Opportunities and Challenges of Virtual Learning

Bridget French, Executive Director, College & Career Readiness, Rockford Public Schools

Dr. Patrick Hardy, Principal, Proviso East High School
Bridget French

Programs aimed at successful student enrollment into postsecondary programs

- Academies at all five high schools
- Master Scheduling
- Middle and high school counselors
- Career & Technical Ed
- Early College Credit

PWR Act work

- Model Partnership Agreement committee
- P20 Council CCR Committee
- IL Report Card User Group
- Dual Credit Fellowship
- Model Programs of Study committees

About Bridget

Executive Director, College & Career Readiness

Rockford Public Schools
Patrick Hardy, Ph.D., D.Min.

Reorganized PEHS in 4 College and Career Readiness Academies
92% post-secondary placement rate
Increased AP offerings from 1 to 15
Doubled dual-credit partnerships
Reduced suspensions by 87%
Reduced expulsions to 0
Transitioned to Personalized Competency-Based Education (PCBE)
1st Certified Marzano Academy in the nation!
2018 IPA West Cook Principal of the Year
Named Marguerite Key Fellow, Northern Illinois University College of Education
Rockford Public Schools

- Birth to 12
- 28,000 students
- 42 schools
- 4 traditional high schools
- 1 alternative school for credit recovery
- Wall-to-wall Academies
- 12 – 14 pathways / programs of study within Academies
- 67% graduation rate
Synchronous

Students learn at the same time

Asynchronous

Students learn at different times
Grades K - 5
Instructional Model

5 days in-person instruction

5 days remote learning
Grades 6 - 12
Hybrid Instructional Model

2 days in-person instruction

3 days remote learning
<table>
<thead>
<tr>
<th></th>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-person instruction</td>
<td>Remote learning</td>
<td>Remote learning</td>
<td>In-person instruction</td>
<td>Remote learning</td>
<td></td>
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<tr>
<td>50-minute class periods</td>
<td>Asynchronous</td>
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<tr>
<td>Minimum <strong>5 hours</strong> of learning</td>
<td>Maximum of <strong>50 minutes</strong> per class period</td>
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<td>Maximum of <strong>50 minutes</strong> per class period</td>
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Wednesdays might look different based on students' needs.
Asynchronous Instruction

What it looks like for students

- Discussion
- Research & Exploration
- Practice & Review
- Collaborative Tasks
- Assessment
- Reflection & Metacognition
- Reteach & Extend

Digital Tools

- Google Tools
- Padlet
- Flipgrid
- Screencastify
- Newsela
- Nearpod
- OneTab
- Seesaw
Remote Instructional Model

5 days remote learning
# 6 – 12 Students Remote

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<td>Remote learning</td>
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<td>Asynchronous</td>
<td>Synchronous</td>
<td>Mix Asynchronous &amp; Synchronous</td>
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<td>Synchronous</td>
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- **Minimum 5 hours of learning**
- **Maximum of 50 minutes per class period**

- **50 minute class periods on bell schedule**
- **Minimum 5 hours of learning**
- **Maximum of 50 minutes per class period**

- **50 minute class periods on bell schedule**

---

*Wednesdays might look different based on students' needs*
Synchronous Instruction

What it looks like for students

- Follow Bell Schedule
- Limit ‘Teacher Talk’
- Introduce Asynchronous Next Steps
- Embed Understanding Checks
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<td>Remote instruction</td>
<td>Small intervention groups</td>
<td>In-person instruction</td>
<td>Remote instruction</td>
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<tr>
<td>50 minute class periods on bell schedule</td>
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Wednesday Instruction

1 day in-person or remote intervention groups
What I Need (WIN) Wednesdays — Grades 6-12

DIAMOND OF INTERVENTION

INTENSIVE INTERVENTION

TIER 3
• Frequent progress monitoring
• Individual intervention

TIER 2
• Intervention in addition to core curriculum
• Strategic monitoring of progress
• FBA

