What part of your strategic plan is still a challenge that you are trying to solve?

* **Step 1 implementation** - Did survey and found that teachers needed infrastructure, but high need was time to collaborate with each other; decided that that collaboration was a place/way to infuse new information and practices;
* **Step 1 implementation** - continue to look for and find current, existing initiatives to use as vehicles through which to infuse new information; capitalize on people going public with praise
* **Teacher buy-in** - hoping to get it through survey; elementary needs survey with secondary teachers volunteering to fulfil the needs
* **How much to invest in current standards while waiting for new** - by creating an effective classroom in the context of the current standards
  + Looking for curriculum – look for materials that align to the framework; materials that are truly aligned to the NGSS will probably work, but check to be sure that they are really aligned as they are often not while claiming they are i.e. kit-based curriculum tend to embrace the practices better than the textbook
* **TIME!**
  + At the teacher level – how can we make science important enough that teachers are afforded the time to teach science?
    - Get rid of AZMERIT? The State Board determines the weight that will be put on AZMERIT. ADE and D. Douglas understand that AZMERIT drives content imbalance in the classroom. There are many other assessments. AZMERIT is not intended to be formative assessment. It is reported at a high, concept level to help communicate that the scores are meant to assess whether things are changing generally, not to be used to specify instructional change or to micro-manage students, teachers, schools, or curriculum. Helping administrators to understand what the purpose/meaning of AZMERIT is will help to shift the micro-focus on scores.
    - DV, created a master schedule to illustrate how much time is invested and where it’s invested for science and SS. Communicating that science is skill-based and therefore needs to be practiced regularly, not in a one-off unit fashion.
    - Provide teachers with more PD re HOW to teach science so that they will be more comfortable teaching science and not opt-out due to discomfort
    - Required assessments, follow-up with admin to see who is implementing them.
    - Teachers don’t know how to use curriculum maps to help design lesson plans; creating bridging documents to support planning practices.
    - Teachers need dedicated time to plan for science – DV – PLCs bringing cohorts together to plan
  + For PD development and delivery – release time is dedicated, how to get some of that for science; some after school PD can be done but there are other commitments taking that time;
    - See how science can accomplish ELA requirements i.e. language development related to science, science teachers won’t need to take the time to attend the ELA PDs.
    - When you are developing disciplinary literacy, using disciplinary-specific skills, how does that connect to the ELA standards?
* **Creating buy-in across grade levels and content areas;   
  creating structures to distribute responsibility so follow-through is possible;   
  trying to figure out how to require teacher follow-through**
  + - Ensuring that lessons learned in PD are put into practice so that they are not lost – offer PD as “not-paid,” but if demonstrated implementation, then they will be paid.
    - Can Title 1 pay for conference attendance as compensation
* **Assessing where the players are at**
* **How do we pre and post assess?**
* **People to drive the plan and to buy-in to the plan**

**Kirkpatrick was developed from a business perspective i.e. how can training accomplish a business objective. But we can adapt it or apply it to our strategic planning.**

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| **Levels** | **Definition** | **Evaluation Methods and Strategies Brainstormed by the Group** |
| **Reaction** | The degree to which participants reacted positively to the event. | * **Anonymous surveys of participants and admin wrt PD days** * **Discussion questions** * **Ticket out the door** * **Pain index** |
| **Learning** | The degree to which the participants acquired the intended knowledge, skills, and adapted their beliefs and attitudes based on the learning objectives of the event | * **pre/post content assessment that articulates the specific skill or knowledge objectives** * **Self-reporting confidence and comfort with content** |
| **Behavior** | The degree to which the participants changed their professional or teaching practices since they have attended the event | * **Pick one thing; follow-up survey** * **On a later date, survey** * **Evidence and/or observation of changed practices; photos and videos** * **Portfolio of outcomes** * **Examples of student work, photos of students engaged** * **Use a shared folder so as to spotlight what’s happening in ways that motivate others** |
| **Results** | The degree to which the event had an impact on the quality of a participant’s teaching/professional practice and their students’ learning. | * **Student survey** * **Portfolio** * **Results might be five years later!** |

|  |  |  |
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| **Levels** | **Definition** | **Evaluation Methods and Strategies suggested in the presentation** |
| **Reaction** | The degree to which participants reacted positively to the event. | * Informal questioning * Ticket out the door * Surveys |
| **Learning** | The degree to which the participants acquired the intended knowledge, skills, and adapted their beliefs and attitudes based on the learning objectives of the event | * Pre-post measures of knowledge, skills, beliefs/attitudes * Self-report confidence measures * Micro-teaching * Journals, blog posts, reports of perceived learning * Implementation intention statements |
| **Behavior** | The degree to which the participants changed their professional or teaching practices since they have attended the event | * Classroom observations * Focus groups with participants and students * Document analysis (course materials, lesson plans) * Self-assessment and reflections * PLC agendas |
| **Results** | The degree to which the event had an impact on the quality of a participant’s teaching/professional practice and their students’ learning. | * Classroom observations * Student evaluations of teaching effectiveness * Peer review of teaching (coaching, observations, PLCs) * Student assessments and performances/achievement * Document analysis (syllabi, assessments, data, examples of student work) |

**Evidence of accomplishment of plan goals** – standing at some point in the future, what will you see that will tell you whether or not your plan goals have been reached?

