"Nobody has a clue what the world will look like in five years' time. And yet we're meant to be educating children for it."

Sir Ken Robinson

## Goals For Presentation

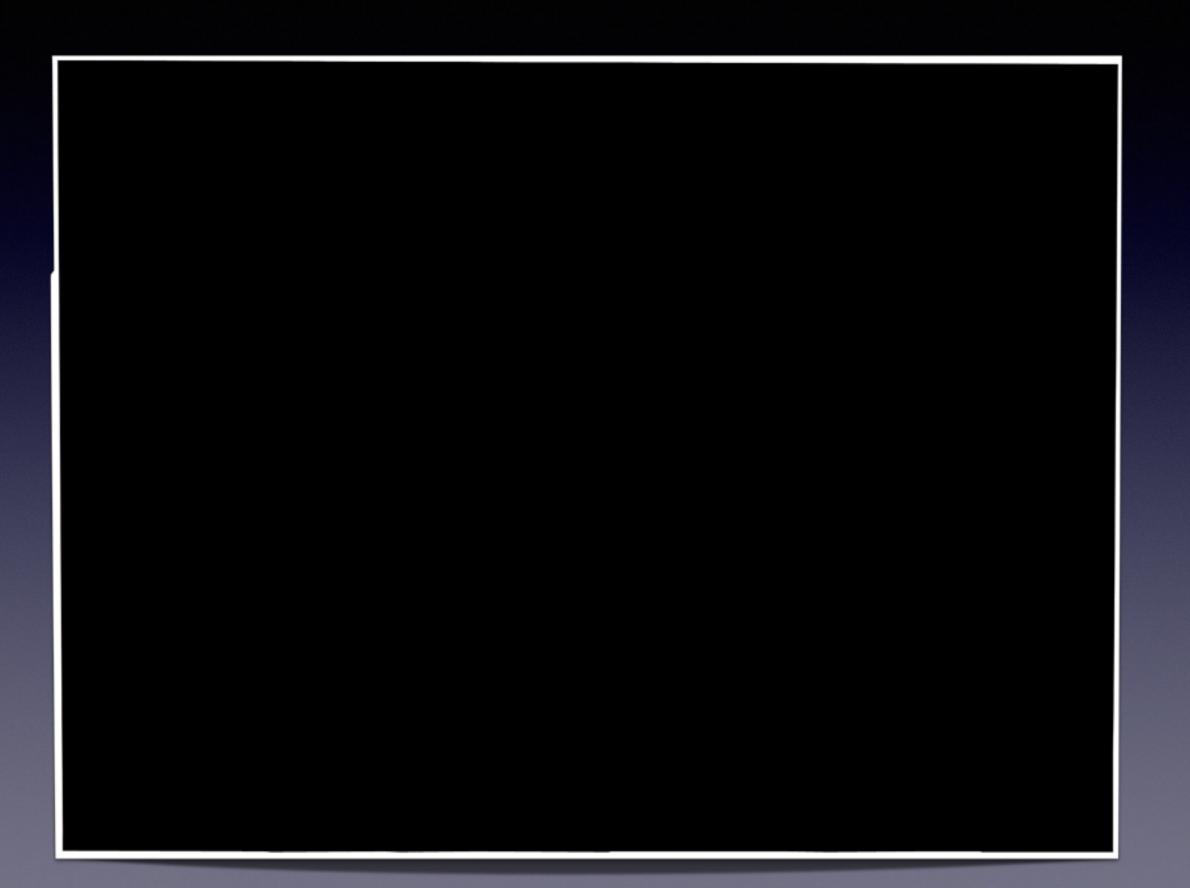
- Better understand difference between 20th & 21st century learning.
- Better understand why important to strengthen 21st century learning in schools.
- Better understand what Asian benchmark schools are doing.
- Better understand current Gr. 8 21st century learning activity.
- Receive invitations to more learning opportunities.

20 <sup>th</sup> Century Learning	21 <sup>st</sup> Century Learning
Learning is time based.	Learning is outcome based.
Lessons focus on knowledge	Lessons focus on higher level
<u>Sorting</u>	
In your envelo ten examples of	pe, there are 20th C learning
an ten examples of	d Student choice important in
<u>Tas</u> Sort into approp	s <u>k</u> oriate columns.
Reading, writing, math are the primary literacies.	Work shown through performances, projects, multi- media
	Multiple literacies including creativity, communication, critical thinking.

20 <sup>th</sup> Century Learning	21 <sup>st</sup> Century Learning
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Sorting Activity	
In your envelo ten examples of	pe, there are 20th C learning
an ten examples of <u>Tas</u> Sort into approp	d 21st Clearning.
We'll check for understanding at end of presentation.	

## Changes in Teaching and Learning

## Why?



February 20, 2014 Top Vietnamese party officials push innovation in schools

by Michael B. Horn

Share via 🚰 💣 🛅 🖂 🧲 😰 💈 😵

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HANOI – Even as the people in Vietnamese schools with whom I have met <u>complain about the restrictions on</u> <u>their ability to innovate</u> and create more student-centered education, top education officials in the Communist <u>Party of Vietnam (CPV) are seeking to spark</u> more innovation in Vietnam's schools to create a more

## Uganda's truant teachers targeted by pupil text-messaging scheme

SMS system aims to reduce absenteeism in a country where teachers fail to turn up for their classes 27% of the time

Amy Fallon in Kampala theguardian.com, Friday 21 February 2014 11.45 GMT Jump to comments (6)



Pupils at St Kizito Nattyole school with the mobile p teacher absentee monitoring scheme. Photograph

If the walls of the primary seven class of St Zirobwe town are anything to go by, the pup knowledge. se students.

uesday, I was impressed with their focus

ding Vice Chairman of the Central Comm all direction for education policies in the c

> World-Wide Interest

## Shanghai schools invest in online teaching methods

Updated: 2014-02-24 03:29 By WANG HONGYI in Shanghai ( China Daily)

🖵 Comments 🔮 Print 🖃 Mail 💿 🖬 Large Medium Small

As college students increasingly turn to free online courses, Chinese educators are seeking to implement the latest developments in online learning for primary, middle and high schools.

