KHIS Computer Repair Club

Program Action - Logic Model - Student Achievement

INPUTS

OUTPUTS
Participants - Activities - Direct Products

OUTPUTS - IMPACT
Short Term - Intermediate - Long Term

Priorities

Mission

Vision

Values

Mandates

Resources

Local Dynamics

Collaborators

Situation

Needs & Assets

Problems

Stakeholders

What we invest	Who we reach	What we do	What we create	Results in terms of Learning	Results in terms of changing Action	Results in terms of change to the Condition
Staff time Tuesdays 1-5 pm	*Existing Contributors*	*Develop* products, curriculum, resources	*Plans*	*Awareness*	*Behavior* (i.e. participation, retention)	*Social* (i.e. Reach, Participation, Diversity)
Volunteer hours Brian & Barbara 5 hours each	*New Contributors*	*Deliver* content and services	*Event documents*	*Knowledge*	*Practice/ Contributions* (i.e. articles, pictures, bytes, edits, etc).	*Economic* (i.e. more funding for programs, more cost effective programs)
Planning time	*Clients*	*Conduct* workshops and meetings	*Topic areas*	*Attitudes*		
Money	*Educators*		*Pages*	*Skills*		
Knowledgebase	*Schools*	*Train*	*Articles*	*Interest*	*Decision Making* (i.e program planning, gap analysis, next steps)	*Civic* (i.e. Reach, Community Assessment)
Expertise	*Decision-Makers*	*Counsel/Advise*	*Templates*	*Opinions*		
Materials	*Consumers*	*Facilitate*	*Satisfaction*	*Aspirations*		
Equipment		*Partner*	*Fun*	*Intentions*		*Environmental* (i.e. Article and Photo Quality, Expanse of Content)
Space KHIS, Room Z4		*Disseminate/ Work with Media*	*Community Networks*	*Motivations*	*Policies*	
Technology					*Social Action*	
Partners						

Assumptions

External Factors

## Evaluation
Identification - Design - Implementation - Completion/Follow-up

Source: http://www.cus.wayne.edu/logic-model-development/

Shortcut to website: **http://bit.do/computerclub**
facebook.com/groups/khiscomputerclub
KHIS Computer Club Process

KHIS Computer Repair Club
Program Action - Logic Model - Student Achievement

Situation
We need assurances from KHIS that our club can use our current facility for a long period of time since we are planning on cleaning it up, painting it and upgrading its furniture and technology.
We need to be recognized by more local business entities and the media for supporting local job training, computer repair services.

Needs & Assets
Requirements (the KHIS administration has provided us):
- Approximately 150 sq ft secure storage space for equipment and computers awaiting repair
- Approximately 200 sq ft room for the club to meet and repair computers. This space could be shared but it would be highly desirable that we be able to keep at least 2 computer stations permanently available. It could be arranged for these stations to be available to other users when not in use by the club.
- Four regular-sized tables and 8 sturdy chairs
- At least four 15 Amp power circuits
- Internet access: Either one active Ethernet port which allows us to connect our own multi-port switch or a KHIS-provided network switch that provides at least eight RJ45 ports.
The club needs another 60" flat screen for instruction since the other we used was taken by another department.

Problems/Challenges
Our club is given a quota of just 80 broken or fixed computers since there is a limited amount of storage space in our room. Our volunteers have to pay for wifi adapters and refreshments out of their own pockets which amount to about $1,000 each year.

Stakeholders
Schools and families within the Windward Oahu District, Kahuku Complex.
The Computer Repair Club is a project of the Ko'olauloa Educational Alliance Corp (a 501 C3 non-profit)
We hope to make the Computer Repair Club a project of the Kahuku Complex 21st Century Community Learning Center (CCLC).

