Research-Based Instructional Practices

Instructional Leadership Academy
October 5-6, 2016

Debbie Rodriguez, Ed.D.
School Effectiveness Specialist
Georgia Department of Education
drodriguez@doe.k12.ga.us

Aleph Fore
Graduation Specialist
Process Manager
Wilcox County High School
forea@Wilcox.k12.ga.us

Nathan Gibbs
Assistant Principal
Wilcox County High School
gibbsn@Wilcox.k12.ga.us

Lou Rodeheaver, Ph.D., NBCT
School Effectiveness Specialist
Georgia Department of Education
lrodeheaver@doe.k12.ga.us

Janie Fields
School Effectiveness Specialist
Georgia Department of Education
jfields@doe.k12.ga.us

Pam Jackson
School Improvement Specialist
Okefenokee RESA
pjackson@okresa.org
School Performance Standard

I-4 Research-Based Instructional Strategies

Uses research-based instructional practices that positively impact student learning.
Research-Based Instructional Practices

What are Research-Based Instructional Strategies?

- Promote student learning
- Relevant to content
• Clear Lesson Goals
• Modeling
• Questioning for Understanding
• Summarizing Using a Graphic
• Practice – Guided and Independent

See for example, John Hattie’s *Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement*, and Robert Marzano’s *Classroom Instruction That Works: Research-based Strategies for Improving Student Achievement*
TKES Performance Standards

• **TKES 2: Instructional Planning**
The teacher plans using state and local school district curricula and standards, effective strategies, resources, and data to address the differentiated needs of all students.

• **TKES 3: Instructional Strategies**
The teacher promotes student learning by using research-based instructional strategies relevant to the content to engage students in active learning and to facilitate the students’ acquisition of key knowledge and skills.

• **TKES 4: Differentiated Instruction**
The teacher challenges and supports each student’s learning by providing appropriate content and developing skills which address individual learning differences.

• **TKES 5: Assessment Strategies**
The teacher systematically chooses a variety of diagnostic, formative, and summative assessment strategies and instruments that are varied and appropriate for the content and student population.
Learning Targets

• I can create a process to review curriculum documents, specifically lesson plans, to ensure effective use of instructional strategies.

• I can create a process to check instructional practices to determine job-embedded professional learning needed to impact teacher practices.
Essential Question

Why is it important to have processes in place to ensure that teachers are implementing research-based instructional strategies that will impact student performance?
What Is A Process?

A process is a series of actions or steps taken in order to achieve a particular end.
Best Practices for Instruction Standard 4

• Share instructional strategies in team meetings (collaborative planning and Leadership Team Meetings). Teacher leaders on the leadership team work with content area teachers to determine effective instructional strategies.

• Research instructional strategies (articles or books).

• Provide professional learning on effective teaching strategies that address deficit areas from observations. Professional learning designs may include modeling, peer observations, collaborative lesson development, teacher-to-teacher conferences, and professional literature.
Look Fors:
Instructional Standard 4

- A variety of instructional strategies and resources are used to teach content.
- Instructional strategies are aligned to student needs, the purpose of the learning, and are appropriate to the content area.
- Students are engaged in learning.
- Instructional strategies are addressed during collaborative planning.
- Instructional strategies are embedded in the development of units and lessons.
- Professional learning is provided to continuously build the repertoire of effective strategies in each content area.
How does it happen?

Leadership must provide:

• Written Expectations
• Step-by-Step Process
• Monitoring Tools
• Observation data
• Job-Embedded Professional Learning
What does it take?

- Strong instructional leadership
- High expectations
- Quality curriculum
- Collaboration
- Instructional teams
- Instructional planning
- Observation data
School Practice Reflection

Do you have a process to review lesson plans and give teachers feedback on their use of research based instructional strategies?

- Checking and sharing instructional strategies
- Providing job-embedded PL to improve instructional practices
- Monitoring the implementation of research based instructional strategies
What Makes It Work at Wilcox County High School?