The development of the Massive Open Online Courses model in recent years has made higher education more accessible and effective for many adult learners.

Now, officials from the Shanghai Education Commission are working to establish an online study platform based on the MOOC model for primary and middle school students, to be





Aaron Sams, an American education expert, tells his audience in Abu Dhabi that chang a more pupil-centred system in schools will not happen overnight but can be achieved. Fatima Al Marzooqi / The National

### Children take centre stage in new Adec classroom learning model

#### Roberta Pennington

February 16, 2014 Updated: February 16, 2014 23:38:00



ABU DHABI // Out with the rote, in with the new classroom learning model. That the central theme at a gathering of about 1,000 school leaders, teachers and principals on Sunday.

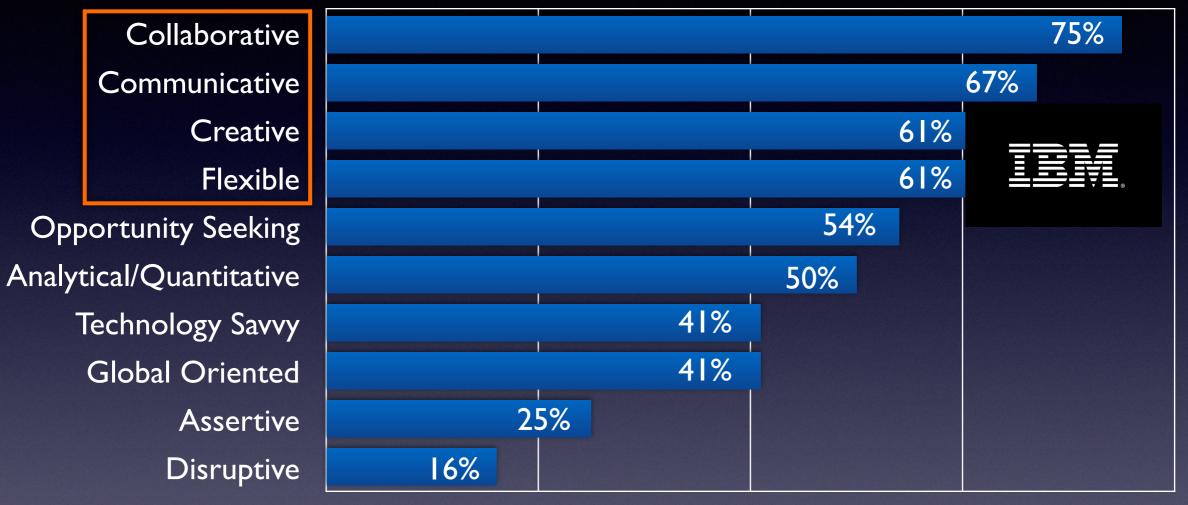
They were part of a day-long Abu Dhabi Education Council conference focused on inspiring leaders to transform the way children learn in the classroom from teacher-centric to pupil-focused.

#### Related

 Abu Dhabi teachers get upda on curriculum

### 2012 IBM Global Chief Executive Study

### Key Employee Success Factors



# Embody creative leadership

CEOs now realize that creativity trumps other leadership characteristics. Creative leaders are comfortable with ambiguity and experimentation. To connect with and inspire a new generation, they lead and interact in entirely new ways.

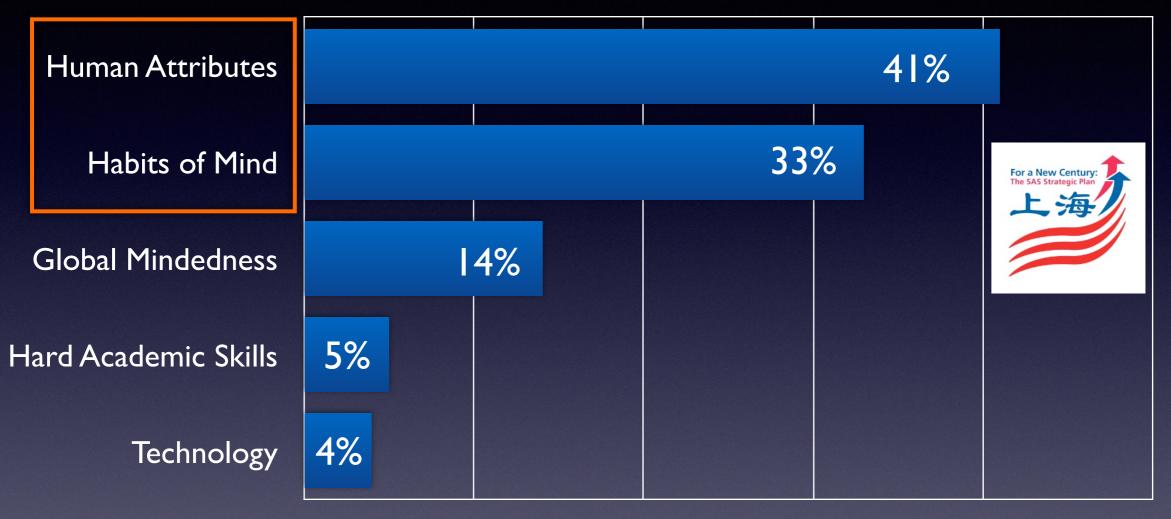
connortable with ambiguity and experimentation. To connect with and inspire a new generation, they lead and interact in entirely new ways.

