Using Technology to Support Student Learning: Project SMART Teacher Professional Development Model, 1987-2011

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What Does SMART Stand for?
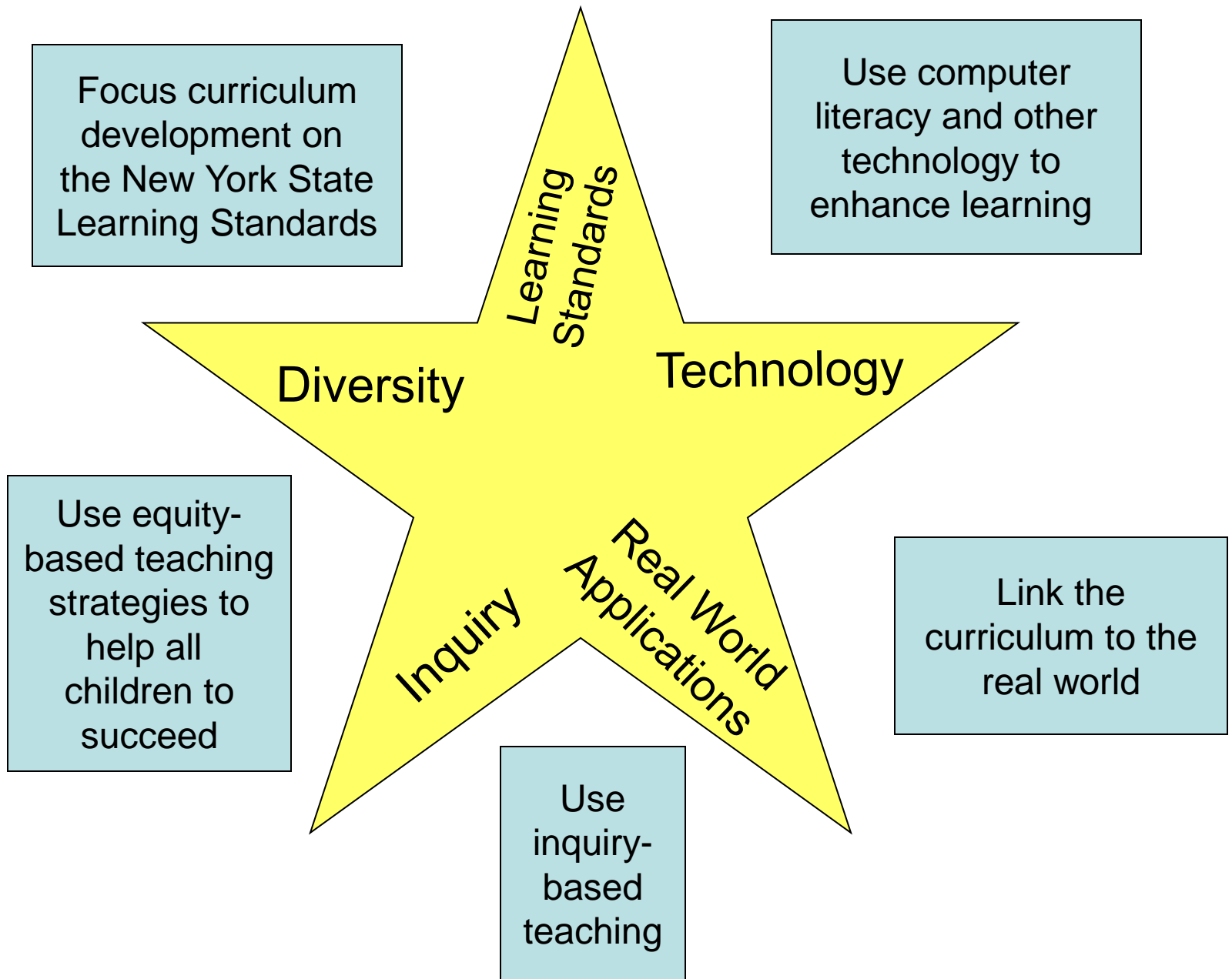
Student-centered,

