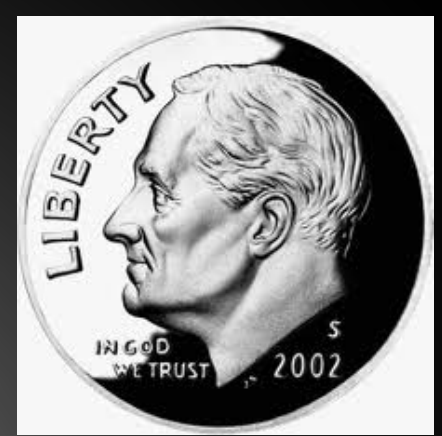


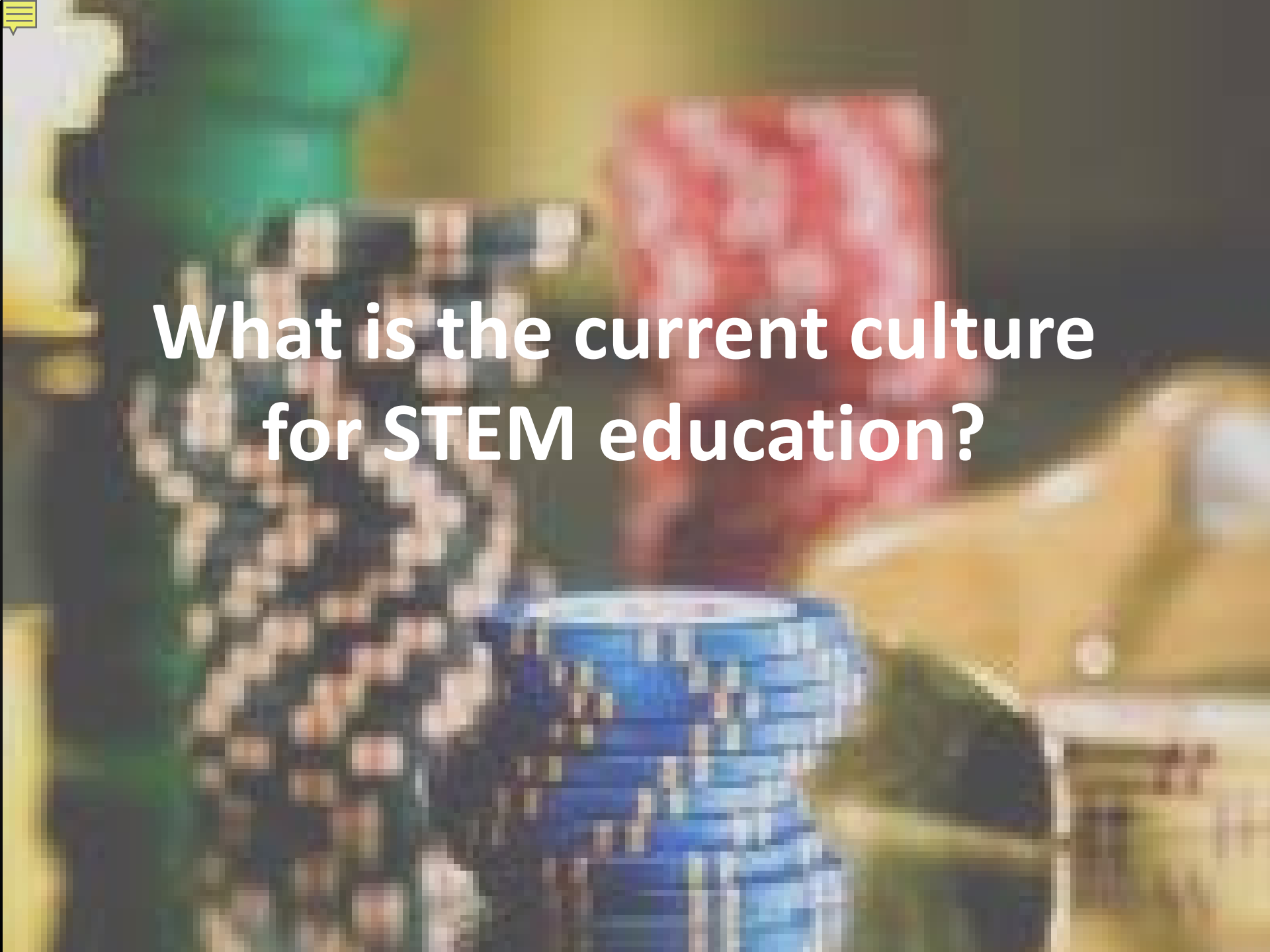


“a new pair-o-dimes”



