Background

- Public High School mid to low socio-economic population, 82% graduation rate
- Re-organization initiative resulting in massive building renovations and the combination of the two high schools
- Recent Central Office turnover with a new goal of becoming a “world class” school district
- Majority of teachers are veterans attempting to move away from traditional lecture style classrooms and transition to a new pedagogy centered around student led learning
Technology Initiatives

- Bring Your Own Device
  Students use their own devices in the classroom to access digital content, online quiz games and other activities.

- Adaptive Learning Technology
  - Mastery Based Learning pilot class
  - Khan Academy sporadically used for personalized review
Scenario Building

**Strengths**
- Describes several favorable futures
- Can open communication and reveal systemic weaknesses
- Improves the decision making process
- Many different ways to build scenarios

**Weaknesses**
- Time consuming
- Must choose people appropriate for task
- Builders must have excellent working knowledge of the field of study
- Must avoid “wishful thinking” or “tunnel vision”

(Meitzner, 2005)
**Scanning**

**Strengths**
- Includes both observational and research based data
- Includes data from county, state, national, and international databases
- Can reveal comprehensive and accurate trends
- Can be conducted in an unstructured environment

**Weaknesses**
- Time consuming
- Needs continuous monitoring
- Great deal of data mining and deciphering needed in order to be effective
Effectiveness of Programs

- Mode of instruction (online vs in person) is unimportant when sound pedagogical methods are used.
- Videos as instructional methods (such as on Khan Academy) are effective if the content is consistent with student skill level.
Availability of Programs

- Many free online programs
- Rapidly increasing number of paid programs
- Users report positive results
- Can be used for credit recovery, advanced placement, increased course offerings
Effects of Budgets on Technology

- Schools need to be creative to access additional monies for technology initiatives
- Develop partnerships with local businesses
- Apply for educational technology grants
Demographics and Technology

- Low socio-economic students and minority students tend to have less access to technology at home.
- Steep learning curve for non-proficient students, issue when using for school.
- Education can be individualized to accommodate learning differences.
Classrooms will be equipped with technology that will allow students to differentiate their learning.

Teachers will provide “big picture” themes to students to provide the purpose for learning the focus points.

Students will have autonomy in choosing which content to work on (to an extent) and how quickly they move through it.

Students will be able to master the material because the technology will tailor the problems to the student’s ability level.
Plan for Change

- Administrators will need to **clearly communicate new expectations** to teachers, students, and parents
- Change the school climate by not accepting mediocrity or failure
- Implement **after school homework lab** for students that don’t do homework or have substandard assessments
- Teachers will need **professional development opportunities** the year prior to implementation as well as a few days before the school year starts
  - Software training, new pedagogical approaches, etc.
- **Apply for grants/fundraise** to purchase new/additional technology for classrooms
- Research best options for classroom technology before purchasing and implementing the new pedagogy
Graduation rates need to increase

Need to reduce the achievement gap between low and high socio-economic and majority/non-majority students (Ash, 2012)

Mastery based approaches cater to student individuality and differentiates for ability, two key factors in keeping students interested (Bowman, 2011)

Student-led, student-driven education gives better long term retention of content (Mitra, 2010)
References


Dell, C., Low, C., & Wilker, J. (2010). Comparing Student Achievement in Online and Face-to-Face Class Formats. MERLOT Journal of Online Learning and Teaching, 6(1).


