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## **Flip Chart Transcription from December 9<sup>th</sup> STEMCAP Forum** **Transitioning**

### **Chart 1**

Straw Goal:

Every student in Corridor/State will be motivated, academically prepared and realize potential in STEM academic areas (“and” shown here also)

(“Create opportunities to motivate, prepare and sustain STEM for” appeared also above “Every student”, but I could not get a sentence out of it, so I think it was superseded by the goal stated above.)

### **Chart 2**

(appears to be continuation of straw goal)

(and) will have opportunity to participate in the STEM professional workforce upon completion of elementary, middle school, high school, certificate, AA, transfer, BS, Graduate Degree

Straw Goal Complete:

Every student in Corridor/State will be motivated, academically prepared and realize potential in STEM academic areas and will have opportunity to participate in the STEM professional workforce upon completion of elementary, middle school, high school, certificate, AA, transfer, BS, Graduate Degree.

### **Chart 3**

Joe:

student centered

science center

“inspire and engage”

Teacher training

Phil:

California space grant – partnerships

K-8 and on to graduate

“Educate”

Bob:

Stanford Lab for students

“Educate”/“Inspire and engage”

Ivan:

CSUN, teacher

Cultivates dreams

Teacher empowerment

“Inspire, Educate”

## Chart 4

Oscar:

MESA – K-16

Transitions

“Educate, inspire and engage”

And link to workforce

David – MESA

Cal Poly SLO

Middle school and high school – after school and in

“Educate, inspire and engage”

Christina – NASA

Need to address gaps in the pipeline – diversity

“link to workforce”

Edna – science nonprofit

NASA teacher training

Educate/workforce

## Chart 5

Melanie – WIRED grant

STEM students

El Camino College

“Educate”

Keith – Hands on experience for young students

FSCA – Collaboration offer with Bob

Richard – Office of science research – JPL

Inspiring teacher

“Educate and inspire”

Urban science corps program

Suggests nonlinear pipeline with multiple entry points

## Chart 6

Dwayne – Project Lead the Way

“Educate” – middle school to high school to community college

Steve – California Community College

Career lattice

“Educate” and workforce connection

Zahed – Cal Poly Project-Based Learning Institute

“Educate” – Potential to expand model

Joan – CSU Chancellors Office  
Transitions in STEM  
Retaining teachers  
Promoting culture of science and technology

Caleb – Science coordination/CTC  
Training urban science teachers  
“Educate”  
Math and science partnership grants

#### Chart 7

Matt – NASA/Project Based Learning

Damon  
Gender issues in math/science  
Community involvement

#### Chart 8

**Strategies leading to outcome:**

**Elementary:**

High quality pd in STEM

GEMS

FOSS

Policy – issue of competition for school day (reading intervention vs. science)

Measure – NAEP data – science

Need to identify measures of engineering and technology

Identify what’s available – opportunity

Asset – Mentoring by scientists and engineers

Partnerships – ongoing

Informal science providers

**Middle School**

Bring *relevance* to academic curriculum

#### Chart 9

**(Middle School, cont’d)**

Awareness of importance of engaging in academics

Parental involvement

Expose kids to college early

Science standards are a laundry list of too many things to cover

Career preparation – including issue of what you do now affects your future (e.g. security clearance)

Need to expand this network to include more organizations

Remember to focus on cultural issues – look beyond ourselves for role models and participation (e.g. Olmos)

## Chart 10

### ***High School***

Explore high school programs in engineering and technology (e.g. Mass)

Are current standards in math and science relevant? Can industry influence?

Need to look at both incremental change and frame-breaking change

Broaden our view of science/math – look at standards

Parent awareness of how the world has changed – global change

## Chart 11

Next Steps:

Recruit new members of group

Plan 1 hour web-based conversation

--politicians, government reps (SBE)