TIER 1
• Instructional/general curriculum
• Universal screenings
• Differentiated instruction
• Skill building/inter
• PBIS
• 2nd step

CORE

INTERVENTION

EXTENSION

INTENSIVE EXTENSION

TIER 2
• Differentiation of core
• Strategic monitoring of progress
• Gifted programming

TIER 3
• Continuous progress monitoring
• Individualized differentiation
• Gifted programming
45 minute
Small group options

20 minutes instruction with teacher
Split into 2 groups if needed

20 minutes independent work

5 minutes all check-in

Small Groups
Literacy
Numeracy
Project-based Support / Work Completion
<table>
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<tr>
<th>Time</th>
<th>Afternoon schedule for Teachers</th>
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<tbody>
<tr>
<td>30 minutes</td>
<td>Lunch</td>
</tr>
<tr>
<td>45 minutes</td>
<td>PLC (teacher time by content)</td>
</tr>
<tr>
<td>45 minutes</td>
<td>SLC (teacher time by Academy)</td>
</tr>
<tr>
<td>Rest of day</td>
<td>Teacher planning time</td>
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</tbody>
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What went well

Access to Technology

- District purchased Wi-Fi and hotspot
- 1:1 Laptops
- Amazon Web Services
- Instructional Technology site with teachers' screencastifys

WIN Wednesday at elementary level
What went well

Staffing

- Additional parent liaisons hired with Title 1
- Principals and APs also taking student caseloads
- 50/50 split: remote – in person
- Small class sizes
- Teachers not teaching remote and in person concurrently
Opportunities

- Difficult to engage students in work based learning
- Intervention/Enrichment not mandatory = low attendance
- Difficult to engage remote learners

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<tr>
<th>Location</th>
<th>On Track</th>
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<tr>
<td>In Person</td>
<td>76%</td>
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<tr>
<td>Full-time Remote</td>
<td>63%</td>
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<table>
<thead>
<tr>
<th>YTD Attendance</th>
<th>Count</th>
<th>On Track</th>
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<tr>
<td>98%+</td>
<td>312</td>
<td>88%</td>
</tr>
<tr>
<td>93-97%</td>
<td>289</td>
<td>96%</td>
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<tr>
<td>89-93%</td>
<td>256</td>
<td>90%</td>
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<tr>
<td>&lt;89%</td>
<td>995</td>
<td>50%</td>
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Next steps

Summer community work

○ Step up / summer bridge programs at all high schools

○ Employer embedded credit recovery

○ Free summer school
Public Act 099-0674
Post-Secondary and Workforce Readiness Act


- Passed unanimously in both legislative houses and was signed July 29, 2016.
- Postsecondary and Career Expectations (PaCE),
- Competency-Based Learning Systems
- College & Career Pathways and Endorsements
- Transitional Math Courses
# 16 Indicators

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3 Challenges of Virtual Learning

- Too Much Content
- No In-Person Learning
- Assessing Learning
## 5 Interrelated Opportunities

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○ Too many standards, not enough time!
○ “It is clear that attempting to teach and assess all standards is an exercise in futility.” (Marzano, Norford, Finn, & Finn III).

Challenge 1

Too Much Content!
7th-Grade Math

~ Five (5) components per standard

145 component elements in 180 days
Measurement Topics
Broad content categories that classroom teachers will assess in each subject area

Proficiency Scales
Important content for a specific topic organized into levels of difficulty
# Integrated Math 2

## Measurement Topic

1. Classify Polynomial (prerequisite)
2. Adding and Subtracting Polynomial Expressions
3. Multiplying Polynomial Expressions
4. Factoring Quadratics
5. Graph Quadratic Functions
6. Solve a Quadratic Equation with Real Solutions
7. Triangle Sum Theorem
8. Pythagorean Theorem to Find an Unknown Side
9. Triangle Similarity
10. Staying Focused When Answers and Solutions are not Immediately Apparent

