Observing the Effectiveness of Secondary School Science Instructors & the Instructional Climate Through the Analysis of Student Performance & Feedback

DEOL Executive Summary and Defense
Keesha Lewis, Doctoral Candidate
Dr. C. Steven Bingham, University Advisor
Mr. T. Brad Craddock, Site Supervisor
Fall 2017
Robert B. Glenn High School (Overview)

- Kernersville, NC
- Winston-Salem/Forsyth County School System
- Approximately 1600 Students
- Principal, Brad Craddock
- 3 Assistant Principals
- 150+ Faculty and Staff
### School Performance Snapshot - 2014

#### Achievement

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>English II</td>
<td>42</td>
</tr>
<tr>
<td>Math 1</td>
<td>39</td>
</tr>
<tr>
<td>Biology</td>
<td>34</td>
</tr>
<tr>
<td>ACT Work Keys</td>
<td>70</td>
</tr>
<tr>
<td>Math Course</td>
<td>95</td>
</tr>
</tbody>
</table>

#### Achievement Score

- **Overall Score**: 55

#### Growth Score

- **Expected**: Exceeded
- **Achieved**: Met
- **Did Not Meet**: Did Not Meet
2014 R. B. Glenn High School Grade

- D – Low-performing rank
- Individual instructor effectiveness – Red (does not meet growth)
- Grade determined using assessment scores (ACT, NC End-of-Course Tests)
  - NC EOC’s:
    - Biology – 34% proficient
    - English II – 42% proficient
    - Math I (Algebra I) – 39% proficient

Approximately 300-350 students tested each year, 114 students were under my tutelage
School Performance Snapshot - 2015

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>English II</td>
<td>43</td>
</tr>
<tr>
<td>Math 1</td>
<td>35</td>
</tr>
<tr>
<td>Biology</td>
<td>27</td>
</tr>
<tr>
<td>ACT Work Keys</td>
<td>65</td>
</tr>
<tr>
<td>Math Course</td>
<td>95</td>
</tr>
</tbody>
</table>

Achievement Score: 54
Growth Score: 52

- Exceeded
- Met
- Did Not Meet
D – Low-performing rank

Title I Status

333 students tested for biology (76 were under my tutelage)
  - Individual instructor effectiveness: Green (meets growth)

Grade determined using assessment scores (ACT, NC End-of-Course Tests)
  - NC EOC’s:
    - Biology: 27% proficient
    - English II: 42% proficient
    - Math I (Algebra I): 35% proficient
School Performance Snapshot – 2016

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>English II</td>
<td>45</td>
</tr>
<tr>
<td>Math 1</td>
<td>39</td>
</tr>
<tr>
<td>Biology</td>
<td>49</td>
</tr>
<tr>
<td>ACT Work Keys</td>
<td>81</td>
</tr>
<tr>
<td>Math Course</td>
<td>95</td>
</tr>
</tbody>
</table>

Achievement Score: 62
Growth Score: 58.2

Exceeded
Met
Did Not Meet
2016 R. B. Glenn High School Grade

- **C: Low-performing status removed**
- 389 biology students tested, 116 were under my tutelage.
  - **Individual instructor effectiveness: Blue (exceeds growth)**
- Grade determined using assessment scores (ACT, NC End-of-Course Tests)
  - NC EOC’s
    - **Biology:** 49% proficient
    - **English II:** 45% proficient
    - **Math I (Algebra I):** 39% proficient
R. B Glenn High School – Report Card

- 2014: D (low-performing)
- 2015: D (low-performing)
- 2016: C-
- 2017: C+

Principal Brad Craddock receives Principal of the Year after achieving great success during the 2016 school year. The school’s low-performing status was removed.
A reflective stance on my first two years as an instructor: The Path to Growth

• Fully accepting my role in the school’s low-performing grade

• Understanding my role in shaping a child’s future

• Understanding my responsibility for providing a quality education to students of all backgrounds

If you can’t make a mistake, you can’t make anything.

Marva Collins
Objectives

- Increase student proficiency levels on the End-of-Course test for Biology.
- Use summative assessments (such as the NC EOC) to measure teacher effectiveness.
- Increase student growth (using the projected scores provided by SAS EVAAS).
- Increase instructor effectiveness.
- Modify the instructional environment to enhance learning.
- Use student surveys as a tool to measure instructor performance school-wide, and ultimately district wide.
- Improved school grade.
Using student surveys as a tool to measure instructor performance school-wide, and ultimately district wide.

- Anonymity guaranteed
- Voluntary
- Google Docs
Student Surveys

How well do you feel that your instructor prepared you for your upcoming End-of-Course (biology) exams?