* Teacher feedback on goals – self-reported comfort levels
* Student engagement measured by observation
* Increased science teaching time measured by Student survey
* Broadened, positive perception of science measured by student survey
* Heightened valuation of science measured by student survey
* Assessment as reflection
* Nature of what coaches do with teachers will shift to support of plan goals, self-reported by coaches
* Increased admin support for science; more proactive pull for science PD, science direction, science support
* Increased funding for science
* Teacher attitudes are more positive; teachers are requesting PD and are looking for their own PD and resources

**Marana’s goal**: for the current step, to determine the PD need of elementary teachers AND to engage secondary teachers in fulfilling the needs.

From the perspective of some point in the future, we know that we successfully determined the PD needs of the elementary teachers because……

* Elementary teachers love us!
* Teachers say they feel supported and have what they need
* Teachers are attending the PD that we offer
* Number of minutes of science teaching increases
* Number of lessons with integrated disciplines increases

From the perspective of that point in the future, we know that we have engaged secondary teachers because….

* 2ndary teachers express feeling excited about developing and delivering PD
* There is open dialog between coordinators, 2ndary and elementary teachers
* 2ndary teachers are asking for PD related to practices (topics which they will teach to elementary)
* Increased participation in authentic opportunities such as science fair, robotics, science olympiad, Odyssey of the Mind, after school clubs
* 2ndary/elementary mentorship relationships have been formalized

**Tanqueverde’s goal**: One year out, science and math PD is in place for K-6 teachers with focus on instructional practices

It’s the fall of 2018. We know that the right science and math PD is in place for K-6 teachers and that it focuses properly on instructional practices because…..

* pre/post surveys show increased comfort level with integration of science into current curriculum
* There is a schedule in place for Fall (maybe Spring) of ‘18 that makes PD available to the teachers
* We have a shared evidence folder and teachers are saving materials in that folder
* We have confidence that we do understand the needs
* There is a menu of options for PD that reflects the true need

**Where are we now?**

* For some, evidence has been identified to reflect plan goals.
* Others: old plan is out; new plan in the making.
* Many: waiting for new standards rather than using up resources with old.

**Challenges you are trying to solve? (intro)**

* Time: Instruction & PD
* Time (again) New Standards
* Teacher Time: dedicated time to teach science, dedicated time to plan and make sense of science resources
* Creating structures to distribute responsibility so follow-through is possible.
* Funding & Admin/Teacher buy-in
* Trying to figure out how to require teacher follow-through
* New Science Adoption: postponed to new standards-curriculum material 20 years old

**Resources needed as leaders:**

* Examples (of how to implement new standards)
* Trainer of trainer documents
* How do we measure accomplishment of standards?
* What does it look like to put S1 & S6 together- with models of teaching and what assessment looks like
* Sample test
* All community sectors should take the test to feel what it’s like
* Performance level descriptors – written by standards writers or by assessment writers? In the existing standards, they were written by the assessment writers. For AZMerit as well.

**Thinking into the future:**

* Marana coordinators will not be able to attend the final celebration session.
* Discussing how to keep the networking and collaboration going
  + Southern Region feedback
    - Need a space for sharing documents and resources i.e. PD agendas, webinars etc. Can the Weebly page be adjusted so that coordinators can upload to the site?
    - Share PD schedules s.t. Coordinators can attend others’ PD in order to observe and learn how the host is doing their PD
    - Or, invite coordinators to come in and provide a PD
  + Central Region Feedback
    - Have an ASCC state-wide meeting during the new standard public comment period and after the new standard public comment period, Jan 6-15 some time. The purpose of this meeting is:
      * Early Jan before closure – to provide public comments
      * After closure before committee meeting – to provide question and highlight challenge for the committee to address
      * After committee finished – for group intelligence re implementing
    - Collaboratively work out PD and how to roll out the new standards
    - Are there ways that the districts in this group can work together in PD planning and delivery
      * Feeder schools to HS district can help to bridge gap between Elem and HS
    - Collaboratively continue learning i.e. do a book study, do study of external research
    - We should keep this group as cohort 1. Another group would be a separate cohort (#2).
* Recommended book: *Helping Students Make Sense of the World using Next Gen and Engineering practices.*  It has detailed descriptions of what a lesson would look like. DO read the framework first.
* Could ASCC do at least one state-wide meeting in Tucson? Or south Chandler? If a second cohort is able to be arranged, separate it from this first.