Survey Says: Instructional Clarity

Principal Name: Kelly Plank
School Name: Northeastern Middle School
Team Members' Names: Kelli Kircher-Taylor and Carrie Mitchell
Principal's Email Contact: kplank@nws.k12.in.us

Background Leading to Our Inquiry (Slide 2)

Our High Reliability School survey indicated that we had two areas that we could focus on to improve upon in the level two area, 2.1 and 2.6. Leading Indicator 2.1: The school leader communicates a clear vision as to how instruction should be addressed in the school. Leading Indicator 2.6: Teachers have opportunities to observe and discuss effective teaching. Our team decided to focus on 2.1 to hone in on our instructional expectations before observing teachers.

The Purpose of Our Inquiry (Slide 3)

Therefore, the purpose of our action inquiry was to focus on 2.1: The school leader communicates a clear vision as to how instruction should be addressed in the school. Surveys indicate that our building wants a clearer understanding of instructional expectations. This presented the opportunity to include teachers in the process of defining instructional expectations, identifying evidence based strategies, and creating a visual aid for teachers to access when planning for instruction. With teacher input, the building will have a much clearer vision of what instruction should look like at Northeastern Middle School.

Our Wondering (Slide 4)

With this purpose, we wondered if with a clear document provided to teachers about effective instructional practices/expectations and common language used, do teachers feel more comfortable implementing effective instructional practices?

Our Actions (Slide 5)

The first step we implemented as a team was to begin researching what effective instructional practices are already identified for us in *The New Art and Science of Teaching.* Our school district has already chosen High Reliability Schools to guide our professional development over the next few years and we are using their framework to improve our instructional practices. Our team felt it best to use this introduction in conjunction with our High Reliability Schools training to help create a schoolwide language for instructional expectations.

The second step in the process was to have teachers read the introduction (pages 1-10) of *The New Art and Science of Teaching*. Then the teachers completed a rating scale of elements through 1 to 43. The rating scale consisted of teachers rating each element based on what they know and use. A rating of 0 reflects the teacher is not using the particular element. A rating scale of 1 reflects the teacher was beginning to use the element partially.

A rating of 2 reflects the teacher was developing the use of the element. A rating of 3 reflects the teacher is applying the element in their classroom regularly. A rating of 4 reflects the teacher was using the element frequently and also innovating to make it their own in their classroom. After gathering the data via Google Form, our team identified the top 10 (of 43) on the list that are the areas that scored the lowest on the survey.

From there, we had the teachers read in The New Art and Science of Teaching about each and every element identified. They used the knowledge gained from the book to work with their PLC teams to create new strategies that they could use to implement in the classroom using the elements. Every PLC in the building compiled their own list of strategies for each element.

Our team met to create one big list of strategies to go with each element to create a written document that has all 43 elements and add strategies to it from our group. We also created a focus document on the ten lowest rating elements with a complete list of strategies to utilize and reference in the classroom. The PLC teams discussed the new strategies in their meetings.

The last step was to resurvey the teachers over 2.1: The school leader communicates a clear vision as to how instruction should be addressed in the school. and compare the results to the results received at the beginning of the school year.

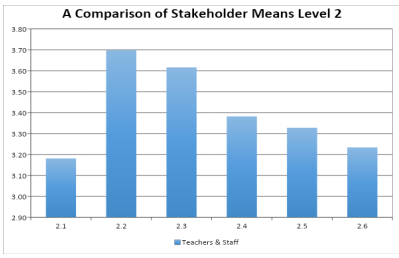
Data Collection (Slide 6)

Our team collected quantitative data by surveying our teachers multiple times with a scale of strongly disagree to strongly agree on questions surrounding instructional expectations. The survey identified a few areas in need of improvement within our building. Other quantitative data collected was the data used to gauge the teacher's comfort level with the 43 elements in The New Art and Science of Teaching by Marzano.

Qualitative data was also collected to be evaluated for instructional clarity. Data from PLC team notes was used. The teachers recorded their notes on strategies that could be used for the 10 lowest rating elements indicated by the survey data collected. The notes were turned into a single compilation of classroom strategies.

