Employing Technology

Enhancements

- Everyone adopts Technology
- Students learn at their own rate/pace
- Every student learns to their potential (non-discriminatory)
- Technology infrastructure to support student learning at their own pace
- Curriculum needs drive the Technology
- Modernize (enhance) student assessments & tracking
- How do I assess the individual student's needs
- Embrace an official change/management program (communication programs to talk about is everyone comfortable?
- Coordination to address concerns
- Are we assessing where we can get the best Technology /process worldwide
- Technology to make students better global students
- How to help teacher integrate Technology into their daily workflow
- Look at the curriculum as the basis for how to introduce the technology
- What programs (for example "scratch") are appropriate to introduce?
- We're not all going to sit in front of a device and get on a personalized learning path
- What is the preference that drives everything below it? Around what are we aligned?
- Enhance communication with parents/home partnership facilitation
- Facilitate clear online learning
- A whole course module to stretch their limits
- Security/internet safety program digital literacy Legal appropriate responsible kink = LARK
- Distraction factor of technology support families
- Finding the way to keep the challenge realistic individualized data for student/teacher/parent/cohort
- Lesson plans is it left to the individual teachers? What mechanisms are there to scaffold teachers? No time. How is it communicated?
- Many, many ways to use Technology to improve education What are ways we can deal with fundamental aspects?
- Leaders & then filter down diffusion of innovation does that work?
- Set objectives and continually assess and review what we want to accomplish
- Here's what we want to accomplishHere's the way we plan to get there? High level (set of drivers) AND Technological support (administrative)
- Take out the Administrative task. Let the teacher focus on learning and not passwords, etc.
- Make sure kids are getting face time, getting tactile learning skills without technology
- Balance Technology & non-technology learning
- Analytic skills How to teach them Critical thinking
- What makes most sense? Use of technology What is the right match

- Teachers need to know what's effective. We can't leave it to the individuals to figure out. Instructional specialists.
- High level strategists needed curriculum leaders?
- Goal then emphasize how to achieve it.

Top Enhancements

- 1. Balance technology and non-technology learning (39)
- 2. Student learning should drive the technology (38)
- 3. Set objectives and continuously update the objectives (restatement) based on progress and learning (**36**)
- 4. Help teachers integrate technology into their daily workflow (23)
- 5. Every student learns to their potential at their own pace (20)
- 6. Empower teachers to drive innovation (19)

1) Balance Technology and Non-Technology Learning

Do we already know student proficiency level with technology?

Barriers:

- *Too much screen time
- Distractors
- Provide tech tools at elementary school access
- Ensure all students have basic level of digital proficiency
- No 1-1 at elementary
- Time in schedule for support of tech specialist

Solutions:

- Provide engaging project-based learning that blends technology collaboration to solve real world problems
- *Leverage student tech knowledge: learning
- *Increase project based learning at all levels (developmentally appropriate)
- Teachers cue students "screens down" when not needed
- Technology etiquette "lesson" parents/students
- Continue to roll out 1-1 so we have what we need to support integration

2) Student Learning Should Drive Technology

Barriers:

- How does individualized learning
- Accountability of learning
- Do these programs/tech exist? Or are we piecing together? Lots of startups assess their worth time to investigate/train/implement new technology
- Assessment of technology & learning wide access interpretation of data
- Technology not best at teaching "skills"

- Can pigeon-hole thinking about lesson delivery avoid assumptions about Techs' abilities
- Knowledge of real-time /on the ground programs in schools

Solutions:

- Stay true to "what do we want students to learn?"
- Using Tech to facilitate/make visible the learning outcome sharing with community & stakeholders
- Strengthen communication about learning
- Assessing successes/challenges
- Don't ask Tech to do something it can't
- App's tool for learning vs. LMS or bigger programs to assess learning

3) Set objectives and continually update the objectives (restatement) based on progress and learning.

