Urban Assembly School for Media Studies

FINAL REPORT

New York City Department of Education External School Curriculum Audit | August 2011

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Contents

Introduction

About This Report

This final report is the result of an external school curriculum audit (ESCA) of Urban Assembly School for Media Studies by Learning Point Associates, an affiliate of American Institutes for Research. This audit was conducted in response to the school being designated as in need of improvement under the New York State Education Department differentiated accountability plan, pursuant to the accountability requirements of the Elementary and Secondary Education Act, as reauthorized by the No Child Left Behind Act. The utilized ESCA process was developed for and carried out under the auspices of the New York City Department of Education (NYCDOE) Office of School Development, within the Division of Portfolio Planning.

About Urban Assembly School for Media Studies

Urban Assembly School for Media Studies (M307) is a small school community located on the Martin Luther King Jr. Campus in Manhattan. Urban Assembly School for Media Studies is co-located on this campus with five other high schools. Each has its own primary floor, and all five share common spaces such as auditoriums, libraries, gymnasiums, and cafeterias. The school works in partnership with the Urban Assembly.

The Urban Assembly is a nonprofit organization that has created and manages a community of small New York City public schools dedicated to preparing students from underresourced neighborhoods for success in college. The Urban Assembly's instructional support, college planning office, and professional partnerships provide students with the academic and life skills necessary not just for high school graduation, or even college admission, but for four-year college completion. The Urban Assembly comprised just four high schools in 2003 and has grown to 21 middle and high schools, many of which are located in the most underserved areas of the Bronx, Brooklyn, and Manhattan. In the 2010–11 school year, the Urban Assembly served more than 8,100 students.

Founded in 2004, Urban Assembly School for Media Studies draws on the media, in all its forms, to excite students about their education, examine complex issues that span diverse subjects, draw connections between classroom instruction and real-life activities, and prepare students for college and professional careers. By analyzing and producing media—including radio, television, film, photojournalism, and advertising—students become effective communicators, informed citizens, and critical thinkers.

Located in Manhattan, Urban Assembly School for Media Studies serves 368 students in Grades 9–12. The school population is comprised of 41 percent African-American, 53 percent Hispanic, 4 percent Caucasian, and 1 percent Asian students. The average attendance rate for the 2009–2010 school year was 78 percent. Sixty-two percent of the students are eligible for free lunch, and 4 percent are eligible for reduced-price lunch.

The 2008–2009 New York State Accountability Report indicates that the school's Hispanic or Latino student subgroup did not make Adequate Yearly Progress (AYP) in English language arts (ELA). The 2009–2010 New York State Accountability Report indicates that economically

disadvantaged and African-American student subgroups did not make AYP in ELA. The school's failure to meet AYP benchmarks for two consecutive years across student subgroups has resulted in the identification of the school as a School In Need of Improvement (Year 1) for English language arts. The report also indicates that the school is currently in good standing for graduation rate.

Audit Process at Urban Assembly School for Media Studies

The ESCA approach utilized at the high school level examines six topic areas: student engagement, academic interventions and supports, support for incoming students, classroom instruction, professional development, and courses and extracurriculars. Data were collected at the school level through teacher surveys, administrator interviews, classroom observations, and an analysis of documents submitted by Urban Assembly School for Media Studies during March, 2011. From these data, Learning Point Associates prepared a series of reports for the school's use.

These reports were presented to the school during a co-interpretation[SM] meeting, held on May 18. During this meeting, all teachers from the Urban Assembly School for Media Studies community read the reports. Through a facilitated and collaborative group process, they identified individual findings, then developed and prioritized key findings that emerged from information in the reports.

The remainder of this report presents the key findings that emerged from the co-interpretation process, and the actionable recommendations that Learning Point Associates has developed in response. Please note that there is not necessarily a one-to-one connection between key findings and recommendations; rather, the key findings are considered as a group, and the recommended strategies are those that we believe are most likely to have the greatest positive impact on student performance at Urban Assembly School.

Key Findings

After considerable thought and discussion, co-interpretation participants determined a set of key findings. These key findings are detailed in this section.

Critical Key Findings

CRITICAL KEY FINDING 1:

The school gathers both quantitative and qualitative data to drive interactions with students, and student data are gathered to determine baseline level with regard to their literacy and numeracy skill levels. In addition, teachers are collecting various independent data. These data are not being synthesized across the school.