Hawaii Public Schools
Windward Oahu District
Kahuku Complex

WINDWARD

Sunset Beach E

Kahuku E → Kahuku H&I
Laie E

Hauula E

Kaaawa E

WINDWARD

OAHU

Waiahole E

Kahaluu E
Ben Parker E
Ahuimanu E
Puohala E
Mokapu E
King I
Aikahi E
Heeia E
Kainalu E
Kapunahala E
Kalaheo H
Castle H
Kailua E
Kailua I
Kaneohe E
Enchanted Lake E
Kailua H
Kaelepulu E
Maunawili E
Keolu E
Olomana I & H
Waimanalo E & I
Pope E

Legend:
- ● Elementary School
- ▲ Elementary & Intermediate School
- ▲ Intermediate/Middle School
- ▲ Intermediate & High School
- ■ High School
- ▲ Elementary/Intermediate & High School
- ✳ Special School

RS 16-0576, November 2015

Priorities

Train KHIS students how to repair and properly configure computers.

Keep usable computers out of the waste stream.

Deploy computers to people who can use them: classrooms, students' homes, etc (as requested by school counselors).

Send junked computer equipment to e-waste recycling.

Mission

Uplift the social and economic status of the Computer Repair Club graduates through education and skills development training with emphasis on values formation, application of computer repair technology and programming skills.

Vision

The Computer Repair Club envisions to be a leading supporter of information technologies, that prepares Ko'olauloa district students to excel in teaching computer education and contribute to the development of society and meet the standards of a fast-paced global life.

Values

Minimizing technology costs for parents and students in our community and for teachers and administrators in our schools.

Mandates

Send e-waste computer equipment to proper recycling.

All computers that are donated must have a [form](#) filled out by a parent or legal guardian that will assure the Computer Repair Club that the computer will not be sold, but returned to the club for other students to use.

General Learning Outcome (GLO's) for students:

- Self-directed Learner (The ability to be responsible for one's own learning)
- Community Contributor (The understanding that it is essential for human beings to work together)
- Complex Thinker (The ability to demonstrate critical thinking and problem solving)
- Quality Producer (The ability to recognize and produce quality performance and quality products)
- Effective Communicator (The ability to communicate effectively)
- Effective and Ethical User of Technology (The ability to use a variety of technologies effectively and ethically)

