

At the Point of Learning: Maine's 1:1 Learning Program

MAINE LEARNING



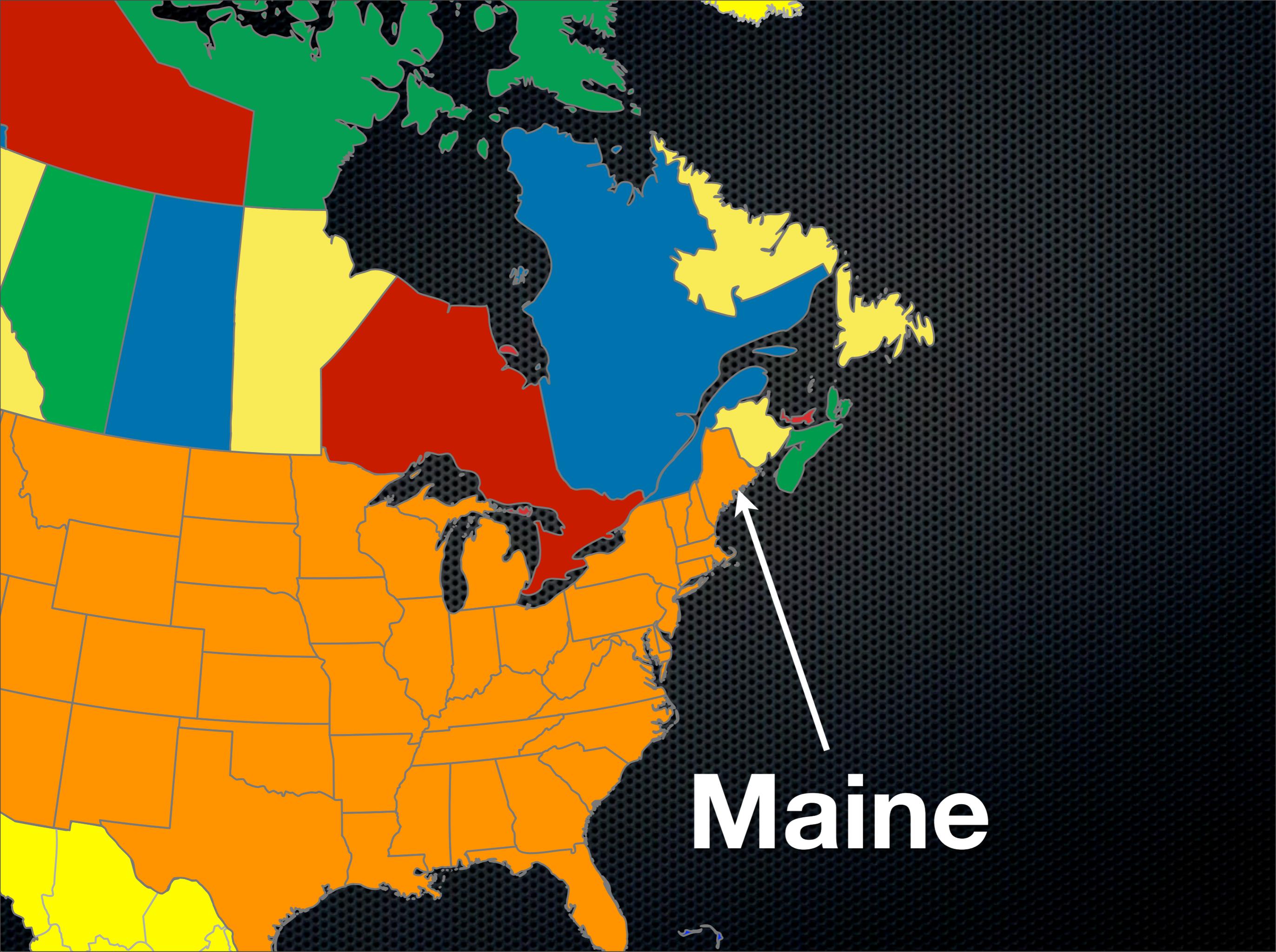
TECHNOLOGY INITIATIVE

Jeff Mao

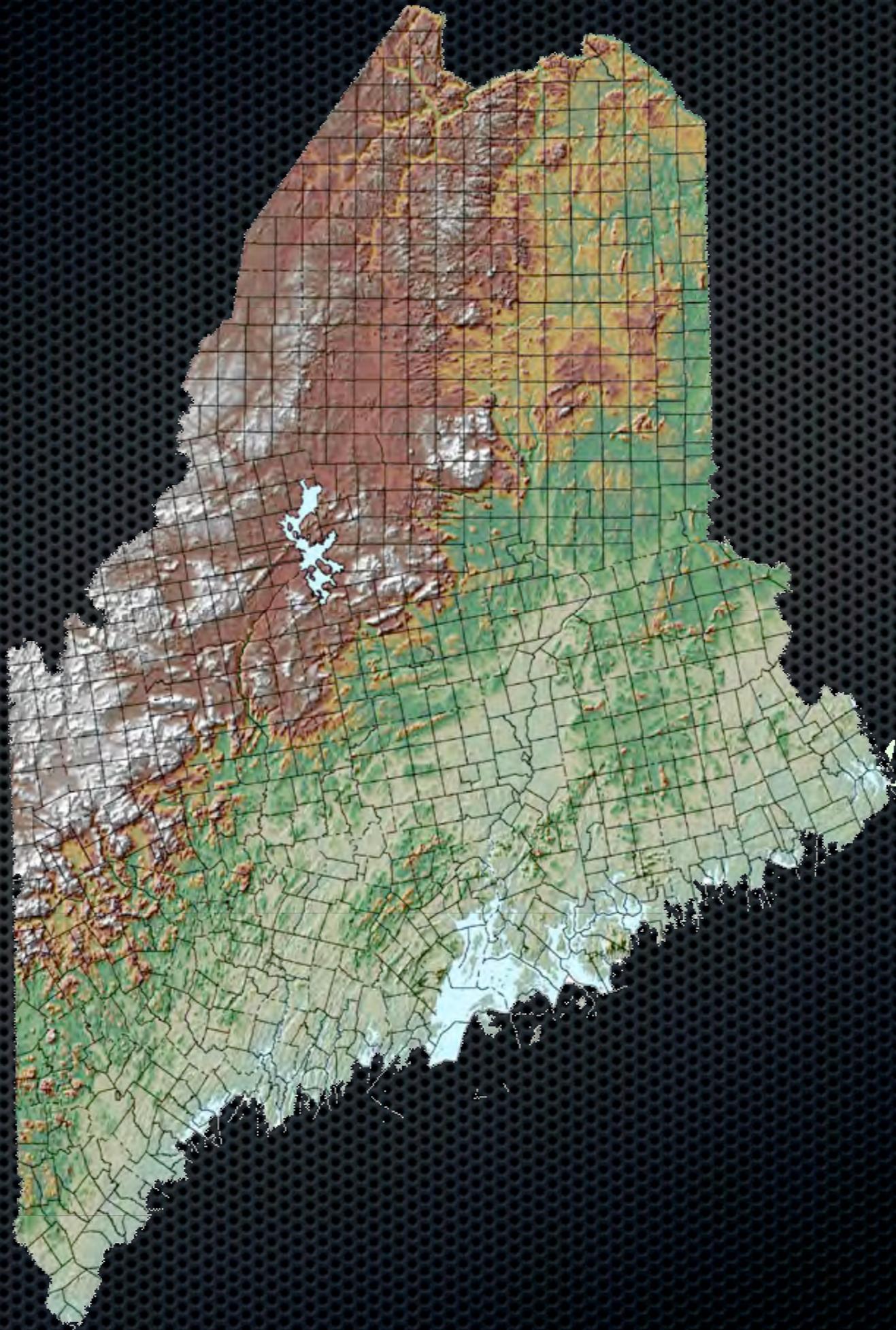
Learning Technology Policy Director

State of Maine

Department of Education

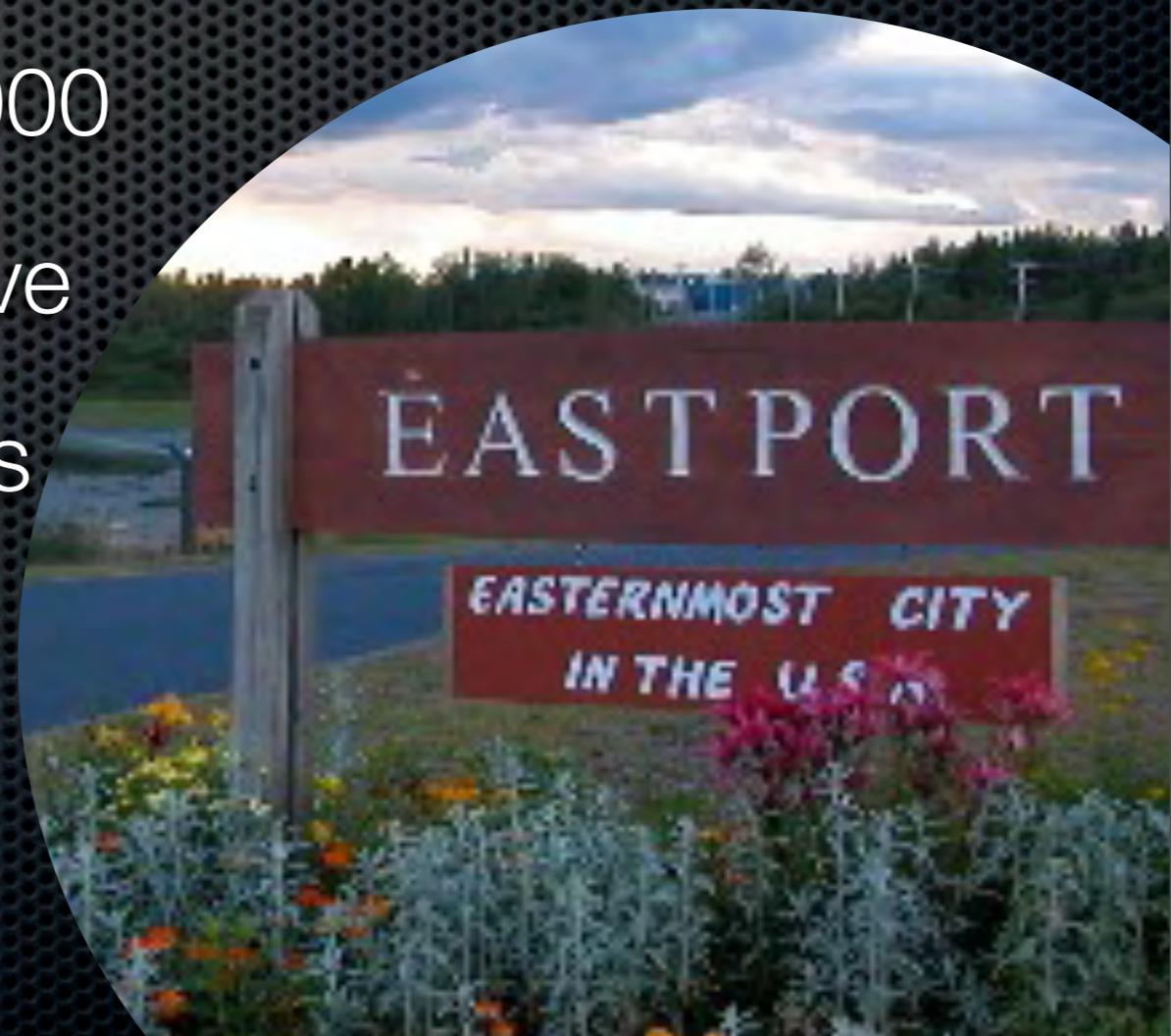


Maine



Maine - by the numbers

- State of Maine
 - Land Area: 91,646 km² (South Korea: 100,032 km²)
 - Total population: 1.3 million
 - Student population (K12): 187,000
- Maine Learning Technology Initiative
 - Schools: 373 secondary schools
 - 7-8: 100% | 9-12: 55%
 - ~70,000 laptops



Gains in Student Achievement

Writing

RESEARCH BRIEF

Maine's Middle School Laptop Program: Creating Better Writers



Photo by David I. Silverman for the Maine Education Policy Research Institute

David I. Silverman

Aaron R. Christie

Maine Education Policy Research Institute

University of Southern Maine

- ✦ Compared before and after 1-to-1 implementation
- ✦ Writing scores on MEA improved approximately 1/3 of a standard deviation
- ✦ Twice as many students using laptops for all stage of writing process met proficiency standard
- ✦ Improvements were independent of test format – online or paper and pencil.

<http://usm.maine.edu/cepare/>

Gains in Student Achievement

Math

RESEARCH BRIEF

Improving Mathematics Performance
Using Laptop Technology:

*The Importance of Professional
Development for Success*



David L. Silvernail

Pamela J. Buffington

Maine Education Policy Research Institute
in collaboration with the
Maine International Center for Digital Learning
University of Southern Maine

- ✦ 2-year study that included professional development for teachers in experimental group
- ✦ Improvement in teachers' knowledge and practice with technology
- ✦ Improvement in students' scores on tests designed for study and on MEAs.

<http://usm.maine.edu/cepare/>

20th and 21st Century Questions

20th C	21st
Who?	Why?
What?	How?
Where?	
When?	