Originally three separate key findings, the co-interpretation participants agreed to combine these key findings into one critical key finding. Supported by evidence from the teacher survey report as well as data from the document review, this key finding was identified by co-interpretation participants from Urban Assembly School for Media Studies as the top prioritized area for improvement. Both sources indicate that student data are gathered through numerous measures, such as online records, teacher-created assessments, and personal interactions during advisory sessions and orientation. However, these data are not shared and synthesized across the school.

CRITICAL KEY FINDING 2:

The opportunities for analysis and problem solving (metacognition) varied from subject to subject, with social studies on the low end. Overall, Urban Assembly School for Media Studies is in the mid-range level when it comes to analysis and problem solving, which means staff is often but inconsistently modeling metacognition aloud and individually.

Supported by evidence from the observation report, this key finding shows that there was some evidence of analysis and problem solving in classrooms observed at Urban Assembly School for Media Studies. Across the classrooms observed, teachers only sometimes provided opportunities for students to use higher-level thinking such as analysis, creation, and evaluation. Complex tasks for students to problem solve also were not provided consistently. Furthermore, teachers did not often model, encourage, and provide tasks that allowed students to develop thinking, self-evaluation, and planning skills.

CRITICAL KEY FINDING 3:

The majority (58 percent) of classes are making superficial connections to content of previous lessons and other forms of context. This speaks to a lack of deep content understanding.

Supported by evidence from the observation report, this key finding indicates that there was moderate evidence of content understanding in more than half of the classrooms observed at Urban Assembly School for Media Studies. Content understanding refers to the depth of lesson content as well as the approach used to help students understand the framework,

key ideas, and procedures in an academic discipline. Observed classrooms sometimes concentrated on meaningful discussion and explanation of broad, organizing ideas and relevant procedural practice, while at other times teachers focused on discrete bits of topically related information. Additionally, class discussion and materials sometimes communicated the essential attributes and examples of concepts and procedures, but at other times these were absent. Teachers also inconsistently connected new lessons to students' background knowledge, and communication of knowledge was occasionally ineffective and inaccurate.

Positive Key Findings

Urban Assembly School for Media Studies identified the following two findings as areas of strength in their school and wishes to improve further in these areas. To further that improvement, recommendations were made around the following findings.

POSITIVE KEY FINDING 1:

Data show that a major academic intervention support is the third trimester, where students are offered a variety of opportunities to ensure they will acquire their credit needs in an engaging way while aligning them with New York State standards.

Supported by document review data, this key finding reveals that, in order to help academically at-risk students, credit recovery, remediation, and Regents preparatory courses are offered in the third trimester at Urban Assembly School for Media Studies. Additional supports include tutoring, book clubs, and a variety of media courses. Teachers also develop their curricula in accordance with New York State standards and designated grade-level benchmarks in order to better meet the needs of students.

POSITIVE KEY FINDING 2:

Teachers utilize and modify curriculum based on the needs of their classes, regularly discuss student progress and identify/develop action plans for students who are in need of academic support, and collaborate to share best practices, develop curricula, and discuss solutions to support the needs of all students, including English language learners (ELLs) and those at risk.

Supported by evidence from the teacher survey report and document review report, Positive Key Finding 2 shows that teachers at Urban Assembly School modify curriculum and instructional programs. Further, teachers frequently collaborate with one another to better support their students' academic progress.

Recommendations

Overview of Recommendations

During the Urban Assembly School for Media Studies co-interpretation, school staff and faculty identified several critical key findings that pointed to issues for improvement at the school and positive key findings that capture the school's successes and that can be expanded upon. These key findings made several themes evident. Co-interpretation participants identified instructional issues (a lack of deep content understanding; and intermittent, inconsistent analysis and problem solving), use of the widely collected data to drive instruction in a consistent and synthesized way across the school, the use of the third trimester to help acquire credits in an engaging way (a positive finding on which the school wishes to expand), and positive professional collaboration (a positive finding on which the school wishes to expand) as priority areas for improvement.

