public education system serves as the formal means of knowledge transfer, while informal means range from on-the-job training to internships to the telling of tales by moonlight. The selected responses below, sorted by region, highlight some of the approaches utilized in education systems across the world:
ASIA
• In addition to a mandatory nine-year formal education program, knowledge is transferred through traditional family means, from elders to children. The Internet is also used to transfer knowledge, more often via smartphones than computers. [China]

EUROPE
• Each state organizes its own formal education policy. Practical knowledge is transferred through internships, which are sometimes unpaid. [Germany]
• Knowledge is transferred via a compulsory core curriculum. Less emphasis is placed on experience-based transfer of knowledge. [Poland]

LATIN AMERICA
• There should be increased efforts to utilize informal education channels, such as the Internet, to reach illiterates and young people without access to schools. [Brazil]
• The Internet, to which only about one third of schools have access, allows teachers to use new technologies as a means of expanding knowledge in the classroom. Lessons that emerge from individual or institutional initiatives are spread via exchange of experience. [Peru]

NORTH AFRICA
• Knowledge is transferred through the formal education system, as well as through on-the-job training, particularly in crafts. [North Africa]

NORTH AMERICA
• Within the education sector, information is disseminated though government and regulatory tools, professional academic associations and conferences, and both specialized and generalized media. [United States]
• Knowledge is transferred through a “classic process” of talking, listening, reading, and writing, except in science classes where students are able to perform experiments. Knowledge is also transferred informally from parents and other family members to children. [United States]

SUB-SAHARAN AFRICA
• Theoretical knowledge is transferred via the formal education system, while skills and competencies are transferred via more informal means, such as mentorship and vocational training. [Cameroon]
• Knowledge is transferred through formal means as well as traditional means, such as folklore. [Ghana]
• Knowledge is transferred via the telling of stories by moonlight. [West Africa]

How can educational preparation best be modified to meet needs of the labor market?

In answering this question, respondents focused on three main themes: integrating new technology into the education system, helping students to increase their critical thinking skills, and promoting a more practical experience-based approach to education. Below are some of the specific suggestions offered by respondents:
• Start preschool early (3-6 years of age), increase access to elementary schools, and increase
technical and professional educational opportunities for high school students. [Brazil]

- Improve communication between the educational system and the labor market. Ensure that educational reforms are enacted in a timely manner so as to effectively prepare students for the rapidly-evolving labor market. [Cameroon]
- Modernize education to focus on opening students’ minds, encouraging students to think critically, helping students to overcome challenges and failures, and teaching different methodologies for understanding and analyzing the world. [China]
- Increase focus on practical knowledge transfer at the university level, particularly through internships and cooperation between educational institutions and employers. [Germany]
- Develop training programs which help integrate new technologies into production processes. Reform the nation’s core curriculum to ensure that students have the skills to be competitive internationally. [Peru]
- Allow students to take ownership of their education by creating individual performance review sessions. [Poland]
- Implement continuing education programs to help professionals adapt to new technologies. [Spain]
- Provide better career counseling to students. [United States]
- Emphasize higher-order thinking skills in order to give students the tools needed to adapt to the constant change of the labor market. [United States]

Please cite successful, innovative projects which might be emulated by other systems. Any useful example of failures?

Respondents cited numerous successful projects including government programs, innovative uses of new technology, and pedagogical improvements. Respondents also mentioned projects which, despite good intentions, failed to meet objectives. Below, divided into successes and failures, are some of the submitted responses:

**SUCCESSES**

- Bolsa-Escola is a program under which the government provides financial assistance to poor families; in return, the families are required to ensure that their children are vaccinated and attending school. [Brazil]
- Universities, online content providers, and professional associations are coordinating with one another to create and develop online instruction for professionals. [Spain]
- Working together with Harvard, young leaders created a summer workshop for social innovators. Workshop participants collaborated to create innovative educational projects in their respective localities. [China]
- A “mobile classroom” brings new technologies to rural areas, and includes a hard drive which is capable of simulating resources which are available only on the Internet. The mobile classroom can also serve as a charging device for classroom computers. [Peru]
- Major universities organize international academic and business competitions to help students increase their competitiveness in the world labor market. [Poland]
- The BRIDGE program is a collaborative network that links school across class, geographic, and technological divides. [South Africa]
- Competency-based education systems incorporate informal knowledge into the formal learning process by finding ways to assess knowledge gained through nontraditional means. [United States]
FAILURES

- As a result of poorly-equipped workshops, technical/vocational education has failed, leaving graduates with only theoretical knowledge rather than the practical experience they need for success. [Cameroon]

- A program called One Laptop Per Child did not meet expectations; while 840,000 laptops were purchased, no plan was made for implementation, teachers weren’t trained properly, and no resources were provided for maintenance. An impact study showed no significant differences between those children who had access to these computers and those who did not. [Peru]

4 “Blue Sky” – if resources were not an object, how would you invest in software and hardware for the future of education in your geographic area? And in what order?