Barriers & Solutions:

- Lack of articulated objective & process for developing it
- Vision directions process for collaborative vision
- Balancing Innovation vs. stability
- Objective/fact-based assessment
 - Provide multiple/balanced data sourced
 - Data driven decision making
- Balancing consistency vs. diversity Solution: Alignment with enough consistency to ensure progress while allowing innovation

Promoting Health and Wellness

Enhancements

- Self-Regulation
- Stress- lack of sleep, exercise, down time (overscheduling, being "on" electronically, unrealistic expectations)
- Defining Achievement- Balance of Achievement and Health
- Self Esteem & Acceptance of Others
- Body Image- Body Language
- Problem Solving Skills\
- Mental Health
- Healthy Sexual Relationships
- Drug and Alcohol: Self-Regulation
- Boys and Self Expression vs. Isolation
- Technology and Health
- Balance of Work, Love & Connectedness, Fun, Art, & Spirit
- Appropriate Developmental Expectations of Students
- Multi-Tasking/Lack of Focus
- "Weak" Peer Connectedness
- Physical Activity
- Sleep
- Nutrition
- Emotional Deficiency
- Family Time
- Gender Violence
- Consistency of Direction
- Survivable Balance of Focus
- Tacit Messages- leading to Overload
- Cultural Competency
- Embed Solutions into Existing Practices
- Partnerships Among Students, Teachers, and Parents
- Moral Development/Character Education
- Adult and Youth Perception of Media
- Contact with Nature
- Mindfulness
- Numbing Emotional Climate
- Boys and Mens' Violence Against Boys and Men
- Girls' Violence Against Each Other

Top Areas for Enhancement

- Self-Regulation
- Moral Development/Character Education
- Stress
- Technology and Health
- Balance: Work, Love & Connectedness, Fun, Art & Spirit
- Mindfulness
- Gender Violence
- Problem Solving

1) Self-Regulation

Barriers

- Poor Modeling & Teaching by Adults
- Poor Self-Awareness & Mindfulness

Solutions

- Using Common Strategies K-12
- Adult Education
- Tools for Tool Box for Students
- Integrative Lessons

2) Moral Development/Character Education

Barriers

- Lack of Connections- Students & Adults
- Lack of Adequate Control of Competing Values From Commercial Culture & Social Media

Solutions

- Slow Down Pace
- Unplugging
- Increase Awareness of Adults- "Takes a Village"
- Embrace It-Teach It-Participate
- Attractive Alternatives
- Consistent Framework K-12 & Community Use

3) Stress

Barriers

- Lack of Balance of Academic & Social/Emotional Goals
- Lack of Mindfulness & Reflection & Map of Balance
- High Expectation, value on external success; lack of skills for self regulation, sleep, nutrition
- Tension between academic Needs and social/emotional needs, psychosocial challenges outside of Academic Arena
- Over-testing in Limited Areas
- Lack of Effective Relations

Solutions

- Create Time, Teach Skills, and Practice Them
- Promote Staff Involvement & Hire for It
- Create Map for Balance- Developmentally Appropriate for Each Grade

Questions & Comments:

- 1. What is currently happening at each school level?
- 2. Emotional and Physical Well Being At the Root of Everything!
- 3. Assessing lots of things but not the real qualities that make people successful

Stress in Youth:

Causes

- Lack of Exercise
- Lack of Down Time (overscheduling, unrealistic expectations, always "on")
- Lack of Connection with Parents, Teachers, and Natural World- To Self, With Peers
- Balance of Health & Achievement
- Lack of "Good" Tools for Managing Stress
- Skills in Self-Regulation

Definition of Achievement:

- Right Answer
- Highest Grade
- Risking New Effort

Self Esteem:

- OK as we are
- Feel OK about Self
- Acceptance of Self and Others
- Acceptance of Body Image
- Problem Solving Skills