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<th>Measurement Topic</th>
<th>Graduation Competency</th>
<th>Score 3.0</th>
</tr>
</thead>
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<td>Classify Polynomial (prerequisite)</td>
<td>Mathematical Reasoning</td>
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<td></td>
</tr>
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- **Classify a polynomial by its degree and its number of terms.**

### Adding and Subtracting Polynomial Expressions

- **ASPE1—Add and subtract polynomials** (for example, \((x^3 + 3x - 6) + (-2x^2 + x - 2) - (3x - 4) = x^3 - 2x^2 + x - 4\)).
- **ASPE2—Simplify polynomials with more than one variable** (for example, \(4x^2y - 3x^2 - 2y + 8xy - 3x^2 + 2x^2y + 4 = 6x^2y - 6x^2 + 8xy - 2y + 4\)).

### Multiplying Polynomial Expressions

- **MDEPE1—Multiply polynomials** (for example, \((10a - 3)(5a^2 + 7a - 1) = 10a(5a^2 + 7a - 1) - 3(5a^2 + 7a - 1) = 50a^3 + 70a^2 - 10a - 15a^2 - 21a + 3 = 50a^3 + 55a^2 - 31a + 3\)).

### Factoring Quadratics

- **FQ1—Factor out a greatest common factor from an expression**; for example, \(6x^2 - 9x + 15 = 3(2x^2 - 3x + 5)\).
# Measurement Topic

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| Matter and Molecules | Scientific Literacy | The student will:  
**MM1**—**Explain how atoms organize to create larger structures** (for example, model different types of atoms, elements, molecules, and compounds to determine similarities and differences between their structures).  
**MM2**—**Explain how chemical reactions change the properties of interacting substances** (for example, given descriptions of changes to substances, determine whether chemical reactions have or have not occurred).  
**MM3**—**Explain how mass is conserved during a chemical reaction** (for example, apply the law of conservation of matter to chemical reactions to explain how atoms within reactants rearrange to create products).
| Atomic Structure | Text Analysis | The student will:  
**AS1**—**Explain the atomic structure and electron configurations of specific elements** (for example, given an element, write and diagram its electron configuration in multiple ways). |
The student will:

- Propose a solution to a given political conflict that addresses the tension between individual rights and the common good inherent in the issue.

3.5 In addition to score 3.0 performance, partial success at score 4.0 content

3.0 The student will:

AD1—Explain how the basic premises of liberalism and democracy are joined in the Declaration of Independence, where they are stated as "self-evident truths".

AD2—Explain how the major ideas of classical republicanism influenced the development of, and are reflected in, the United States Constitution.

2.5 No major errors or omissions regarding score 2.0 content, and partial success at score 3.0 content

2.0 The student will recognize or recall specific vocabulary (for example, abridge, authority, citizen, classical liberalism, consent, constitutional democracy, democracy, Enlightenment, free enterprise, government, inalienable, liberal democracy, liberalism, limited government, market economy, right, self-evident, sovereign) and perform basic processes such as:

- Explain that the central idea of liberalism.
- Explain the difference between the use of the term "liberal" in referring to the American form of government and the use of the terms "liberal" and "conservative" in referring to positions on the spectrum of American politics.
- Explain where the term "democracy" is derived from, and that the central focus of democracy.
- Explain the difference between the use of the term "democratic" to refer to the American form of government and the use of the term to refer to the Democratic Party in the United States.
- Explain the meaning of statements from the Declaration of Independence.

AD2—The student will recognize or recall specific vocabulary (for example, amendment, article [US Constitution], Articles of Confederation, citizenship, civic virtue, classical republicanism, common good, constitutional democracy, direct democracy, Electoral College, equal representation, Federalist Papers, Great Compromise, proportional representation, pure democracy, representative government, republic, section [US Constitution], social contract, sovereign, states’ rights, US Congress, US Constitution, US House of Representatives, US Senate) and perform basic processes such as:

- Describe the major ideas of republicanism.
- Describe the general history of republicanism.
- Explain how the use of the term "republican" to refer to the American form of government differs from the use of the term to refer to the Republican Party in the United States.
- Differentiate between a republic and a direct democracy.
- Describe the development of the United States Constitution.

