

Dear Dr. [REDACTED]

Thank you for your participation in the Reflective Friends process. Attached you will find the Reflective Friends Summary Report. This report was developed based on the data collected and the discussion during the collaborative meeting with the school leadership on March 3rd.

The intent of this document is to provide you with information that will help you determine action steps toward your goal(s). This is a fairly comprehensive list of possible next steps. You may want to consult with you leadership team, as you review the list and consider the actions that will best meet the needs of your students and teachers. Careful consideration should be taken as you determine the best way to share this information with your staff. It is not our intent that this document be shared with the entire staff.

We know you will want to take some time to review the data again and consider next steps. We would like to meet with you again after Spring Break to discuss possible methods for implementing your goal(s) and providing you with further support.

Please feel free to contact either of us at any time with questions.

Truly,

Gaynell Lyman
Tom Woodward

Reflective Friends Overview

On February ██████████, 2010, off-site administrators, members of Henrico County Public Schools Staff Development Department and external consultants visited ██████████ High School in support of the Reflective Friends process. Members of the team included:

██████████, President, LogicWing, Inc.

██████████ Assistant Principal, Highland Springs High School

██████████, Principal, Paul R. Smith Middle School, Florida

██████████, President, Advanced Learning Partnerships, Inc.

Gaynell Lyman, Henrico County Staff Development

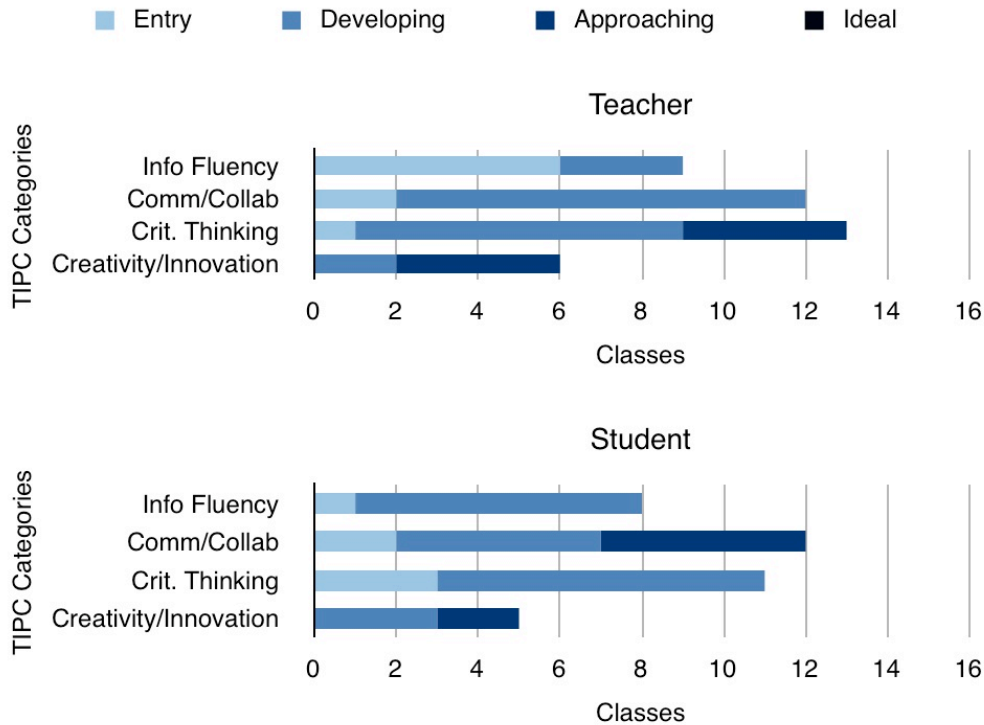
██████████ Principal, Freeman High School

Tom Woodward, Henrico County Staff Development

Over the course of the two days these individuals conducted classroom visits and interviewed students, as well as teachers. Sixteen classrooms were observed for one period each. During the classroom visit, the observer(s) used a tool to document the 21st century skills addressed by the lesson and described the teaching and learning that was taking place. The 21st century skills were aligned to the TIP chart for both teacher implementation and student outcomes. Eleven teachers were interviewed over two 30-minute sessions. The questions used were designed to engage teachers in conversation about 21st century skills and the integration of technology. Two groups, for a total of eight students were also interviewed about their learning experiences at ██████████. Following the collection of data, the Reflective Friends team compiled the data and developed some recommendations for next steps.