Teachers also read The New Art and Science of Teaching by Marzano collecting their own data and knowledge to contribute to the collection of strategies. After the teachers were done reading the information, they were given another survey to gauge the level of comfort with the new instructional clarity emerging in our building.

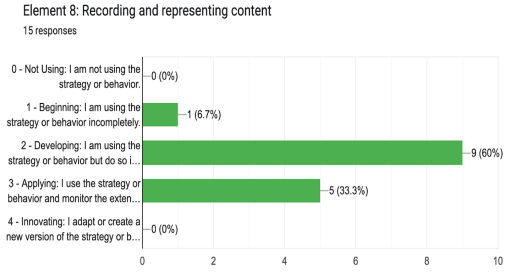
Our Data (Slides 4-15)



Slide 4 shows the data collected during the first High Reliability Schools teacher survey given to teachers at the beginning of the year. This was analyzed to identify two main areas in need of improvement. The team narrowed their focus down to one area, 2.1, to complete their action research.

#	Field	Minimum	Maximum	Mean	Std Deviation	Count
1	School leaders and teacher leaders have developed a written document articulating our schoolwide model of instruction.	2.00	5.00	3.25	0.99	20
2	New teachers have professional development opportunities to learn about our schoolwide model of instruction.	2.00	5.00	3.55	0.89	22
3	I can describe the major components of our schoolwide model of instruction.	2.00	5.00	3.05	0.95	21
4	School leaders limit the number of new initiatives, prioritizing those related to our schoolwide model of instruction.	1.00	4.00	3.05	0.89	19
5	Our school has a common language for talking about teaching and instruction.	2.00	5.00	3.33	0.99	21
6	I use our schoolwide language of instruction in faculty and department meetings.	2.00	5.00	3.11	0.79	19
7	I use our schoolwide language of instruction during PLC meetings.	2.00	5.00	3.16	0.81	19
8	I use our schoolwide language of instruction in informal conversations.	2.00	4.00	2.95	0.74	20

Slide 5 shows the data broken down in area 2.1 of the High Reliability Schools survey. This data was analyzed to fully understand exactly what the teachers desired from their instructional clarity. Teachers wanted a written document that they could reference for instructional strategies in the classroom.



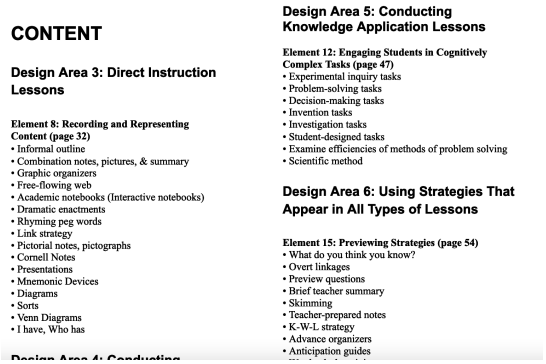
Slides 9-11 show the data collection in rating the lowest elements according to our staff. The data from the teacher ratings of all 43 elements revealed that elements 8, 11, 12, 15, 18, 27, 28, 30, 42, 43 are our lowest indicators.