Respondents were divided on the relative importance of hardware and software in their respective education systems. While most believed hardware investment to be an important first step, some noted that with proper software, hardware may be unnecessary. Below are select responses:

- As long as an adequate amount of hardware exists, the focus should be on software, which includes but is not limited to quality of faculty, robustness of teaching methodology, and administrative capacity. [China]

- The country should invest first in a software platform to be used in all schools to assign and turn in homework, submit and monitor grades, and compare learning results across regions. New hardware would then only be required at the institutional level. [Germany]

- Provide hardware first and allow users to get acclimated, then introduce new software. [Ghana]

- The government has prioritized investment in and provision of hardware, resulting in a lack of available software for students. It is important to formulate partnerships between the state, private enterprise, and academia so that new educational software can be developed for use in classrooms. [Peru]

- Investment in hardware and software should go hand-in-hand. [Poland]

5 On a scale of 1 (least) to 10 (most), kindly rank the relative importance of the following sectors in the future of public and private education in your country:

a. Teacher training/empowerment
b. Web connectivity/broadband
c. Ability to quantify and measure results of pilot programs
d. Pedagogy
e. Continuity in policy formation
f. Innovation in policy formation
g. Humanities content and pedagogy
h. Education for the purpose of improving civic society and citizen participation

Applicant responses to this question showed a strong preference for teacher training and empowerment, ranking it significantly above the seven other categories. Numerical rankings from each respondent were tallied and averaged into a data set. In the graph below, each
sector is represented by the letter assigned to it in the above question:

![Graph showing mean ranking across respondents]

In answering this question, respondents both outlined shortcomings within the measurement process and proposed solutions to address these shortcomings. Respondents recommended better data collection, more direct communication between institutions, and new impact assessments as possible fixes. The selected responses below detail these recommendations:

- A national center should be created to collect education data and results. Teachers should then receive access to this data. [Brazil]
- Standardized tests should not be the only measure of improvement and success. Measurements of an individual's civic consciousness and potential for generating social impact should also be developed and utilized. [China]
- Educational institutions should maintain direct communication with employers in order to be able to react quickly to the needs of the labor market. [Germany]
- Teachers must be protected from cultural fights, and must receive proper classroom resources. [North Africa]
- Insufficient impact assessments exist to determine the effectiveness of educational programs. The development of such assessments should be a priority. [Peru]
SURVEY SUMMARY
POSSIBLE FOLLOW-UP

1. Teachers and their training are essential to ICT applications.

2. The Digital Commons should be available to all, but is not.

3. Educational solutions should combine both tradition and modernity. Neither can act entirely alone.

4. The job market on all continents is woefully underserved by the educational sector. This creates frustrated management, exacerbates unemployment, and adversely affects efficiency in providing goods and services.

5. The youth bulge is both a challenge and opportunity in developing economies.

6. Big Data will quickly change research and implementation; information available to all must be sustained and utilized, averting duplication in information gathering.

7. Schools, tech/community centers, libraries are vital in furthering educational goals.

8. Public-private partnerships are growing, and are improving conditions for all.

9. Most cultures place education as their highest ethical, cultural, and moral priority.

10. The 2015 VEF survey provides rich anecdotal material and insights on four continents. With a limited data base, self-selecting respondents, and improvised methodology, a more systematic follow-up by Virtual Educa’s partners could render more information.

“Talent is more equally distributed than opportunity”
BYRON AUGUSTE, OPPORTUNITY @ WORK (NEW AMERICA FOUNDATION)
APPENDIX

COMMENTS, SOURCES ON THE UNITED STATES

In 2004, a Zogby poll indicated that 77 per cent of the American public say that high school programs in the U.S. do not adequately prepare young people to understand current international affairs. Only about one in ten (11%) believe high school students are prepared.

The American Forum for Global Education (AFGE) seeks to address these deficiencies in the United States. AFGE donors are listed below:

U.S. GOVERNMENT AGENCIES

National Endowment for the Humanities
United States Institute of Peace
U.S. Department of Education
National Science Foundation
U.S. Agency for International Development
U.S. Department of State

FOUNDATIONS

Carnegie Corporation of New York
The Danforth Foundation
The Freeman Foundation
The William and Flora Hewlett Foundation
W.K. Kellogg Foundation
Longview Foundation
James S. McDonell Foundation
The New York Community Trust
Roche Family Foundation
The Rockefeller Foundation
Tinker Foundation Incorporated
Center for Global Partnership
Ford Foundation
The German Marshall Fund of the United States
The Hitachi Foundation
Albert Knudstader Family Foundation
Richard Loundsbery Foundation
Mertz Gilmore Foundation
The Pew Charitable Trusts
Rockefeller Brothers Fund
The Starr Foundation
United States-Japan Foundation