### SAS STRATEGIC-PLANNING PROCESS

**"World Café" Community Conversations** October 11–14, 2010

**Summary of Responses** 

### Desired Skills/Attitudes of SAS Graduate



**41%:** Human attributes including the ability to communicate, compassion, empathy, life balance, sociability and well-roundedness

**33%:** Habits of mind and personality including adaptability, creativity, critical thinking, innovation, intellectual curiosity and the EAGLES (the SAS educational objectives)

### SAS STRATEGIC-PLANNING PROCESS

**Student "World Café" Community Conversations** November 22-23, 2010

### **Summary of Responses**

### Question 1 (331 total responses)

What do you consider to be the most valuable skills and attitudes for an SAS student to develop?

- A. **79%:** Habits of mind and character including adaptability, creativity, critical thinking, innovation, intellectual curiosity and the EAGLES (the SAS educational objectives)
- B. 10%: Hard academic skills and scholastic preparation for college and life
- C. 7%: Global-mindedness including understanding of and tolerance for other cultures
  4%: Miscellaneous, or responses not pertinent to the question

### SAS STRATEGIC-PLANNING PROCESS

**"World Café" Community Conversations** October 11–14, 2010

### **Summary of Responses**

Question 1 (909 total responses)

What are the skills and attitudes you would like to see in a graduate of SAS?

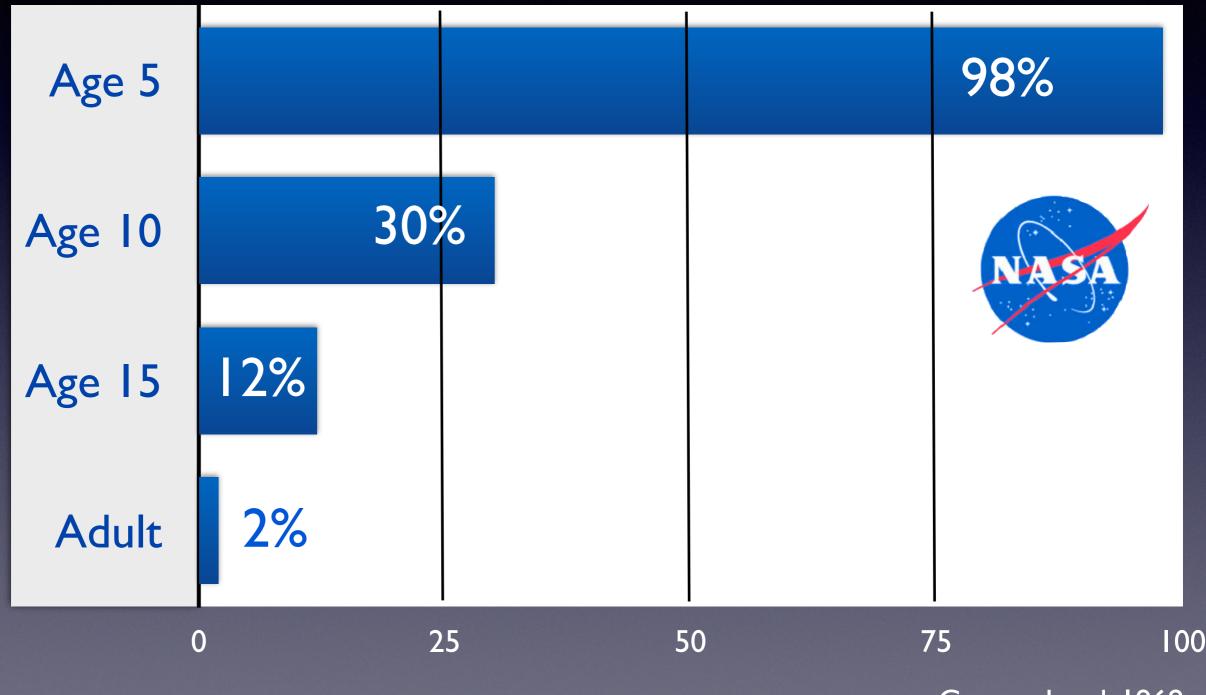
- A. 41%: Human attributes including the ability to communicate, compassion, empathy, life balance, sociability and well-roundedness
- B. **33%:** Habits of mind and personality including adaptability, creativity, critical thinking, innovation, intellectual curiosity and the EAGLES (the SAS educational objectives)
- C. 14%: Global-mindedness including understanding of and tolerance for other cultures
- D. 5%: Hard academic skills and scholastic preparation for college and life
- E. 4%: Embrace of technology and its effective and responsible use
  - 3%: Responses not pertinent to the question

"We see a lot of undergrads at Stanford unable to collaborate and communicate."