- Curriculum Document Revision
- Weekly Collaborative Planning
- Lesson Plan Rubric and Feedback
- Classroom Observation Data
- Learning (Focus) Walk Data
- Leadership Team Meetings
- Instructional Focus Calendar
- Job-Embedded Professional Learning
- Walkthrough Data Results
Wilcox County High School

• Julie Childers, Superintendent
• Chad Davis, Principal
• Tim Conner and Nathan Gibbs, Assistant Principals
• Aleph Fore, Process Manager
Wilcox County High School

High School Enrollment: 326
Middle School Enrollment: 273
Total Students: 599
Total Teachers: 40
Total Administrators: 3
Total Buildings: 2
Students Who Eat Free: 100%
Indicators of Success

• Graduation Rate
• CCRPI Score
• Student Achievement
• Processes
• School Climate and Culture
• Teacher Morale
• Professional Practice

Results = Change
SYSTEM FOR EFFECTIVE SCHOOL INSTRUCTION
A Model for School Leaders to Build an Effective Instructional Program

Refine for Continuous Instructional Improvement
- Reflect on What Did and Did Not Work
- Adjust Planning, Implementation and Monitoring
- Celebrate and Share Successes
- Identify Next Steps

Prepare for Quality Instruction
- Plan with A Team
- Identify What Students Should Know and Do
- Determine How Students Will Show They Know and Can Do
- Use Planning Tools For Instruction

Ensure Student Success
- Check for Understanding
- Analyze: Identify Strengths and Gaps
- Provide Feedback
- Adjust: Intervene and Enrich

Provide Quality Instruction
- Pervasive Lesson Practices
- Lesson Opening
- Transition to Work Session
- Work Session
- Lesson Closing

Adapted from the W. Edwards Deming Institute
• Instructional Calendars
• Curriculum Maps
• Pacing Guides
• Instructional Units
• Assessments

• Learning Walks (Focus Walks)
• Lesson Plan Review with Feedback
• TKES
• Identify and address gaps in instruction through Job-Embedded Professional Learning

Assess – Refine for Continuous Instructional Improvement

Plan – To prepare for quality instruction

Monitor – Ensures Student Success

Implement – Quality Instruction

• Instructional Teams
• Collaborative Planning Teams
• Leadership Team
• Content and Vertical Teams

• Tools
• Lesson Plan Template

• Research-based instructional strategies
• Instructional Framework
Curriculum Revision

• Instructional Unit Revision
  • Groups of Teachers:
    • Review and Revise
      • Instructional Calendar
      • Curriculum Map
      • Pacing Guides
      • Instructional Units
    • Identify research-based instructional strategies
  • Guidance and Evidence:
    • Schedule of Work
    • Expectations Checklist
    • Posted Work Products
    • Job-Embedded Professional Learning

Assess – Refine for Continuous Instructional Improvement
### Instructional Calendar

**Chart 1**

**Algebra 1**

<table>
<thead>
<tr>
<th>Month</th>
<th>Number School Days</th>
<th>Subtract testing days, field trips and any other events that take away time from instruction</th>
<th>Number of Instructional Days</th>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>19</td>
<td>-1</td>
<td>18</td>
<td>(1st day of school procedures)</td>
</tr>
<tr>
<td>September</td>
<td>21</td>
<td>-1</td>
<td>20</td>
<td>Homecoming Pep Rally</td>
</tr>
<tr>
<td>October</td>
<td>19</td>
<td>0</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>November</td>
<td>17</td>
<td>-1</td>
<td>16</td>
<td>Veterans’ Day Program</td>
</tr>
<tr>
<td>December</td>
<td>11</td>
<td>-9</td>
<td>2</td>
<td>Review &amp; testing weeks</td>
</tr>
</tbody>
</table>

**Total Number of Instructional Days for the 1st Semester block schedule**: 87

<table>
<thead>
<tr>
<th>Month</th>
<th>Number School Days</th>
<th>Subtract testing days, field trips and any other events that take away from instruction</th>
<th>Number of Instructional Days</th>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>19</td>
<td>-1</td>
<td>18</td>
<td>1st day procedures</td>
</tr>
<tr>
<td>February</td>
<td>19</td>
<td>0</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>March</td>
<td>21</td>
<td>0</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>April</td>
<td>15</td>
<td>0</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>5</td>
<td>0</td>
<td>5</td>
<td></td>
</tr>
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</table>