Category	Element	Pg	Overview	Strategies	Examples
Conducting Direct Instruction Lessons	8: Recording and Representing Content	32	Linguistic and nonlinguistic encoding of content in ways that are personally meaningful	1. Informal outlines 2. Summaries 3. Pictorial notes and pictographs 4. Combination notes, pictures, and summaries 5. Graphic organizers 6. Free-flowing webs 7. Academic notebooks 8. Dramatic enactments 9. Mnemonic devices 10. Rhyming pegwords 11. Link strategies	1. Two-column notes 4. Two-column notes 5. T-charts 5. Venn diagrams 8. Act out movements of atoms/molecules of a substance in different states 8. Using hands to explain the motion of different tectonic plate boundaries 11. I have - Who has 11. Frayer diagrams 1. Grocery store notes with multiple sources 7. Interactive notebooks 5. Sorts 9., Link together key facts with sounds/sayings 3. drawing diagrams (Earth's position for seasons, sun, moon, Earth for tides)
Conducting Practicing and Deepening Lessons	11: Examining Errors in Reasoning	41	Examining students's own reasoning and overall logic of information presented	1. Identifying erros of faulty logic 2. Identifying errors of attack 3. Identifying errors of weak reference 4. Identifying errors of misinformation 5. Practicing identifying error in logic 6. Finding errors in media 7. Examining support for claims	1. Analyze the statement - Students determine what is incorrect about the statement and why 3. A 2016 Science Std LST 4.2 - "Distinguish between facts, reasoned judgement based on research, and speculation." 3, 4, and 6. Many times as science teachers we encounter students who have misinformation or have wrongly interpreted some topic in science. We have to talk thme through these errors. 5. Students build / debug code on code.org

Slides 12 and 13 are examples of the qualitative data collected during team PLC meetings. The notes collected were used to determine strategies the teams wanted added to the written document for instructional clarity.

Timestamp	School leaders and teacher leaders have developed a written document articulating our schoolwide model of instruction.	New teachers have professional development opportunities to learn about our schoolwide model of instruction.	I can describe the major components of our schoolwide model of instruction.	School leaders limit the number of new initiatives, prioritizing those related to our schoolwide model of instruction.	Our school has a common language for talking about teaching and instruction.	I use our schoolwide language of instruction in faculty and department meetings.	I use our schoolwide language of instruction during PLC meetings.	I use our schoolwide language of instruction in informal conversations.
Avg	3.65	3.41	3.12	3.12	3.76	3.65	3.65	3.18
Low	2	2	1	1	3	3	3	2
High	5	5	5	5	5	5	5	5
Previous	3.25	3.55	3.05	3.05	3.33	3.11	3.16	2.95

Slide 14 is the data collected in the post survey of teachers. Northeastern Middle School grew in all areas of the level 2.1 indicator except one. The data analyzed indicated that our teachers have a greater understanding of the expectations of the schoolwide instructional model.



CONTENT

Design Area 3: Direct Instruction Lessons

Element 8: Recording and Representing Content (page 32)
- Informal outline
- Combination notes, pictures, & summary
- Graphic organizers
- Free-flowing web
- Academic notebooks (Interactive notebooks)
- Dramatic enactments
- Rhyming peg words
- Link strategy
- Pictorial notes, pictographs
- Cornell Notes
- Presentations
- Mnemonic Devices
- Diagrams
- Sorts
- Venn Diagrams
- I have, Who has

Design Area 5: Conducting Knowledge Application Lessons

Element 12: Engaging Students in Cognitively Complex Tasks (page 47)
- Experimental inquiry tasks
- Problem-solving tasks
- Decision-making tasks
- Invention tasks
- Investigation tasks
- Student-designed tasks
- Examine efficiencies of methods of problem solving
- Scientific method

Design Area 6: Using Strategies That Appear in All Types of Lessons

Element 15: Previewing Strategies (page 54)
- What do you think you know?
- Overt linkages
- Preview questions
- Brief teacher summary
- Skimming
- Teacher-prepared notes
- K-W-L strategy
- Advance organizers
- Anticipation guides

On slide 15, there are links to examples of the written document created. The picture to the left is an example of what the completed written document looks like.

Our Discoveries (Slide 16-20)

Our team discovered three things during this process. They are stated here:

- Learning Statement 1: The teachers do not feel like the school has a clear vision as to how instruction should be addressed in the school.
- Learning Statement 2: A common language needs to be developed for teachers to be able to have those conversations in informal or formal conversations around the school.
- Learning Statement 3: We have specific areas in the instructional model that we feel need focus and attention to first before moving on.

Each learning statement comes with a synopsis of how we interpreted our data and our conclusions from those findings.