Formative assessment
versus
Summative assessment

**“A personal digital device,
at the point of learning,
as defined by the student.”**

Susan Gendron

Maine Department of Education

Commissioner of Education





TPCK

Dr. Matthew Koehler and Dr. Punya Mishra

<http://www.tpck.org>





Content



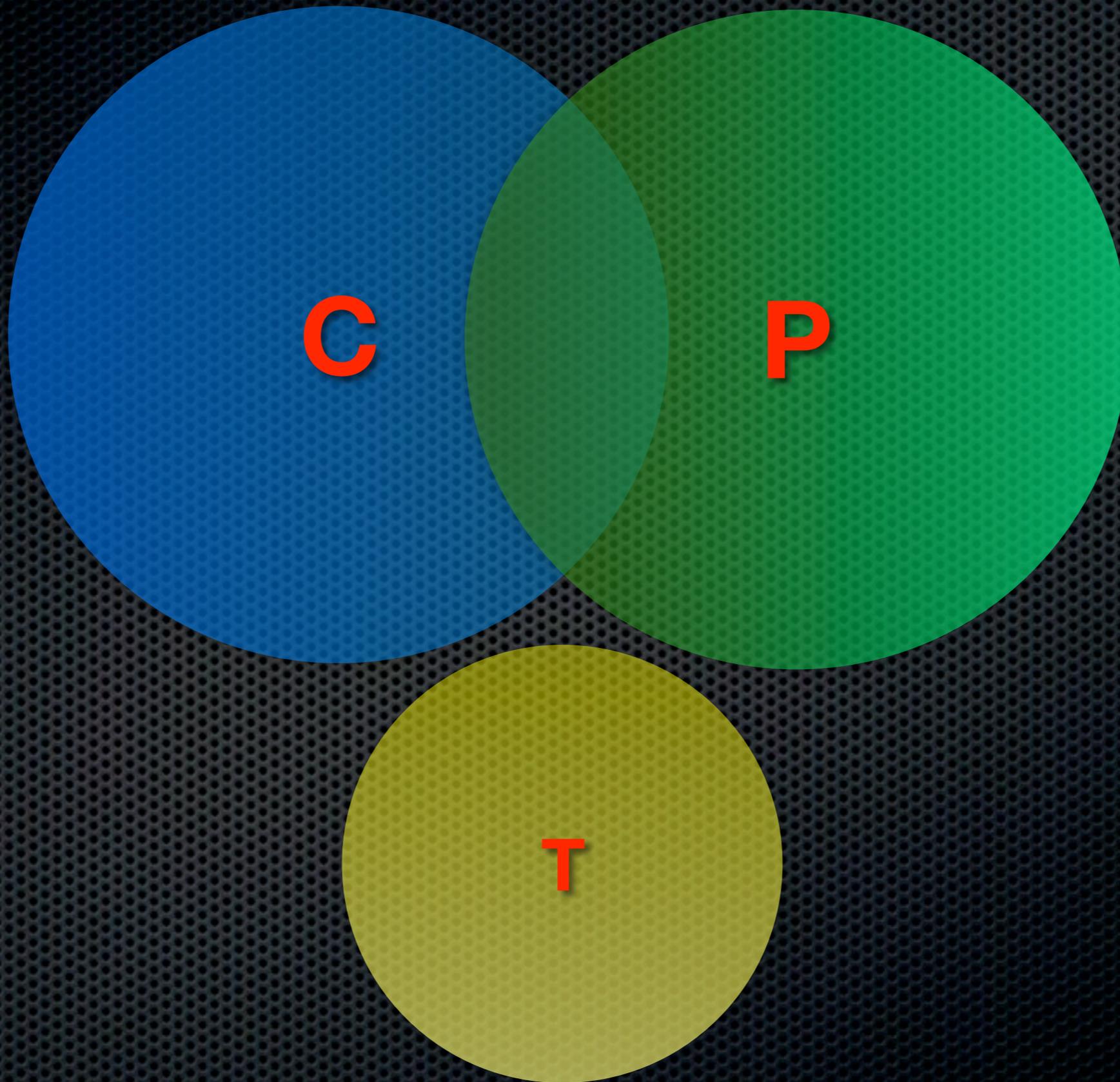