Exploring Early Childhood Education

Identify problems and enhancements

- A) Children enter first grade with a history that sets them up for success or failure
- A) Schools do not do enough to address needs based on history
- B) Do we know whether incoming K parents want FDK?
- B) Is cost of FDK cost prohibitive?
- C) Required learning of content of K is not necessarily in line with how students learn (not developmentally appropriate)
- C) Are we setting up students for failure or who will need services later because of push down mandates?
- B) Are we providing enough services and support in half day program?
- B) Decision of choice between half day and BASE or not vs. FDK is difficult how is it made? By parents and by Administration
- B) Half day program for K is shorter than pre-school
- B) Are we helping or hurting students by keeping them in half day?
- B) Have we seen a difference in assessments for half day vs. FDK?
- B) What is students' stress level and push down mandates cause it?
- D) Parents' level of stress & causes & impact on students
- A) Address students' needs earlier than 3 years old
- C) Impact of holding students back a year
- B) Understand difference of half day vs. FDK transitioning to first grade
- E) Benefit of conducting assessments earlier for incoming K students
- A) Provide guidance support for 3-5 year old families

Consolidation of Brainstorm Ideas in Sub-topics, A through E (refer to list above to learn how initial ideas were grouped by the participants):

- A) Address needs based on history (10 points)
- B) FDK What barriers preventing us from offering a town-funded FDK program for all students? (39 points)
- C) CONTENT What are the barriers preventing us from delivering developmentally appropriate curriculum content for all students? (30 points)
- D) STRESSS What are the barriers preventing us to identify and address stress levels of children & families? (21 points)
- E) Timing of Assessments (5 points)

Break Out Session: B) FDK

Enhancement Brainstorm List

- Teachers have more time to deliver curriculum
- Stronger balanced program of meeting the whole child
- Academic gains with different pacing
- Uniform system/program for district

Top 2 or 3 Enhancements

- Balanced curriculum
- Teachers have time to deliver curriculum

Barriers:

- Financial cost \$600k-\$700k per year Is FDK advantageous
- Parents who prefer and want traditional K for child
- Is FDK developmentally appropriate for all children?

Solutions:

- Longitudinal study looking at student data for last four years
- Early childhood grants from state
- Given longitudinal study, survey parents on universal FDK vs. traditional
- Provide parent education, meeting social & emotional needs of students K-12

Break Out Session: C) CONTENT

What are the barriers from delivering a developmentally appropriate curriculum for all students?

Barriers:

- Are Common Core standards developmentally appropriate for K?
- How has Wayland chosen to implement the Common Core and what are other towns choosing to do?
- How do teachers feel about developmental appropriateness of Common Core?
- Are we labeling children behind, spending funds on SPED services earlier?
- How is state funding tied to delivery of Common Core?
- Do parents understand RTI?

Solutions:

• Gather information from teaching professionals, conducting survey/town groups about developmental appropriateness of Common Core (Gather information from our teaching professionals – study of Kindergarten & Gr. 1 teachers)

- Find out what other communities are doing about Common Core (Survey of surrounding towns how are they implementing or choosing not to?)
- Determine if we train our teachers sufficiently for delivering Common Core (Has training taken place? Is more needed to implement common core?)
- Conduct longitudinal study of RTI kids

Break Out Session: D) STRESS

What are the barriers preventing us from identifying and addressing stress levels of students and families?

Barriers:

- Push down curriculum
- Academically focused pre-school programs
- Lack of communication between pre-school and WPS
- After school activities that children engage in is it too much? Does it impede their kindergarten experience?

Solutions:

- More parent communication/education (Parent communication to relieve stress and understand expectations)
- Make Kindergarten successfully/developmentally appropriate place for K for all levels
- Bring pre-school and K educators together for better communication & coordination
- Make Kindergarten a successful appropriate placement for all 5-year olds all styles of learning
- Have the district champion curriculum for all 5-year olds
- Create a bigger voice of preschool & kindergarten educators who share concerns about push down curriculum working with administrators to investigate the issues
- Take a stand gather, study & prepare data

