The Board of Education has two goals:
  • increase student achievement
  • enhance community engagement

With the help of my team, I’ve developed a presentation to articulate the 21st Century educational experience to be provided by Granite School District.

I ask you to share this presentation with your staff.
Learning is not compulsory... neither is survival.

W. Edwards Deming
I am telling you that it is ok to risk; the name of the game is NOT keeping lids on pots but CONSTRUCTIVE TROUBLEMAKING in the interest of student achievement and community engagement.

Mistakes are ok, but we need to play within the rules.
CURRENT SITUATION

- Legislative animosity
- Generation X
- Transformations
`In my view, the traditional public education system is incapable of making the necessary transitions and is doomed. As a policy maker, should I sit by and watch or is there something I can do to hurry its demise?``

Legislator to Clayton Christensen during presentation on Disruptive Innovation, July 16, 2010

- 2011 General Session, SB 65: Statewide Online Education Program
Gen X mother to Linda Mariotti

“It is practically impossible to persuade most Gen-X parents that they should relinquish their choice for the sake of some great public good.”

Meet Mr. and Mrs. Gen X: A New Parent Generation, The School Administrator, Jan, 2010
THREE TRANSFORMATIONS

- Economic
- Demographic
- Technological
“The U.S. and the world are in the middle of an economic rebalancing that hasn’t been seen since the rise of the great European empires in the 1500s. Power is shifting from West to East, technology is rejiggering the relationship between growth and jobs, and both trends are intersecting in ways that have undercut the upper trajectory of our economy. It’s uncharted territory in which policymakers and economists alike are flying blind.”

*Time*, June 13, 2011
WORLD LEADERSHIP

- 1500’s – 1600’s: Spanish Empire

- 1700’s – 1800’s: British Empire (with great French influence if not sustained leadership)

- 1900’s: United States of America

- 21st Century: USA? China? India?
1. *Is preserving world leadership, economic or otherwise, a relevant or desirable goal?*

2. *Based on the answer to the foregoing question, what then is the role of Granite School District?*
o Utah is an increasingly diverse, heterogeneous state.
  • Pam Perlich: http://www.bebr.utah.edu/index.html

o Granite students are an increasingly diverse, heterogeneous group.
OPPORTUNITIES PROVIDED BY DIVERSITY

- Chinese Education System
- Indian Education System
- Huge investment in top 10% (a fairly homogeneous group)
HOMOGENEOUS V. HETEROGENEOUS GROUPS

Research on problem solving and innovation:
Three Groups
- homogeneous group
- diverse group with training on implications of diversity
- diverse group without training on diversity

Diverse groups not trained on the existence and implications of differences produced lower problem-solving scores than homogeneous groups.

Diverse groups with training produced scores that averaged six times higher than the homogeneous groups.

*Member Heterogeneity and Dyadic Creativity, Harry C. Triandis*
Research comparing ethnically diverse teams to all-Anglo teams doing a [creative and innovative] task shows that the diverse teams outperformed the homogeneous ones by about 10 percent.

Ethnic Diversity and Creativity in Small Groups, Taylor Cox Jr.
A homogeneous group will outperform a heterogeneous group until the heterogeneous group learns to leverage its diversity – thereafter the homogeneous group can’t touch them.

There is no better place to practice leveraging diversity than in our classrooms and schools.
Recognizing the obvious challenges associated with our diverse population-

1. *How can we leverage diversity in our classrooms and schools?*

2. *How can we “capitalize” on the diversity?*
Disruptive Technology:
DISRUPTIVE TECHNOLOGY
DISRUPTIVE TECHNOLOGY
DISRUPTIVE TECHNOLOGY
DISRUPTIVE TECHNOLOGY
RCA HiFi v. Sony Pocket Radio

- Which gave better sound?
- Which was higher quality?
- Which company drove the other out of business?
RCA HiFi v. Sony Pocket Radio

- What was the only real feature that made the low quality Sony product “superior” to the Zenith or RCA hi-fi?

  **Flexibility**

  Interestingly, RCA’s metrics of superiority were not those the consumer was using.

  “The customer rarely buys what the company thinks it is selling him.”

  Peter Drucker
1. *What disruptions, if we don’t respond, will drive us out of business even though - we (currently) have a monopoly on the market, and our quality is (currently) better?*
2. What metrics do we use to measure quality as opposed to the metrics that interest the consumer (begging the questions - who is our consumer? and what does the consumer want?)?