Multicultural,

Active,

Real-world,

Teaching

Focus curriculum development on the New York State Learning Standards

Use computer literacy and other technology to enhance learning

Learning Standards

Diversity

Technology

Use equity-based teaching strategies to help all children to succeed

Inquiry

Real World Applications

Link the curriculum to the real world
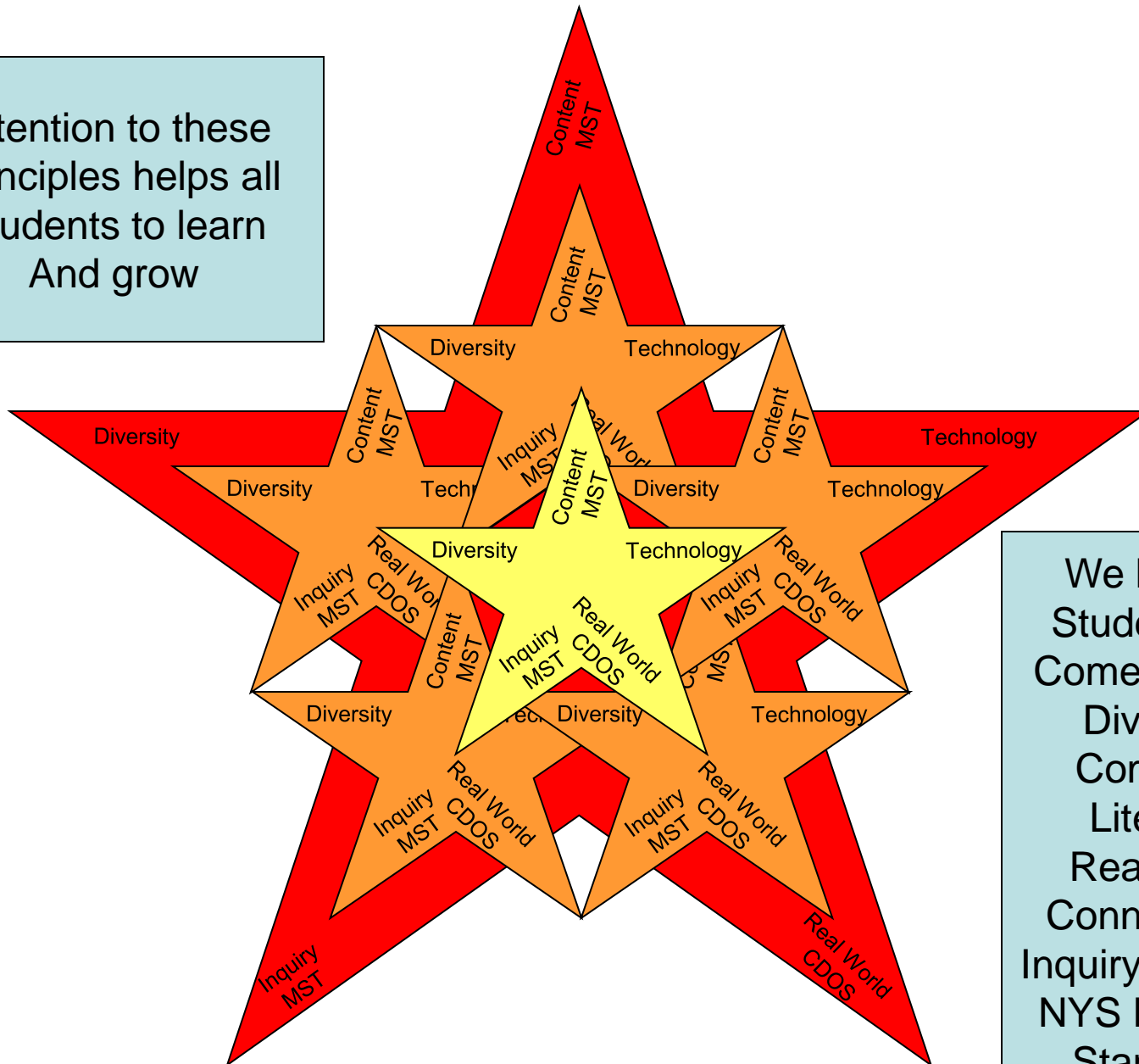
Use inquiry-based teaching