Learning Statement 1: The teachers do not feel like the school has a clear vision as to how instruction should be addressed in the school. High Reliability Schools is now our instructional model that comes embedded with a common language. The school corporation has also started the process of implementing the instructional expectations into our strategic plan for the district and all three schools are moving toward the same goal.

Learning Statement 2: A common language needs to be developed for teachers to be able to have those conversations in informal or formal conversations around the school. This was also brought to light by the HRS survey but also conversations had during PLCs. The common language going forward will revolve around the language used in The New Art and Science of Teaching. We will utilize the 43 elements of effective instruction and focus on a few areas at a time.

Learning Statement 3: We have specific areas in the instructional model that we feel need focus and attention to first before moving on. This was identified during the rating of all 43 elements in the New Art and Science of Teaching. The areas of attention include areas in the content and context categories.

Where We Are Headed Next (Slides 20- 21)

The potential that our school holds is really highlighted by the action research process. I have learned more than what was taught in the action research itself and more largely about my position in the school. I have learned that we have areas that we can improve and are willing to do so. I have learned that our teachers have a drive to be the best that they can be. They are eager to do what is best and just want some guidance on how to get there. This is just the beginning. The teachers value having a direction to go with clear expectations on how to get there. This is just step one in the process of growing our school at the hands of me, the instructional leader.

At Northeastern Middle School, I plan to move forward with our growth by continuing through the process of identifying areas of need and developing action plans addressing those areas using a team of teachers to do the work. I plan on implementing instructional rounds so teachers can observe and learn from each other. NWS is working on a more comprehensive new teacher orientation program to onboard our new teachers and staff going forward and bridging the gap in instructional expectations. I wonder what our instructional practices will look like in the classroom going forward.

Bibliography (Slide 22)

Marzano, R. J., & Marzano, R. J. (2019). The handbook for the new art and science of teaching. Bloomington, IN, Solution Tree Press.

Marzano, R. J., & Marzano, R. J. (2017). The new art and science of teaching. Bloomington, IN, Solution Tree Press.

Survey Says: Instructional Clarity

Northeastern Middle School

Kelly Plank
kplank@nws.k12.in.us
Kelli Kircher-Taylor and Carrie Mitchell

Background Leading to this Inquiry

High Reliability Schools Introduction - Level 2 Results

Leading Indicator 2.1: The school leader communicates a clear vision as to how instruction should be addressed in the school.

Leading Indicator 2.6: Teachers have opportunities to observe and discuss effective teaching (Holding until the next action research cycle.)

Purpose of This Inquiry

Surveys indicate that our building wants a clearer understanding of instructional expectations. This presented the opportunity to include teachers in the process of defining instructional expectations, identifying evidence based strategies, and creating a visual aid for teachers to access when planning for instruction. With teacher input, the building will have a much clearer vision of what instruction should look like at Northeastern Middle School.

