



This workforce solution was funded by a grant awarded under Workforce Innovation in Regional Economic Development (WIRED) as implemented by the U.S. Department of Labor's Employment and Training Administration. The solution was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This solution is copyrighted by the institution that created it. Internal use by an organization and/or personal use by an individual for non-commercial purposes is permissible. All other uses require the prior authorization of the copyright owner.

Flip Chart Transcription from December 9th STEMCAP Forum Recruitment/Retention

Chart 1

Goal statement (key aspects/inclusions)

- Student engagement – Relevance (address the “why”)
- Student awareness
 - Tough area
 - Parent-driven (career decisions)
 - Need bi-lingual sessions
 - Address perceived “inaccessibility” of science – lab scientist image is only perceived career – no “accessible” career options
 - Teacher not a desirable path
 - Can we target first generation college?

Chart 2

Goal statement (key aspects/inclusions, cont'd)

- Hidden jobs
- Articulation of career options
- Value of STEM career
 - Personal impact of STEM career not clear
 - Some students want career to make impact
 - Financial benefit of STEM career not clear
 - Some students want financial success
 - Recruit retirees as SMEs (subject matter experts)
- Math standards hurting
- Resources – attraction tool

Chart 3

Goal statement (key aspects/inclusions, cont'd)

- Hands-on, experiential
- Skill sets

(Riordan) Call for rigorous research, especially as regards hands-on, experiential learning...anecdotal policy development creates disconnect

- What is out there?
- What new research is needed?

Standards checklist

Chart 4

Goal statement (key aspects/inclusions, cont'd)

Increase number of...

Address root cause

All available resources to engage
Value of STEM
Awareness/exploration
Value Proposition
Paradigm

Chart 5

Increase number of STEM students, graduates, teachers, professors, mentors by utilizing all available resources (public and private) to

Building
Pedagogy
Reverse trend
Change model

Chart 6

INSPIRE

CCST recommendation: Governor serve State as S&T champion
Return on Investment
Achievability/awareness of value
Role models
Script manipulation – Hollywood/television (e.g. Numbers, CSI)
Websites
Update image of S&T
Personalize crisis – call to action re: generational fears/concerns of upcoming generation, e.g. global warming, etc. Create social relevance
Field trips

- Liability issue

Chart 7

ENGAGE

Relate science and tech to everyday life
Technical mentors in classroom
Resources – Subject Matter Experts (SMEs)
Relevant – women, others
Volunteers – Future Scientists/Engineers

Chart 8

ENGAGE (cont'd)

Models

- Customize engagement

- Pre-service opportunity
- Math and science classes at University
- Adj Teacher Corps – S&Ts part of Corps to support
- Teacher as scientist – give S&T teachers scientist status – opportunities in industry, informal science etc.

Chart 9

EDUCATE

Saturday programs

Ombudsman to translation

El Camino Space and Science Day

- First Robotics
- Family

Different strategies, different audiences

15 scans/CDE standards

Chart 10

EDUCATE (cont'd)

Legislative awareness of Board of Education/Governor

Students – early identification

No mandated minutes except PE (CDE clarification re: mandated schoolday subject times)

Chart 11

EMPLOY

Utilize HR research re: employee satisfaction – key aspects:

- Relevance – do they know where they fit in big picture?
- Confidence in leadership of their organization?
- Do I feel valued, are they investing in me?
- Etc.

Pedagogy

Strong induction (BITSA induction)

Retention – teacher collaboration

Tough Districts – incentives

Measures/sustainability

Chart 12

EMPLOY (cont'd)

Internship

Parallel: Pedagogy/content

Chart 13

Criteria for best prax, model programs, etc.

Leadership capacity
Hands-on, experiential
Impactful objectives: Audience identified/assessments
Third party evaluation performed
Replicability
Teaming
Cost-effective
Measurability
ART – Achievable, Relevant, Time-Based
Accountability
Contribution to deep understanding
Demonstrated value
21st Century workforce relevance
Collaboration – integrated beyond mere partnering
Appropriateness
Sustainability
Systemic
Scalability
Inquiry-based
Both qualitative and quantitative objectives
Transferability
Not dependent on one champion or SME or founder for future success

Chart 14

What measures/outcomes could be used to evaluate success within this priority area?

Positive impressions delivered e.g. news clips, conference addresses, etc.
Media time/dollars
Evaluation models/tools identified
Recommendation of metrics/baseline
Amount of new partnerships
Changes in programs

Chart 15

What other orgs/individuals?

California School Boards Assn.
California Math Council
County Science and Math Coordinators
County Supts
Prof Student
CTC (California Teacher Credentialing)
IWITTS – Institute for Women in Technology Trades and Sciences
California Business Roundtable

Military

Media – California Media Council

CalSpace Institute

CTA?

AFTA?

HR reps

TechNet (Nano, Info, Bio)

Communication:

- Web/electronic
- Videocams
- Webinars
- CCC Conference