THE FOUR RECOMMENDATIONS

With these issues in mind, Learning Point Associates has developed the following four recommendations:

1. Provide clear expectations and support for the schoolwide use of student achievement data for planning and delivering instruction.
2. Implement instructional strategies that increase opportunities for higher-order thinking, analysis and problem solving, and deeper content understanding.
3. Continue to enhance existing programs to improve credit recovery efforts. Ensure that these credit recovery programs flexibly meet students' needs, motivate students, monitor their progress, and include a college/career-oriented community.
4. Provide structure and purpose of collaboration between teachers and connection to school goals and professional development.

For each recommendation, additional information is provided in the narrative on specific actions that the school may consider during its action-planning process, as well as real-life implementation examples and research resources for further reading.

Please note that the order in which these recommendations are presented does not reflect a ranking or prioritization of the recommendations.

Recommendation 1: Systematic Use of Data

Provide clear expectations and support for the schoolwide use of student achievement data for planning and delivering instruction.

LINK TO RESEARCH

Student assessment data are essential tools in measuring the effectiveness of instruction; teachers can use these data to ensure the success of all students.

The Institute of Education Sciences Practice Guide, *Using Student Achievement Data to Support Instructional Decision Making* (Hamilton et al., 2009) includes the following school-level recommendations regarding data use to improve instruction:

- Establish a clear vision for schoolwide data use.
- Provide supports that foster a data-driven culture within the school.
- Make data part of an ongoing cycle of instructional improvement. (p. 9)

Clear Vision for Schoolwide Data Use. Learning Point Associates and Educational Service Agency Alliance of the Midwest (2006) emphasize the need to do the following:

> Make sure all staff members understand what their core responsibilities are and what their obligations are for learning to do that work better. Understanding this will make a big difference in how staff will seek, manipulate, present, and use data. (p. 21)

The principal and school leaders also should set the example of using data regularly. A study of the effects of leadership practices on student achievement by Mid-Continent Research for Education and Learning (Waters, Marzano, & McNulty, 2003) shows "the extent to which the principal monitors the effectiveness of school practices and their impact on student achievement" to be one of the 21 leadership responsibilities associated significantly with student achievement (p. 12). Cotton (1988) agrees, "The careful monitoring of student progress is shown in the literature to be one of the major factors differentiating effective schools and teachers from ineffective ones" (p. 1).

Supports That Foster a Data-Driven Culture Within the School. Cultivating a culture of reflection and continuous improvement will help teachers feel comfortable using data. Young's (2008) case studies identify four dimensions of trust that suggest how culture may or may not support teachers using the data system. To the degree that teachers think in terms of these four dimensions, they will be more likely to utilize a data system if:

- Other teachers have high standards.
- Other teachers won't think I'm incompetent.
- Others will participate/reciprocate in response to my engagement.
- Problems I raise will be seen as collective problems. (p. 99)

Time also is an important factor in professional support. Teacher respondents cited in a U.S. Department of Education report on data use most often cited "lack of time to examine and reflect on data [as] the greatest barrier to data-driven decision making" (Means, Padilla, & Gallagher, 2010, p. 87).

QUICK LINKS: Online Sources for More Information

Children First Intensive (Website)
http://schools.nyc.gov/Accountability/resources/childrenfirst/