Pedagogy

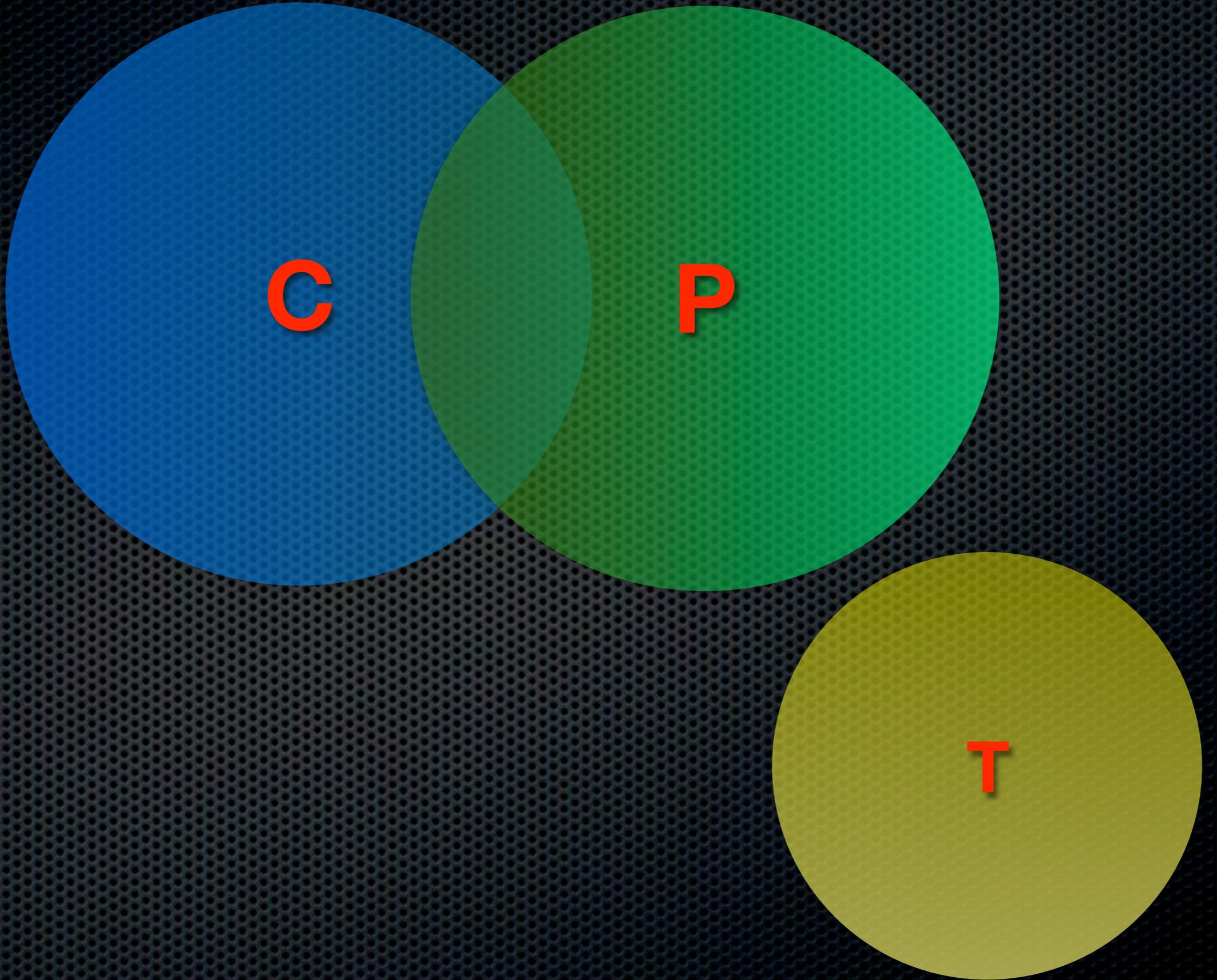


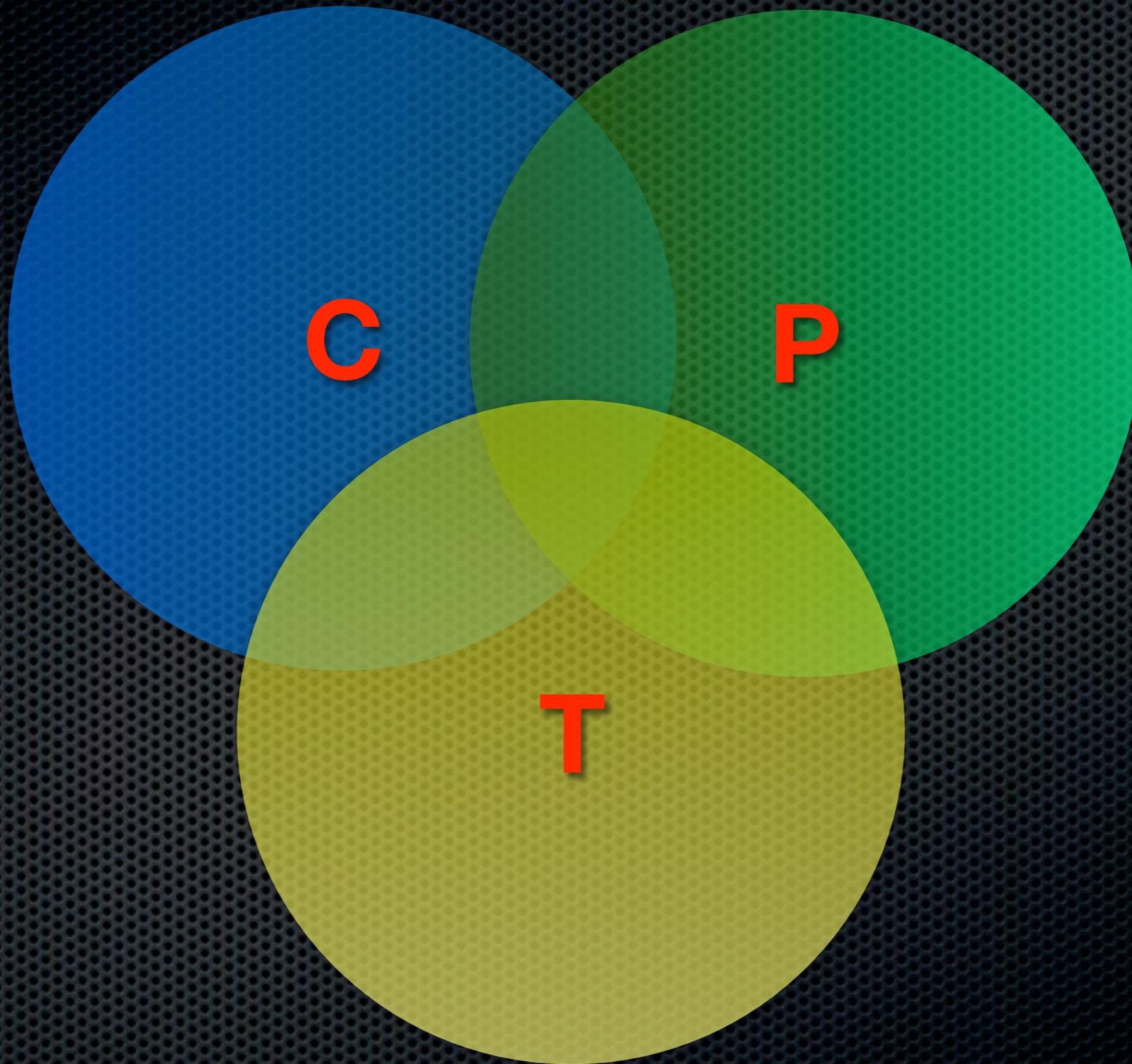
Technology

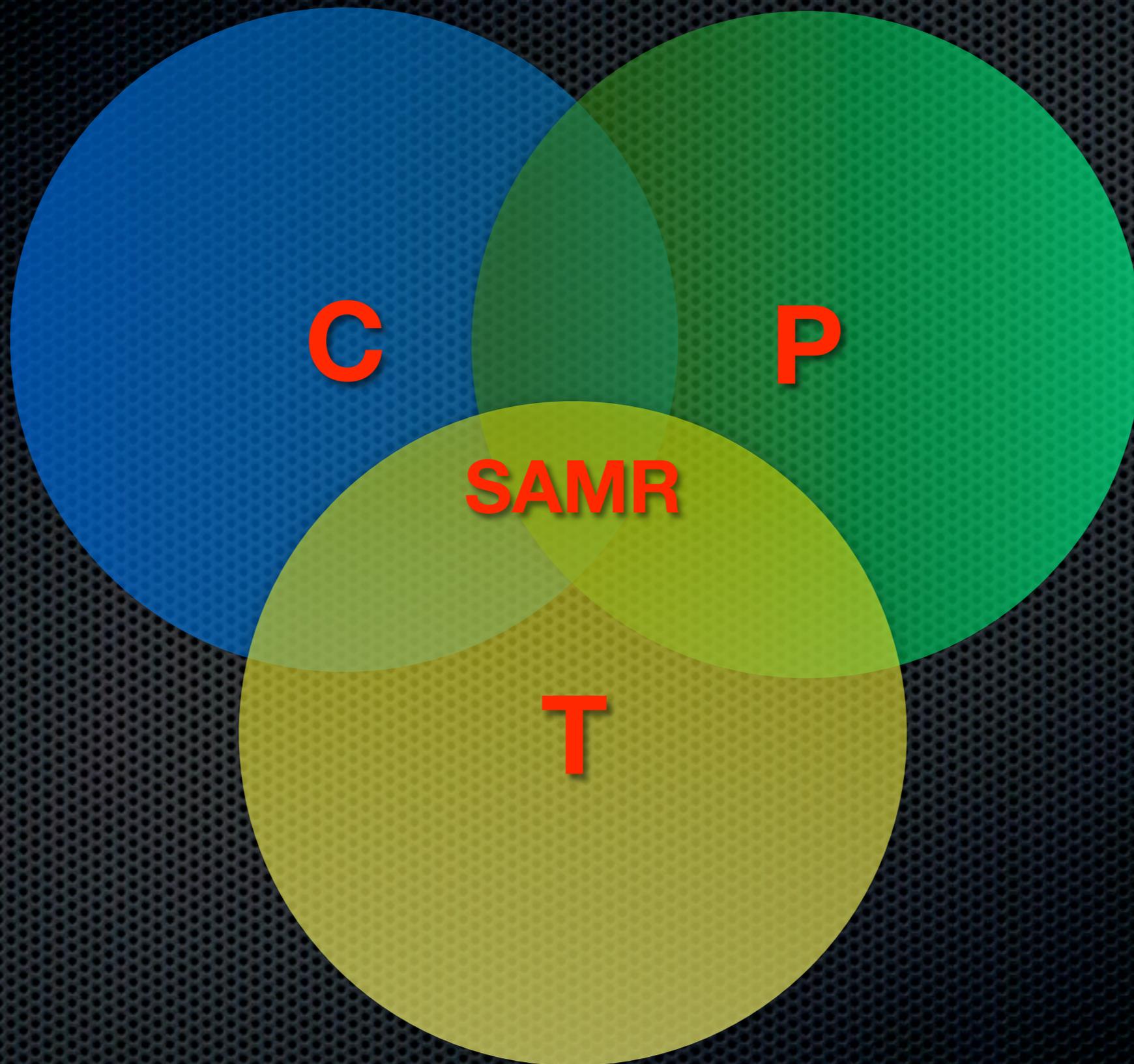












SAMR

Dr. Ruben Puentadura

<http://www.mlti.org/vitta>

<http://www.hippasus.com/resources/tte/>

Augmentation

Acts as a direct tool substitute, with functional improvement

Substitution

Acts as a direct tool substitute, with no functional change

Augmentation

Acts as a direct tool
substitute, with functional
improvement

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Acts as a direct tool
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functional change