Data Collection

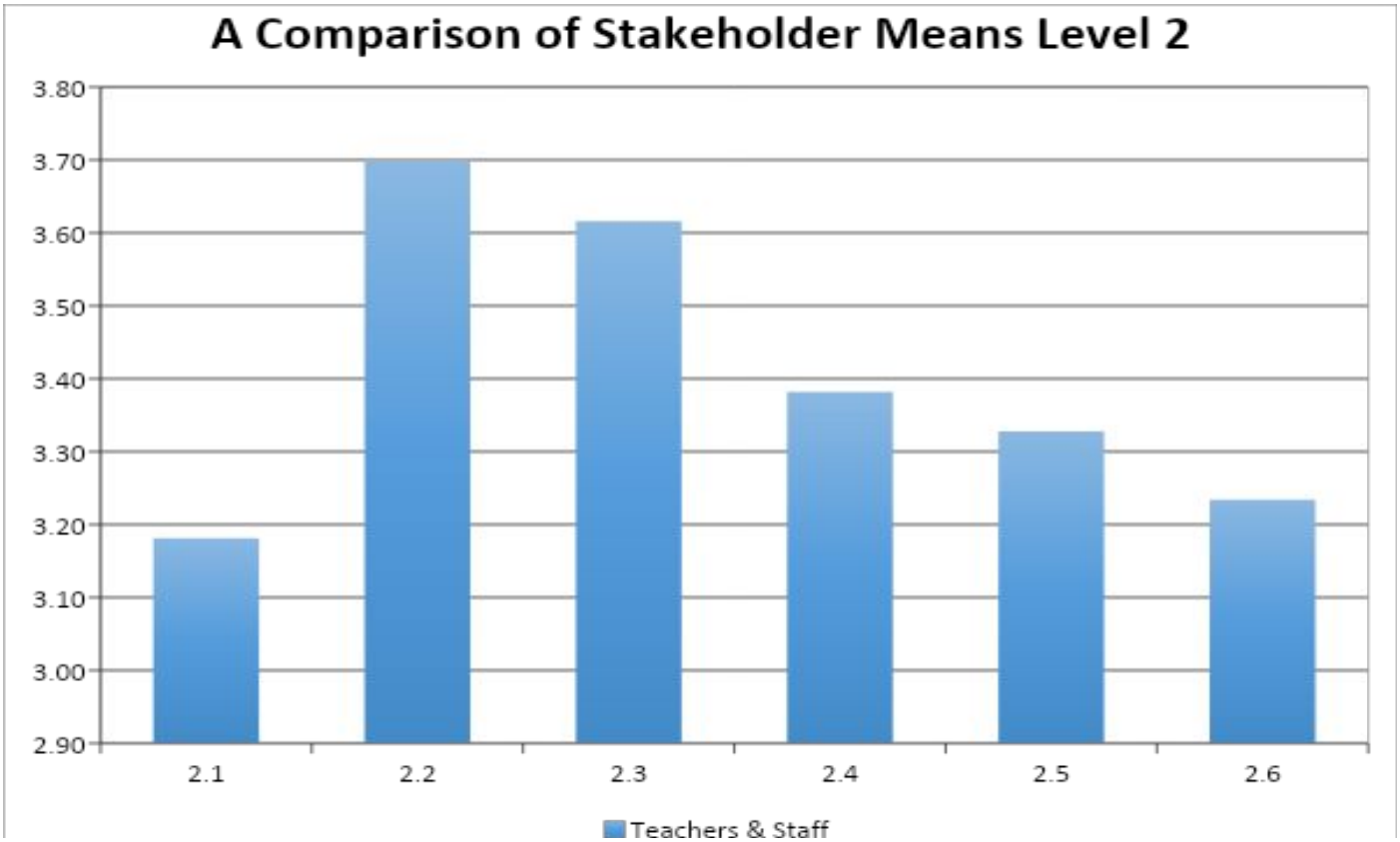
HRS Survey to identify the lowest indicators. (2.1 & 2.6)

Survey-43 Elements rating scale to identify the 10 lowest elements according to the teachers in our building.

PLC notes from each departments meetings including strategies developed within the PLC teams.

Survey teachers on the clarity of the instructional expectations.

Data Collection



High Reliability Schools Survey 2.1

#	Field	Minimum	Maximum	Mean	Std Deviation	Count
1	School leaders and teacher leaders have developed a written document articulating our schoolwide model of instruction.	2.00	5.00	3.25	0.99	20
2	New teachers have professional development opportunities to learn about our schoolwide model of instruction.	2.00	5.00	3.55	0.89	22
3	I can describe the major components of our schoolwide model of instruction.	2.00	5.00	3.05	0.95	21
4	School leaders limit the number of new initiatives, prioritizing those related to our schoolwide model of instruction.	1.00	4.00	3.05	0.89	19
5	Our school has a common language for talking about teaching and instruction.	2.00	5.00	3.33	0.99	21
6	I use our schoolwide language of instruction in faculty and department meetings.	2.00	5.00	3.11	0.79	19
7	I use our schoolwide language of instruction during PLC meetings.	2.00	5.00	3.16	0.81	19
8	I use our schoolwide language of instruction in informal conversations.	2.00	4.00	2.95	0.74	20

Our Wondering

With a clear document provided to teachers about effective instructional practices/expectations and common language used, do teachers feel more comfortable implementing practices?