> Susie Wise - K12 Lab Network Director Stanford d.school

# So what is happening in schools?

## NASA Longitudinal Creativity Study to select innovative engineers and scientists

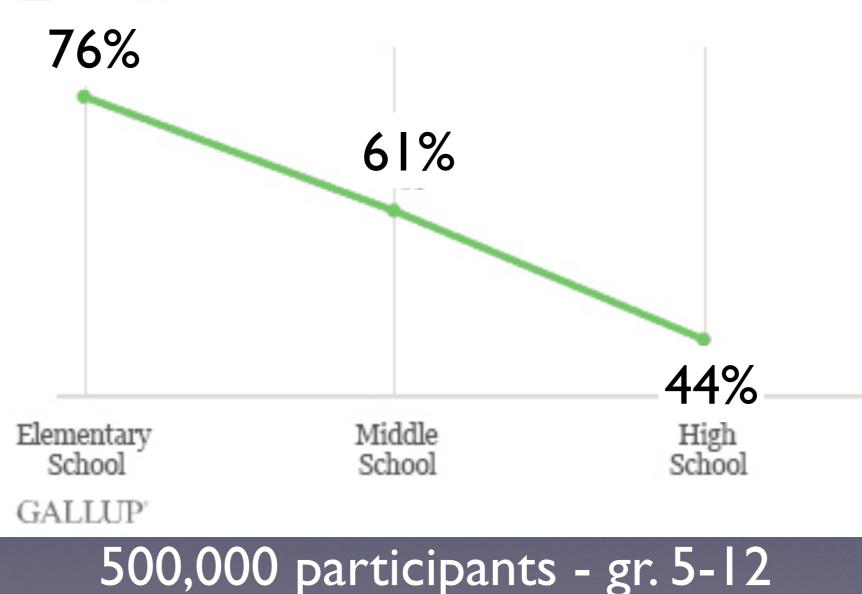


George Land, 1968

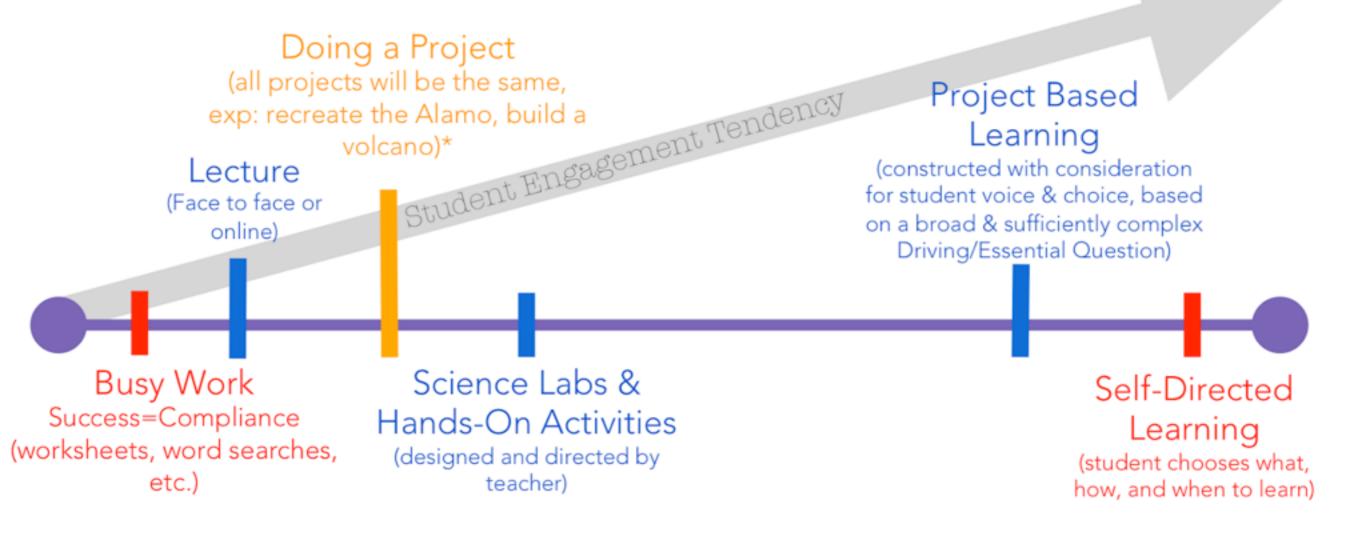
# Student Engagement

The School Cliff: Students' Engagement Drops Over Time The Gallup Student Poll

% Engaged



## Student Choice Continuum



## Based on Curriculum

\*May or may not be specifically curriculum-based

© Amy Mayer, friedtEdTechnology.com

#### WORKSHOP 1

Topic: Futures Academy Part 1: Talking the Talk Title: Futures Academy Part 1: Talking the Talk Description:

## International School Beijing

Why are 180 school days guiding our calendar? Why do we teach subject area content ? Why do we educate children the same way as we did 100 years ago? The International School of Beijing and Robert Landau have challenged the "how" of education by designing a new concept from the ground up. The Futures Academy will use an experiential and project based learning approach, dedicated to making schools fit children and their passions, instead of the other way around. Areas discussed include the opportunities and challenges associated with innovation in international school settings, strategic thinking, and communicating to your community.

#### WORKSHOP 1

Topic: Futures Academy Part II: Walking the Walk Title: Futures Academy Part II: Walking the Walk Description:

We know education continues to change and we know we want to provide the best opportunities for our students, but how? Innovation may sound appealing in a Board meeting or parent focus groups, but then what? Two ISB principals, Paul Wood and Mark Hardeman, present the challenges of implementation including factors such as: scheduling, creating partnerships and networks, recruiting facilitators (teachers), assessing and reporting on student learning, and communicating to constituents.

## Futures Academy

Project Based Learning



#### Andy Davies

Andy Davies is currently Head of School at t are improving learning, international educa

Graeme Scott

Assistant Head of School for Learning at International School Bangkok.

