

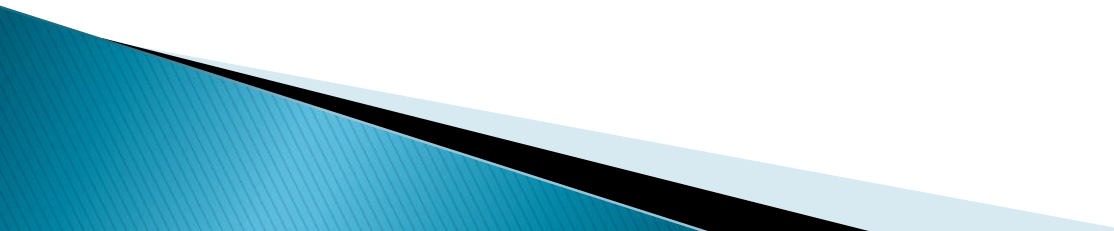
# BLOSSOMS

## – An Introduction

Naveed A. Malik



# BLOSSOMS

- ▶ **B**LENDED
  - ▶ **L**EARNING
  - ▶ **O**PEN
  - ▶ **S**OURCE
  - ▶ **S**CIENCE
  - ▶ **O**R
  - ▶ **M**ATH
  - ▶ **S**TUDIES
- 

# BLOSSOMS



**BLOSSOMS**

BLENDING LEARNING OPEN SOURCE SCIENCE OR MATH STUDIES

# BLOSSOMS

- ▶ An initiative of MIT-LINC

- <http://linc.mit.edu>

- Born in 2001, LINC is a consortium of educators, scholars, researchers and professionals from over 20 countries. Partners are committed to establishing collaboration and cooperation across international borders, with the goal of using technology-enabled, new media to improve the quality of higher education worldwide

# BLOSSOMS

- ▶ BLOSSOMS idea founded at MIT by
  - Prof. Richard Larson &
  - Elizabeth Murray
  - <http://blossoms.mit.edu>
- Sparked by a visit to a rural school in China where
  - Teacher used a videotaped lecture to enliven an otherwise cold, bleak classroom
  - Teacher paused the lecture from time to time to engage with the class

# Students in the Yuanzhou District Of Ningxia Province, China



A photograph of two young children standing in a vast, green, grassy field under a cloudy sky. The child on the left is a boy with short dark hair, wearing a light-colored, patterned short-sleeved shirt. The child on the right is a girl with short dark hair, wearing a colorful, patterned vest over a green long-sleeved shirt. She has her hand near her mouth. The background shows rolling green hills and a distant mountain range under a grey, overcast sky.

*With today's technologies,  
every young person can have a  
quality education regardless of  
his or her place of birth.*

Photo by Mr. LIU Fuchen

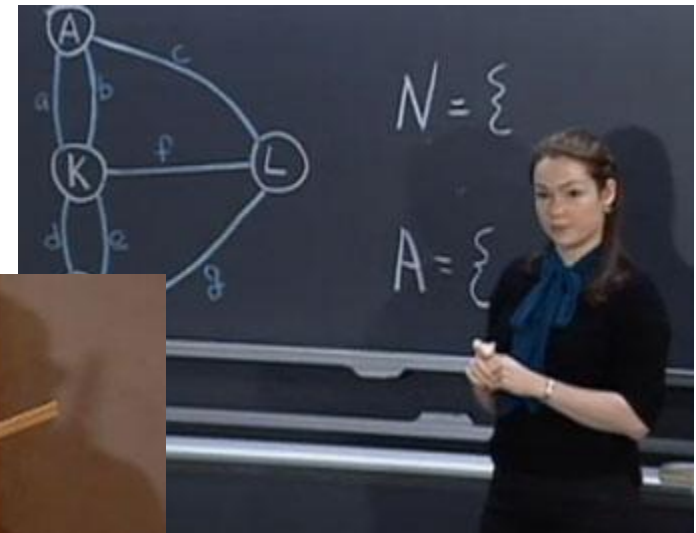
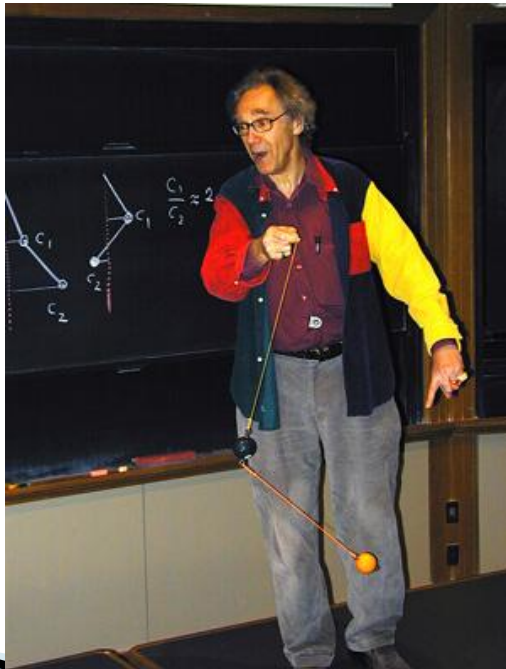
# The BLOSSOMS Vision