Following the collection of data, the Reflective Friends team compiled the data and developed some recommendations for next steps. Representatives from the team met with school leadership on March 3, 2010 to discuss the meeting and possible next steps. This overview represents a synthesis of the data collected during this process and discussion of the data during this collaborative meeting. Findings reveal that ██████████'s staff has a strong start regarding 21st century skill integration. The overall recommendation for improvement is focused on higher level use of technology to meet instructional objectives. Summary of findings follow.

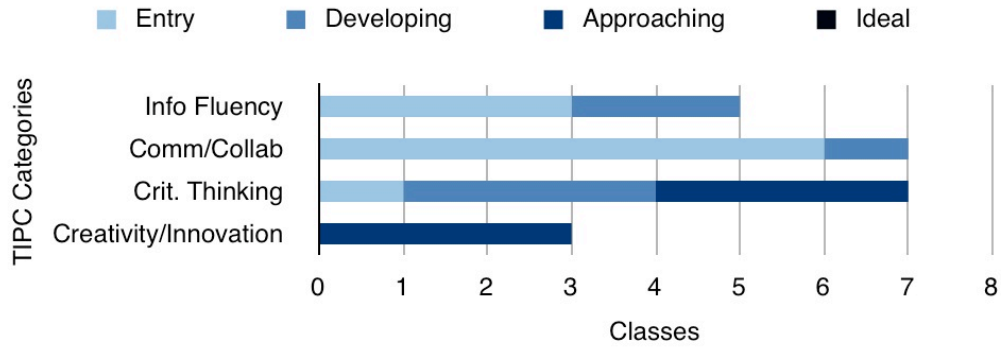
High School
Reflective Friends 2010



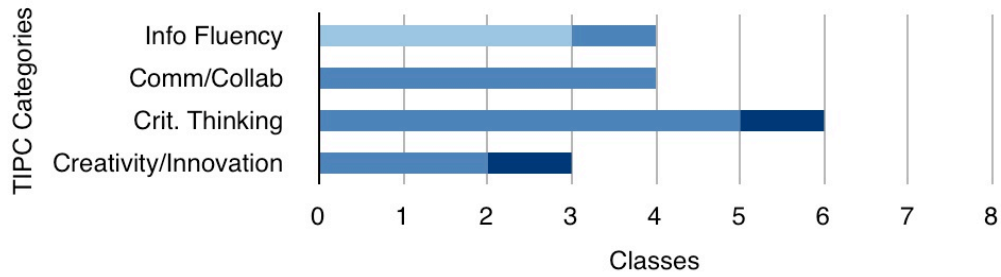
These graphs represent 16 classroom observations. The first chart is the data for teachers and the second focuses on students.

Teacher Use in Classes	Student Use in Classes	Tools Used
9	13	Laptops (information access, organization, notes)
8	1	Projector (demonstration, powerpoints, image display)
2	9	Internet (information access, gizmos)
1	1	Promethean Board (display, some interaction with students)
2	4	SchoolSpace (file exchange, blog)

Selected Teachers



Random Teachers



Teacher Interview Trends

During the reflective friends visit, two groups of teachers, for a total of eleven (11) teachers were interviewed about topics related to the integration of 21st century skills. Interview data is reported based on a variety of factors. Specific responses are recorded that support or clarify observational data. Additionally, non-verbal cues indicating support by additional members of the group which were not recorded in the response numbers may have played a role in statement selections. The following trends emerged from these conversations. The number in parenthesis represents the number of instances that indicator was mentioned.

Key components of 21st century classroom include:

- problem solving/critical thinking (9 responses)
- communication(4)
- collaboration (5)

Definition of collaboration focused on:

- teacher facilitating student learning (4).