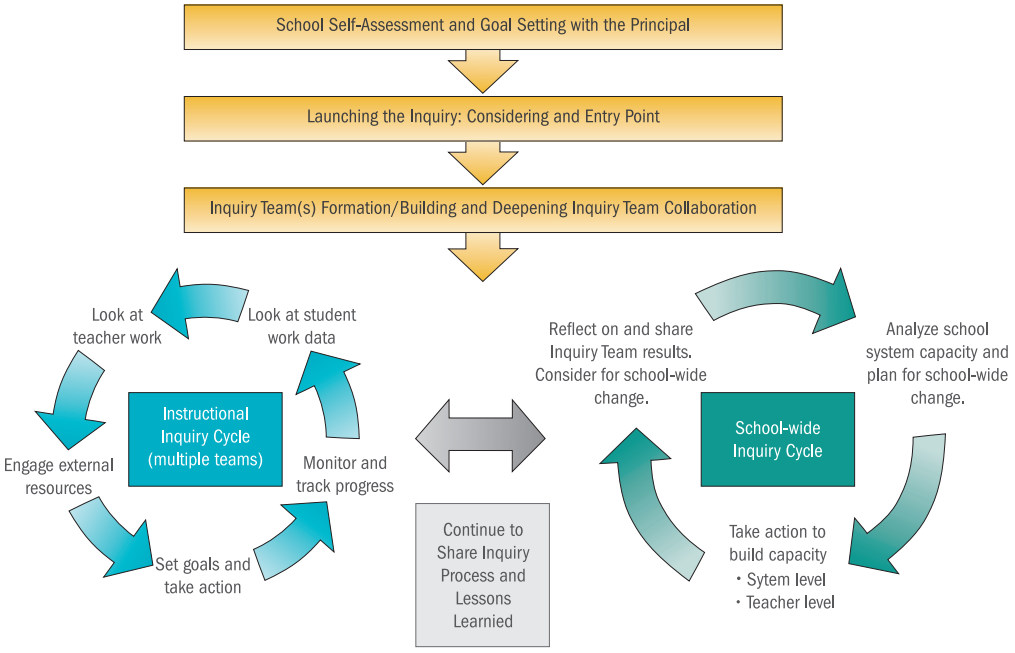
Doing What Works: Providing Research-Based Education Practices Online (Website)
http://dww.ed.gov/

Using Student Achievement Data to Support Instructional Decision Making (Publication)
http://ies.ed.gov/ncee/wwc/pdf/practiceguides/dddm_pg_092909.pdf

Finally, "teachers need to learn how to obtain and manage data, ask good questions, accurately analyze data, and apply data results appropriately and ethically" (Lachat & Smith, 2005, p. 336). Through professional development and coaching, the school can support teachers in meeting these goals.

Data as Part of an Ongoing Cycle of Instructional Improvement. The NYCDOE Children First Intensive (CFI) professional development plan established school-level inquiry teams at each school to support student achievement. NYCDOE uses the following graphic (see Figure 1) to illustrate the ongoing process of collaborative inquiry.

Figure 1. Collaborative Inquiry Process



Source: New York City Department of Education (2011a)

NYCDOE (2011a) defines c*ollaborative inquiry* as "a sustained process of investigation and action by a group of educators that empowers teachers to improve student achievement and close the achievement gap. Collaborative inquiry can look very different in different contexts, but there are some common threads across all teams, mainly that teachers evaluate the effectiveness of their collective work through the lens of student work and data."

IMPLEMENTATION CONSIDERATIONS

1. **Create a school culture of reflection and continuous improvement.** School leaders play an important role in creating a school culture of reflection and continuous improvement.
   - Assign teachers to grade-level and/or subject-specific collaborative inquiry teams, if they do not already exist, to analyze schoolwide data and grade-level/subject-specific data.
   - Identify how the work of collaborative inquiry teams will align with the schoolwide goals developed as part of the collaborative inquiry cycle, and as required for the Comprehensive Education Plan.

- Set aside time for collaborative data analysis. This analysis can take place during existing teacher collaboration time or could be done through inquiry teams.
- Develop a standard data analysis protocol and schedule.
- Provide resources to support teacher collaboration on data analysis, such as tracking sheets and/or a data coach.

2. **Set clear expectations for data use.** Establish clear expectations regarding teacher use of data.
   - Establish a yearly, schoolwide schedule for assessments and screening procedures (e.g., three times each year).
   - Identify assessment instrument(s) that will be used to track student achievement. Screening instruments should be valid, reliable, and aligned with grade-level curriculum based on learning standards (e.g., state assessments, Acuity predictive assessments, or instructionally targeted assessments) or subject-specific and researched-based assessments (e.g., Woodcock-Johnson III Diagnostic Reading Battery, Qualitative Reading Inventory, Dynamic Indicators of Basic Early Literacy Skills).
   - Ensure that assessment results are shared with teachers in a timely way and that teachers have access to assessment results, if assessment results are not readily available on the Achievement Reporting and Innovation System (ARIS).
   - Describe how the school, teams, and individual teachers will be expected to use data (e.g., set goals, align resources, modify scope and sequence, identify students for tutoring, target students in lesson plans).
   - Provide professional development as needed on topics such as data analysis, item analysis, and instructional strategies.

