Using Data Protocols to Inform Teacher Preparation Curriculum

Andrea Lachance and Angela Pagano
SUNY Cortland
Beginnings...

• C-TEN conversations
  – Led by Dennis Farnsworth

• Consultation with BOCES Partners
  – Jeff Craig: OCM BOCES
  – Heather Sheridan-Thomas: TST BOCES

• Resulted in examination of Professional Learning Team Model
At the same time...

Collegial inquiry work through TLQP grant and NYSUT Education Learning Trust (ELT)

- Districts wanted leadership training for teachers
- Worked with ELT to come up with a model for teachers leading collegial inquiry groups/professional learning teams
Collegial Inquiry Groups: Training Model

- ELT did two full days of PD with local teacher leaders around the use of protocols in discussion.
- Workshop used real data/issues as part of training with protocols.
- Follow-up session occurred after participants leaders tested the model in their schools with their colleagues.
- Protocol use got high praise.
Merging Ideas

Based on advice from BOCES as well as success with Collegial Inquiry Group model, came up with a plan to create similar groups in nine teacher prep programs on our campus. Groups included: Childhood, Early Childhood, Special Education, Literacy, Math, Science, Social Studies, Modern Languages, Physical Education.
Format/Structure

- Named: Professional Learning Teams (PLT)
- Strategically selected leaders for each PLT
- Leaders got to select additional members for the team.
- One team member had to be from P-12 settings.
Professional Development

• Outside facilitator was hired to do PD for full day on PLT’s with all team members.
• Part of workshop was devoted to exploring data in teams.
• PLT Leaders got additional training in leading a PLT using protocols.
Protocols

• Structured format for examining an issue or concern.
• Provides for specific roles and format for a meeting.
• Various types of protocols can be used.
• Most groups found protocols to be useful.
PLT Work

- PLT Groups have been working for summer/fall to analyze data and make recommendations to revision for programs.
- Second full day of PD will take place in January and PLT’s will present their findings.
Secondary Science PLT

• Members = department chairs in biology, chemistry, geology & a high school biology teacher

• Attended summer workshop & have met twice to examine data
Type of data influences response...

• 1\textsuperscript{st} meeting – most recent certification exam data

• 2\textsuperscript{nd} meeting – long term data including GPA & course grades
Sample Outcomes

- Analysis & discussion of CST data in earth science found:
  - 28 candidates passed on first attempt, and 3 passed on second attempt. This gives an overall pass rate of 91%.
- Using a score of 220/300 (73%) as "passing", the pass rates for the sub-areas are:
  - 1: Foundations of Scientific Inquiry = 91%
  - 2: Space Systems = 74%
  - 3: Atmospheric Systems = 82%
  - 4: Geological Systems = 91%
  - 5: Water Systems = 77%
  - 6: Geological Systems Constructed Response = 74%
- Interpretation: we should look to improve our teaching in subareas 2, 5, and 6, and perhaps 3 as well.
Lessons Learned

• Data is compelling – especially for A&S faculty.
• P-12 constituents are more positive about protocols than higher ed constituents.
• But all agree setting time aside with multiple stakeholders to have these discussions is valuable and beneficial to the programs.