**Total Number of Instructional Days for the 2nd Semester block schedule**: 79

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Target:</td>
<td>Teachers can determine number of instructional days in the SY 2016-2017 to teach the content of the standards.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit</td>
<td>Number Learning Targets that align with intent and rigor of standards</td>
<td>Content to be covered</td>
<td>Number of Days to teach and learning content</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>---------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Unit 1 Quantities &amp; Modeling</td>
<td>7</td>
<td>Quantitative Reasoning, Algebraic Models</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Unit 2 - Understanding Functions</td>
<td>6</td>
<td>Functions &amp; Models, Patterns &amp; Sequences</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Unit 3 - Linear Functions, Equations, &amp; Inequalities</td>
<td>10</td>
<td>Linear Functions, Forms of Linear Equations, Linear Equations &amp; Inequalities</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Unit 5 - Linear Systems</td>
<td>5</td>
<td>Solving Systems of Linear Equations Modeling with Linear Systems</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Unit 6 - Exponential Relationships</td>
<td>8</td>
<td>Geometric Sequences &amp; Exponential Functions Exponential Equations &amp; Models</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Unit 7 - Polynomial Operations</td>
<td>4</td>
<td>Adding &amp; Subtracting Polynomials Multiplying Polynomials</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Unit 9 - Quadratic Equations &amp; Modeling</td>
<td>7</td>
<td>Using Factors to Solve Quadratic Equations, Using Square Roots to Solve Quadratic Equations Linear, Exponential, &amp; Quadratic Models</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Unit 8 - Quadratic Functions</td>
<td>5</td>
<td>Graphing Quadratic Functions Connecting Intercepts, Zeros, and Factors</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Unit 4 - Statistical Models</td>
<td>3</td>
<td>Multi-Variable Categorical Data One-Variable Data Distributions</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>
Collaborative Planning

• Groups of Teachers:
  • Plan quality instruction
    • Discuss lesson plan essentials
  • *Share research-based instructional strategies*
    • Evaluate assessment items
  • Identify struggling students and plan interventions

• Guidance and Evidence:
  • Schedule of Meeting
  • Expectations Checklist
  • Agenda and Minutes
  • Leadership Team Report
  • Revised Work Products
  • Job-Embedded Professional Learning
Collaborative Planning Meeting Agenda
August 10, 2016

Meeting Time: 11:20 - 12:20

Department: Science

Materials to bring to meeting: Course standards, lesson plans, resources, laptops

- Welcome — Fore

- Collaborative Planning Presentation — Fore
  Discuss meeting times and locations
  Group Norms
  Checklist
  Wall Chart — focus on Reviewing Lesson Plans

- Lesson plans — Each teacher will present his/her lesson plans, strategies, tasks, assessments for the upcoming week

- Teacher One
  - Standards and Learning Targets
  - Teaching Strategies engage students
  - Rigorous Task Assignments
  - Assessment

- Teacher Two
  - Standards and Learning Targets
  - Teaching Strategies engage students
  - Rigorous Task Assignments
  - Assessment

- Teacher Three
  - Standards and Learning Targets
  - Teaching Strategies engage students
  - Rigorous Task Assignments
  - Assessment

<table>
<thead>
<tr>
<th>Course</th>
<th>State Target 2017</th>
<th>2015 % of Students Passing EOC (80%)</th>
<th>2016 % of Students Passing GA Milestones (80%)</th>
<th>Smart Goal 2017 SIP (5% increase)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>63.8%</td>
<td>9.52%</td>
<td>43.1%</td>
<td>45.26%</td>
</tr>
<tr>
<td>Physical Science</td>
<td>58.5%</td>
<td>23.68%</td>
<td>27%</td>
<td>28.35%</td>
</tr>
<tr>
<td>9th Lit</td>
<td>67.9%</td>
<td>32.8%</td>
<td>31%</td>
<td>32.55%</td>
</tr>
<tr>
<td>11th Lit</td>
<td>65.8%</td>
<td>25.64%</td>
<td>22.2%</td>
<td>23.31%</td>
</tr>
<tr>
<td>US Hist</td>
<td>68%</td>
<td>12.33%</td>
<td>17.6%</td>
<td>18.48%</td>
</tr>
<tr>
<td>Econ</td>
<td>65.3%</td>
<td>30.95%</td>
<td>53%</td>
<td>55.65%</td>
</tr>
<tr>
<td>Coord Alg</td>
<td>63.6%</td>
<td>31.25%</td>
<td>22.6%</td>
<td>23.73%</td>
</tr>
<tr>
<td>An. Geom.</td>
<td>63%</td>
<td>25%</td>
<td>48.6%</td>
<td>51.3%</td>
</tr>
</tbody>
</table>

- Struggling students — Will not be discussed today but should be a routine agenda item as all future sessions.

- Upcoming Agenda — Plans for next Collaborative Planning session. Include SMART Goals.
Collaborative Planning Checklist

The sole purpose of collaborative planning is to discuss what is being taught, how it is being taught, and interventions for students who did not learn the content.