#### WORKSHOP 1

Topic: Broadening Horizons, Opening Doors ISB Vision 2020 Title: Broadening Horizons, Opening Doors ISB Vision 2020 Description:

Students have more educational choices and access to learning than ever before. At ISB we asked ourselves: how do we stay relevant and ensure the best learning possible in this constantly changing world? Learn how we are addressing these questions and shaping future learning opportunities for our students.

International School

Bangkok

### Jakarta International School



#### **Biography:**

**Tim Carr**, having lived and learned in some interesting international schools, is now happily in residence in Jakarta.

**Steve Druggan**, from the booming town of Tidioute, PA, has spent most of his career in school leadership roles in Milan, Munich, and now Jakarta.

#### WORKSHOP 1

Topic: Futures Academies or Foundational Shifts? Title: Futures Academies or Foundational Shifts? Description:

With our myriad approaches to converting our schools for the future, let's talk about what's working well and how we might build on those successes. This session will depend on participants to share examples of initiatives that they've tried in order to make learning more contemporary. In so doing, maybe we can unearth some ideas that will help us all to collaboratively transform to meet our current and future students' learning needs.

JIS Website: We must therefore convert our schools, perhaps fundamentally, to allow for new and appropriate methodologies of learning.

## Design Thinking

## Singapore American School

#### WORKSHOP 1

**Topic:** 

Title: Designing the School of the Future - The Singapore American School Journey Description:



What would you do if you were given the opportunity to "re-invent" your school, challenging all of your assumptions about teaching, learning, 21st century skills, and the future? This workshop will tell the story of the SAS world-wide journey to reinvent our school. We will describe our research, development, and design process as well what we have learned from schools around the globe. The SAS reinvention project captures design thinking, R&D processes, change leadership, and learning for the future. Join the conversation about lessons from leaders that are risking it all to reinvent themselves. You won't want to miss it!!

## \_earning for the Future

### Laurie McLellan/ Ed Ladd



## Nanjing International School

#### **Biography:**

Laurie McLellan, Head of School, Nanjing International School.

Laurie left Scotland in 1988 and has worked in leadership roles in schools in Colombia, Belgium, Vietnam, Sri Lanka and China. From time to time there is a new and exciting idea that impacts his thoughts and practice. Design Thinking is capturing his imagination at the moment.



Ed Ladd - Head of School , American School of Japan

### WORKSHOP 1

American School In Japan

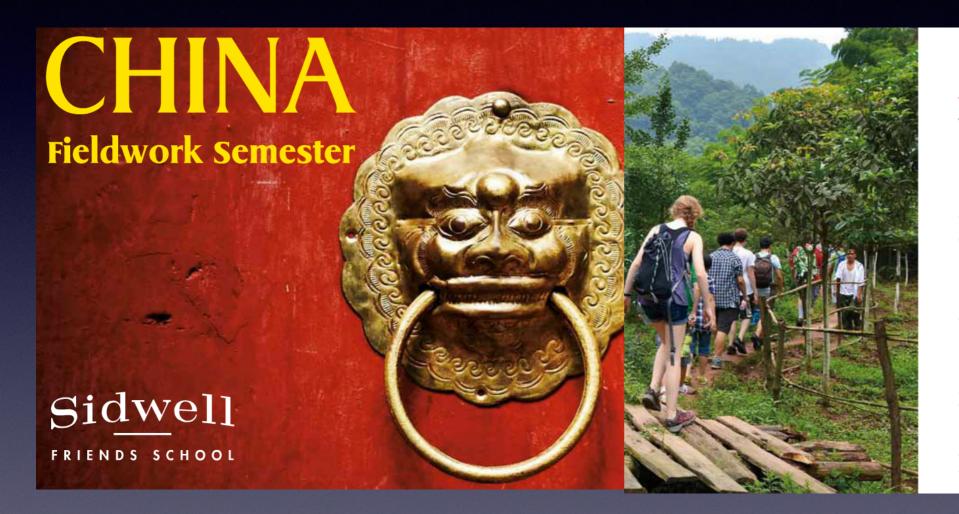
### Topic: Design Thinking - ideas to action

Title: Design Thinking - ideas to action

### **Description:**

Two schools on different pathways with a unifying goal. In the search to make learning more relevant to students Design Thinking has become a driver at two EARCOS schools. It is causing some great confusion to help us vision the future as it could be. We will share our challenging but enjoyable journeys so far.

