

**The Adventure of Extreme Learning:
Documenting Impactful Online Learning
Experiences and the Potential for Life Change**

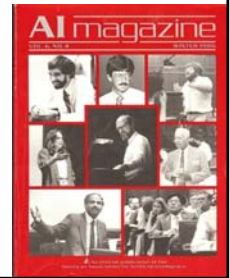
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and
Eulho Jung, Minkyong Kim,
Abdullah Altuwaijri, Verily Tan, Yurong Wang
Indiana University



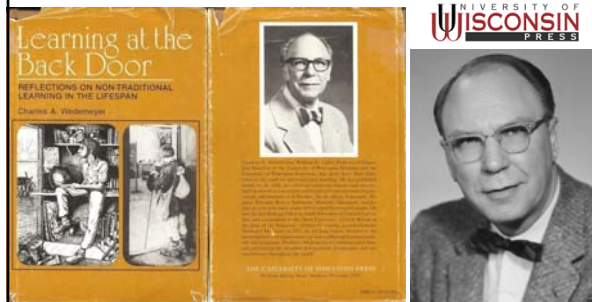
**Change not possible as an
accountant...**
(Life as a CPA, 1981-1986)



Decided to Read, Read, Read...
(e.g., People like Albert Bandura, Howard
Gardner, Roger Schank, **Elliot Soloway**, etc.)



Took Correspondence & TV Courses
(thanks to Bob Clasen and Charles
Wedemeyer, the University of Wisconsin)



Audience Poll:
**Raise your hands if learning
technology has ever transformed
your life.**



Fast Forward 25 Years...
“Anyone can now learn anything from anyone at any time.”



SKILLSHARE LEARN TEACH

Learn anything from anyone, anywhere.

Join us! Start learning and discover unique classes in your city.

1. Portals of OER (MIT Open Courseware, Open Yale)




Help millions reach their potential

Video Lecture

Assignments

Home

2. Online Language Learning (BBC Learning English)




Topics from Everyday Life

Assessment Tool

Home

3. Social Change and Global Education (e.g., Longitude, iCivics)



longitude

Oxfam

Home

4. Shared Online Video (e.g., CurrentTV, GetIdeas)



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“Sex, Lies & Cigarettes”: Vanguard Trailer

Inside a Massachusetts stash house, p
Dispatches from the Field

5. Adventure Learning (e.g., Earthducation)



Field Update

Home

Focused on Real Issue

6. Virtual Education (Khan Academy)

Salman Khan: Math master of Internet

Assessment

Home

We are entering a jumping off point...

Learn Anytime, Always On/Mobile

Robert Johnson, who championed the open-format Learn Anytime program at a two-year college in Louisville, Ky. checks students' e-mail while waiting for a flight. "Everything I need to do today, I can do on my phone."

Totally Extreme Learning...

The road chose me
50,000kms of ebb and flow
"This is not a holiday, this is my life."

NAUTILUS LIVE

Cameras stream Canadian polar bear migration

Extreme Learning Defined (Bonk, 2011)

"Extreme learning can involve learning while on a boat at sea near the North Pole or when sailing around the world. It also occurs when tracking the blog and podcasts postings of those in similar adventures such as riding a bike or a car around the world or through the Americas. Extreme learning also includes more sedate and passive forms of learning including watching an online video in TED, LinkTV, CurrentTV, or YouTube."

Extreme Learning continued... (Bonk, 2011)

"Through extreme learning Web resources, those stuck behind prison walls, injured and in a hospital bed, or unemployed and unable to pay for college tuition can learn to be more productive members of society. Others might be in transition from one career to another and find open educational resources and OpenCourseWare can arouse new interests and confidence" (see Iiyoshi & Kumar, 2008).

Extreme Learning

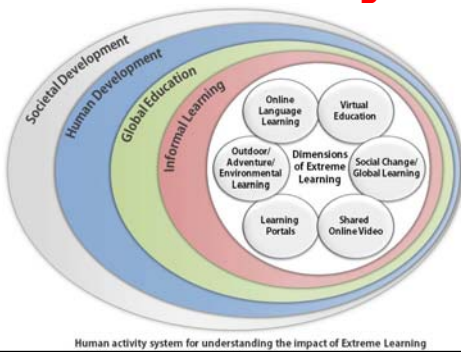
"Still others **might be retired** and offer their educational ideas and mentoring services to anyone interested in the topic. Others might be earning their MBA **while in war zones** in Iraq or Afghanistan."