Enhancing the Curriculum

Areas to Enhance

- 1) Foreign language in elementary schools (188)
- 2) Broader history in elementary schools (0)
- 3) Less respective topics (i.e. colonial history) (0)
- 4) Experiential career exploration (HS) (10)
- 5) Enriched/advanced math at elementary schools (21)
- 6) Enhanced RTI at elementary level for advanced math students (4)
- 7) Alignment of elementary math to state standards (43)
- 8) Alignment of ELA at all levels to the common core (i.e. expository writing (0)
- 9) Greater exposure to engineering /computer science (39)
- 10) Enhance computer usage past just looking up information (21)
- 11) More systemic approach to STEAM throughout K-12 (44)
- 12) Redefine social competency at elementary schools (service learning) (30)
- 13) Computation thinking broaden (36)
- 14) More creativity & how that is fun (vs. pressure for grades) \implies joy of learning (60)
- 15) More project based/exploration learning/real world problem solving (40)
 - 16) More community involvement in learning/classes (7)
- 17) Rethink how arts are taught in elementary school (12)
- 18) Strengthening of writing program (all levels), grammar (35)
- 19) Less toe memorization
- 20) Visual literacy competency (8)
- 21) Study skills @ MS & HS (56)
 - Increase rigor of MS so prepared for HS completeness
 - Understanding of who is responsible
 - Being comprehensive
- 22) Nature rich education (Eco & outdoor ed)

Top Enhancements Areas

- Elementary Math
- Foreign Language inclusion at Elem
- STEM K-12
- Creativity/joy of learning

1) Foreign Language in Elementary School

Barriers

- Current Global Child program is thought to already be an elementary program
- Budget: staff coordination

- Reticence of elementary teachers to lose time with SS "another special"
- Which language(s)
- perspective of parents' /teachers
 - Lack of importance of language
- Finding the right teachers who can work with elementary school kids
- Pressure of "the test" no time for language classes
- Music program
- Focused barriers: time/ money

Solutions

- Task force to see what other towns have done, how they manage
 - Logistics, budget
 - o find people that have implemented a program
- Survey town members
- Extend the school day
- Educate the public about benefits of language in the elementary schools

2) STEAM/ Computer Science

- Computer science, math, engineering, design/data
- Scope of course
- Depth of course
- Linkages K-12

Barriers

- Not on MCAS/testing or a priority
- 2) Bi K-12 science, engineering, computer science specialists/knowledge
- Budget
- Time in schedule given required courses (MS)
- AP/ Computer science outdated
- 6) It's new can we fund good curriculum
- Space concerns (HS/facility) & equipment
- Opportunities to sample short term K-12
- Everyday math not linked to common core
- Limited offerings

Solutions

Elementary

- Formalize/define content robotics and computer science coding
- Research, pilot, adopt math program aligned with ccss
- Art & technology connection (MS) design part of art offering
- Partner with other schools outside Wayland

Middle School

- Use community expertise (HS) maybe Stem
- CS web development as part of technology required and fun make this a rotation in the "United Arts"
- Unlock chromebook for use
- Add staff (HS) capabilities
- Use computer in design/creative appeal
- "Green" design project (HS)
- Access & support for online learning supervision (MS)
- Rogue units to inspire experimentation (in system)
- More CS, computational science, courses if experiential learning
- Appropriate space & tools provided (e.g., 3D printing) collaborative use
- Career mentoring ongoing Opportunities Olin manage it

3) Creativity / Joy of Learning

Barriers

- Time to fit into schedule, esp. with required curriculum (16)
- hard to assess creativity and we have obsession with testing (16)
- class size (2)
- task-focused mindset over student-focused mindset (e.g., must teach math, vs. starting with student) (14)
- standardized testing requirements (2)
- teacher evaluation tied to standard testing (11)
- lack of training around creativity, love of learning (9)

Solutions (we had to rush this as we didn't leave much time for it!)

- Pay less attention to common core standards
- Find creative ways to meet standards with student based learning and project based learning
 - o infuse creativity mindset into curriculum/projects
 - o have projects with A, A-, F grading; or no grading
- Have safe spaces to try things out
 - it should be OK to fail
 - spell it "faile" because it shouldn't be a four letter word
- Show interdisciplinary connections and applications in project based learning
- Introduce creativity breaks/activities
 - inspirational, fun activities
 - o not tied to usual assessment

Raising the Bar Break-Out Session

Enhancements

What needs to be enhanced or adopted to endure that all students particularly those "in the middle" are challenged and well served?