CORPORATIONS

American Express Company
Banker’s Trust
Honeywell International
Merck & Co, Inc
The New York Times Foundation
RF Binder Partners, Inc
Ruder-Finn, Inc.
Volvo Car Corporation
American Stock Exchange
Citibank
International Business Machines Corporation
Morgan Guaranty Trust Company of New York
Pfizer Inc.
Royal Dutch/Shell Group of Companies
Sarah Lee Corporation
Xerox Corporation

U.S. WEBSITES FREE OF CHARGE

http://educationusa.state.gov/  (USG educational advising)
http://www.cmu.edu/oli/index.html  (Carnegie Mellon’s Open Learning Initiative)
http://open.yale.edu/courses/  (Open Yale courses)
http://ocw.it.edu/OcwWeb/web/home/home/index.htm  (MIT OpenCourseWare)
http://cnx.org/ (Rice University Connections, a clearing house of educational modules)
http://www.openculture.com/ (Open Culture – free audio books, courses, language…)
http://www.wordpress.com (a blogging platform)

STUDY OF MOBILE PHONE USAGE IN AFRICA

Adam Clayton Powell III
Senior Fellow, International Mobile Studies
USC center on Communication Leadership and Policy
University of Southern California
acpowell@usc.edu

OTHER RELEVANT LINKS AND SUMMARIES

AFRICAN DEVELOPMENT BANK (ADB)
The African Development Bank (ADB) is the flagship or parent institution of the African Development Bank Group. Its members include 53 independent African countries (regional member countries) and 25 non-African countries. Its major role is to contribute to the economic and social progress of its regional member countries - individually and collectively. ADB lends money and gives grants to African governments, as well as invests in private companies operating in Africa. Through its financing for the social sector, ADB is engaged in the education policy development. The organization designed the Higher Education, Science and Technology Strategy to assist member countries to strengthen their educational systems, particularly tertiary education, science, technology, technical and vocational education as well as training. The Bank’s activities focus on centers of excellence and networks of small national institutions by using distance-learning modalities. Likewise, the organization works with its member countries to reform and transform higher education systems as well as technical and vocational training in science, technology and innovation in order to accelerate economic growth in Africa.
http://www.afdb.org/

AFRICANDEVJOBS
AfricanDevJobs connects organizations and professionals who are focused on Africa’s growth and development. Through employment opportunities and career advancement resources, AfricanDevJobs is committed to social and economic development in Africa. The social enterprise provides a platform for recruitment, networking, and information in African development. The organization places an emphasis on giving jobseekers access to the information and opportunities needed to advance their career in African development, highlighting the voices of Africans on the continent and in the diaspora in African development, and creating the opportunity for more diversity in international development.
http://africandevjobs.com/

AMERICAN COUNCIL OF EDUCATION (ACE)
ACE represents the presidents of U.S. accredited, degree-granting institutions, which include two- and four-year colleges, private and public universities, and nonprofit and for-profit enti-
ties. The Council convenes representatives from all sectors to collectively tackle the toughest higher education challenges, with a focus on improving access and preparing every student to succeed. ACE is consistently at the center of federal policy debates in areas critical to higher education.

The council has led discussions about Pell grant funding, scientific research, tax proposals, and many other key issues. ACE's efforts on behalf of the nation's colleges and universities ensure members are: informed and up to date on significant public policy issues affecting higher education; connected to federal policymakers; and, represented on Capitol Hill as federal officials make critical decisions about institutions and students.

http://www.acenet.edu/

ASSOCIATION FOR DEVELOPMENT OF EDUCATION IN AFRICA (ADEA)
ADEA is a forum for policy dialogue on education policies and a partnership between African education and training ministries and their technical and funding partners. The institution is based within the African Development Bank. It supports policy dialogue through the Biennales/Triennales events, which bring together higher education stakeholders form the African countries, as well as the representatives of the development agencies. Policy dialogue is also promoted through ADEA's Steering Committee seminars. These seminars provide a venue for high level discussions between ministers of education and member agencies on priority issues for education in Africa. The organization also facilitates regional and sub-regional cooperation and dialogue. It organizes technical or sub-regional ministerial meetings on topics of common interest in order to foster greater cooperation between countries. The following themes have been explored: education and HIV/AIDS; ICTs in education systems; education in conflict and post-conflict situations; secondary education; contract teachers; bilingual and mother tongue instruction; education for rural people; school fee abolition initiatives; dialogue between ministers of Finance and Ministers of Education; education for peace; skills, training and for jobs for the youth.

http://www.adeanet.org/

BROOKINGS INSTITUTION CENTER FOR UNIVERSAL EDUCATION
The Center for Universal Education is one of the leading policy centers focused on universal quality education in the developing world. The Center develops and disseminates effective solutions to achieve equitable learning, whereby all children and youth are able to access a quality education that supports their lifelong learning and development. The Center plays a critical role in influencing the development of new international education policies and in transforming them into actionable strategies for governments, civil society and private enterprise.