All academic year and Summer Institute activities are infused with these principles
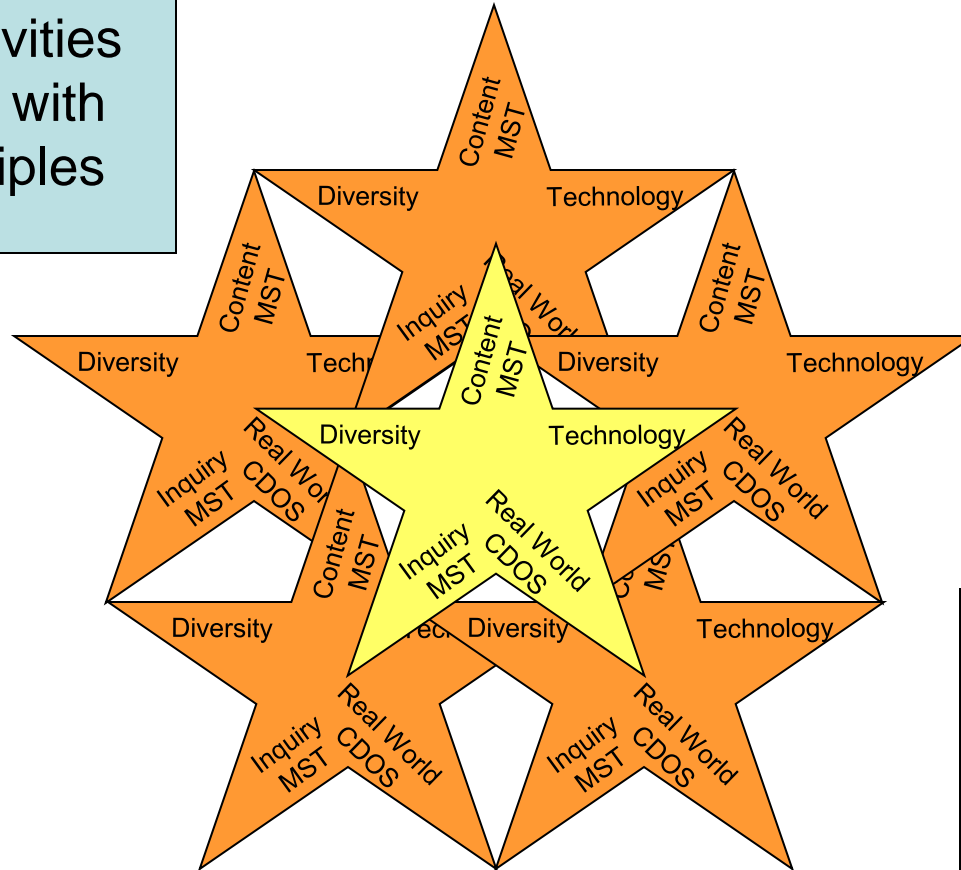
These principles are reflected in the professional development and teaching of Project SMART teachers

Content MST
Diversity
Technology
Inquiry MST
Real World CDOS

Attention to these Principles helps all Students to learn And grow

We believe Students will Come to value Diversity, Computer Literacy, Real world Connections, Inquiry, and the NYS Learning Standards

SMART WEBSITE

www.oswego.edu/prosmart

Project SMART Summer 1998

Using Computer Technology to Support a Culture of Inquiry

What Does it Look Like?