The Seven Cs – 21st Century Lifelong Skills

Seven Cs	Component Skills
Critical Thinking-and-Doing	Problem-solving, Research, Analysis, Project Management, etc.
Creativity	New Knowledge Creation, "Best Fit" Design Solutions, Artful Storytelling, etc.
Collaboration	Cooperation, Compromise, Consensus, Community-building, etc.
Cross-cultural Understanding	Across Diverse Ethnic, Knowledge and Organizational Cultures
Communication	Crafting Messages and Using Media Effectively
Computing / ICT Literacy	Effective Use of Electronic Information and Knowledge Tools
Career & Learning Self-reliance	Managing Change, Lifelong Learning and Career Redefinition
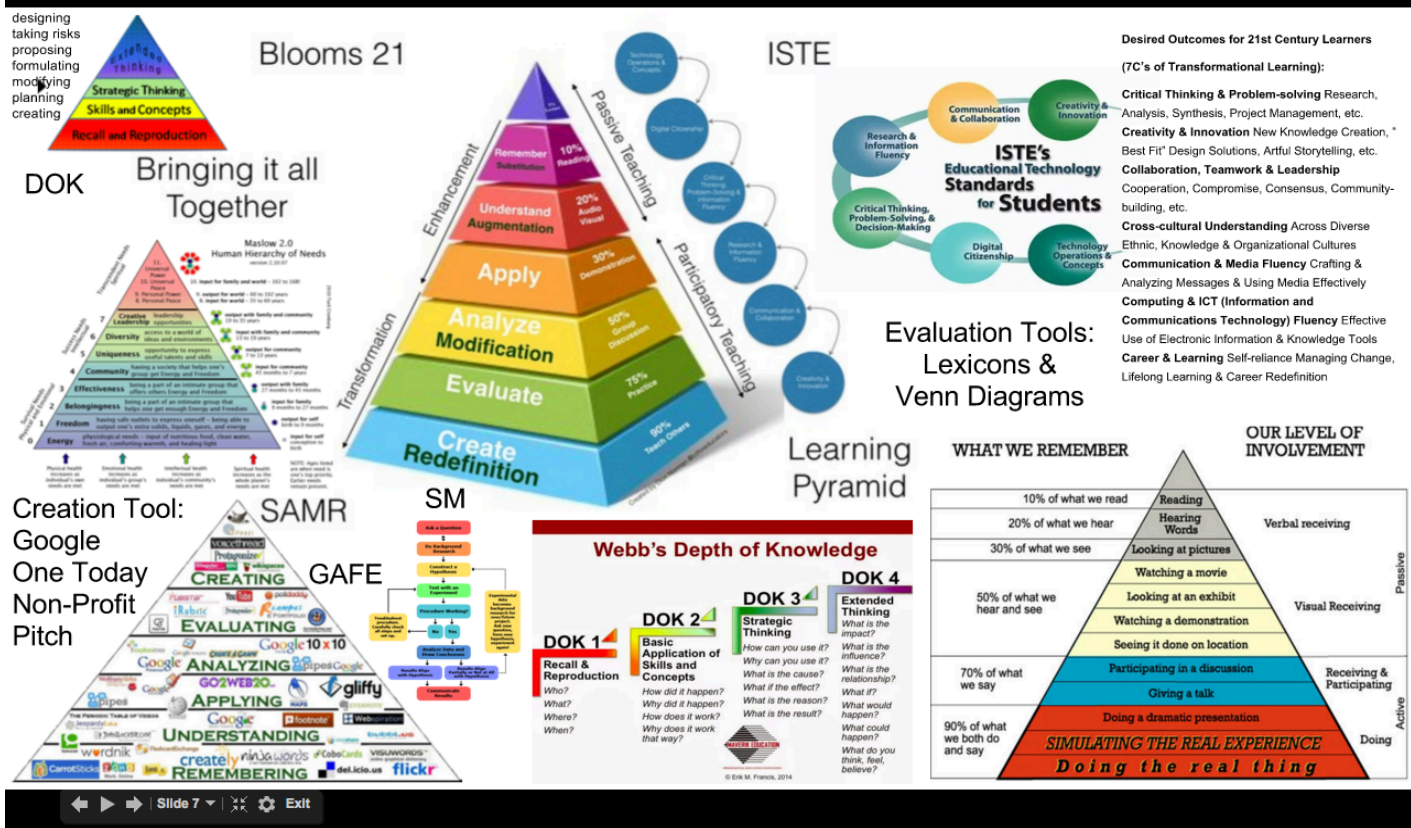
Resources
We will accept working and dead computers collected from the island the campus that are considered broken. We will solicit donations from businesses or individuals. These computers are typically donated by organizations that are "refreshing" their computers with newer models. They get tax credit for donations and usually wipe the computer hard drives prior to donation. These sources include but are not limited to:
- BYUH eWaste, PCC eWaste, Turtle Bay Resort Foundation
- SunEdison, Kahuku Community Fund, Hawaii Community Foundation, OHA, City and County of Honolulu, Alu Like, donorschoose.org
- Computers for Kids (http://www.catii.com/comp4kids.html)
- Hawaiian Hope (http://www.hawaiianhope.org/)
We will solicit computers from the community for repair or tune-up including the removal of computer viruses and adware/spyware.
We are part of the Kahuku Green Club.

Local Dynamics
Due to our remote location on campus, it is a little difficult for parents to find us. The campus is locked on weekends and during holidays.

Collaborators
- KHIS Administration (for approving usage of facilities), KHIS Counselors (for finding families that need computers)
- BYU Hawaii
- Computers for Kids
- HawaiianHope.org
>   Hawaiian Hope is a Hawaii-based non-profit organization run by Curtis Kropar and his cadre of volunteers. HH serves the IT needs of other non-profits, the homeless and low-income families. HH has installed hundreds of small to large computer labs primarily for the use of low-income families. They run low-cost Internet Cafes to serve low-income families. In the last 5 years, they have given away more than 1.200 free computers including more than 100 given away in a single night to Hau'ula Elementary School students in 2011: (https://www.youtube.com/watch?v=ug6ndTdVrqA)

INPUTS

What we invest

Staff time
Tuesdays 2:30-5 pm
Noah Jaussi
5 hours each per week
Computer Repair Club charter info (link)
List of members (link)

Volunteer hours
Brian Walsh, Barbara Keen, Christian Wilson
5 hours each per week

Planning time
Meetings are held each week during the first hour of the Computer Repair Club.