The role of technology in supporting 21st century skills was mainly limited to:

- allowing for student participation in lieu of classroom participation (4)
- allowing students access to information and activities not available in class (5).

Teachers define real-world learning as:

- relating to student lives and current events (5)
- life skills (time management/project management) 3
- application of concepts (3)

Creativity was defined in multiple ways:

- class projects and building things (3)
- group work, drawing, problem solving, writing (2 each)

Other points of interest:

- Teachers state that integration of 21st century skills is just good teaching that doesn't require technology (2)
- There appeared to be some confusion between creativity and artistic ability among some respondents.

Interview Trends- Students

Eight (8) students participated in group interviews that focused on learning at [REDACTED]. Interview data is reported based on a variety of factors. Specific responses are recorded that support or clarify observational data. Additionally, non-verbal cues indicating support by additional members of the group which were not recorded in the response numbers may have played a role in statement selections. The following trends emerged from these conversations. The number in parenthesis represents the number of instances that indicator was mentioned.

Students describe the typical day comprised of:

- taking notes (11)
- Student quote: "I like that my teachers tell me what's important"

Student report using the following technology:

- SchoolSpace (5)
- laptops (3)
- Promethean boards(3)

There seems to be a strong cross-curricular pairing in the school between:

- history and English departments (3).

Students describe the following issues with group work:

- work distribution (3)
- finding time to collaborate outside of class (3)
- Student quote regarding a collaborative assignment: "...it was hard to get everybody on the same page with it. I understand her goal, but it didn't meet her idea of how it was supposed to work out...we didn't have class time and we were supposed to use discussion board to [coordinate our groups]... and we were supposed to use discussion board so she could read it, but most groups just didn't do it."

Student comments about creativity:

- "I don't like to do it only because we never do."
- "...there is so much direction that is specific...I lose my creativity because I'm always having to follow instructions so precisely."

The subjects seen by students as correlating most closely with desired real world skills were math and English (4) although the mentioned skills tended to focus on lower level concrete usage for both subjects.

Other points of interest:

- Outside of school, students reported low levels of technology usage.
- Students participate in sports outside the classroom (3).

Summary of Findings and Next Steps

The data analysis by both the school Reflective Friends team and the leadership was closely correlated. Both groups saw targeted higher level technology integration as a key component necessary for next level achievement. The left column of the table below summarizes the findings and the right column identifies possible next steps.

The importance of 21st Century Skills	
<p>The school team acknowledges that [redacted] may have deemphasized the importance of "effective use of technology" by isolating it as one of the ten 21st century skills they are focusing on.</p> <ul style="list-style-type: none">• Teacher interviews indicate a limited understanding of the role of technology integration- mainly that it provides students an alternative means to participate and access information/activities that are not available in class• Student description of technology use was primarily SchoolSpace and Promethean boards• Teachers state that integration of 21st century skills is just good teaching that doesn't require technology	<p><i>Leadership should consider nuancing its message to better emphasize the integral role technology plays in reaching next level 21st century skills integration.</i></p> <ul style="list-style-type: none">• narrow the focus to three 21st century skills.• model best practice technology integration when communicating and collaborating with the staff• promote and share lessons from the school community that exemplify 21st century skills emphasizing skillful and targeted technology integration• ensure that the leadership team shares a common vision, understanding and knowledge of 21st century classrooms and current core technologies