# What's Happening in President Obama's School?



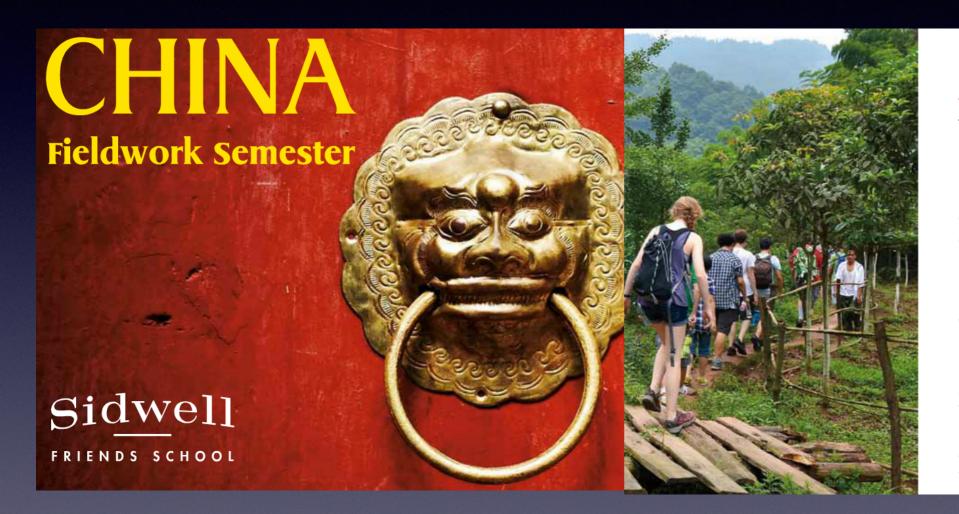
#### **THE PROGRAM**

The Sidwell Friends School China Fieldwork Semester (CFS) is an intensive project-based student research program in Xizhou, Yunnan, for sixteen 11th or 12th grade students, American and Chinese, working together in a research "collaboratory" housed in a historic residential facility.

The CFS coursework in history, literature, science, language, and math will be credited by Sidwell Friends School.

CFS will be held annually during the spring semester. Students will arrive in China on January 22, 2014, in time for Spring Festival, and will return on May 22. The allinclusive cost of the program is \$20,750, which covers all airfare, expenses, and a personal \$500 spending account for each student. For Sidwell students, SFS tuition and financial aid apply to cover nearly all program costs.

# What's Happening in President Obama's School?



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## Xizhou is our Microcampus location.



The "Big Shifts" ... and Schools of the Future

Patrick F. Bassett, NAIS President bassett@nais.org

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### The Big Shifts

- Knowing..... Doing
- Teacher-centered..... Student-centered
- The Individual..... The Team
- Consumption of Info....Construction of Meaning
- Schools......Networks (online peers & experts)
- Single Sourcing..... Crowd Sourcing