3. What does it mean to “respond”?
WE HAVE THE BEST 1950's MODEL OF EDUCATION THE WORLD HAS EVER SEEN!
BUT WAIT - MAYBE IT’S THE BEST 19TH CENTURY EDUCATION ...
We’ve talked about the situation; now, what is our business or mission? What does a 21st century educational experience look like?

another fun Deming quote:

*It is not necessary to change. Survival is not mandatory.*
WHO DEFINES OUR CORE BUSINESS?

Legislature

Business

Parents
SHOPPING FROM HOME
INTERNET RETAIL
QUARTZ CRISIS
How did Sears lose the corner on the shopping-from-home market?

How did the Swiss watch companies lose their corner on the market?

They were confused about the business they were in: Retail v. Shopping from Home Watch-making v. Time-keeping
Many classrooms are all about “you sit there and listen to me.”

Many student schedules are created to support and preserve FTE.

This is what it looks like when we are in the school business.
1. What does it look like when we are in the “education business”?

2. Do our current decisions reflect that we are in the education business, or is there internal confusion?
READING THE TEA LEAVES
“[Here] is the biggest learning disconnect between the old age and the new age. In the old age classroom, if someone asked you a question and you didn’t know the answer, you failed. In the new age classroom, ... if someone asks you a question you should get five minutes to access whatever sources you use in your daily life to answer that question, because that’s how we will handle questions and problems in our real daily lives, not in isolation, but in extreme interconnection.”
“First, the methods by which the mobile generation learns outside the classroom must be adopted inside the classroom. Thus, 24/7 use of one-to-one, handheld, portable technology must be allowed.”

“Second, curriculum and pedagogy need to change; we need to move from an ‘I teach’ to a ‘we learn’ culture.”
What’s the alternative? More of the same. And this is increasingly unacceptable.

Ostriches will find that their toes will be crushed in the stampede from their own schools.
## Student-Centric Education: Personalization

<table>
<thead>
<tr>
<th>Current System</th>
<th>Personalized System</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Mass production</td>
<td>• Mass customization</td>
</tr>
<tr>
<td>• Time constant/achievement variable</td>
<td>• Time variable/achievement constant</td>
</tr>
<tr>
<td>• Assembly line/common pace</td>
<td>• Knowledge age/individualized pace</td>
</tr>
<tr>
<td>• Institution/teacher centered</td>
<td>• Student centered</td>
</tr>
<tr>
<td>• Fixed place</td>
<td>• Anywhere, everywhere</td>
</tr>
</tbody>
</table>
ESSENTIAL INDIVIDUALIZATION ELEMENTS

- Flexible, anytime/everywhere learning
- Redefined teacher role and expanded “teacher”
- Problem-based/authentic learning opportunities
- Student-driven learning path
- Mastery/competency-based progression/pace
21st Century Skills

- Critical thinking and problem solving
- Communication
- Collaboration
- Creativity and innovation

- Reading
- Writing
- Mathematics
1. What should a student-centric education look like in Granite School District?

2. What do we need to do to provide student-centric education?

3. What are positive and negative implications of moving to the “education business”?

4. What is the role of the district office?
GRANITE SCHOOL DISTRICT’S GREATEST ASSET

Human Capital

Educators:
Administrators
Teachers
“No man is an island, entire of itself; every man is a piece of the continent, a part of the main. If a clod be washed away by the sea, Europe is the less, as well as if a promontory were, as well as if a manor of thy friend's or of thine own were: any man's death diminishes me, because I am involved in mankind, and therefore never send to know for whom the bell tolls; it tolls for thee.”

Meditation XVII, John Donne, 1623
No educator, whether administrator or teacher, is an island.

No school or classroom is an island.

There are many things we are able to do in Granite School District that are not being done in other districts because of our size.
NECESSARY CONCEPT TO DEVELOP AND PRESERVE OUR EDUCATORS

- Caveat: while competition and specialization among schools are fair and perhaps even encouraged, subterfuge and knives in backs cannot be tolerated.

WE’VE GOT TO BE IN THIS TOGETHER.
Thanks for the philosophy, Martin; what are we taking home?
Student-Centric Education

- Engaging
  - Relevance, rigor and relationships

- Customized
  - Everywhere I go, parents ask what we’re doing for high achievers. NCLB has forced focus on struggling students only and statistical games (although it has forced us to look at individuals we’d averaged away in the past).