Extreme Learning Areas

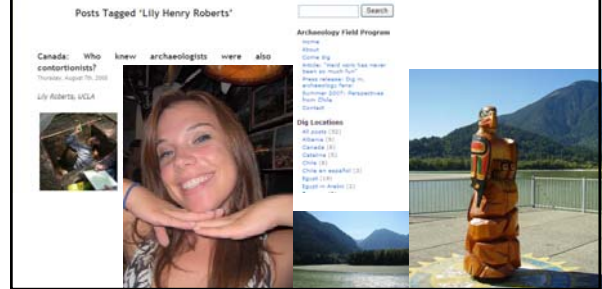
1. Adventure Learning and environmental education
2. Virtual Education (formal as well as informal)
3. Social Change and Global Learning
4. Language Learning
5. Shared online video
6. Learning portals

Visual Representation of Extreme Learning



Human activity system for understanding the impact of Extreme Learning

Totally Extreme #1. Blogging Field Archeology Research (e.g., Lily Henry Roberts, UCLA digging in Hope, BC, Stó:lō First Nation people from 12,000 years ago)



Totally Extreme #2. Virtual High School Learning by Boat (e.g., Bridey Fennell and her family sailing and learning in the Caribbean)



Totally Extreme #3. Kids Learn Online, Teach Online (e.g., the World's Youngest Teacher; Adora Svitak)



Totally Extreme #4.

OER (iPod) Learning from MIT OCW (e.g., Wendy Ermold, University of Washington)

Totally Extreme #5.

Global and Environmental Education (e.g., Cassandra Brooks: The Last Ocean Project, Ice Stories, and Shark Theater: a 24 foot inflatable screen and outdoor ocean theater to tiny islands)

Totally Extreme #6.

Online Language Learning (e.g., 300,000 people per month listening to ChinesePod, PaTTalk, iTalki, Palabea, Babbel)

Totally Extreme #7.

Shared Online History Videos (e.g., "History for Music Lovers" with over 50 songs including: Trojan War "Tainted Love" by Soft Cell; Charlemagne "Call Me" by Blondie, Cleopatra, Napoleon, Shakespeare, the Vikings)

Totally Extreme #8. Global Education and Virtual Education (South African teens get virtual mentoring), Danielle Berger, CNN, Jan 14, 2011 <http://www.cnn.com/2011/LIVING/01/13/cnnheroes.stokes/index.html?hpt=T2>

Totally Extreme #9.

Massive Open Online Courses (MOOC) (e.g., Fall 2011 Stanford AI Course 135,000+ sign up; Summer 2011 Online Learning Course, Ray Schroeder, U. of Illinois at Springfield, 2,700+ sign up;)

Totally Extreme #10. Military Mobile Learning and MBAs from War Zones (u.s. Army Learning Concept for 2015, January 2011).

<http://www.youtube.com/watch?v=KD9NGAV3-3k> (4:26 minutes)

Extreme Learning Website

Extreme Team Research

Content Analysis of over 300 websites

Web Site Coding Scheme

Criteria	Definition
1. Content Richness	This criterion deals how adequately it fulfills the purpose of learning, and whether the information is credible and up-to-date or not.
2. Functionality of Technology	This criterion deals with whether it contains effective and appropriately employed technology for the stated learning purpose.
3. Extent of Technology Integration	This criterion deals with issues of interaction, collaboration, and information collection, contribution, & community thru such tech.
4. Novelty of Technology	This criterion deals with whether contains emerging, unusual, or novel technologies.
5. Uniqueness of Learning Environment / Learning	The purpose of learning is highly different from traditional classroom settings.
6. Potential for Learning	Learning activities or learning opportunities for the target audience to achieve the intended learning goals.
7. Potential for Life Changing	This criterion deals with whether influences or improves the quality of life and extends or changes the perspective of the world for the intended audience.
8. Scalability of Audience	This criterion deals the possibility to broaden the size and scope of its potential intended audience.