\_\_\_\_\_

• High Stakes Testing..... High Value Demonstrations

Copyright National Association of Independent Schools



Visits to 21st century learning schools in California and Atlanta

EARCOS Leadership Conference

Strategic Planning Curriculum Committee



Visits to 21st century learning schools in California and Atlanta

EARCOS Leadership Conference

Strategic Planning Curriculum Committee

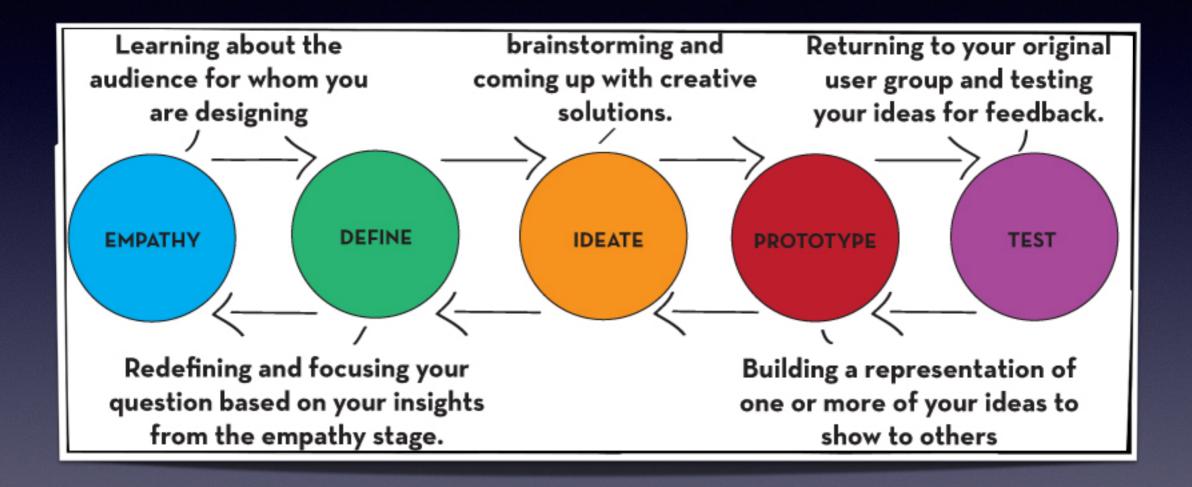
2 Types of Learning Stand Out

# Design Thinking & Project-Based Learning

# Design Thinking

Design Thinking Solving Problems

## **Design Thinking Process**

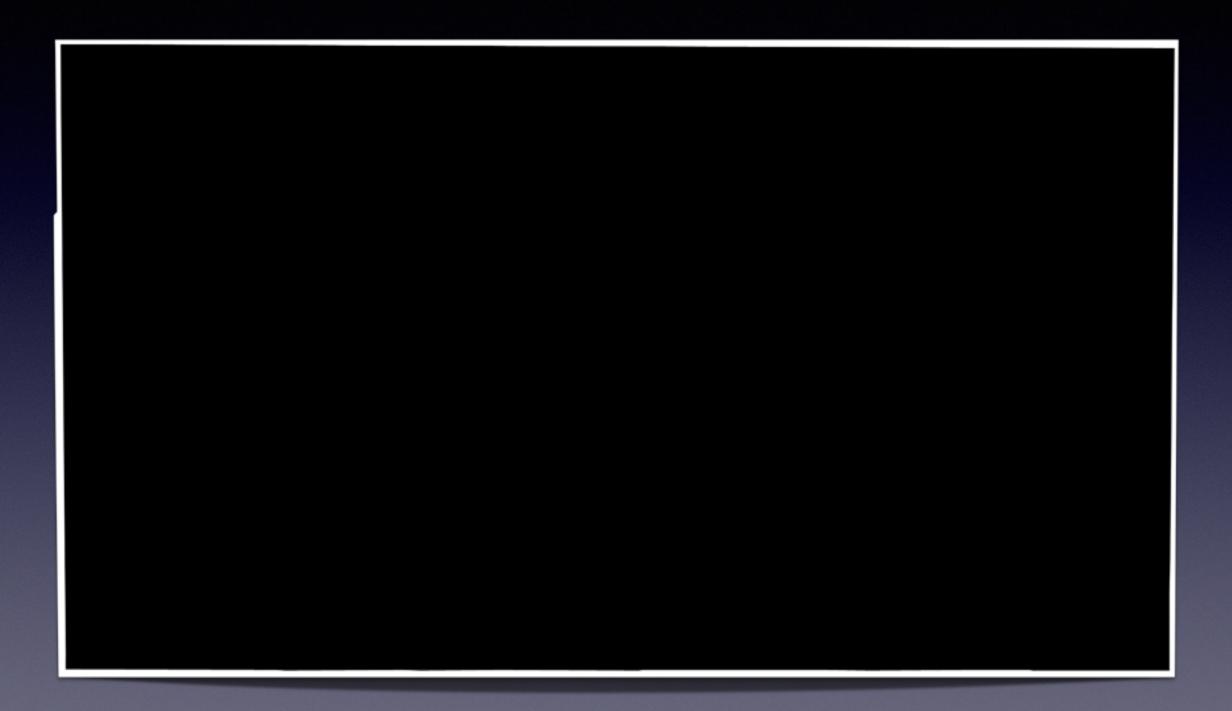




## Marshmallow Challenge Instructions

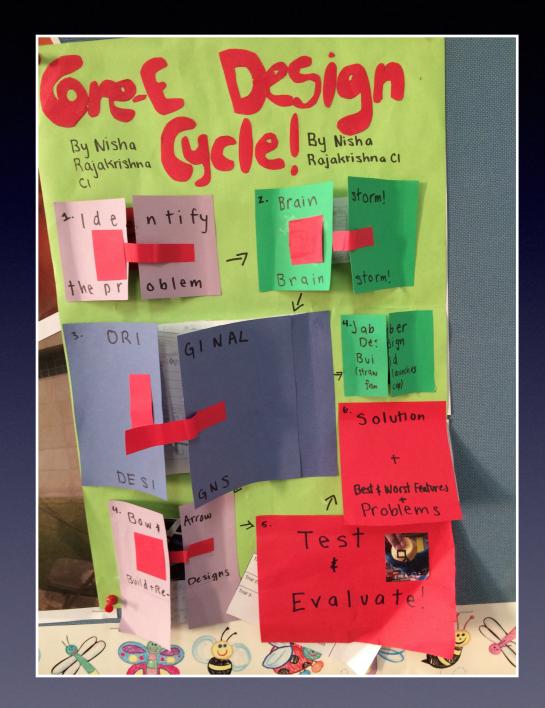
- 1. Build the Tallest <u>Freestanding</u> Structure: The winning team is the one that has the tallest structure measured from the table top surface to the top of the marshmallow. That means the structure cannot be suspended from a higher structure, like a chair, ceiling or chandelier.
- 2. The <u>Entire</u> Marshmallow Must be on Top: The entire marshmallow needs to be on the top of the structure. Cutting or eating part of the marshmallow disgualifies the team.
- 3. Use as Much or as Little of the Kit: The team can use as many or as few of the 20 spaghetti sticks, as much or as little of the string or tape. The team cannot use the paper bag as part of their structure.
- 4. Break up the Spaghetti, String or Tape: Teams are free to break the spaghetti, cut up the tape and string to create new structures.
- 5. The Challenge Lasts 18 minutes: Teams cannot hold on to the structure when the time runs out. Those touching or supporting the structure at the end of the exercise will be disqualified.





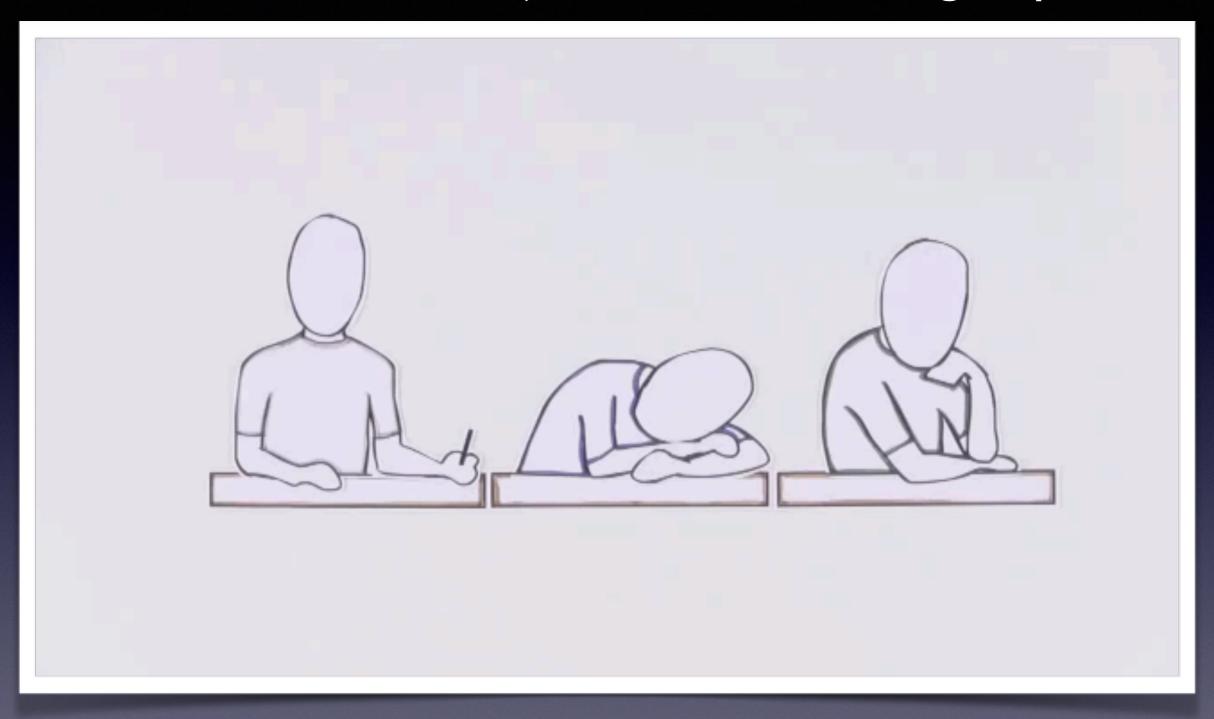
DT "Design A Wallet" in gr. 8 Advisory.