3. **Provide training on instructional strategies and differentiation.** "Just having student data is not sufficient if teachers do not have ideas about how to teach differently based on student performance" (Means et al., 2010, p. 87).
   - Provide professional development on instructional strategies and differentiation to give teachers a wealth of instructional options that they can call on to meet student needs.
   - Adjust classroom instruction based on student progress. The Institute of Education Sciences Practice Guide, *Using Student Achievement Data to Support Instructional Decision Making* (Hamilton et al., 2009), identifies the following changes to instruction that teachers can make to improve student achievement:
   - Prioritizing instructional time.
   - Targeting additional individual instruction for students who are struggling with particular topics.
   - More easily identifying individual students' strengths and instructional interventions that can help students continue to progress.
   - Gauging the instructional effectiveness of classroom lessons.
   - Refining instructional methods.
   - Examining schoolwide data to consider whether and how to adapt the curriculum based on information about students' strengths and weaknesses. (p. 5)

4. **Monitor Progress.** Track implementation of schoolwide data use policies to ensure that they are being implemented consistently and to provide teachers with continuous feedback and appropriate support.
    - Establish a system of multiple methods for ensuring that teacher teams have what they need to engage in regular data analysis to inform instruction. This system could include inquiry team data logs, teacher reflection sheets on instructional strategies, and/or reports from the data coach.
    - Consider implementing classroom walk-throughs by administrators, a lead teacher, or the data coach to see how data analysis and professional development are impacting classroom practice and to identify the best ways to support teachers moving forward. The intention of this process is formative teacher feedback to improve instruction—not to penalize teachers; thus, the school may wish to work collaboratively with its instructional staff to develop a related classroom walk-through protocol. By building in feedback loops, the school can ensure that effective decisions are being made, based on data. As Learning Point Associates and the Educational Service Agency Alliance of the Midwest (2006) state:

        > Data make change visible. Data provide an empirical lens that magnifies objective detail while distancing us from personality. Data can confirm if there is change or not. The smaller, the tighter, the more frequent the feedback loops that the data system supports, the more staff can make decisions, the more frequently decisions can be made, and the more likely that the decisions made will be better ones. (p. 5)

MacArthur Ninth Grade School

MacArthur Ninth Grade School is located in suburban Houston, Texas. Seventy-nine percent of students are eligible for free or reduced-price lunch.

USING DATA FOR CURRICULUM DEVELOPMENT

Teachers and skills specialists regularly revisit and refine lesson design and instructional strategies based on student data. Teachers provide clear expectations for all class assignments to ensure students clearly understand the expectations. Rubrics are used to assess the products.

Each summer, the principal sets aside funds to design curriculum. During this time, teachers work together to finalize all aspects of the curriculum for each core subject area, such as determining skill objectives; warm-up activities; lessons, activities, and readings; and teaching strategies. Teachers may use assessments and data analysis to further refine the curriculum during the school year. For example, the assistant principal for curriculum noted that students were struggling with literary elements. To identify strategies to address the issue, teachers observed, discussed, and implemented key aspects of successful lessons from other teachers.

ANALYZING DATA

The school administers regular three-week and six-week assessments to check students' mastery of the objectives. Teachers analyze these data for trends and provide tutorial sessions to individual students to ensure they can demonstrate mastery. Students also monitor their own data and set learning goals after each six-week benchmark assessment.

For the three-week assessments, teachers develop a test that typically includes 12–15 multiple-choice questions based on district benchmark assessments. The results help teachers plan instruction and provide interim feedback to students.

The six-week assessments are the districtwide benchmark tests that contain 15 questions.

Teachers typically add more items to ensure a minimum of four questions about each objective. After assessments are scanned and scored, teachers return the results to the students.

The students count their errors per objective, determine and record their percentages, and set personal goals for the next assessments.

To analyze these results, teachers enter them in a spreadsheet that was created by the testing coordinator. To determine whether the results of an individual teacher align with the average in the department, teachers meet by department and compare the passing percent of each class with the average in the department. Then teachers reflect on the results to determine (a) areas of instruction that need to be strengthened and (b) specific objectives that should be re-taught for a whole class period or revisited through daily warm-up activities.

The district has established a 70 percent mastery goal for the six-week benchmark assessments. Students who do not meet this goal participate in afterschool tutorial sessions. Each core subject has one day set aside for these sessions. Students receiving this additional support are retested until they achieve the benchmark goal.