Redefinition

Allows for the creation of new tasks, previously inconceivable

Modification

Allows for significant task redesign

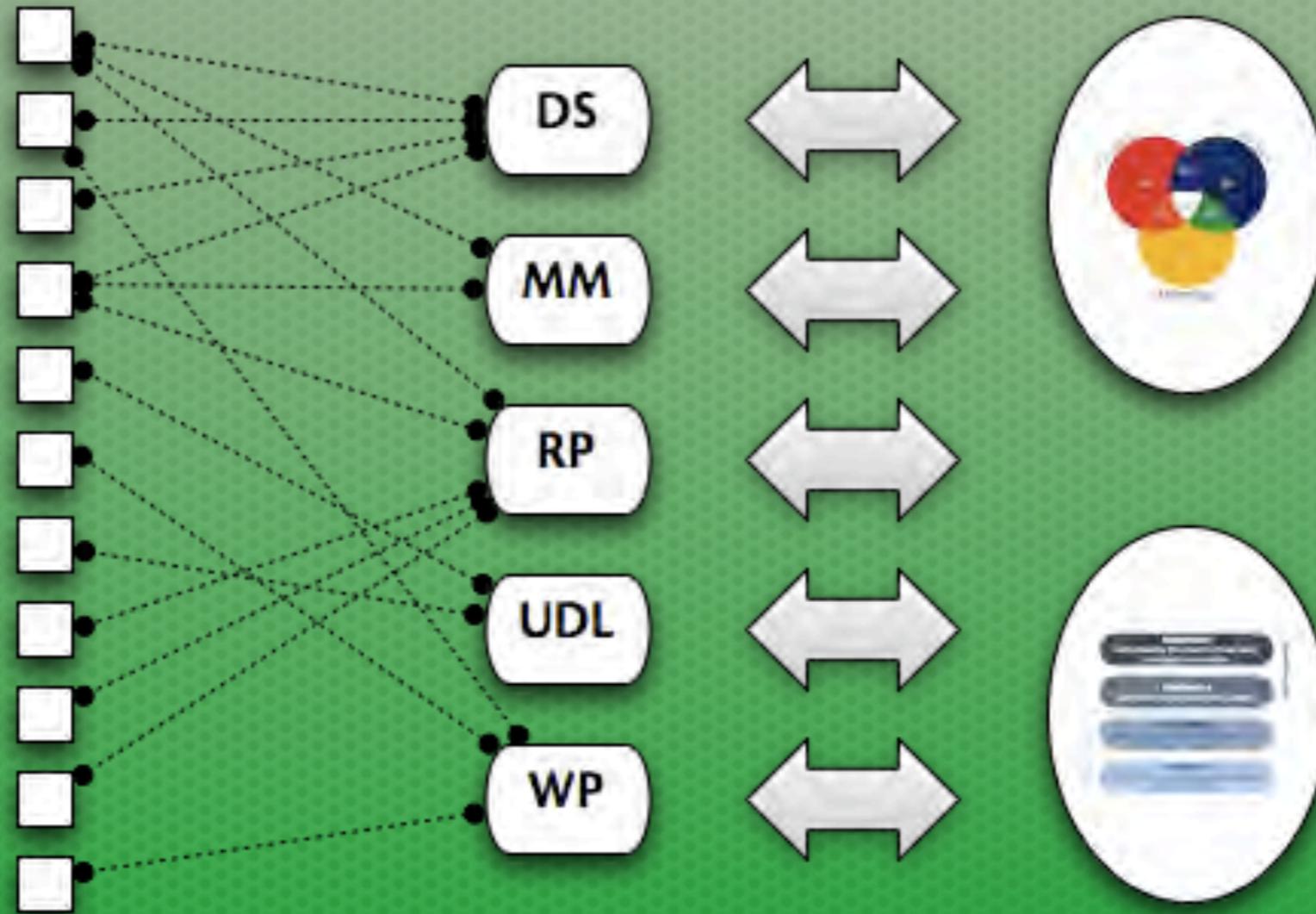
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F2F Sessions



What's on
Your MacBook?
(podcasts)

Lenses
(webinars/podcasts)

TPCK/SAMR
(podcasts)

Other Podcasts

5 Lenses

- ✦ [DS] Digital Story Telling and Media Production
- ✦ [MM] Making Meaning
- ✦ [RP] Research Process
- ✦ [UDL] Universal Design for Learning and Accessibility
- ✦ [WP] Writing Process

Maine Learning Technology Initiative

http://maine121.org/

Maine Learning Technology Initiative

MAINE LEARNING TECHNOLOGY INITIATIVE

Professional Development for Teachers

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Type text to search here...

Welcome to Maine121.org

August 19, 2009 Jeff Mao 4 comments

Welcome to Maine121.org, the new online home of professional development resources for teachers participating in the Maine Learning Technology Initiative (MLTI). For the past 7 years, MLTI professional development specialists (aka Statewide Integration Mentors [SWIMs]) have hosted school and regional workshops all over Maine. The SWIMs will continue to host these types of events, but this year we will be emphasizing online opportunities to reach more teachers more often.

Each week, MLTI will host at least one live webcast (or webinar). Online webcasts will allow you to participate from any broadband Internet connection. These workshops will continue to build upon our past work with the [TPCK](#) and [SAMR](#) models. Through five lenses, we will examine the effective use of technology as a teaching and learning tool.

Information about how to participate in these weekly events and a schedule is available by following the [WebCasts](#) link at the top of the blog. Follow up information and links to recordings of the presentations on [iTunes U](#) will be posted here. We encourage you to share your thoughts and ideas here on the blog as well.

Digital Storytelling and Media Production, Making Meaning, Research Process, UDL and Accessibility, Writing Process

November 5 Webinar: Directed Use of Research Tools

October 31, 2009 Jim Wells Leave a comment

The entry points for locating information can be the key to finding appropriate, detailed and timely resources. With simple modification of practice, and more directed querying, online tools and applications on the MLTI image can become powerful additions to the research process. This webinar will examine search tools both familiar and less