Collaborative Team ____________________________ Date: __________________

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1. Team members and administrators receive an agenda one day in advance of the meeting.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Team members arrive on time.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Team members sign in.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Members have an agenda during the meeting.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. A time keeper is assigned to allow time for each member to share and to keep track of the time.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. A member is assigned to take notes during the meeting.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7. Each team member brings lesson plans and materials to discuss lesson plans.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8. Each team member shares the standards, tasks (assignments), teaching strategies, and assessments for each lesson for the week.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9. Team members actively listen and give feedback on how to improve the tasks (assignments) for the work session to make sure the task matches the rigor of the standard.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10. Team members discuss the students who are struggling to learn the content and a plan of attack to provide interventions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11. An agenda is created for the upcoming session.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12. The note taker emails the minutes to team members.</td>
</tr>
</tbody>
</table>

Signature of Principal or Designee: ________________________________________

Comments: ________________________________________________________________

______________________________________________________________
Lesson Plan Review with Feedback

• Data
  • TKES Summary
  • Student Achievement Data
  • Collaborative Planning
  • Leadership Team

• Guidance
  • Expectations Template
  • Sample Lesson created by admin
  • Lesson Plan Feedback Rubric

• Goals
  • *Increase effective use of instructional strategies to improve student learning*
  • Increase TKES ratings for all teachers to at least proficient
  • Improve inter-rater reliability
Weekly Lesson Plan Protocol Details

- Teachers post lesson plans to Google drive by midnight Sunday that include:
  - Minimum Lesson Plan expectations
  - Research-based instructional strategies that are highlighted
- Administrators access lesson plans on Monday morning
  - Collaboratively review, guided by the Lesson Plan Feedback Rubric
  - Collectively provide written feedback to individual teachers
- Monday afternoon feedback
  - Conferences with individual teachers scheduled
  - Celebrations and/or coaching scheduled for upcoming weekly departmental Collaborative Planning sessions
- Administrators observe classrooms together to ensure fidelity of lessons
- Job-embedded Professional Learning identified and scheduled
- Learning Walks to determine impact of Professional Learning
- Data compiled and presented to Leadership Teams
- TKES data included as available
# Lesson Plan Expectations

<table>
<thead>
<tr>
<th>Date</th>
<th>Standard(s)</th>
<th>Learning Target(s)</th>
<th>Opening Teacher Led</th>
<th>Work Session Teacher facilitated Student led</th>
<th>Closing Student focused</th>
<th>Differentiation</th>
<th>Assessment</th>
<th>Use of Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>List the standard and element to be taught.</td>
<td>Warm Up: List activity and provide description.</td>
<td>Teacher Role: Guide/facilitate student learning by: Providing detailed description how students are to utilize instructional strategies to accomplish assigned task(s) and master content</td>
<td>Teacher Role: Gather data to inform subsequent instruction</td>
<td>Teacher Role: Utilize data to ensure your planning meets the needs of all individual students.</td>
<td>Teacher Role: Check for student’s understanding of content throughout the lesson using a variety of formative assessment strategies.</td>
<td>Teacher Role: Utilize technology to: expand and enhance traditional instruction while supporting the standard. Increase student engagement Improve student learning Examples of effective use of technology: Socrative, web quests, Kahoot, Google Classroom, Viztech/ZSpace Interactive notebooks, SMART notebooks,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>State specific expectation(s) of what your students are expected to learn from the work session. Must be directly aligned to the standard and element listed. This is what your students are to know and learn from the lesson.</td>
<td>Teacher Role: Active prior knowledge (schema) by reviewing what was learned previously and connect learning to real world application</td>
<td>Facilitate learning by providing rubrics, checklists, and resources needed to guide student work and promote student self-assessment</td>
<td>Teacher Role: Provide students with a variety of ways to “show what they know” Examples include: TOTD, Quick Checks, 3-2-1, etc.</td>
<td>List specific ways you will differentiate at least one of the following: content, process, and/or product. Include evidence of how data was used to identify individual student needs.</td>
<td>Utilize multiple summative assessment strategies to allow students a variety of ways to show what they know and have learned</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
### Admin Lesson Plan

**Instructional Strategies**

<table>
<thead>
<tr>
<th>Learning Target</th>
<th>Opening</th>
<th>Work Session</th>
<th>Closing</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Teacher:</strong> Gibbs</td>
<td><strong>Class:</strong> 12th Grade Lit</td>
<td><strong>Week of:</strong> 12/7/2015-12/11/2015</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Monday, 12/7/2015**

**Standard:**
ELAGSE12RL2: Determine two or more themes or central idea of text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text.