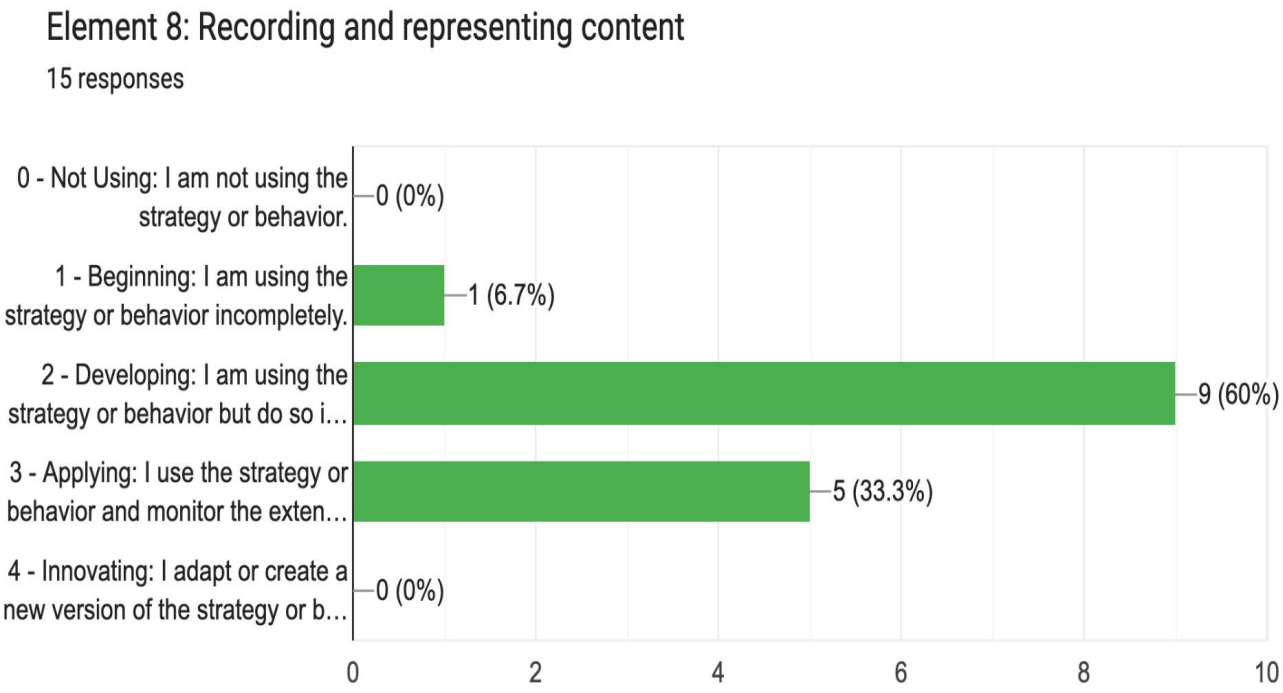
Our Actions- Put it all together

- *The New Art and Science of Teaching* introduction in conjunction with our High Reliability Schools training to help create a schoolwide language.
- Teachers choose the top 10 (of 43) on the list that they believe are the areas that they need improvement by completing a Google Form.
- Read *The New Art and Science of Teaching* introduction and the pages relating to the 10 areas of focus.
- Created a document that has all 43 and add strategies to it. Focus on 10 chosen by our teachers thus creating a written document to work from.
- Discuss implementation and strategies to focus on in the classroom.
- Resurvey teachers
- Compare data