A New Paradigm for STEM

Becky Ashe
KCS STEM Coordinator
Principal, L&N STEM Academy



**What is the current culture
for STEM education?**

Looking for directions

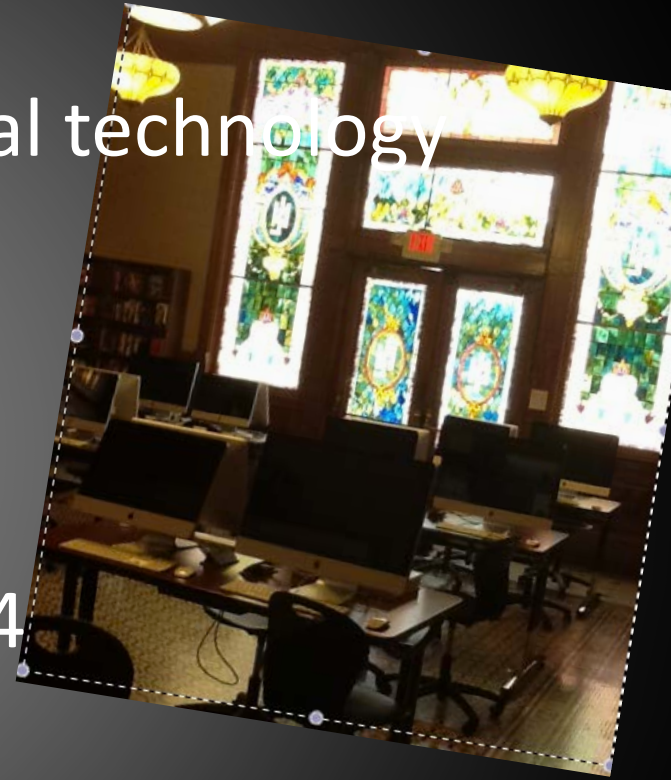
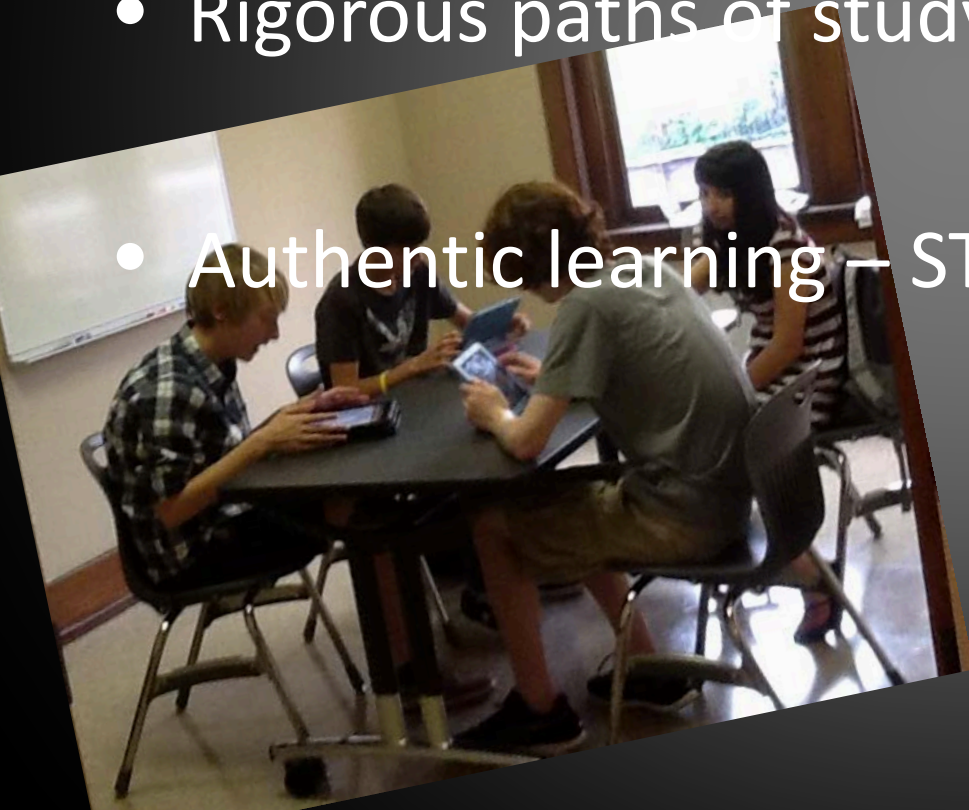
- *Successful K-12 STEM Education: Identifying Effective Approaches in Science, Technology, Engineering, and Mathematics*, The National Research Council, 2011
- “The primary driver of the future economy and concomitant creation of jobs will be **innovation**, largely derived from advances in science and engineering.”

First to the Top

- Platform school – L&N for Knox County
- Regional Hubs – KARST, UCRSI, UETSI, . . .
- TSIN – state network
- STEMx – multistate network for STEM

Philosophies of the L&N

- Student engagement – personal technology
- Rigorous paths of study
- Authentic learning – STEM 1 - 4



Lessons Learned

- Abolish the isolation
 - Common work space
 - Shared classrooms
 - Embracing a universal curriculum
 - Habits of STEM
 - Co-facilitation
 - Teacher as learner
 - Emergence of authentic curriculum



Lessons Learned #2

- Different philosophy of engagement
 - Technology integration
 - Modeling
 - So you say you have a STEM focus...what makes your classroom/school look different?
 - Habits of STEM
 - Nerd pep rally
 - Sigma Tau Phi
 - Shooting rockets



Lessons Learned #3

- Spirit of inquiry
 - Latitude in classroom management
 - Organized chaos
 - Professional safety net
 - Administrative cheerleaders and models
 - Staying on the bleeding edge



You can be part of this:

- Becky Ashe, L&N STEM Academy Principal
becky.ashe@knoxschools.org
- Marilyn Roddy, East TN STEM Innovation Hub
marilyn.rodny@knoxschools.org

<http://knoxcountysystemac.knoxschools.org>