The main focus of the organization is: conducting innovative research and generating real solutions to achieve equitable learning for all; informing policymakers and thought-leaders on educational challenges in the developing world; and, shaping the policy debate by elevating global education higher on the international agenda. The Center for Universal Education is engaged in three broad areas: improving education resources and learning outcomes, influencing the global education agenda, and advancing quality education in conflict contexts.

http://www.brookings.edu/about/centers/universal-education
**DFID (BRITISH AID ORGANIZATION)**

The Department for International Development (DFID) leads the UK’s work to end extreme poverty. DFID’s ending the need for aid by creating jobs, unlocking the potential of girls and women and helping to save lives when humanitarian emergencies hit. The department is responsible for: honoring the UK’s international commitments and taking action to achieve the Millennium Development Goals; making British aid more effective by improving transparency, openness and value for money; targeting British international development policy on economic growth and wealth creation; improving the coherence and performance of British international development policy in fragile and conflict-affected countries; improving the lives of girls and women through better education and a greater choice on family planning; preventing violence against girls and women in the developing world; and, helping to prevent climate change and encouraging adaptation and low-carbon growth in developing countries. DFID’s priorities for education include helping 9 million children in primary school, at least half of which will be girls, helping 2 million children in lower secondary school, and training more than 190,000 teachers and improve the quality of education and children’s learning. The Department works directly in 28 countries across Africa, Asia and the Middle East.

https://www.gov.uk/government/organisations/department-for-international-development

- **Research on Improving Systems of Education (RISE)**

  The RISE program is a large scale, multi-country research program that seeks to answer the question: “What works to improve education systems to deliver better learning for all at scale in developing countries?”

RISE aims to provide the evidence base on education systems needed to improve learning outcomes by:

1. Commissioning high-quality research on education systems and systems reform that responds to locally-identified challenges;
2. Engaging with researchers and practitioners to develop an analytic framework to understand how education systems function; and
3. Ensuring that researchers, teachers, policymakers and other education practitioners globally have access to the most relevant, up-to-date research on the impact of education systems on learning for all.

RISE is funded by the United Kingdom’s Department for International Development, which has allocated £21 million for high-quality research in up to five countries over six years. It is managed and implemented through a partnership based in Oxford, UK, between leading international development consultancy Oxford Policy Management and the Blavatnik School of Government at the University of Oxford. Research is led by Professor Lant Pritchett and a team at the Center for Global Development, a non-profit think tank based in Washington DC.

A multi-disciplinary Intellectual Leadership Team of global academics and practitioners provides strategic, intellectual and practical advice to the programme.

www.rise.ox.ac.uk

**DIDACTA**

Didacta is Europe’s largest education trade fair, which offers the overview of the offers, trends and current themes from early childhood learning through to further education for adults, the
new technologies and in the institutional sector. It includes an exhibition, where businesses present new solutions for a wide range of fields of education to a large audience. In numerous forums, lectures, congresses, workshops and discussion rounds, the high-level supporting program deals with the current developments in the field of education and pedagogy.

http://www.didacta.de

EDUWIRE

EDUwire is a dynamic resource for higher education IT & AV professionals. The organization’s website and daily e-newsletter provide context, commentary, and analysis of all the latest news, products, and trends in the evolving world of edtech. The EDUwire Daily Update offers readers curated content for MOOCs, Flipped Classrooms, Cloud-Computing, Lecture Capture, Learning Management Systems, Web 2.0, Pedagogy, Distance Learning, Classroom Audio, Classroom Video, Education Apps, Streaming, Control Systems, IT, and Security.

http://www.eduwire.com/

EUROPEAN UNION (EU)-AFRICA STRATEGIC PARTNERSHIP

The political framework of cooperation between the EU and Africa is the Joint Africa-EU Strategy (JAES), adopted in 2007, the first and only intercontinental partnership strategy. The Africa-EU Partnership is enshrined in the JAES: a partnership of equals, determined to tackle together issues of common concern.