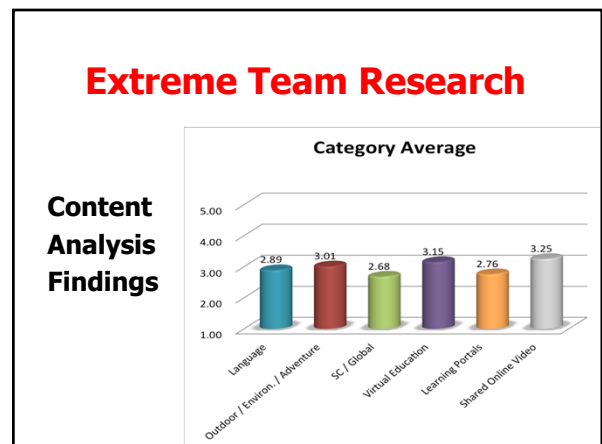
Extreme Team Research

Content Analysis Findings

	Criteria								Overall Average
	Content Richness	Functionality of Technology	Extent of Technology Integration	Novelty of Technology	Uniqueness of Learning Environment	Potential for Learning	Potential for Life Change	Scalability of Audience	
Language Learning	2.90	3.05	2.90	2.70	2.77	3.10	2.63	3.06	2.89
Adventure Learning	2.93	2.94	2.76	2.57	3.65	3.33	3.12	2.82	3.01
Global Education	2.53	2.64	2.55	2.37	2.84	2.84	2.93	2.74	2.68
Virtual Education	3.39	3.20	3.07	2.82	2.94	3.39	3.11	3.30	3.15
Learning Portals	3.19	2.79	2.73	2.49	2.57	2.86	2.50	2.95	2.76
Shared Online Video	3.38	3.41	3.16	3.00	3.21	3.37	3.11	3.38	3.25

305 Websites individually evaluated by 4 raters

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Coolest Websites

Categories	Coolest websites	
1. Online Language Learning	Live Mocha BBC Learning English	EnglishPod Chinese Pod
2. Virtual Education	MIT OpenCourseWare (OCW) MIT OpenCourseWare (OCW) Highlights for High School Khan Academy Open University UK-OpenLearn Ed Tech talk	John Hopkins OpenCourseWare NASA for Educators Florida Virtual School Smithsonian
3. Social Change/Global Education	ICivics	
4. Adventure/Outdoor Learning	Earth education Jon Bowermaster	Nautlius Live Explore
5. Learning Portals	MERLOT	
6. Shared Online Videos	National Geographic Education Academic Earth Discovery News Video	Wonder How To Videos EduTV Link TV

Extreme Learning Stories Mobile Storytelling and Pocket Schools (e.g., Paul Kim, Stanford & Seeds for Empowerment)

The diagram illustrates a cycle of learning: **International Students** and **Local Students** interact through a **Digital repository of stories**. This process leads to **Greater awareness of the conflict and understanding of Palestinian and Israeli youth**, which in turn fosters **Mutual understanding** and **Global citizenship**. The website also features a section titled "Empowering the next part of the story" with various educational resources.

HOPES: Humanity's Open Platform for the Exchange of Stories

The diagram shows a central circle labeled "Extreme Learning" surrounded by six segments: **Video**, **Portals**, **Adventure**, **Social**, **Virtual**, and **Language**. Surrounding this central hub are six thematic areas: **Informal Learning**, **Human Development**, **Global Learning**, **Societal Development**, **Language**, and **Video**.

Sample HOPES Stories

The screenshot shows a story titled "Life-changing Story > Open University" by DaMarco. The story describes DaMarco's journey from a junior year at Seton High School to attending college on time with athletic scholarships. A video player shows DaMarco speaking, and the text below reads: "Changing Education, Changing Lives - DaMarco".

Sample HOPES Stories

The screenshot shows a story titled "Life-changing Stories > Michigan Virtual University" by Carley. The story describes Carley's experience with online learning, noting that she was able to meet her goals and return to the classroom in November. A video player shows Carley writing on a whiteboard.

Web Platform Storytelling System

Students need to know that these things are available.

By: Ad Adina (adina)

Click the "Quote" button to add the selected text to "Quotation"

Established in 1962, Ahmadu Bello in Nigeria's largest university, with 30,000 students. Though the university boasts a large and well-maintained physical infrastructure, its internet access - like that of almost all Nigerian universities - is extremely limited.

Even the computer lab does not have a Web connection.

And because of the large number of students and the limited number of terminals, students can sign up for only 30 minutes each week on university computers.

Getting access

When **Adinjuwa** was first introduced to MIT OpenCourseWare through a CD-ROM in the university computer lab he had only 20 minutes to look through the material. Impressed with the content, he asked the computer lab for a copy of the CD when they were unable to give him one. Adinjuwa decided to find the site on his own, and copied down the Web address.

From his home computer, he has enjoyed regular access to OCW, and has used it to complement the course materials he has gotten through Ahmadu Bello.



Extreme Learning “Stretches the Edges” of Humanity

Humanity

Open Culture

Education Just Ahead

Document, Catalog, Grasp, Connect, Inspire Others, ...

What are your Extreme Learning HOPES and DREAMS?

Website: www.Extreme-Learning.com
Slides at: TrainingShare.com

Write to Justin: juswhiti@umail.iu.edu
Write to Curt: curt@worldisopen.com

Extreme Learning

We all learn!

Extreme!

Learning!