5.5 Partial success at score 3.0 content, and major errors or omissions regarding score 3.0 content

1.0 With help, partial success at score 2.0 content and score 1.0 content

0.5 With help, partial success at score 2.0 content but not at score 3.0 content

0.0 Even with help, no success
# Sources & Research 4

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
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</table>
| 4.0   | The student will:  
  • Investigate a modern or historical issue and use research to support a conclusion about the effects of that issue on literature from that time (for example, use research to support a conclusion about WWII’s impact on literary trends during the latter half of the twentieth century and works such as Joseph Heller’s *Catch 22* or Arthur Miller’s *Death of a Salesman* or Arthur Miller’s *The Crucible*). |
| 3.5   | In addition to score 3.0 performance, partial success at score 4.0 content |
| 3.0   | The student will:  
  • Evaluate the relevance and credibility of sources (for example, after being presented with two source texts, explain why each is or is not credible and how relevant each source would be to a specific research question). |
| 2.5   | No major errors or omissions regarding score 2.0 content, and partial success at score 3.0 content |
| 2.0   | The student will:  
  • Read bibliography entries to determine if a source’s topic relates to the topic under investigation.  
  • Cross-reference citations in texts to check for authenticity.  
  • Describe qualities that typically appear in a credible source (such as objective tone, lack of overly emotional rhetoric, verifiable research, clearly stated publisher and date of publication).  
  • Use databases, books, journals, etc. to ensure credibility of information. |
| 1.5   | Partial success at score 2.0 content, and major errors or omissions regarding score 3.0 content |
| 1.0   | The student will:  
  • Recognize or recall specific vocabulary (for example, *bias, bibliography, citation, credibility, objective, relevance, rhetoric, source*).  
  • Identify bias in sources.  
  • Identify types of texts or sources that are generally credible (such as peer-reviewed articles, scientific studies, newspaper or online news articles, primary sources). |
| 0.5   | With help, partial success at score 2.0 content but not at score 3.0 content |
| 0.0   | Even with help, no success |
Opportunity

Reduce: Reduce the amount of content taught and assessed

Develop: Develop a list of measurement topics

Generate: Generate proficiency scales for each MT

Compose: Compose well-defined learning targets
○ Teachers continually review content in the proficiency scales for each measurement topic

○ Teachers will *not* review every topic during a review session or activity

○ At PEHS, reviews often focus on topics that will impact the PSAT/SAT
Collective Responsibility

- Teachers consider themselves responsible as a group for each student’s growth and development.
- Breaks the traditional approach of each teacher being considered the only one responsible for the students his class.
## 5 Interrelated Opportunities

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Challenge 2

No In-Person Learning
Blended Learning...in Remote & Hybrid Contexts

**Face-to-Face/Mastery-Based Model**
- Introduces online instruction on a case-by-case basis
- Allows struggling or advanced scholars to work at their own pace
- *Scholars rotate between online and remote instruction based on completion of evidence
- Assess scholars at different time

**Flex Model**
- Online learning is the backbone
- Used with non-traditional scholars
- Learning is self-guided, independent
- Directs scholars to teacher-supported activities at select times.
## 5 Interrelated Opportunities

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Challenge 3

ASSESSING LEARNING
Measurement Process

- Test less, assess more!
- Conduct many different forms of assessment over time
- Think of tests/quizzes as one form of assessment
- Assessment is any systematic way of collecting evidence
- Measurement is the process of translating evidence from assessments into a number on a scale
Assessment

MT & Scales

Blended Learning

Cumulative Review

Collective Responsibility
Thank You!

Q & A