

Problem Statement: Students are not succeeding in middle school science.

Goal: The ultimate goal is to create a strong foundation for students to be successful in science.

Rationale:
If we create a PLC from K-8 for science utilizing our feeder elementaries and middle school, then we will create higher achieving science students prepared for high school.

Inputs: Support will be needed from teacher, building, and district levels. Resources include a grant from the U.S. Department of Education and support from the team, the district TOSAs, and the teachers (including consultants from elementary schools)

- Activities:**
1. Co-leads initiate discussion with all district personnel.
 2. Relationship-building with elementaries
 3. Team time to flesh out and develop the PD (consult TOSAs)
 4. Team Leads will meet with elementary consultants to adjust the PD (develop syllabi for clock hours and ensure that they're fluid documents).
 5. Meet with admin. to talk about strategic planning with the 8th grade teachers, reasons for inviting the rest of the science team to the PD, and developing the protocols for science teachers (they'll work as focus group to look for evidence of strategic implementation and effectiveness).
 6. The team meets with middle school science teachers – focus on the cross-curricular connections. Offer clock hours for their involvement in this process and point out the TPEP (Danielson/Criterion) connections that will be achieved through their involvement.
 7. PD will take place.
 8. Implement the plans.
 9. Reflect on the PD and plans.
 10. Revision of the plan.
 11. Cyclical process of PD, implementation, reflection, revision.

- Outputs:**
1. Survey answers and commitment to the implementation (we'll have a picture of their needs) from elementary teachers following elementary social.
 2. PD plan is developed and fleshed out. Output of planning for PD will be the syllabi and plans for PD.
 3. Following meeting with elementary consultants, PD is refined to meet needs of elementary. They'll also give feedback of implementation following PD (use Google Doc. Each elementary school will need their own Google Doc/folder).
 4. PD will give elementary teachers one strategy to walk away with. Ask them, "What's one thing you can do in the next 30 days?" They'll also leave with teacher materials, books, and resources (toolkit).
 5. Elementary teachers will also have clock hours offered.
 6. Result of the focus group involvement (middle school science teachers) will provide data that can help refine the PD process and implementation.
 7. Focus group will have clock hours for participation and TPEP connections for evaluations.
 8. Output of PD will be the teacher surveys.

Outcomes:

Short Term:

- Finalize contacts, meetings, and plans.
- Relationships built with elementary school teachers, principals, and key district personnel (measured through satisfaction survey?).

Medium Term:

- Deliver the first three PDs (strategic planning of meetings)
- Percentage of teachers coming to PDs increases for every PD until reaching two teachers per grade level.
- Consultants report usage of strategies and takeaways within buildings.
- Increased communication within elementary school teachers and middle school teachers.

Long Term:

- Deliver final PD and evaluate process.
- Consider offering August PD to transfer the process to the other middle schools.
- Possible focus: Teacher-Led Change. It could also have a sub-heading about this plan. Could encourage/empower others to spark change.
- Percentage of teachers who commit to remaining in the PLC.
- Implementation continues into next school year and becomes a sustainable model.
- Increased student engagement.
- Increase in 5th and 8th grade student science test scores.

External Environment: Participation of elementary school teachers and middle school science teachers are uncertain. Support of one of the three elementary school principals is uncertain. Assistant Superintendent of Elementary support is uncertain. Possible negativity, lack of open mind, and resistance to change at the PDs. Fear of more work, lack of confidence, lack of content knowledge, and fear of the unknown for elementary teachers.