In April 2014, the 4th EU-Africa Summit took place under the theme “Investing in People, Prosperity and Peace”. The Summit agreed that the implementation of the Joint Strategy during 2014-2017 should focus on five priority areas:

• Peace and Security
• Democracy, Good Governance and Human Rights
• Human Development
• Sustainable and Inclusive Developmental Growth and Continental Integration
• Global and Emerging Issues


EU-COMMUNITY OF LATIN AMERICAN AND CARIBBEAN STATES (CELAC) PARTNERSHIP

The Community of Latin American and Caribbean States (CELAC), launched in 2010, is a regional mechanism for political dialogue and cooperation. For the first time, it involves 33 countries of Latin America and the Caribbean (LAC). It has merged the Rio Group (political consultation forum) and CALC (“Cumbres América Latina y Caribe” – internal LAC Summits). EU-CELAC relations are structured around biennial summits, regular senior officials’ meetings as well as specific thematic dialogues and initiatives including: From now on CELAC will be the EU’s counterpart for the bi-regional partnership process, including at summit level.

http://www.eeas.europa.eu/ia/migration/index_en.htm
EU HUMAN DEVELOPMENT SECTOR

Inclusive and sustainable economic growth is crucial to long-term poverty reduction and growth patterns are as important as growth rates. To this end, the EU supports economic growth paradigms which are inclusive and sustainable, characterised by people's ability to participate in, and benefit from, wealth and job creation.

https://ec.europa.eu/europeaid/civil-society_en
https://ec.europa.eu/europeaid/countries-territories-and-regions-where-we-are-active_en
https://ec.europa.eu/europeaid/funding/about-grants_en

THE FALLACY OF THE ‘DIGITAL NATIVE’: WHY YOUNG PEOPLE NEED TO DEVELOP THEIR DIGITAL SKILLS

‘Digital native’ is a term increasingly used in public discourse to describe the generations of young people who grow up surrounded by digital technologies. The term suggests that young people intuitively know how to use technology and hence have no need for digital education or training. This paper outlines the issues connected with this assumption and provides evidence to demonstrate that it is a dangerous fallacy. Young people do not inherently possess the skills for safe and effective use of technologies, and skills acquired informally are likely to be incomplete. The failure to provide youth with a complete set of skills in a formal manner leads to a new digital divide between digital lifestyle skills and digital workplace skills. The lack of proficiency in the tools needed for today's workforce contributes to an increasingly lost generation, who are unable to realize their full potential as learners, employees, entrepreneurs or citizens using digital technologies.


INTER-AMERICAN DEVELOPMENT BANK (IDB)

The Inter-American Development Bank works to improve lives in Latin America and the Caribbean. Through financial and technical support for countries working to reduce poverty and inequality, IDB helps improve health and education, and advance infrastructure. IDB’s aim is to achieve development in a sustainable, climate-friendly way. With a history dating back to 1959, today IDB is the leading source of development financing for Latin America and the Caribbean.


INTERNATIONAL FINANCE CORPORATION (IFC)

IFC, a member of the World Bank Group, is the largest global development institution focused exclusively on the private sector in developing countries. IFC is owned by 184 member countries, a group that collectively determines policies. The organization works in more than 100 developing countries allows companies and financial institutions in emerging markets to create jobs, generate tax revenues, improve corporate governance and environmental performance, and contribute to their local communities. IFC’s vision is that people should have the opportunity to escape poverty and improve their lives. The organization’s priorities include: strengthening the focus on frontier markets; addressing climate change and ensuring environmental and social sustainability; addressing constraints to private sector growth in infrastructure, health, education, and the food-supply chain; developing local financial markets; and, building long-term client relationships in emerging markets. IFC helps build capacity in private education in emerging markets to complement the offering of the public
sector and to create more opportunities for children, youth, and working adults. IFC supports private education providers which have a particular emphasis on providing knowledge and skills that lead to employability. Innovative models are helping private education providers increase reach and improve quality of education. Achieving quality and access at lower costs is critical for creating educational opportunities for close to 70 million children and youth globally without access to education.

IFC helps private education providers expand to reach more students in middle and low-income groups and to promote higher quality of education. http://www.ifc.org/

INTERNATIONAL SOCIETY FOR TECHNOLOGY IN EDUCATION (ISTE)
ISTE is a nonprofit organization serving educators and education leaders committed to empowering connected learners in a connected world. The aim of the organization is to connect educators with their peers, share knowledge and ideas, and help lead the transformation of education. The organization manages the ISTE Conference & Expo, which is the premier forum in which to learn, exchange ideas and survey the field of education technology. It promotes ISTE Standards for learning, teaching and leading in the digital age. ISTE also serves as the advocacy network and engages with the federal and state lawmakers and regulators, local policy makers, associations, nongovernmental organizations, coalitions and the media to advocate for the effective use of technology in the education process. http://www.iste.org/