Culture of Inquiry

Project SMART Culture

| Collaborative | Sustained | Contextual | Research Based | Inclusive |

Changes

From		To
Listening	→	Inquiry
Thinking	→	Collaborating
Questions	→	More Questions
Uncertainty	→	A Plan
Attending	→	Learning and Growing

SMART 2009: Overview of Sessions available

1. Assisstive Technology
2. Legos
3. Skype
4. SMART Board
5. Graphing Calculator
6. Facebook/Overview/Twitter/MP3
7. Videotaping
8. Secondlife
9. Internet in the Learning Cycle
10. Web Based Teaching, Blogging
11. Discussion groups with ANGEL

Our Mission:
<u>Produce Technology-Fluent Kids</u>

Within an effective educational setting, technology can enable students to become:

- – Capable information technology users
- – Information seekers, analyzers and evaluators
- – Problem solvers and decision makers
- – Creative and effective users of productivity tools
- – Communicators, collaborators, publishers, and producers
- – Informed, responsible, and contributing citizens,

  to live, learn and work successfully in an increasingly complex and information-rich society.

Communication and Collaboration in the Classroom
ITC Skills for the 21st Century

* **Standard 3:**

Technology productivity tools

- Students use technology tools to enhance learning, increase productivity, and promote creativity.
- Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.

* **Standard 4:**

Technology communication tools

- Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.
- Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.

* Ref. National educational technology standards for students (NETS)

All Children Must be Ready for a <u>Different World</u>

- **Parents want it!**
  Parents want their children to graduate with skills that prepare them to either get a job in today's marketplace or advance to higher levels of education and training.

- **Employers want it!**
  Employers want to hire employees who are honest, reliable, literate, and able to reason, communicate, make decisions, and learn.

- **Communities want it!:**
  Communities want schools to prepare their children to become good citizens and productive members of society in an increasingly technological and information-based world.

- And most of all… **kids need it**!!!

Using Technology to Support Cultural Understanding

- Video ethnography project with urban and rural middle school children

  - Calculator Project in Benin, West Africa and Alagoas, Brazil

Inquiry Oriented Mathematics:
The Alagoas Calculator Project

Ramalho Interprets for Burrell

Exploring Mathematics Using the Calculators

Planning Lessons Using the Calculators

Using iPads to Explore Online Resources

Teachers Present and Discuss

Sharing and Critiquing Group Lessons

Lesson Study Model

Visiting the Research Laboratory

Alagoas Research Lab

SMART 2011: Social Justice Through the Arts

Technology's role in
Social Justice Activism

Using iPads to Support Literacy

<u>Resources</u>

Dream Yard Project:
http://www.dreamyard.com The largest arts education program in the Bronx, Dream Yard provides in-and-out of school art education, with a commitment to social justice. In their work, participants collaborate in art projects that are community based and aimed at building social consciousness.

Studying artists' lives and activism: Judith Baca, Los Angeles artist activist, engages high school students in Chicana Mural Project Read about her work and view images at www.sparcmurals.org

[100,000 Dreams by Kang](): Drawings by South Korean Children were matched by drawings by North Korean Children and installed in a vinyl tube in a DMZ between the 2 countries

[The Fundred Dollar Project](): Children across the US create Fundred Dollars to go to Washington DC to raise real funds to clean lead from New Orleans soilChicana and

[Chicano Space](): [http://mati.eas.asu.edu/ChicanArte/html_pages/Protest-home.html]() This website is posted by the Hispanic Research Center at Arizona State University. It featuresart images, analysis, and biographical information, as well as lesson plans of artists

The Feminist Art Project, Rutgers University: http://feministartproject.rutgers.edu/
This site is a constantly updated resource of history and images of feminist art.

Facing History and Ourselves: http://www.facinghistory.org/
This project uses new media to engage youth from middle school through college in studyinghi story connected to issues in our world today.

Independent Television Services: http://www.itvs.org/
ITVS provides many programs for all ages on topical social justice issues from diverse perspectives.

Playing for Change: Musicians from around the world collaborate on this song, displayed on Youtube.

References:
Beyerbach, B., & Davis, R. D. (eds.).(2011). *Activist art in social justice pedagogy: Engaging students in glocal issues through the arts. NY:* Peter Lang. Beyerbach, B., Walsh, C., & Vannatta, R. (2001).

From teaching technology to using technology to enhance student learning: Preservice teachers' changing perceptions of technology infusion. Journal of Technology and Teacher Education. 9(1), 105-127.