Money
KHIS Computer Repair Club has not received any income for its services over the past 8 years

Knowledgebase
All new members of the Computer Repair Club do not require previous experience. They just need to be willing to learn from our team members and encourage a positive working environment.

Expertise
As students spend time each week fixing computers, they will be surprised at the value of their new skills since they are always in demand. Learning to fix computers and learning how to program with mentors will help young people their logic and reasoning skills.

Materials
Personal computer repair tools, cleaning materials, air and water compressor.

Equipment
Computers will only have legally licensed software installed
- Operating system will be as licensed on the Windows COA label, free Mac OS or free Linux
- Office software will typically be the free OpenOffice suite
- Antivirus software will be the free Avast, AVG or Security Essentials
- Other free utilities: Adobe Acrobat Reader, VLC Media Player
Computers will be offered "as-is" with no implied warranty
Un-repairable or junk computers will be disposed of as e-wast**e**

Space
Kahuku High and Intermediate School, Room Z4
Approximately 400 sq ft secure storage space for working computers and equipment and computers awaiting repair

Technology
Windows 10, Mac OS, Cloudready OS
Desktops, laptops, Chromebooks, iPads

Partners
BYU Hawaii, PCC, Turtle Bay Resort Foundation
Computers for Kids, HawaiianHope.org
Kokua Hawaii Foundation, Malaekahana Hui, Captain Planet Foundation, Whole Foods Kailua, Ulupono Initiative, Hawaii Community Foundation, OHA, Kahuku Community Foundation
University of Hawaii (potential partner)

Main Areas of Focus
Academic

Science
Technology
Engineering
Math

Enrichment
Entrepreneurship
Community Service Learning
Mentoring

Character Ed
Youth Leadership

OUTPUTS Participants

Who we reach
Students in the Koʻolauloa School District: Kahuku High and Intermediate, Kahuku Elementary, Laie Elementary, Kaaawa Elementary, Sunset Beach Elementary Schools

Existing Contributors
BYU Hawaii, Computers for Kids, PCC, City and County Waste Treatment facilities

New Contributors
Local businesses

Clients
Since KHIS apparently has a policy of NOT deploying desktop computers (except for their testing centers), we will likely not be deploying computers on campus, but if any are deployed on campus then they will be clearly identified and maintained by WFE. Note that if desired, it would be feasible to establish a functional computer lab with donated computers, although they might be more susceptible to breakdown than DOE-supplied brand-new computers.

Computers are offered to students of WFE and also to any other KHIS students who can be identified by school counselors.
Other potential customers include local non-profit organizations such as "Kahuku Elderly Hauoli Hale", "Hope Chapel Kahuku", after school programs at Kahuku Community Center.

We might have to develop a prioritization process to determine who gets a computer if there is a large demand from students and the community. Hopefully, we would be able to increase our supply to meet any demand.

Repaired computers will not be stored indefinitely awaiting customers. Ideally, they will be deployed within four weeks of being repaired. Excess repaired computers or computer parts will be donated to Hawaiian Hope for their use.

Students in the Koʻolauloa School District: Kahuku High and Intermediate, Kahuku Elementary, Laie Elementary, Kaaawa Elementary, Sunset Beach Elementary Schools.

Educators
Teachers in the Koʻolauloa School District: Kahuku High and Intermediate, Kahuku Elementary, Laʻie Elementary, Kaʻaʻawa Elementary, Hauʻula Elementary, Sunset Beach Elementary Schools

Koʻolauloa Educational Alliance Corp (a 501 C3 non-profit)
Kahuku Complex 21st Century Community Learning Center (CCLC)
Kahuku.org

Decision-Makers
KHIS Principal, Kahuku/Castle Complex superintendent, KHIS Tech Coordinator

Consumers

Students in the Ko'olauloa School District: Kahuku High and Intermediate, Kahuku Elementary, La'ie Elementary, Ka'a'awa Elementary, Hau'ula Elementary, Sunset Beach Elementary Schools
Other potential consumers include local non-profit organizations such as "Kahuku Elderly Hauoli Hale", "Hope Chapel Kahuku", after school programs at Kahuku Community Center.