MASTERCARD FOUNDATION SCHOLARS PROGRAM
The MasterCard Foundation Scholars Program is an initiative to educate and prepare young people – particularly from Africa – to lead change and make a positive social impact in their communities. The Program provides young people from economically disadvantaged communities who have demonstrated academic talent and leadership potential with access to quality and relevant education. Students receive financial support for fees, uniforms, books and supplies, transportation, accommodation, and stipends. The Program will serve an estimated 15,000 young people at the secondary and university levels. Likewise, the Program is building a global network of education institutions and non-profit organizations committed to educate young people who are committed to the betterment of their communities. This network will document and share best practices to identify, educate, and mentor students, and transition them into the workforce. http://mastercardfdnscholars.org

NEW AMERICA FOUNDATION
The New America Foundation's Education Policy Program uses original research and policy analysis to solve the nation's critical education problems, serving as a trusted source of objective analysis and innovative ideas for policymakers, educators, and the public at large. The organization combines a steadfast concern for low-income and historically disadvantaged people with a belief that better information about education can vastly improve both the policies that govern educational institutions and the quality of learning itself. New America's work encompasses the full range of educational opportunities, from early learning to primary and secondary education, college, and the workforce. New America is deeply engaged
in ongoing developments in educational technology at all levels of child and adult development. The organization believes new organizational models have potential to achieve breakthrough levels of performance on behalf of students. And New America believes that all providers of education must be held constructively accountable for the quality of their work. The education-focused programs include Federal Education Budget Project, Early Education Initiative, Higher Ed Watch, and Ed Central.

https://www.newamerica.org/education-policy/

**ORGANIZATION OF AMERICAN STATES (OAS) SCHOLARSHIPS AND GRANTS**

The Academic Scholarship Program of OAS, established in 1958, give yearly grants for masters, doctorates, postgraduate study and research with university credit. The Special Scholarship Program (SPECAF), established in 1983, gives grants for two years of study to anglophone members of the Caribbean and Surinam.

http://oas.org/es/becas/

**ORGANIZATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (OECDE)**

OECDE is an organization that unites 34 countries and serves as a forum for their governments. It works with governments on issues of economic, social and environmental change. The organization measures productivity and global flows of trade and investment. It conducts a continues monitoring of events in member countries as well as outside OECDE area, and includes regular projections of short and medium-term economic developments. OECDE sets international standards on a wide range of things, from agriculture and tax to the safety of chemicals, which take a form of recommendations further implemented by the governments. The organization is one of the world’s largest sources of comparable statistical, economic and social data.

In the education field OECDE collects education statistics and conducts the international large-scale assessments. OECDE education statistics and indicators provides a strong base for international comparisons of all aspects of education systems. Its research and policy analyses facilitate peer learning across countries as new policy options are explored. The organization manages the Program for International Student Assessment (PISA), which is a triennial international survey aimed to evaluate education systems worldwide by testing the skills and knowledge of 15-year-old students. To date, students from 70 countries participated in the survey.

http://www.oecd.org/

- **Program for International Student Assessment (PISA)**

  The Program for International Student Assessment (PISA) is an international assessment that measures 15-year-old students’ reading, mathematics, and science literacy every three years. First conducted in 2000, the major domain of study rotates between mathematics, science, and reading in each cycle. PISA also includes measures of general or cross-curricular competencies, such as collaborative problem solving. By design, PISA emphasizes functional skills that students have acquired as they near the end of compulsory schooling. PISA is coordinated by the Organization for Economic Co-operation and Development (OECDE), an intergovernmental organization of industrialized countries, and is conducted in the United States by NCES. The next assessment is in 2015.
PISA 2015 will assess students’ mathematics, reading, and science literacy in more than 70 countries and educational jurisdictions. Science is the major subject area in 2015, as it was in 2006. PISA 2015 will also include a collaborative problem solving assessment and an optional financial literacy assessment. U.S. 15-year-old students will participate in this optional assessment.

The most recent PISA results are from 2012 and are available here. The PISA 2012 financial literacy results were released in July 2014 and are available here. More information about PISA and resources, including the OECD’s PISA reports, PISA assessment frameworks, and international data files, are available at the OECD’s website.

http://nces.ed.gov/surveys/pisa/

PEW RESEARCH CENTER

Pew Research Center is a nonpartisan fact tank that informs the public about the issues, attitudes and trends shaping America and the world. Pew conducts public opinion polling, demographic research, content analysis and other data-driven social science research. The think tank provides independent opinion research about American attitudes on politics and major policy issues and study the changing U.S. electorate by measuring long-term trends in political values and public policy priorities, as well as conducting timely and topical polling on the issues of the day. Pew Research Center study U.S. politics and policy; journalism and media; internet, science and technology; religion and public life; Hispanic trends; global attitudes and trends; and U.S. social and demographic trends. Under the umbrella of “U.S. social demographics and trends” Pew Research conducts analysis and research with regard to education.