**Learning Target:**
Students will demonstrate their understanding of theme in text.

**Warm Up:**
Example of Themes listed on board that deal with the topics of: Beauty, revenge, ambition, friendship, and conflict with parent or child. Students will use newspapers to find examples of the listed themes and tell if they are good, bad, or both.

**Opening:**
Teacher will model by selecting two themes from the list of themes on the board. Teacher will define each theme chosen and tell whether they are good, bad, or both. The teacher will discuss why understanding the theme is important when reading text.

**Critical Terminology:**
Theme, analyze, development, interact, complex account

**Teacher will monitor and facilitate lesson on theme.**

Students will be divided into groups and given a green and red card. They will reflect on their experiences with each of the themes and decide if they are good, bad, or both. Students will share answers within groups.

Then, in groups, the students will **draw two columns (graphic organizer)** on a piece of paper. In the first column, they will write three facts that they know about the novel, “Frankenstein”. In the second column, they will predict how Shelly will teach a moral lesson about life using these facts.

**Teacher will conduct a quick check.** The students will answer a series of three questions about themes. Students will hold up a green card if they understand and a red card if they don’t completely understand or don’t understand at all.

**Formative Assessment:** Quick check. Assessment data will be used to check for understanding.

**Materials:** Stop/Go Cards, Frankenstein novel, newspapers, smart board, paper and pen.

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**Tuesday, 12/8/2015**

**Standard:**
ELAGSE12RL2: Determine two or more themes or central idea of text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text.

**Warm Up:**
Mini grammar lesson: Students will review 2 sentences on Smart board and provide the rules that support why the sentences are correct. (Sentences will be pulled from Mary Shelly’s, Frankenstein)

**Opening:**
The teacher will define theme and model how to trace themes throughout the

**Teacher will observe small group discussion and facilitate activity.**

Students will split into groups of 4. They will discuss themes in Frankenstein up to this point. They will then look back at examples in the text and jot down the page, paragraph, and

**Alternate activity assessment: Students will turn in peer notes to be reviewed by teacher.**

**Teacher will observe small group discussion and also demonstration by individual group leaders.**

**Formative Assessment:** Anecdotal teacher observations

Review of closing assignment

**Materials:** Frankenstein Novel, paper, pen, and smartboard
**Instructional Strategies Highlighted in US History Lesson Plan**

**Tuesday 9/16**

**SSUSH6** The student will analyze the impact of territorial expansion and population growth and the impact of this growth in the early decades of the new nation.

- a. Explain the Northwest Ordinance's importance in the westward migration of Americans, and on slavery, public education, and the addition of new states.
- b. Describe Jefferson's diplomacy in obtaining the Louisiana Purchase from France and the territory's exploration by Lewis and Clark.

**Agendas are placed on Google Classroom each day. This is an example of Multiple Means of Representation.**

<table>
<thead>
<tr>
<th>Teacher will introduce the task.</th>
<th>Teacher will ask students to write a three sentence response to the prompt and share.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher will read the Louisiana Purchase primary sources from Reading Like a Historian.</td>
<td>Students should write three sentences in response to the prompt: Did Federalists oppose the Louisiana Purchase for practical or political reasons? (In other words, did the Federalists have real concerns, or did they just hate Jefferson?)</td>
</tr>
<tr>
<td>H. Instructional Strategies for Close Reading of Declaration of Independence</td>
<td>Provide Multiple Means of Representation</td>
</tr>
<tr>
<td>5. PALS reading strategy</td>
<td>1. Provide options for perception 1.1 Offer ways of customizing the display of information</td>
</tr>
<tr>
<td>6. Uses peer to peer interaction</td>
<td>1.2 Offer alternatives for auditory information 1.3 Offer alternatives for visual information</td>
</tr>
<tr>
<td>7. Purposeful Pairs</td>
<td>3: Provide options for comprehension 3.1 Activate or supply background knowledge</td>
</tr>
<tr>
<td>8. Complete Whole Group Activity Google Docs</td>
<td>3.2. Highlight patterns, critical features, big ideas, and relationships</td>
</tr>
<tr>
<td><strong>I. Instructional Strategies for Close Reading of Declaration of Independence</strong></td>
<td>3.3 Guide information processing, visualization, and manipulation 3.4 Maximize transfer and generalization</td>
</tr>
<tr>
<td>Teacher will also Model (Multiple Means of Representation) a constructed response for the students before beginning their work.</td>
<td>Provide Multiple Means of Action and Expression</td>
</tr>
<tr>
<td>7. Groups 1-5 Activities (Students are placed in cooperative groups of four)</td>
<td>4: Provide options for physical action 4.1 Vary the methods for response and navigation</td>
</tr>
<tr>
<td>8. Each group has a different assignment</td>
<td>4.2 Optimize access to tools and assistive technologies</td>
</tr>
</tbody>
</table>