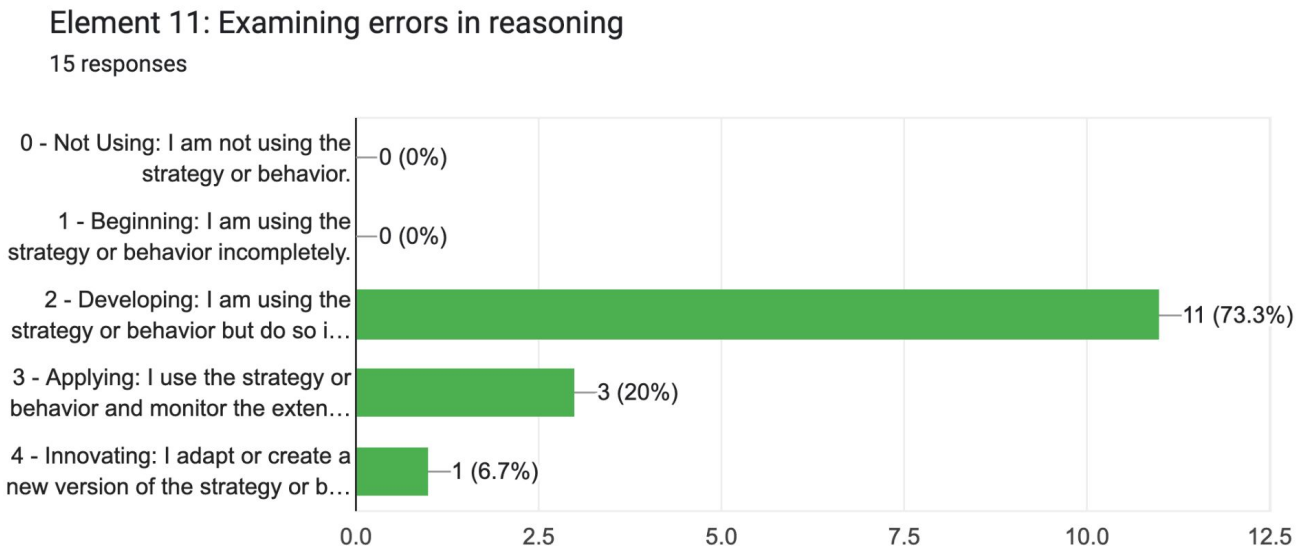
Our Data from Staff Rating Scale

The data from the teacher ratings of all 43 elements revealed that elements 8, 11, 12, 15, 18, 27, 28, 30, 42, 43 are our lowest indicators. These are the areas, as a staff, that we feel we could use the most work and the most focus. When reading the rating scale, we focused on the areas that had the most teachers who answered beginning or developing.

Our Data from Staff Rating Scale



Our Data from Staff Rating Scale



Our Data from Science PLC

Category	Element	Pg	Overview	Strategies	Examples
Conducting Direct Instruction Lessons	8: Recording and Representing Content	32	Linguistic and nonlinguistic encoding of content in ways that are personally meaningful	1. Informal outlines 2. Summaries 3. Pictorial notes and pictographs 4. Combination notes, pictures, and summaries 5. Graphic organizers 6. Free-flowing webs 7. Academic notebooks 8. Dramatic enactments 9. Mnemonic devices 10. Rhyming pegwords 11. Link strategies	1. Two-column notes 4. Two-column notes 5. T-charts 5. Venn diagrams 8. Act out movements of atoms/molecules of a substance in different states 8. Using hands to explain the motion of different tectonic plate boundaries 11. I have - Who has 11. Frayer diagrams 1. Grocery store notes with multiple sources 7. Interactive notebooks 5. Sorts 9., Link together key facts with sounds/sayings 3. drawing diagrams (Earth's position for seasons, sun, moon, Earth for tides)
Conducting Practicing and Deepening Lessons	11: Examining Errors in Reasoning	41	Examining students's own reasoning and overall logic of information presented	1. Identifying erros of faulty logic 2. Identifying errors of attack 3. Identifying errors of weak reference 4. Identifying errors of misinformation 5. Practicing identifying error in logic 6. Finding errors in media 7. Examining support for claims	1. Analyze the statement - Students determine what is incorrect about the statement and why. 3. A 2016 Science Std LST 4.2 - "Distinguish between facts, reasoned judgement based on research, and speculation." 3, 4, and 6. Many times as science teachers we encounter students who have misinformation or have wrongly interpretted some topic in science. We have to talk thme through these errors. 5. Students build / debug code on code.org