DT Exploratory class.

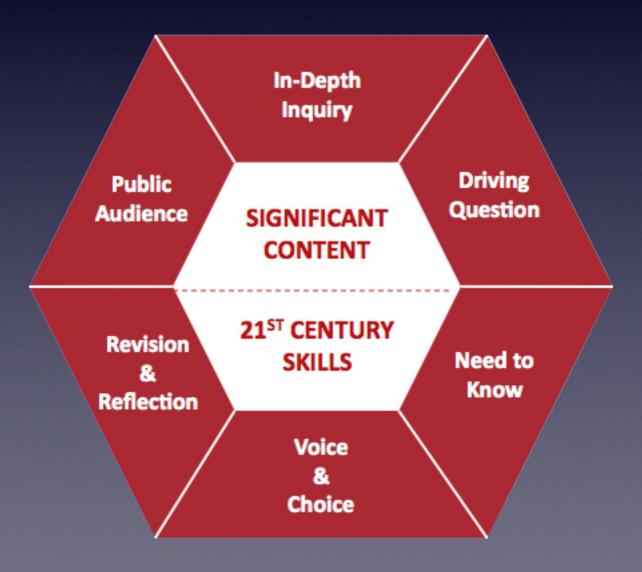


Project Based Learning Solve Questions, Problems, Challenges

## Project Based Learning Explained



In Project Based Learning (PBL), students go through an extended process of inquiry in response to a complex question, problem, or challenge. While allowing for some degree of student "voice and choice," rigorous projects are carefully planned, managed, and assessed to help students learn key academic content, practice 21st Century Skills (such as collaboration, communication & critical thinking), and create high-quality, authentic products & presentations.



## Gr. 8 Integrated Project - Global Issues Summit

Monday this week, we begin a very exciting adventure: all grade 8 students will be members of integrated (Social Studies/Science; Red/Gold) "Expert Working Groups" preparing for a Global Issues Summit to be held March 21 right in our Grade 8 classrooms. Using the Problem Based Learning (PBL) model, students will develop understanding of the following global issues:

Ethical Application of Genomics Promoting the Use of Environmentally Friendly Energy Sources Measures to Protect Living Resources Access to Water as a Human Right

For approximately 18 days, they will meet in working groups to develop their working knowledge and understanding in order to seek innovative, sustainable solutions to the issues. March 20-21, they'll engage in a "High-level Meeting" (Global Issues Summit) representing different UN member nations to formally debate resolutions they prepare. This is sure to be a memorable learning experience. We will keep you posted!

20 <sup>th</sup> Century Learning	21 <sup>st</sup> Century Learning
Learning is time based.	Learning is outcome based.
Lessons focus on knowledge	Lessons focus on higher level
Sorting Activity	
In your envelo ten examples of	pe, there are 20th C learning
an ten examples of	d Student choice important in
<u>Tas</u> Sort into approp	s <u>k</u> oriate columns.
Reading, writing, math are the primary literacies.	Work shown through performances, projects, multi- media
	Multiple literacies including creativity, communication, critical thinking.

20 <sup>th</sup> Century Learning	21 <sup>st</sup> Century Learning
Learning is time based.	Learning is outcome based.
Lessons focus on knowledge recall.	Lessons focus on higher level thinking skills.
Passive Learning.	Active Learning.
Individual work within 4 walls of classroom.	Collaborative work with classmates & outside school.
Teacher is center of attention & provider of information.	Student is center of attention. Teacher is facilitator.
Little student choice in learning.	Student choice important in learning.
Curriculum based on individual subjects.	Integrated and cross-subject level curriculum.
Teacher is sole judge of student work.	Multiple assessors, public audiences
Nearly all work is done in print.	Work shown through performances, projects, multi-
Reading, writing, math are the primary literacies.	media
	Multiple literacies including creativity, communication, critical thinking.

What can I do at home to stimulate my child's creative and innovative thinking?

MS Counselor Coffee Thurs. Feb. 27 10:00 in HS A103

Topic: Parent Partnerships New Chinese Program Wednesday, March 5 (Chinese) Wednesday, March 12 (English) 9:00 - 10:00 in LMC

> Presenter: Dr. Suyi Wang

Science Curriculum Presentation Thursday, March 6 8:15 - 9:00 in TBD

Topic: Science in the 21st Century

## Questions For Follow Up?

Please put on note card.