RSS feed

MAINE LEARNING TECHNOLOGY INITIATIVE

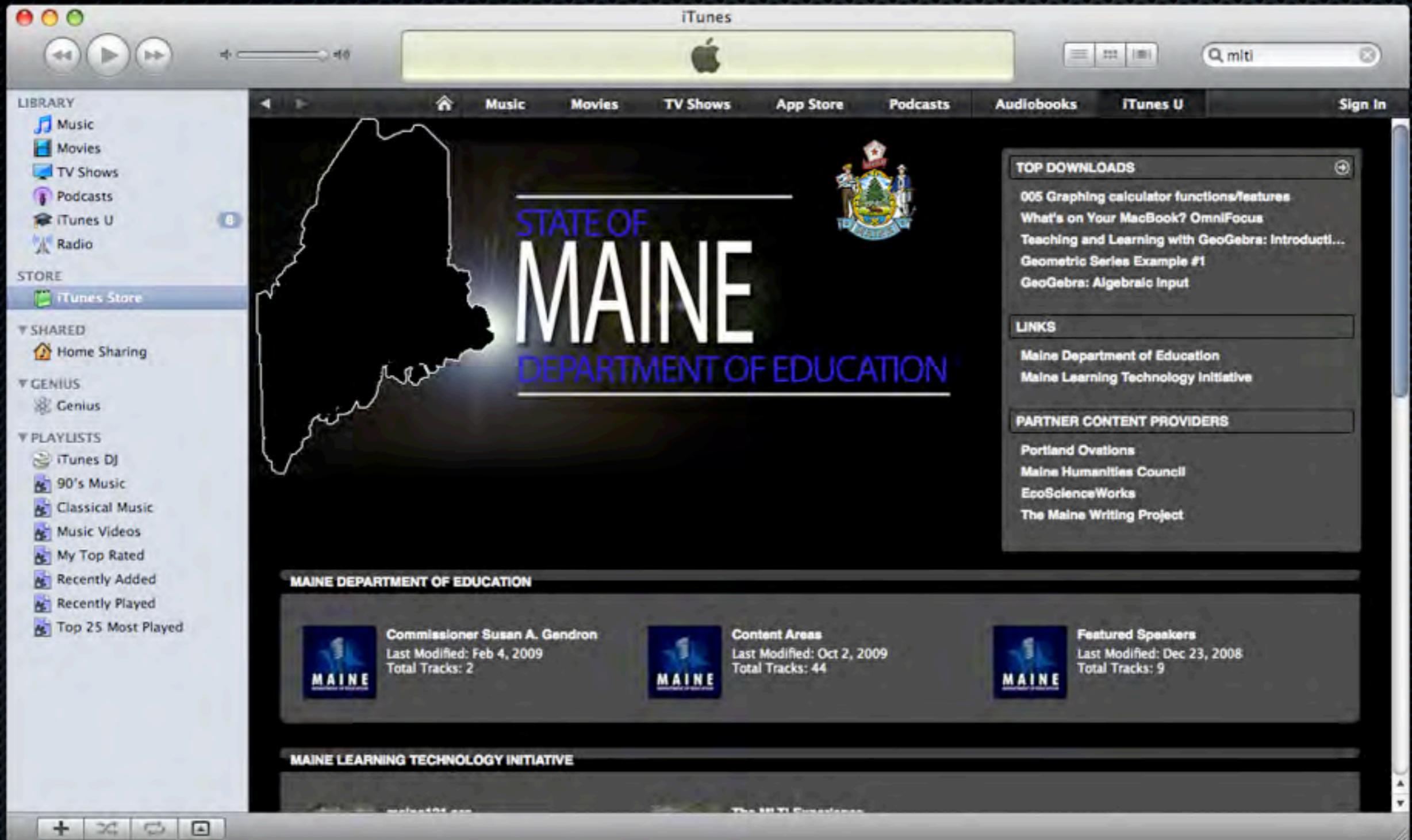
Lenses

- Digital Storytelling and Media Production (3)
- Making Meaning (2)
- Research Process (3)
- UDL and Accessibility (4)
- Writing Process (5)

Tag Cloud

accessibility brainstorm brainstorming built-in access CRP digital storytelling ideas prewriting quick write research Research Process tags tools udl vocabulary **webinar** word processing **writing** writing prompt

<http://www.maine121.org>



iTunes U

Structure Should Liberate, Not Confine*

- ✦ **Common hardware**
- ✦ **Custom designed software image**
 - ✦ **Common software applications**
 - ✦ **Common operating system**
- ✦ **Common support channels**
- ✦ **Common Networks**

* from the Mission Statement for the Allendale Columbia School, Rochester, NY

Hardware and Software

- ✦ **Support educational goals**
- ✦ **Content creation is very important**
 - ✦ **Tool-based software**
 - ✦ **Not a lot of “educational” software**
- ✦ **Wireless, robust, professional**

1:1 Ecosystem

Student	a personal digital device, at the point of learning, as defined by the student
Teacher	TPCK-SAMR
Professional Development	Classroom focused, role-based
Technical Support	Embedded, Student/Teacher centric
Infrastructure	Wireless & Ubiquitous
Leadership	Pressure and Support
21st Century Tools	Portable, professional, robust. Foster collaboration and communication

Lessons learned

- ✦ Leadership Leadership Leadership
- ✦ F2F PD is great, but not scaleable and it's expensive
- ✦ Centralized State contract
 - ✦ “one throat to choke” works
- ✦ 1:1 is an ecosystem



Questions?



STATE OF MAINE
DEPARTMENT OF EDUCATION

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Questions?