Our Data from Social Studies PLC

The New Art & Science of Teaching

Elements NMS needs to work on

Element 8 – Recording and Representing Content

- Graphic organizers
- 2 column notes/Cornell notes
- Social studies notebooks
- Summarizing and presenting current events from the world to the class

Element 11 – Examining Errors in Reasoning

- Examine propaganda and identify the lies/misinformation being presented
- Examine political ads to identify the misinformation, errors in logic, etc.
- Examine Apartheid legislation/Civil Rights Law to identify common misbeliefs driven by the ethnic group controlling the government

BoY to EoY Comparison

Timestamp	School leaders and teacher leaders have developed a written document articulating our schoolwide model of instruction.	New teachers have professional development opportunities to learn about our schoolwide model of instruction.	I can describe the major components of our schoolwide model of instruction.	School leaders limit the number of new initiatives, prioritizing those related to our schoolwide model of instruction.	Our school has a common language for talking about teaching and instruction.	I use our schoolwide language of instruction in faculty and department meetings.	I use our schoolwide language of instruction during PLC meetings.	I use our schoolwide language of instruction in informal conversations.
Avg	3.65	3.41	3.12	3.12	3.76	3.65	3.65	3.18
Low	2	2	1	1	3	3	3	2
High	5	5	5	5	5	5	5	5
Previous	3.25	3.55	3.05	3.05	3.33	3.11	3.16	2.95

Examples

All elements

Our focus

Our Discoveries from data collection

Learning Statement 1: The teachers do not feel like the school has a clear vision as to how instruction should be addressed in the school.

Learning Statement 2: A common language needs to be developed for teachers to be able to have those conversations in informal or formal conversations around the school.

Learning Statement 3: We have specific areas in the instructional model that we feel need focus and attention to first before moving on.

Our Discoveries

Learning Statement 1: The teachers do not feel like the school has a clear vision as to how instruction should be addressed in the school. This is highlighted in the HRS survey.

High Reliability Schools is now our instructional model that comes embedded with a common language. The school corporation has also started the process of implementing the instructional expectations in to our strategic plan for the district and all three schools are moving toward the same goal.

Our Discoveries

Learning Statement 2: A common language needs to be developed for teachers to be able to have those conversations in informal or formal conversations around the school. This was also brought to light by the HRS survey but also conversations had during PLCs.

The common language going forward will revolve around the language used in *The New Art and Science of Teaching*. We will utilize the 43 elements of effective instruction and focus on a few areas at a time.

Our Discoveries

Learning Statement 3: We have specific areas in the instructional model that we feel need focus and attention to first before moving on. This was identified during the rating of all 43 elements in the New Art and Science of Teaching.

The areas of attention include areas in the content and context categories.

What have we learned about...

What have we learned about our school?

We have learned that we have areas that we can improve and are willing to do so.

What have we learned about our teachers?

We have learned that our teachers have a drive to be the best that they can be. They are eager to do what is best and just want some guidance on how to get there.

What are the implications of what we have learned for the work?

This is just the beginning. The teachers value having a direction to go with clear expectations on how to get there. This is just step one.

Where We Are Heading Next

At Northeastern Middle School, we plan to move forward with our growth by continuing through the process of identifying areas of need and developing action plans addressing those areas. We plan on implementing instructional rounds so teachers can observe and learn from each other. NWS is working on a more comprehensive new teacher orientation program to onboard our new teachers and staff going forward and bridging the gap in instructional expectations. We wonder what our instructional practices will look like in the classroom going forward.

Bibliography

Marzano, R. J., & Marzano, R. J. (2019). The handbook for the new art and science of teaching. Bloomington, IN, Solution Tree Press.

Marzano, R. J., & Marzano, R. J. (2017). The new art and science of teaching. Bloomington, IN, Solution Tree Press.