- Each child is a thinker and intellectual, a holder of knowledge. The kids aren’t here to serve us; we are here to serve them.
“A DAY IN THE LIFE...”
A 21ST CENTURY EDUCATIONAL EXPERIENCE

- Modules
  - http://www.youtube.com/watch?v=MpBL1gBtY3w
  - http://www.youtube.com/watch?v=fogehnFNDwo&feature=related

- Distance Education
  - distance teaching and learning
“A DAY IN THE LIFE...”
A 21ST CENTURY EDUCATIONAL EXPERIENCE

○ Competency Based
  • Individually paced – credit awarded upon mastery

○ Problem Based
  • Meaningful (relevant) problems, not the group work that drives kids and parents justifiably nuts
OTHER EXAMPLES

- [http://www.youtube.com/watch?v=CdH8tsr6DXg&feature=related](http://www.youtube.com/watch?v=CdH8tsr6DXg&feature=related) kid, DNA from yeast
- [http://www.youtube.com/watch?v=DVngiJtsLBs](http://www.youtube.com/watch?v=DVngiJtsLBs) teacher, 3 digit addition
ANALYSIS

○ Quality (currently) stinks.

○ Kids are not engaged.

○ A demand exists, and we need to get ahead of the curve (or go the way of Zenith and RCA).
1. How would you have your school assess your school’s progress towards providing a 21st Century education?

2. How would you have the district assess your school’s progress?
We’re more than a decade into the 21st century - it’s time...
• Provision of differentiated support to schools

• Expansion of Granite Connect

• Provision of PLC support for authentic problem-based learning and leveraged diversity
FOR THE DISTRICT OFFICE:
2011-2012 SCHOOL YEAR

- Development and facilitation of partnerships with “foreign” schools and classes
- Articulation of strategies for meeting the diverse needs of advanced learners
“Electrify” our world

- Every teacher will have a website with
  - all materials online
  - all assignments online
  - all documents online
  - all content online

- A parent should never hear, “I’ll send a copy of that home.” Rather, “You can view it and print it from my website.”
## Future Direction: Change Management Strategies

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directive</td>
<td>• relatively fast</td>
<td>• ignores the views of those affected by change</td>
</tr>
<tr>
<td>Expert</td>
<td>• uses relevant expertise</td>
<td>• expertise may be challenged</td>
</tr>
<tr>
<td></td>
<td>• small groups required</td>
<td>• resistance of those not consulted</td>
</tr>
<tr>
<td></td>
<td>• relatively fast to implement</td>
<td></td>
</tr>
<tr>
<td>Negotiated</td>
<td>• change recipients have some say</td>
<td>• may be relatively slow</td>
</tr>
<tr>
<td></td>
<td>• resistance to change likely to be reduced</td>
<td>• anticipated change may have to be modified</td>
</tr>
<tr>
<td></td>
<td>• areas of disagreement highlighted</td>
<td></td>
</tr>
<tr>
<td>Participative</td>
<td>• change more likely to be accepted</td>
<td>• relatively slow to implement</td>
</tr>
<tr>
<td></td>
<td>• more people committed to change</td>
<td>• more complex to manage</td>
</tr>
<tr>
<td></td>
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<td>• requires resources</td>
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NEXT STEPS: (ASSUMING PARTICIPATIVE STRATEGY)

- Sharing of this presentation with your staff and eliciting (and forwarding) answers to the discussion questions

- Collation (and redistribution) of materials produced today and from your staffs

- Implementation (with district support) of teacher websites
**Next Steps: (Assuming Participative Strategy)**

- Distillation of work and establishment of associated educator (administrator and teacher) study groups under the DISC umbrella

- Development of long-range plan and “action step” recommendations for the Board of Education

- Churning of information

- Development and implementation of action steps
FUTURE DIRECTION: DRAFT

- 2012-13: Students collaborating and producing together via class portals
- 2013-14: Lessons streamed and recorded
- 2014-15: All classes streamed and recorded
- 2015-16:
Please understand that I am absolutely and unequivocally committed to the survival of the institution of public education. However, I believe that survival is on the line and that change is necessary.
It’s an honor for me to work with you in this capacity. Let’s leverage our expertise and diversity and make this the greatest district in which to learn and work that the 21st century will ever see.