**Implement Quality Instruction**
# Instructional Strategies Highlighted in Biology Lesson Plan

**Teacher:** Richard Woods, Georgia's School Superintendent

**Class:** 10 Grade Biology

**Week of:** 8/22/2016 to 8/25/2016

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<table>
<thead>
<tr>
<th>Learning Target</th>
<th>Opening</th>
<th>Work Session</th>
<th>Closing</th>
<th>Differentiation</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plant Adaptations SB4. Students will assess the dependence of all organisms on one another and the flow of energy and matter within their ecosystems.</strong></td>
<td><strong>Warm-Up:</strong> Students will complete 7 MC questions over plant adaptations. After 4 minutes, each student will turn to their elbow partner and compare their answer.</td>
<td>Students will complete independent activity over the different tropisms… <a href="http://tinyurl.com/j28dair">http://tinyurl.com/j28dair</a></td>
<td>Students will complete a 10 question TOD using USA test prep. Level of questions will be based on grade in the class. Students with A and B will get the more difficult questions and students will grades lower than B will be assigned questions that are easier to comprehend.</td>
<td><strong>In gold throughout lesson plan</strong></td>
<td><strong>SB4d quiz Formative TOD closing</strong></td>
</tr>
<tr>
<td><strong>Opening: Teacher will present a video and a handout...All about Tropisms.</strong> <a href="http://tinyurl.com/hwd4kvw">http://tinyurl.com/hwd4kvw</a> (handout) <a href="https://www.youtube.com/watch?v=HdwcllkSoBY">https://www.youtube.com/watch?v=HdwcllkSoBY</a> (video)</td>
<td><strong>Differentiation on presentation.</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>Quiz over SB4d Wednesday</strong></td>
</tr>
<tr>
<td><strong>Critical Vocabulary:</strong> Essential** Plant Adaptations Tropisms Supplemental** Chemotropism Geotropism Phototropism Thigmotropism Xylem Phloem Flower Cone Seed Dispersal Dormancy Hormones **Essential vocabulary listed in the GPS Standards <strong>Supplemental vocabulary listed in the state frameworks and/or other state document</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>UNIT TEST OVER SB4 NEXT MONDAY</strong></td>
</tr>
</tbody>
</table>

---

**Implement—Quality Instruction**
<table>
<thead>
<tr>
<th>Day</th>
<th>Standard(s)</th>
<th>Learning Target(s)</th>
<th>Warm-up</th>
<th>Opening (Teacher Focused)</th>
<th>Work Session (Look at your content instructional Framework sheet)</th>
<th>Closing</th>
<th>Key Vocabulary</th>
<th>Questioning</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>H-CN.A.1, H-CN.A.2, N.C.9-12, N.C.9-12, N.C.9-12, N.C.9-12</td>
<td>I can add, subtract, and multiply complex numbers.</td>
<td>Teacher: Take roll, pass out graded papers if needed. Students: Using your iPad, find the answer to the following questions. 1. What is i? 2. What is i^2? 3. What is i^3? 4. What is i^4? 5. What is i^5?</td>
<td>Teacher: I will model a nested Venn diagram over the complex number system.</td>
<td>Teacher: I will put up problems that students are struggling with solving quadratic equations by taking the square root of a number and relies them. This group was determined from the previous day's assessment. Students: Students will work problems 3-18 section 3.2 adding, subtracting, and multiplying imaginary numbers. I will use the picture above to allow the students to view the complex number system. I will model how to add, subtract, and multiply imaginary numbers using explain 1, 2, and 3.</td>
<td>Teacher: I will monitor students as they present their problems. I will help explain problems. Students: I will be assigned problems to work on the board or using the document camera. We will review all programs.</td>
<td>Imaginary number, complex number, real number, conjugate, -i.</td>
<td>Do all complex numbers include an imaginary part? Explain. How can you tell which part of a complex number is the real part and which is the imaginary part?</td>
<td>Observation - during the closing, small group reteaching during work session.</td>
</tr>
</tbody>
</table>
# Lesson Plan Feedback