http://www.pewresearch.org/

QUADRENNIAL DIPLOMACY AND DEVELOPMENT REVIEW (QDDR)

The Quadrennial Diplomacy and Development Review (QDDR) provides a blueprint for advancing America’s interests in global security, shared prosperity, and universal values of human dignity and freedom. As a joint effort of the Department of State and the U.S. Agency for International Development (USAID), the review identifies major global and operational trends that constitute threats or opportunities, delineates priorities and reforms, to ensure our civilian institutions are in the strongest position to shape and respond to a rapidly changing world.

http://www.state.gov/s/dmr/qddr/2015/index.htm

ROCKEFELLER FOUNDATION

The Rockefeller Foundation’s mission is to promote the well-being of humanity throughout the world. The Foundation pursues this mission through dual goals: advancing inclusive economies that expand opportunities for more broadly shared prosperity, and building resilience by helping people, communities and institutions prepare for, withstand, and emerge stronger from acute shocks and chronic stresses. To achieve these goals, the Foundation works in four focus areas—advance health, revalue ecosystems, secure livelihoods, and transform cities—to address the root causes of emerging challenges and create systemic change. Together with partners and grantees, The Rockefeller Foundation strives to catalyze and scale transformative innovations, create unlikely partnerships that span sectors, and take risks others cannot. In 2006, The Rockefeller Foundation underwent a major shift in fund-
ing strategy. Some of the areas for which the Rockefeller Foundation used to provide major support are no longer areas of focus, including education reform, peace and security, and international arts and humanities.

http://www.rockefellerfoundation.org/

SIMSCHOOL

simSchool began over 2005 as a research question among educational scientists at the University of North Texas and the University of Vermont. Their question, “Can you learn to teach, or teach more effectively, with a simulation,” served as the impetus for a decade of research and development of scientifically sophisticated, artificially intelligent simulations. Now used in hundreds of educational programs and schools in over a hundred countries, simSchool is a continuously evaluated simulation-based tool for teacher training and curriculum improvement.

http://simschool.org/

SOROS FOUNDATION (“OPEN SOCIETY FOUNDATION”)

The Open Society Foundations work to build vibrant and tolerant societies whose governments are accountable and open to the participation of all people. The Soros Foundation seeks to strengthen the rule of law; respect for human rights, minorities, and a diversity of opinions; democratically elected governments; and a civil society that helps keep government power in check. The Foundation helps to shape public policies that assure greater fairness in political, legal, and economic systems and safeguard fundamental rights. Working in every part of the world, the Open Society Foundations place a high priority on protecting and improving the lives of people in marginalized communities. The Open Society Foundations are committed to empowering young people by supporting efforts to increase access to quality education. From early childhood to higher education, the Foundation works to ensure young people from different backgrounds have equal access to education and to promote critical thinking, respect for diverse opinions, and free and open intellectual inquiry. The following Open Society programs focus on this issue: Early Childhood Program, Education Support Program, International Higher Education Support Program, and Scholarship Programs.

http://www.opensocietyfoundations.org/

UNITED NATIONS CHILDREN’S FUND (UNICEF)

UNICEF is a United Nations Program that provides long-term humanitarian and developmental assistance to children and mothers in developing countries. It promotes the rights and wellbeing of every child through the work in 190 countries and territories to translate that commitment into practical action, focusing special effort on reaching the most vulnerable and excluded children. UNICEF recognizes the particular importance of early childhood development and adolescence. Its programs focus on the most disadvantaged children, including those living in fragile contexts, those with disabilities, those who are affected by rapid urbanization and those affected by environmental degradation. UNICEF promotes girls’ education – ensuring that they complete primary education as a minimum. The organization acts so that all children are immunized against common childhood diseases, and are well nourished. It works to prevent the spread of HIV/AIDS among young people and to help children and families affected by HIV/AIDS to live their lives with dignity.

http://www.unicef.org
UNITED NATIONS DEVELOPMENT PROGRAM (UNDP)
The United Nations Development Program (UNDP) is the UN’s global development network. It works in more than 170 countries and territories, helping to achieve the eradication of poverty, and the reduction of inequalities and exclusion. It helps countries to develop policies, leadership skills, partnering abilities, institutional capabilities and build resilience in order to sustain development results. UNDP work is concentrated on four main focus areas: poverty reduction and achievement of the MDGs; democratic governance; crisis prevention and recovery; environment and energy for sustainable development. UNDP’s network links and coordinates global and national efforts to achieve the UN Millennium Development Goals. These goals include eradicating extreme poverty and hunger; achieve universal primary education; promote gender equality and empower women; reduce child mortality; improve maternal health; combat HIV/AIDS, malaria, and other diseases; ensure environmental sustainability; global partnership for development.

http://www.undp.org

- United Nations Post-2015 Sustainable Development Agenda
  The new post-2015 development agenda builds on the Millennium Development Goals (MDGs), eight anti-poverty targets that the world committed to achieving by 2015. Enormous progress has been made on the MDGs, showing the value of a unifying agenda underpinned by goals and targets. Yet despite this success, the indignity of poverty has not been ended for all.

