• How did we get into science coaching and what does this mean for schools?
• How do science coaches promote reflective practice in schools?
• What are some key elements of training & support for science coaches?
• What are some lessons we have learned in supporting science coaches?
SO, WHAT DO SCIENCE COACHES DO?

WHAT DO COACHES HAVE TO KNOW TO DO THIS?
YOU MIGHT BE A SCIENCE COACH IF...

- You are driven to improve instruction and data guides you on your way
- You know your state science standards better than anyone!
- You build the capacity of your colleagues for success!
- You can get all the pieces back into the kit box...neatly!
- You can still teach kids...and you can teach adults too!
Coaching

Collaborating

Coordinating

Consulting

WHAT COACHES DO...
Coaches engage educators in purposeful ways, to continuously improve instruction and accelerate student learning. Coaches listen, observe, question, and offer appropriate support to help teachers grow, reflect, and make effective instructional decisions.
"They say 'practice makes perfect.' Of course, it doesn't. For the vast majority of golfers it merely consolidates imperfection.” Henry Longhurst, British Golf Writer

"Practice means to perform, over and over again in the face of all obstacles, some act of vision, of faith, of desire. Practice is a means of inviting the perfection desired.” Martha Graham American Dancer
WHY COACHING?

Staff development that improves the learning of all students:
- Learning Communities
- Leadership
- Resources
- Data-Driven
- Evaluation
- Research-Based
- Design
- Learning
- Collaboration
- Equity
- Quality Teaching
- Family Involvement

NSDC's Standards for Staff Development (Revised, 2001)

http://www.nsdc.org/standards/index.cfm
YES, GOOD THINGS HAPPEN!

INSTRUCTION
- More & better inquiry
- Less reliance on texts/worksheets
- More teacher confidence
- Better assessment strategies

ACHIEVEMENT
- More gains in proficient + advanced
- More acceleration with “high needs” kids
Features of Inquiry Compared Between Coached and Non-Coached Science Teachers

<table>
<thead>
<tr>
<th>Feature</th>
<th>Coached</th>
<th>Non-Coached</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question</td>
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<td>Conclusion</td>
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<td>Evaluate &amp; Compare</td>
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<td>33</td>
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<tr>
<td>Communicate</td>
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<td>22</td>
</tr>
</tbody>
</table>

Improvement in Instruction
STUDENT ACHIEVEMENT

- Over **83% of all** individual grade levels impacted by **science** coaches showed a “safe harbor” or better gain in science after one year.
- Nearly **71% of all** individual grade levels impacted by **science** coaches showed a “safe harbor” or better gain in science **two years in a row**.
OUR MODEL

Staff development that improves the learning of all teachers:

• Learning Communities
• Leadership
• Resources
• Data-Driven
• Evaluation
• Research-Based
• Design
• Learning
• Collaboration
• Equity
• Quality Teaching
• Family Involvement

NSDC’s Standards for Staff Development (Revised, 2001)

http://www.nsdc.org/standards/index.cfm
Summer Institutes
Learning Community Meetings

Weekly
• coaching conversations
• reflective journal

Monthly
• school visits
• school team meetings
• coaching plan reviews

Ongoing phone, email, and chat room

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STELLAR – San Marcos, TX
Do what you say you are going to do.

Out of sight is not out of mind. Look for cues!
LESSONS LEARNED

- Limit distractions.
- Pick the low fruit.
LESSONS LEARNED

Be the change you wish to see...
LESSONS LEARNED

Leave with a plan for action.

End with reflection!
The Secret Life of Science Coaches

3 ideas you want to remember about science coaching

2 things you would like to know more about

1 idea about science coaching you will discuss over dinner tonight
things you would like to know more about

How to coach teachers who are resistant to change. (6)
How to build relationships/trust. (6)
Using journals. (6)
How to engage administrators. (3)
How to evolve the coaching role. (3)
Training for coaches. (3)
Having meaningful reflections. (3)
Effective use of time & effort. (3)
Marketing the role of the coach. (2)
Giving effective feedback. (2)
Specific coaching conversations.
Developing effective PLC’s.
How to collect data with teachers and what to do with it.
Does TX have any coaching initiatives?
Staying focused on coaching.
What coaches do in their planning time.
Do coaches like science?
Staff development standards.
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