OUTPUTS Activities

What we do

Develop products, curriculum, resources
Programming instruction
Create arduino apps

Deliver content and services
Computer repair, virus removal

Conduct workshops and meetings
Computer instruction

Train
Students, teachers, parents, community

Counsel/Advise
School Tech Administrators

Facilitate
Computer repair, recycling computers and batteries
[Link](#) to have computers repaired

Partner
Ko'olauloa Educational Alliance Corp (a 501 (C)(3) non-profit)
Kahuku Complex 21st Century Community Learning Center (CCLC)
Neverware CloudReady

Disseminate/Work with Media
Showcase accomplishments to School Community Council (SCC) and local TV stations

OUTPUTS Direct Products

What we create
Teach students how to fix donated (non-DOE) tech devices
Teach students computer programming
Prepare students for A+ Computer Repair Certification
Prepare students for Praxis II Technology Education Certification
Prepare students for IT careers
Assist with identifying and moving eWaste
Reuse broken or outdated computers with Cloudready.

Plans
Our plan is to repair and deliver 20 computers per month to families in the Ko'olauloa district.

Event documents
Document computer donations, ewaste processing and pickups via online google docs.

Topic areas
Computer repair, arduino, programming, robotics.

Pages
Link to School Website computer club page.
Document accomplishments and press releases of Computer Repair Club (link).

Articles
Have article written in MidWeek.

Templates
Share our success with 50,000 other schools that normally throw away old technology.
Share school technology plans and tech sustainability with them via website and email.

Satisfaction
Our goal is to satisfy many families in the Ko'olauloa district by providing free computer and computer repair so students in their families can do homework and other assignments without paying a fortune for technology.

Fun
Learning how to repair computers is not only a useful and rewarding skill, it is actually fun to do.

Community Networks
Ko'olauloa Educational Alliance Corp (a 501 C3 non-profit).
Develop relationships with outside entities (Apple, Computers for Kids, Computer Geeks, Kahuku Senior Center, BYU Hawaii, Turtle Bay Resort, PCC, etc)
Learning how to use arduinos and create apps

OUTPUT IMPACT *Short-Term*

Results in terms of Learning

Awareness
Of computer recycling

Knowledge
Of how to repair computers.

Attitudes
Help people think about recycling broken technology before simply throwing it away.

Skills
Student learn valuable job skills. Our club president is the youngest employee of Turtle Bay Resort and works in their tech dept.

Interest
We would like to see more young women and men become involved in STEM projects.

Opinions
We would like more people in our community on building academic programs at our school.

Aspirations
Help Computer Repair Club students hook up with mentors and volunteers, find scholarships and jobs for them related to technology (i.e. Google, Tesla, Apple, Microsoft, etc).

Intentions
We aspire to help young people in our district to find and use the resources they need to find a rewarding career in technology.

Motivations
Our sincere motivation is to help young people enjoy helping others, particularly teachers, to use technology to benefit society.

OUTPUT IMPACT Intermediate

Results in terms of changing Action

Behavior
(i.e. participation, retention)
As students in the club take their roles seriously, their behavior improves and they are now looked as professionals.

Practice/Contributions
(i.e. articles, pictures, bytes, edits, etc).
As we document all of the contributions of the club, administrators, teachers gain confidence in our role as a support team.

Decision Making
(i.e program planning, gap analysis, next steps)
Measure and document our progress to facilitate the decision-making process by our stakeholders.

Policies
Link to policies, standards.

Social Action
Outreach program to make sure students are aware and become aware of our repair and training programs.

OUTPUT IMPACT Long-Term - STUDENT ACHIEVEMENT

Results in terms of change to the Condition

Social (i.e. Reach, Participation, Diversity)
Advertise Computer Repair Club position openings in school bulletin and enewsletter. (link to application form)
Link to join computer club.(create online google form).