- Very well
- Well
- Moderately well
- I do not feel prepared for my exams due to shortcomings presented by my teacher
- I do not feel prepared, because I did not try my best
Student Surveys

Classroom Environment: Was the environment welcoming, visually appealing, and conducive towards the progress of student learning?

☐ Yes

☐ No

Did your instructor make you feel safe within his/her classroom?

☐ Yes

☐ No
Student Surveys

Did your instructor make you feel safe within his/her classroom? *

- Yes
- No

Did you feel confident in responding to questions verbally? *

- Yes
- No
- N/A I don't typically answer questions aloud
Based on the instruction provided, what score do you THINK you will earn on your biology EOC?

- [ ] 1
- [ ] 2
- [ ] 3
- [ ] 4
- [ ] 5
Student Surveys

Did your instructor express/verbalize high expectations for your success? *

☐ Yes

☐ No

Was the course rigorous? (Not in the amount of work; but in the level of content taught) Were you challenged?

☐ Yes

☐ NO
Student Surveys

Classroom environment: Did the instructor play music softly in the background while students worked independently?

☐ Yes

☐ No

Classroom environment: Did the instructor decorate his/her classroom with work completed by students?

☐ Yes

☐ No
Student Surveys

What suggestions do you have for your instructors in the future? Check all that apply

☐ More games

☐ More labs

☐ More group activities/collaborative activities

☐ More opportunities for extra credit/grade recovery/remediation

☐ Increased use of technology (simulations, webquests, etc...)
Results from Student Survey: Spring 2016

How well do you feel that your instructor prepared you for your upcoming End-of-Course (biology) exams?

26 responses

- 21 (80.8%) Very well
- 4 (15.4%) Well
- 1 (3.8%) Moderately well
- 0 (0.0%) I do not feel prepared for my exams due to shortcomings presented by my teacher
- 0 (0.0%) I do not feel prepared, because I did not try my best
Results from Student Surveys:  
Fall 2016/Spring 2017

How well do you feel that your instructor prepared you for your upcoming End-of-Course (biology) exams?

9 responses

- 44.4% Very well
- 33.3% Well
- 22.2% Moderately well
- 18.5% I do not feel prepared for my exams due to shortcomings presented by my teacher
- 11.1% I do not feel prepared, because I did not try my best
Results from Student Surveys: Spring 2016

Classroom Environment: Was the environment welcoming, visually appealing, and conducive towards the progress of student learning?

26 responses

96.2% Yes

No
Results from Student Surveys: Fall 2016/Spring 2017

Classroom Environment: Was the environment welcoming, visually appealing, and conducive towards the progress of student learning?

9 responses

- Yes: 9 (100%)
- No: 0
Results from Student Survey: Spring 2016

Did you feel confident in responding to questions verbally?

26 responses

- Yes: 65.4%
- No: 30.8%
- N/A I don't typically answer questions aloud
Results from Student Surveys: Fall 2016/Spring 2017

Did you feel confident in responding to questions verbally?
9 responses

100% Yes
Results from Student Surveys:
Spring 2016

Based on the instruction provided, what score do you THINK you will earn on your biology EOC?

26 responses

53.8% 23.1% 23.1%
Results from Student Surveys:
Fall 2016/Spring 2017

Based on the instruction provided, what score do you THINK you will earn on your biology EOC?

9 responses
Results from Student Surveys: Spring 2016

What suggestions do you have for your instructors in the future? Check all that apply

26 responses

- More games: 10 (38.5%)
- More labs: 20 (76.9%)
- More group activity: 9 (34.6%)
- More opportunities: 7 (26.9%)
- Increased use of: 5 (19.2%)
What suggestions do you have for your instructors in the future? Check all that apply

9 responses

- More games: 4 (44.4%)
- More labs: 5 (55.6%)
- More group activity: 3 (33.3%)
- More opportunities: 2 (22.2%)
- Increased use of technology: 1 (11.1%)
Instructional Modifications

- Lecture/Instruction time limited to 15 minute intervals.

- Students spend more time exploring and learning independently.

- Student work is displayed in the classroom, which builds confidence and self-esteem when completing assignments.

- Music is played while students are engaged in assignments. When the music stops, students know its time to reconvene.
Old

■ Lecturing and speaking for an entire class period (90 minutes).

■ Students spent more time copying notes from the board.

■ Minimal decor. Generic science posters displayed.

■ Students worked in silence with minimal conversation or opportunities for movement.

New

■ Lecture/Instruction time limited to 15 minute intervals.

■ Students spend more time exploring and learning independently.

■ Student encouraged to move, explore, and discover via laboratory assignments and hands-on activities.

■ Student work is displayed in the classroom, which builds confidence and self-esteem when completing assignments.