**Categories** | 0 | 1 | 2 | 3 | 4 | **Comments**
--- | --- | --- | --- | --- | --- | ---
Plan submitted on time | | | | | | ✔ |
Standards
1. Standard(s) listed | | | | | | ✔ |
2. Direct Focus of Work Session | | | | | | ✔ |
Learning Target
1. Directly Aligned to standard | | | | | | ✔ |
2. Clearly state what students are supposed to learn | | | | | | ✔ |
Opening
1. Is Warm Up activity and description listed | | | | | | ✔ |
2. Is Opening activity and description listed | | | | | | ✔ |
Work Session
1. Teacher’s role clearly stated | | | | | | ✔ |
2. Student activity support learning target/standard | | | | | ✔ |
3. Is work session activity clearly detailed | | | | | | ✔ |
Closing
1. Type of assessment used listed | | | | | | ✔ |
2. Learning target/standard aligned | | | | | | ✔ |

**Date:** 8-23-16

**Teacher Name:**

**Monitoring – Ensures Student Success**
## Instructional Strategies
1. Research based strategies used
2. Are Instructional strategies detailed

## Use of technology
1. Teacher use of technology
2. Student use of technology
3. Purposeful use of technology

## Differentiation
1. Is differentiation based on assessment data
2. Is connection to data clearly documented
3. Does differentiation meet the needs of all students

### Rating Scale:
1. Not evident/Inappropriate
2. Emerging-some evidence
3. Proficient
4. Exemplary

### Evaluator’s comments:
- Very much improved. You have good details in your plan and we can see you put much thought into planning.
- Some instructional strategies -
Teachers,

Lesson plans for this week looked really good. We are seeing more teachers using data. We are seeing all kinds of instructional and assessment strategies being utilized. Remember to give yourself credit on your plans if you are doing something in class. It is very important that you continually assess your students and adjust your lessons to help the ones who are struggling.

This week's averages:

Math = 32.6
ELA = 31
S.S. = 28.8
Science = 27.8

Great work!
C. Davis
Lesson Plan Review Data Summary

### Wilcox County Middle and High School Lesson Plan Feedback Summary
SY 2016-2017

<table>
<thead>
<tr>
<th>Category</th>
<th>Expectation</th>
<th>Total # teachers: 12</th>
<th>Total # teachers: 11</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Level 1</td>
<td>Level 2</td>
<td>Level 3</td>
</tr>
<tr>
<td>Deadline</td>
<td>Plans submitted on time</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Percent</td>
<td>100.00%</td>
<td></td>
</tr>
<tr>
<td>Standards</td>
<td>Standard(s) listed</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Percent</td>
<td>100.00%</td>
<td></td>
</tr>
<tr>
<td>Learning Target</td>
<td>Directly aligned to standard</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Percent</td>
<td>0.00%</td>
<td>100.00%</td>
</tr>
<tr>
<td>Opening</td>
<td>Warm Up activity listed and described</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Percent</td>
<td>16.67%</td>
<td>25.00%</td>
</tr>
<tr>
<td>Work Session</td>
<td>Teacher role clearly stated</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Percent</td>
<td>8.33%</td>
<td>33.33%</td>
</tr>
<tr>
<td></td>
<td>Student activity supports learning target/standard</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clear details of student expectations provided</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Percent</td>
<td>16.67%</td>
<td>33.33%</td>
</tr>
<tr>
<td>Closing</td>
<td>Type of assessment(s) used listed</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Percent</td>
<td>16.67%</td>
<td>33.33%</td>
</tr>
<tr>
<td>Instructional Strategies</td>
<td>Research-based instructional strategies are listed and described in detail</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Percent</td>
<td>16.67%</td>
<td>25.00%</td>
</tr>
</tbody>
</table>