Economic (i.e. more funding for programs, more cost effective programs).
Write grants to secure funding for computer repair tools, curriculum, transportation, training, etc.
Link to current grant request.
Integrate entrepreneurship, sustainability, film and computer club for economic development project with Google, VR, Google Street View, Google My Business, etc.
Link to school fundraising documentation. (take photo of 2 pages).
One of our students received a prestigious tech position for a large business at at 15.
A former ELL learner and member of our club become a valedictorian upon her graduation.

Civic (i.e. Reach, Community Assessment)
Recipient of donated computers can get higher grades, apply for scholarships and college, etc.
Share Computer Repair Club documentation, visit with schools, administrators and superintendents
Facilitate other schools in starting their own respective Computer Repair Clubs.

Environmental (i.e. Article and Photo Quality, Expanse of Content)
The KHIS Computer Repair Club has diverted hundreds of computers from dumpsters. For completely broken computers, they were properly processed for ewaste. Here is a list of our ewaste pickups.

Assumptions

We will be able to have the same amount of space in room Z4 to use and repair computers.
Ensure our room will be safe from mildew, mold, weeds, electrical fires, arson attempts, and natural disasters.

SWOT

Internal Factors

Strengths (positive)

Weaknesses (negative)

External Factors

Opportunities (positive)

Threats (negative)

Hawaii DOE Policies and Procedures.

Evaluation

Identification
Write grants to secure funding for computer repair tools, curriculum, transportation, training, etc.

Design
Design Computer Repair Club template for schools in the entire state.

Implementation
Share documentation, visit with schools, administrators and superintendents.

Completion/Follow-up
Film our club president explain how our Computer Repair Club operates and share on 'Olelo, TV morning news and other outlets

Background on Nathan Strain, Computer Repair Club president:
I was raised and educated in Utah and in Hawaii. I have been the president of the Computer Repair Club since 2015.I currently work on the tech team at Turtle Bay Resort and I also help the tech team at KHIS. I have helped our school win several awards using distributive computing to help find cures for the ebola and HIV viruses. I have also helped repair hundreds of computers that were donated to families in our school district that have no computers at home to do homework.

**Background on Brian Walsh, Volunteer Mentor:**
I was raised and educated in South Africa where I worked as an Electronic Engineer designing communications equipment. I moved to the United States in 1984 and worked in Maryland designing Data Modems for 5 years, then I moved to California and worked for Intel as the Engineering Manager of a team that developed retail data modem products and later computer platforms used for system-level validation testing of new microprocessors. Since retiring in 1999 and moving to Kaaawa, I volunteer at several local schools (mostly Kaaawa, Hakipuu Learning Center and Kahuku), helping to maintain and repair computers and networks. I have been married to my wife, Kaye, for 30 years and I am a US citizen.

Background on Barbara Keen, Volunteer Mentor:
Barbara Keen grew up in the Midwestern United States. She attended Ohio State University, Ohio Institute of Technology and Thomas Edison State University where she obtained her degree in Electronics Engineering Technology. Barbara proceeded to travel the world and work in the Radar and Aviation Electronics sector for many years. In the early 2000's she attended Microsoft school and received her Microsoft certifications, A+, and Networking Certifications and worked in the computer and networking technology field to date. She brings with her 34 years of a wide array of electronics and computer technology experience. Currently, Barbara is on hiatus and giving back to the community by assisting with the Kahuku Intermediate and High School Computer Club and many other community service projects on the island of Oahu.

Background on Christian Wilson, Volunteer Mentor:
I was raised and educated in private British and American schools in Mexico and Brazil. I worked in the computer field since 1977 in New York and Hawaii.I graduated from BYU-Idaho and BYU-Hawaii and received degress in Computer Science and Business Management. I retired as a senior systems analyst and retail manager in 1999 and have done computer consulting work since that time. I volunteer and work part-time at Kahuku High and Intermediate School and as volunteer board member of the Ko'olauloa Educational Alliance Corporation non-profit assisting them with their websites, broken computers, sustainability program, grant writing, and college and career readiness programs.