■ Music is played while students are engaged in assignments. When the music stops, students know it's time to reconvene.
I'm a teacher. A teacher is someone who leads. There is no magic here. I do not walk on water. I do not part the sea. I just love children.

Marva Collins

meetville.com
## Collective School Performance Data (Biology)

**Report:** School Value Added  
**Test:** End of Course  
**School:** Robert B Glenn High School  
**Subject:** Biology  
**District:** Forsyth County Schools  
**Year:** 2017

### Table: Subject Performance

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Students</th>
<th>Average Score</th>
<th>Average Percentile</th>
<th>Average Predicted Score</th>
<th>Average Predicted Percentile</th>
<th>Growth Measure</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>333</td>
<td>244.5</td>
<td>30</td>
<td>245.7</td>
<td>34</td>
<td>-1.2 R</td>
<td>0.3</td>
</tr>
<tr>
<td>2016</td>
<td>389</td>
<td>248.2</td>
<td>41</td>
<td>247.5</td>
<td>39</td>
<td>0.7 B</td>
<td>0.3</td>
</tr>
<tr>
<td>2017</td>
<td>311</td>
<td>248.9</td>
<td>43</td>
<td>247.0</td>
<td>37</td>
<td>1.8 B</td>
<td>0.3</td>
</tr>
<tr>
<td>3-Yr-Avg</td>
<td>1033</td>
<td>247.2</td>
<td>37</td>
<td>246.8</td>
<td>36</td>
<td>0.4 B</td>
<td>0.2</td>
</tr>
</tbody>
</table>

**Legend:**
- **B**: Significant evidence that the school's students made more progress than the Growth Standard
- **G**: Evidence that the school's students made progress similar to the Growth Standard
- **R**: Significant evidence that the school's students made less progress than the Growth Standard
# Candidate’s Individual Performance

<table>
<thead>
<tr>
<th>Year</th>
<th>Growth Measure</th>
<th>Standard Error</th>
<th>Index</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>-1.7</td>
<td>0.4</td>
<td>-3.77</td>
<td>Does Not Meet Expected Growth</td>
</tr>
<tr>
<td>2015</td>
<td>-0.6</td>
<td>0.5</td>
<td>-1.12</td>
<td>Meets Expected Growth</td>
</tr>
<tr>
<td>2016</td>
<td>2.8</td>
<td>0.7</td>
<td>4.01</td>
<td>Exceeds Expected Growth</td>
</tr>
<tr>
<td>Multi-Year Average</td>
<td>0.2</td>
<td>0.3</td>
<td>0.52</td>
<td>Meets Expected Growth</td>
</tr>
</tbody>
</table>

---

### Your Effectiveness Checklist

1. Create a culture of consistency
2. Reduce discipline problems
3. Increase student achievement
4. Teach and support teachers
Candidate’s Individual Performance

- 2014: Ineffective
- 2015: Effective
- 2016: Exceedingly effective
- 3-year average: Effective

North Carolina Department of Public Instruction

Report: Teacher Value Added
School: Robert B Glenn High School
District: Forsyth County Schools
Teacher: KEESHA LEWIS (5149988332)

Test: End of Course
Subject: Biology
Listen to your audience! Listening to my students helped me become a better teacher.

Don't be afraid of harsh critique.

Change is a precursor to growth.

Every child is capable of learning. Intelligence and I.Q. are not fixed.

Leaders ask for help, and acknowledge those that help them.

Learning is a continual process, the acquisition of a terminal degree does not signify the end of education—but, the beginning of lifelong learning.

Instructors that avoid receiving evaluations from their audience are likely lacking in effectiveness.

We do not learn from experience... we learn from reflecting on experience.

- John Dewey
Acknowledgements

- My mother, Ruth Lewis, and brothers Thomas and Larry Richardson
- Dr. Sharese Smith, Jessica Langley, Avery Brockett, Fatima Stevens, Kimberly Cates-Mays, and William Landis
- My supervisor, Mr. Thomas Brad Craddock, Principal, R. B. Glenn High School
- Gardner-Webb Family: Dr. C. Steven Bingham, Dr. Jeffrey Hamilton, Jay Human, Randa Ross, Tiffany Lyles
- Dr. Thomasina Odom, Dr. Cheryl D. Jackson-Lewis
- North Carolina A&T State University Family: Dr. Cailisha Petty, Dr. Perpetua Muganda, Dr. Vivian Hampton
- Elizabeth City State University Family: Dr. Gary Harmon, Dr. Roberto Frontera-Suau, Dr. Ashraf Alam, Dr. Jacqueline Pool, Dr. Josiah Sampson, Mr. Warren Pool
- My R. B. Glenn High School Family: Tangela Wallace, Latarsha Pledger, Chad Tesh
- The Ronald E. McNair Program at Elizabeth City State University

Thank you.
1 References


