Supporting Teacher Quality through STEAM Certification

Vivian Ekchian, LAUSD Interim Superintendent
Dina Sim, Administrator of Instruction, LD Northwest
Michael Beiersdorf, STEAM Coordinator, LD Northwest
Christopher Sims, STEAM Expert, LD Northwest
Jose Cantu, Assistant Chief, Human Resources
Peggy Taylor Presley, Director, Human Resources, Teacher Support and Development Program
Ileana Davalos, Director, Human Resources, Professional Learning and Leadership Development
Eduardo Solorzano, Administrator of Middle Schools Instruction, Division of Instruction
Our Shared Accountability

- Provide PD for schools
- Support teacher effectiveness
- Delivery system for services

- Advocate for change
- Collaborate as thought partners
- Resources & funding

- Work with the state
- Teacher recruitment & selection
- Authorize credentials

- Provide focused school support
- Outline policy recommendations
- Resources & funding
Why Science, Technology, Engineering, Arts, and Math?
21st Century STEAM Workforce

The U.S. Department of Commerce estimates that nationally, jobs in science, technology, math, and the arts will grow 17% by 2020, nearly double the growth of non-STEAM fields.

- U.S. Department of Commerce

By 2022, the U.S. will have more than 1.2 million unfilled STEAM jobs.

- U.S. Bureau of Labor Statistics

Los Angeles leads Boston, New York, and the Silicon Valley in the number of high-tech jobs.

- High Tech in L.A. Report

One in eight Los Angeles jobs is part of the vital creative economy.

- Otis Report on the Creative Economy
Meeting Demand in Our Community

- Parents and families
- Community leaders and organizations
- Businesses
- Institutions of higher education
There Are Many Bright Spots

● There are many bright spots of schools creating spaces for this type of instruction

○ VAAS
○ White Limerick

● Opportunities to provide what we have done with them, what supports we've offered, what we've had them do

● STEAM Collaborative, STEAM Design, STEAM Saturday
Bright Spots Video

creating local solutions... for a global impact

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**14 STEAM Magnets, Academies and Programs (And Growing)**

104 Schools Participating in STEAM Fest

77 Schools Participating in STEAM Design Day

31 Schools Participating in STEAM Access and Equity Saturdays

47 Schools Requesting STEAM Certification for Teachers and Administrators
STEAM Certification Program
Preparing our Students to...

Think creatively and abstractly

Communicate and express ideas purposefully

Use technology and digital media strategically and capably

Engage as constructive, concerned, and reflective citizens
Preparing Our Classrooms

How do we accelerate and sustain academic progress through STEAM education pre-K through grade 12 and beyond for all students?
The Time Is Right

- Implementation of many new standards including NGSS, ELA, Math, ELD, ISTE, and others
- Need to increase and sustain enrollment
- Preparing 21st Century Students for a Global Society
Support Needed
Where Do Teachers and Administrators Turn for Support?

- Traditional PD on discrete topics (NGSS, Close Reading, Questioning)
  - We do a lot of PD, how do we loopback? And, how do we know it’s working?
- Existing formal programs for credentials and certifications
  - Credentials
  - Masters
  - Certificate
  - National Boards
  - Job embedded using language from Andrea, where are they getting it?

The majority of these opportunities are subject specific -

- Shortage of job-embedded, high quality training and support needed to grow capacity of STEAM educators
- District-wide standards implementations in our schools will insist upon reform and change in the current professional development system
- Twenty-first century learning, which is blended, personalized and competency-based, requires new skills, new roles, and a new mindset for educators
STEAM Certification Program Proposal

- Update hiring profiles of teachers and administrators
- Develop Teacher and Administrator STEAM Certification Modules
- Create a demand for teachers with STEAM training
- Create a lattice of teacher developmental roles
The Solution
Empowering our teachers and administrators to strengthen STEAM in our schools.
Focused Direction
Collaborative Cultures
Creating opportunities for deep learning
Accountability
Informed by what we know about the best PD practices and teacher support
Program Overview:
Teacher Certification

Courses Include
- STEAM Foundations
- Access and Equity
- Assessment
- Curriculum and Instruction
- Leadership
- Capstone

Delivery Model
- Hybrid of High Quality Face-to-Face, Communities of Practice, and Digital Content and Tools
- All courses infused with Digital Media Literacy and Instructional Technology support teachers need to leverage these tools in their classrooms.
Turning Up the Volume on Changes in Practice

Evaluation practices:
- Observations of training program
- Participant surveys and interviews
- Classroom and site observations
Program Overview: Administrator Certification

Features

- Aligned with the LAUSD School Leadership Framework, training will be keyed to the role of the site administrator in implementing STEAM programs.