- ▶ To develop
  - a large,
  - free repository of
  - *Blended Learning* video modules
  - to be used by math and science teachers
  - in high school classrooms
  - around the world.



# Video Modules

- ▶ Created by gifted volunteer educators from around the world
- ▶ Started from USA, Jordan

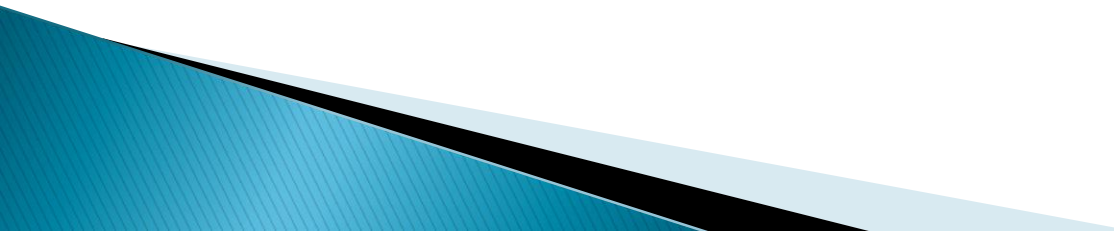


# Video Modules

- ▶ and Pakistan!



# The BLOSSOMS Pedagogy

- ▶ **Aimed at**
    - Critical thinking
    - Creative thinking
    - Lateral thinking
  - ▶ **Motivation: learning for life**
- 

# The BLOSSOMS Pedagogy

- ▶ Designed to run in harmony with the in-class teacher
- ▶ Subject matter covering a specific area of mathematics or of a physical science.

# BLOSSOMS Design

- ▶ **#1: Central Role of the Classroom Teacher**
  - Teachers often feel marginalized by a pedagogical model that places the student in front of a computer rather than in the regular classroom with the teacher
- ▶ **#2: Co-creation and Co-usage with Educators in Developing Countries**
  - Local language and English versions created with translations in both directions

# BLOSSOMS Design

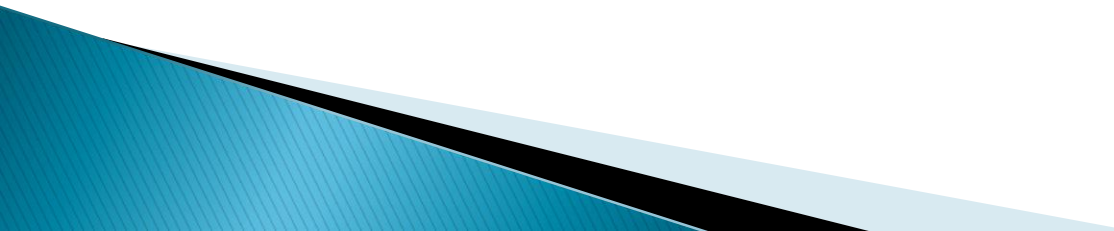
- ▶ **#3: Use of Appropriate Technology - High Tech, Medium Tech and Low Tech**

BLOSSOMS has pursued a strategy of technological minimalism by creating video rather than digital modules.

“The greatest challenge for OER initiatives in the developing world is to work with educators to build collaboratively effective OER delivery in areas where bandwidth and technology are limited.”

Paul Albright in his final report on the 2005 *IIEP Internet Forum On Open Educational Resources*

# BLOSSOMS Design

- ▶ “blended learning” here means
    - each video is designed for viewing in brief segments
    - in-class teacher engages the class in an active, goal-oriented exercise between segments
    - Once this learning goal is accomplished, the video is turned on for the next segment.
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# BLOSSOMS Example

- ▶ Prof. Richard Larson
  - “The Broken Stick Experiment”



Thank You