Plan – To prepare for quality instruction
<table>
<thead>
<tr>
<th>Instructional Strategies Noted:</th>
<th>Research-based instructional strategies are listed and described in detail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Teacher use of technology clearly described and enriches traditional instruction</td>
</tr>
<tr>
<td></td>
<td>Student use of technology clearly described and encourages student engagement</td>
</tr>
<tr>
<td></td>
<td>The use of technology aligns with and supports mastery of standard</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Use of Technology</th>
<th>Based on assessment data</th>
<th>Data sources clearly identified and documented</th>
<th>Meets the individual needs of all students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>16.67%</td>
<td>25.00%</td>
<td>33.33%</td>
</tr>
<tr>
<td></td>
<td>0.00%</td>
<td>0.00%</td>
<td>81.82%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Instructional Strategies Noted:</th>
<th>Use of Technology Noted:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grouping, Trading Game, Grphic organizer, Secret Partner, Compare/Contrast, TOTC, Peer-to-Peer, Think/Pair/Share, 3-2-1, Interactive notebook, Swat the answer, Real World situation, Game boards, Informed Observer, modeling</td>
<td></td>
</tr>
<tr>
<td>Small groups, modeling, Venn diagram, reteaching, peer-to-peer discussion, Grphic organizer, kinesthetic activities, 3-2-1, Think/Pair/Share, TOTD, Double Bubble Thinking Map, demonstrations and labs, Interactive notebook, exit slips, Google Classroom daily agenda, Pals Reading,</td>
<td></td>
</tr>
</tbody>
</table>

| Reminders from Administration: | |
|--------------------------------| |
| Powerpoint, Kahn Academy, academic videos, YouTube/TeacherTube, | Powerpoint, Google Classroom, videos |
| Instructional Focus: Deconstructing standards with students and utilizing the language of the standard throughout the lesson to improve student learning. Data from the closing should be used to plan alternative activities and group students. Closings must assess whether or not students can address the learning target. Utilize technology to improve student engagement. | |

Plan – To prepare for quality instruction
Work Session

Take five minutes to:

• Review Lesson Plan Expectations Template
• Discuss the lesson plan with your group
• Rate each category on the rubric
• Share feedback
Indicators of Success

• Increased Graduation Rate

<table>
<thead>
<tr>
<th>Percent of ALL Students Graduating in 4 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>65.3%</td>
</tr>
</tbody>
</table>

• 100% of Seniors graduated in May 2016
Indicators of Success

• Increased CCRPI Score

<table>
<thead>
<tr>
<th>Wilcox County High School</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
</tr>
<tr>
<td>64.7</td>
</tr>
</tbody>
</table>
Indicators of Success

Increased Student Achievement for 2016

• 5 out of 8 EOC assessments improved
• Some improved up to 30 percentage points
Wilcox County High School Next Steps

Become a PLC where everyone shares research-based instructional strategies to improve student learning

- Monthly instructional focus
- Involve everyone in learning walks
Instructional Focus Calendar

This PL will occur during one weekly Collaborative Planning session. One other weekly Collaborative Planning session will allow time for on-going revisions of units and common assessment.

August – Teacher and students deconstruct standards and utilize language of standards throughout the lesson to improve student learning.

September – Utilize formative assessment data to group student during instruction. (Select a teacher who is doing this already to model.)

October – Students monitor their own learning. (Tools will be provided for individual students to complete.)

November –

December –

January – Revise units and common assessments

February – TBD based on TKES data

March – TBD based on TKES data
Action Plan

At your tables, use the template provided to make a plan of action. Create an intentional, explicit process for your school to get from where you currently are to where you want to be.
School Practice Reflection

Do you have a process to review lesson plans and give teachers feedback on their research-based instructional strategies?

- Checking instructional strategies
- Sharing instructional strategies
- Providing job-embedded PL to improve instructional practices
- Monitoring the implementation of research-based instructional strategies
## Action Plan

Do you have a process to review lesson plans and give teachers feedback on their research-based instructional strategies? | Yes or No | Jot down your next steps
--- | --- | ---
1. Checking instructional strategies |  |  
2. Sharing instructional strategies |  |  
3. Providing job-embedded PL to improve instructional practices |  |  
4. Monitoring the implementation of research-based instructional strategies |  |  

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**Richard Woods,**
Georgia’s School Superintendent
“Educating Georgia’s Future”
gadoe.org
Questions?
Research-Based Instructional Practices

Instructional Leadership Academy
October 5-6, 2016

Debbie Rodriguez, Ed.D.
School Effectiveness Specialist
Georgia Department of Education
drodriguez@doe.k12.ga.us

Aleph Fore
Graduation Specialist
Process Manager
Wilcox County High School
forea@Wilcox.k12.ga.us

Nathan Gibbs
Assistant Principal
Wilcox County High School
gibbsn@Wilcox.k12.ga.us

Lou Rodeheaver, Ph.D., NBCT
School Effectiveness Specialist
Georgia Department of Education
lrodeheaver@doe.k12.ga.us

Janie Fields
School Effectiveness Specialist
Georgia Department of Education
jfields@doe.k12.ga.us

Pam Jackson
School Improvement Specialist
Okefenokee RESA
pjackson@okresa.org