The members of the United Nations are now in the process of defining Sustainable Development Goals (SDGs) as part of a new agenda to finish the job of the MDGs, and leave no one behind.

http://www.undp.org/content/undp/en/home/mdgoverview.html

- United Nations Sustainable Development Goals (SDGs)
  One of the main outcomes of the Rio+20 Conference was the agreement by member States to launch a process to develop a set of Sustainable Development Goals (SDGs), which will build upon the Millennium Development Goals and converge with the post 2015 development agenda. It was decided establish an “inclusive and transparent intergovernmental process open to all stakeholders, with a view to developing global sustainable development goals to be agreed by the General Assembly.”

https://sustainabledevelopment.un.org/?menu=1300

UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION (UNESCO)
UNESCO is a specialized United Nations agency, which works to build networks among nations that enable them to create holistic policies that are capable of addressing the social, environmental and economic dimensions of sustainable development. To achieve its goal UNESCO acts to ensure universal access to quality education as a fundamental human right and as a prerequisite for human development. It strives to build intercultural understanding through protection of heritage and support for cultural diversity. UNESCO created the idea of World Heritage to protect sites of outstanding universal value. It supports pursuit of scientific cooperation: such as early warning systems for tsunamis or trans-boundary water manage-
ment agreements, to strengthen ties between nations and societies. The organization protects the freedom of expression as an essential condition for democracy, development and human dignity.

UNESCO coordinates the Education for All movement, tracks education trends and raises the profile of educational needs on global development agendas. It works to provide global and regional leadership in education; to strengthen education systems worldwide from early childhood to the adult years; to respond to contemporary global challenges through education.

The organization focuses on increasing equity and access, improving quality, and ensuring that education develops knowledge and skills in areas such as sustainable development, HIV and AIDS, human rights and gender equality. UNESCO works with governments and a wide range of partners to make education systems more effective through policy change. [http://en.unesco.org/](http://en.unesco.org/)

**WORLD BANK**

The World Bank is a composition of the International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA). The IBRD provides loans and other assistance primarily to the governments of the middle-income countries. It aims to help developing countries reduce poverty, promote economic growth, and build prosperity. The governments of 188 member countries own IBRD. The organization provides a combination of financial resources, knowledge and technical services, and strategic advice to developing countries, including middle income and credit-worthy lower income countries. IBRD supports long-term human and social development that private creditors do not finance. It works to preserve borrowers’ financial strength by providing support in times of crisis, when poor people are most adversely affected. The organization promotes key policy and institutional reforms (such as safety net or anti-corruption reforms); creates a favorable investment climate to catalyze the provision of private capital; facilitates access to financial markets often at more favorable terms than member-countries can achieve on their own.

IDA provides interest-free loans and grants to the governments of the poorest countries for programs that boost economic growth, reduce inequalities, and improve people’s living conditions. IDA is one of the largest sources of assistance for the world’s 77 poorest countries, 39 of which are in Africa. It is the single largest source of donor funds for basic social services in these countries. IDA charges little or no interest and repayments are stretched over 25 to 38 years, including a 5- to 10-year grace period. IDA also provides grants to countries at risk of debt distress. The World Bank financed 543 projects for tertiary education. [http://www.worldbank.org/](http://www.worldbank.org/)

**WORLDDIDAC ASSOCIATION**

Worliddiac is the global trade association for companies providing products for education and training at all levels. Its membership includes 161 companies and organizations from 39 countries on five continents. It is the organizer of Worliddiac Basel exhibition and trade show, which is the international event in trade with educational supplies. The organization manages the Worliddiac Award - an internationally recognized distinction for educational resources. The Worliddiac Award intends to motivate manufacturers of educational products towards the development of high quality and innovative products and to support the
continuous further development, and thus improvement, of learning and teaching.

http://www.worlddidac.org

WORLD INNOVATION SUMMIT FOR EDUCATION (WISE)
WISE is an international, multi-sectoral platform established by the Qatar Foundation. The initiative aims to transform education through innovation. Through both the annual Summit and a range of ongoing programs, WISE is promoting innovation and building the future of education through collaboration. The organization is a network of education stakeholders - from students to decision-makers - from about 200 countries who share ideas and collaborate to seek creative solutions to solve challenges facing education. WISE encourages new approaches to education and seeks to promote best practices from multiple sectors and from around the world.

http://www.wise-qatar.org/