Communication and Collaboration	
<p>Based on observation data there is a high level of communication and collaboration in the developing category of the TIP chart, with sharp drop offs on either side. Observations also show that student outcomes are not as high as teacher inputs on the TIP chart. This may indicate that structures are not in place at the lower level that enables the teachers and students to move to the next, and suggests a need for instruction related to the development of communication and collaboration skills.</p> <ul style="list-style-type: none">• Students reported problems associated with grouping and expectations.• Teacher interview data reveals that while teachers value communication and collaboration skills, they limit the scope to group work and in-class discussion boards.• While there were no direct observations of communications outside the the walls of the classroom, interview data identified one instance of communication with an expert and technology use to support communication with students who are less likely to participate in class.• Regarding a collaborative assignment that utilizes a discussion board to organize groups, one student comments, "<i>...it was hard to get everybody on the same page with it. I understand her goal, but it didn't meet her idea of how it was supposed to work out...we didn't have class time and we were supposed to use discussion board to [coordinate our groups]... and we were supposed to use discussion board so she could read it, but most groups just didn't do it.</i>"	<p><i>In class communication and collaboration is a strong component of ██████████'s classrooms. In order to reach the next level, teachers should consider leveraging technology components to expand the classroom and provide opportunities for real world application and audience. These changes will positively impact all TIP chart categories.</i></p> <ul style="list-style-type: none">• school leadership communicates that communication and collaboration is a school focus• school leadership continuously addresses the integral role that technology integration plays in communication and collaboration• the ITRT plays a lead role in helping teachers identify communication and collaboration technologies that support lesson objectives efficiently• the ITRT provides necessary support and training to facilitate the integration of these technologies with both teachers and students

Critical Thinking and Problem Solving	
<p>Observational data shows that teachers are implementing critical thinking and problem solving at the highest concentrations and highest levels relative to the other 21st century skills. Implementation lacks technology integration, real world audiences and expansion outside of the classroom.</p> <ul style="list-style-type: none">• Teacher interviews indicate that this skill set is a priority and foremost in their conceptual understanding of a 21st century classroom.• Student interview data regarding the integration of critical thinking and problem solving seems to correlate with lesser observational TIP chart levels for students.• Teachers are providing open-ended questions and project-based lessons but support for student use of technology and real-world application is lacking.	<p><i>Critical thinking and problem solving were strongly represented in the observational data. Technology integration and real world audiences were missing components. The leadership team, with the help of the ITRT, should consider helping teachers reach the approaching and idea categories of the TIP chart in the following ways.</i></p> <ul style="list-style-type: none">• help teachers identify technologies that allow students to spend more time on critical thinking and problem solving and less time on locating and organizing information• provide necessary support and training to facilitate the integration of these technologies with both teachers and students• help teachers identify technologies that allow students to publish work in a real world context for audiences beyond the classroom

<p>ITRT Role</p>	
<p>Based on overall trends regarding lower level technology integration across multiple categories, the ITRT was identified as a key change agent.</p> <ul style="list-style-type: none"> • Teacher interviews indicated low technology use and a low emphasis on technology integration as a 21st century component. • Student interviews indicated low level technology use- predominantly factual information retrieval. • Observational data indicated lack of technology extensions as a major factor limiting TIPC ratings. 	<p><i>The ITRT should play a more prominent role in emphasizing and supporting technology integration. The ITRT role will be more formalized and structured in the following ways.</i></p> <ul style="list-style-type: none"> • communication between the administration and ITRT will be improved • the ITRT will design and model lessons that integrate technology at the approaching and ideal level • the ITRT will plan and co-teach lessons that help teachers advance • identify and share best practice lessons with school leadership and teachers and facilitate conversations around them (face to face and electronically) • the ITRT will identify technologies that will enhance lessons in specific content areas and provide training for teachers in those areas
<p>Sharing Best Practice</p>	
<p>The shared message regarding 21st century skills had deemphasized technology integration as a necessary component.</p> <ul style="list-style-type: none"> • School leadership acknowledges that teachers use technology just to use it and that at times it has become a barrier. • Teachers need to be aware of tools that are available to them and opportunities to see how these tools integrate with learning in the classroom. 	<p><i>As part of setting the vision for exemplary 21st century skills integration the administration in conjunction with the ITRT, department heads and other staff members should consider increasing teacher exposure to ideal classrooms by:</i></p> <ul style="list-style-type: none"> • promoting and sharing lessons from the school community that exemplify 21st century skills emphasizing skillful and targeted technology integration either in person or electronically • capturing and sharing classroom practice through video • providing increased structured opportunities for peer observation

Advisory Group	
Administration self-identified the need, and desire, for an additional advisory group.	<p><i>An advisory group outside of the leadership team will be formed. It should be composed of teachers and students. This group:</i></p> <ul style="list-style-type: none">• will include student participants• will expand the 21st century conversation• will provide alternate points of view and suggestions