  - This will include:
    - Facilitating high quality professional development,
    - Monitoring instruction,
    - Supporting staff with collaboration opportunities and resources,
    - Communicating the program effectively through public relations and social media to the school’s community and stakeholders.
A Formula for High Achieving STEAM Students

Empowered STEAM Teachers + Empowered STEAM Administrators = Stronger STEAM Campuses = High Achieving STEAM Students

STEAM Teacher Certification

STEAM Administrator Certification

STEAM Campus Certification
Supporting Employee Growth & Development for Student Success

LAUSD Human Resources
March 6, 2018
What We Know

Great teachers are seeking:

- Great leaders to work for
- Growth in their profession
- Recognition for quality work done
- Meaningful compensation
- Collaborative working environment

A teacher’s perception of the school leader has the greatest impact on whether s/he stays or goes

## LAUSD Teacher Support Continuum

### Pre-Teaching
- Career Ladder and University Teacher Preparation
- Working toward Subject Matter Competency
- California Subject Examinations for Teachers (CSET)
- Subject matter waiver program
- District Intern (DI)
- University Intern (UI)
- Teacher Preparation Program
- Advisement and support
- Reimbursement for CSET prep courses and exam
- RICA support
- PD sessions
- Tuition reimbursement
- Textbook stipend
- Credential testing
- Step Up forums

### Pre-Credential Provisional Permit
- Working Toward Subject Matter Competency
- District Intern (DI)
- University Intern (UI)
- Teacher Preparation Program
- Advisement and support
- RICA support
- DI - Preliminary credential courses & added authorizations

### District Intern
- Working toward Preliminary Credential
- Beginning teacher growth and development induction (BTGDI)
- Clear education specialist induction program (CESIP)
- District intern induction program (DIIP)
- Advisement and support
- Framework aligned clear credential induction support

### Induction
- Working toward Clear Credential
- NBC support network for candidates
- Mentor training
- Guidance and support from school stakeholders

### Advanced Degree/Certification
- Working toward Advanced Professional Practice
- Masters Degree
- Doctorate Degree
- National Board Certification (NBC)

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**Educator Development and Support**
Supporting the growth and development of teachers and leaders
The Promise of Micro-Credentialing

Four key features define educator micro-credentials:

- Competency-based
- Personalized
- On-demand
- Shareable

1. Teachers enter into the micro-credential they want to earn
2. Teachers pursue their learning
3. Teachers gather and submit evidence of their competence
4. Trained assessors evaluate the evidence educators submit
5. Teachers earn the micro-credential and are awarded a digital badge.

Supporting the Growth and Development of Teachers

Support and Evaluation
EDS Teacher
EDS School Leader
EDS District Leader

Learning Management
My Professional Learning Network
The EDS frameworks and systems support our school leaders and teachers as the cornerstones of good instruction and effective schools, informing the overall direction as a District on professional development and support for all of our educators.
The My Professional Learning Network (MyPLN) has the infrastructure to offer learning opportunities including in-person, virtual, and blended learning courses culminating with a certification of mastery in the content, as well as an official transcript of participant accomplishments.
Supporting Employee Growth & Development for Student Success

LAUSD Human Resources
March 6, 2018
STEAM School Certification
The vision for P-12 STEM/STEAM education in Los Angeles Unified School District is to empower school communities to integrate science, technology, engineering, arts, and mathematics through the process of critical thinking, communication, creativity, and collaboration to foster innovation not just for today, but the future.
Development of the STEM/STEAM Certification
LAUSD STEM/STEAM Certification

Spring 2017

Beginning of the Certification Process

Fall 2017

Research and Collaboration

December 2017

School Selection

January – May 2018

Pilot of Certification Rubric

June 2018 and beyond

Reflection and Next Steps
Participating Schools

- Boys Academic Leadership Academy
- Christopher Columbus Middle School
- Heliotrope Elementary School
- Los Feliz STEMM Magnet School
- Malabar Street Elementary School
- Montara Avenue Elementary School Magnet
- Nevin Avenue Elementary School
- Olive Vista Middle School STEAM Magnet
- Park Western Early Education Center
- Playa Vista Elementary School
- Robert E. Peary STEAM Magnet Middle School
- San Fernando Institute for Applied Media
- San Pascual Elementary School
- Telfair Elementary School
- The Science Academy STEM Magnet
- Torres Engineering and Technology Academy High School
- Willenberg Career and Transition Center
The Science Academy

STEM Magnet
STEAM School Certification
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