PORTRAIT OF A 21ST CENTURY LEARNER

TO SUCCEED IN A GLOBAL COMMUNITY, I WILL NEED TO BE:

A CRITICAL THINKER
A PROBLEM SOLVER
AN INNOVATOR
A COMMUNICATOR
GLOBALLY AWARE
CIVICALLY ENGAGED
A SELF-DIRECTED LEARNER
INFORMATION & MEDIA LITERATE
FINANCIALLY & ECONOMICALLY LITERATE
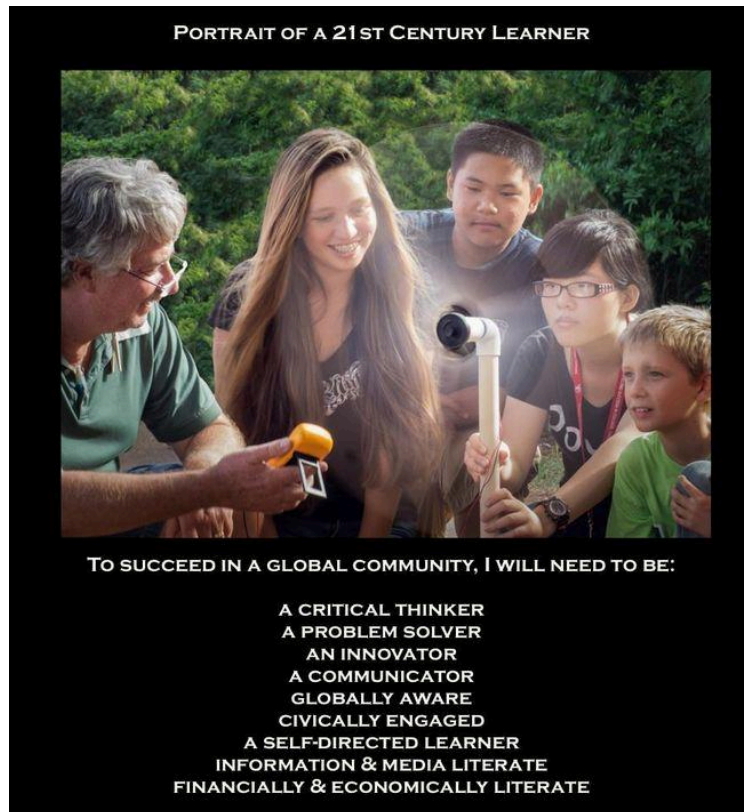
Desired Outcomes for 21st Century Learners:

7C's of Transformational Learning:

- **Critical Thinking & Problem-solving** Research, Analysis, Synthesis, Project Management, etc.
- **Creativity & Innovation** New Knowledge Creation, "Best Fit" Design Solutions, Artful Storytelling, etc.
- **Collaboration, Teamwork & Leadership** Cooperation, Compromise, Consensus, Community-building, etc.
- **Cross-cultural Understanding** Across Diverse Ethnic, Knowledge & Organizational Cultures
- **Communication & Media Fluency** Crafting & Analyzing Messages & Using Media Effectively
- **Computing & ICT (Information and Communications Technology) Fluency** Effective Use of Electronic Information & Knowledge Tools
- **Career & Learning Self-reliance** Managing Change, Lifelong Learning & Career Redefinition

21st Century Learning Formula

3R's X 7C's = 21st Century Learning

- Oracle Learning Foundation
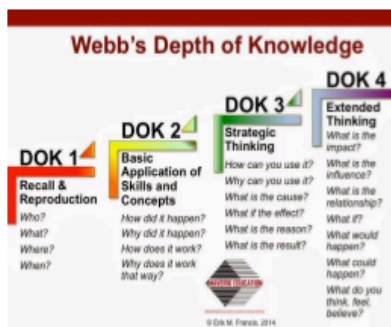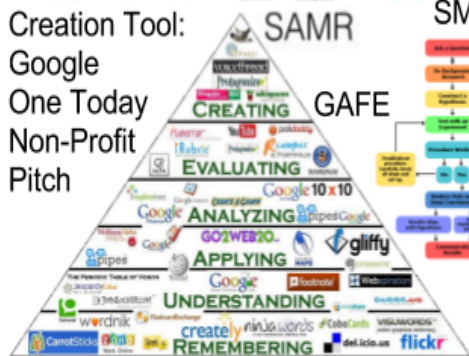
Pictures of students getting jobs, scholarships, etc
Families receiving fixed computers (sina)