- 1. Personal connections with students "in the middle" that lights a fire (77)
- 2. Re students "in the middle" -- By grades? By goal achievement? Where is Wayland on this? What is the data? Is information anecdotal?
- 3. Kahn Academy continual learning learning to learn learn through osmosis personal connection great idea
- Personal motivation from student to student, interaction rather than "milestones of success" from system. Student driven student-engaged process – leadership – public speaking (5)
- 5. Culture shift/content shift how does the system accommodate different leaners?
- 6. Do kids define themselves in the middle? Do parents define their kids in the middle? (10)
- 7. More reward/more challenge for kids in the middle (more hugs & more jobs)
- 8. More opportunities arts, drama, sports, vocational programs to engage kids in areas of interest/success (25)
- 9. Early investment of limited dollars to get better dividends early intervention (55)
- 10. Recognition of kids' effort/success lacking in the "middle" group
- 11. Raising the Bar on Wayland best possible system
- 12. Do we have flexibility as school system/parents to impact these issues? What is impact of mandates common core? (40)
- 13. How to expose "middlers" to all kids of thinkers how to create movement within different kinds of thinkers (15)
- 14. Can/should we mainstream kids in the middle "up"?
- 15. Are there kids in the middle who with different support could do more?
- 16. Do kids in the middle have a self-perception of being stuck in the middle level? (5)
- 17. Shouldn't we push all kids to their potential? Staffing sufficiency? Teacher availability at MS: relationship, extra attention for kids who seek it (35)
- 18. 2-4 approaches to student as to how they might best respond, "secret sauce"
- 19. Integrated day connections but with disciplines not learning in a vacuum students using their strengths to improve in areas of challenge (20)
- 20. Project based learning as a vehicle (19)
- 21. Buddy across schools- buddy with a HS classroom (10)
- 22. Evaluate how we teacher kids to study & prepare (65)
- 23. What do we do to enhance challenge help every kid to reach his/her potential (9)
- 24. Difficulty/challenge/success of differentiation in the classroom. Can we find a way to support differentiation in classroom (20)
- 25. Attention on how students become motivated (20)
- 26. How can we encourage families to be involved (3 legged stool) (50)

Top Enhancements

- 1. Personal Connection
- 2. Study Skills
- 3. Early Intervention
- 4. Motivation

1. Personal Connection

Barriers

- Too many kids/too few teachers
- Easier to overlook the middle kid
- Shyness, coaster
- No time other than planned activities for teachers' schedule
- Contract restrictions with teachers
- 10 lbs. in a 5 lb. sac
- Lack of flexibility state mandates
- Practical barriers to man students/ teachers
- Other adults in the building broaden opportunity for role models
- Content not equally interesting to all kids
- Teachers preferences involvement of volunteers
- Peer pressure against teachers relationships
- Lack of recognition atta boy or
- Personality/chemistry with students & teachers (ability to connect)
- Physical /health issues lack of recess
- Technology

Solutions

- To teacher student ratio:
 - Find other role models, mentors System wide methodology
- To lack of time for connections:
 - Other priorities, state mandates
 - Find teachers tools to make micro touches
 - Create more time
- To success of differentiated learning:

2. "Owning" & Employing Good Study Skills

Barriers

- Fingers everyone (teachers, parents & administrators) think someone else is teaching and communicating this
- Lack of instruction in study halls at MS & SH
- Curriculum difficult to integrate study skill into each academic curriculum & assessments

Solutions

- Find out current practices of teachers solicit feedback from teachers do they think is a good role for them to communicate/instill study skills what do they suggest that parents can do to help
- More formal study sessions across all curriculum before mid-term finals, heavily weighed grades & projects
- Change study halls to be more instructional

3. Early Intervention (Elementary School)

Barriers

- Mandated standards doing RTI well
- Staffing for individual work (RTI)

Solutions

- Hire staff
- Money for staff to help train parents
- Balance technology with 1-1
- More time for staff to work with children