(Description from the Doing What Works website: http://dww.ed.gov/media/DDI/DDDM/TopicLevel/case_macarthur_revised.pdf)

Recommendation 2: Instructional Rigor

Implement instructional strategies that increase opportunities for higher-order thinking, analysis and problem solving, and deeper content understanding.

LINK TO RESEARCH

Instruction that pushes students to engage in higher-level thinking leads to deeper learning for students (Marzano, Pickering, & Pollock, 2001) ; Newmann, Bryk, & Nagaoka, 2001; Pashler et al., 2007). Too often, particularly in schools where students are struggling, instruction focuses on lower-level thinking skills, basic content, and test preparation. Teachers of struggling student groups or tracks usually offer students "less exciting instruction, less emphasis on meaning and conceptualization, and more rote drill and practice activities" than do teachers of high-performing or heterogeneous groups and classes (Cotton, 1989, p. 8). Yet this focus on basic skills does not necessarily improve student achievement.

Several research studies were completed from 1990 to 2003 "which demonstrated that students who experienced higher levels of authentic instruction and assessment showed higher achievement than students who experienced lower levels of authentic instruction and assessment" (Newmann, King, & Carmichael, 2007, p. vii). These results included higher achievement on standardized tests (Newmann et al., 2001). It also is important to note that these results "were consistent for Grades 3–12, across different subject areas (mathematics, social studies, language arts, science), and for different students regardless of race, gender, or socioeconomic status" (Newmann et al., 2007, p. vii).

Teachers need to provide structured opportunities and time for students to take on higher-level cognitive work (Tomlinson, 2003). In discussing the *gradual release of responsibility model*, Fisher and Frey (2008) state that "the cognitive load should shift slowly and purposefully from teacher-as-model, to joint responsibility, to independent practice and application by the learner" (p. 2). This process allows students to become what Graves and Fitzgerald (2003) call "competent, independent learners" (p. 98).

There are several steps to ensure that students are being asked to complete this type of intellectually challenging work, which increases test scores and improves performance on authentic assessment measures as well. Newmann et al. (2001) define *authentically challenging intellectual work* as the "construction of knowledge, through the use of disciplined inquiry, to produce discourse, products, or performances that have value beyond school" (p. 14).

Daggett (2005) agrees, stating that all students should be pushed "to achieve academic excellence, which ultimately boils down to applying rigorous knowledge to unpredictable, real-world situations, such as those that drive our rapidly changing world" (p. 5). Disciplined inquiry, which occurs in the classroom, requires that students "(1) use a prior knowledge base; (2) strive for in-depth understanding rather than superficial awareness; and (3) express their ideas and findings with elaborated communication" (Newmann et al., 2001, p. 15).

IMPLEMENTATION CONSIDERATIONS

1. **Cultivate schoolwide high expectations for students.**

QUICK LINKS: Online Sources for More Information

Doing What Works: Providing Research-Based Education Practices Online (Website)
http://dww.ed.gov/

Organizing Instruction and Study to Improve Learning (Publication)
http://ies.ed.gov/ncee/wwc/pdf/practiceguides/20072004.pdf

- Align instruction with the New York State P–12 Common Core Learning Standards. According to NYCDOE (2011b), schools in New York City are set to have fully adopted the P–12 Common Core Learning Standards for students to take aligned assessments during the 2014–15 school year. These standards are internationally benchmarked and rigorous; they clearly explain what students at each grade level are expected to know and be able to do. Some schools were involved in pilot programs in 2010–11.
- Develop a shared understanding of instructional rigor through collaborative curriculum planning, design, and/or redesign. When developing or revising curriculum maps, identify opportunities for formative assessment tasks that encourage higher-level thinking for each unit of study.
- Through teacher collaboration, develop common student assignments that ask students to perform rigorous and authentic tasks.
- Through teacher collaboration, develop common student assessments that include rigorous and authentic summative assessment tasks.
- Monitor implementation of expectations through classroom observations, lesson plan review, and student achievement results on common formative assessments.

2. **Provide professional development for teachers on instructional strategies that push students to engage in higher-order thinking.**
   - Provide ongoing professional development for teachers that describes the importance of pushing students to do higher-level thinking and provides strategies for how to do so. This training may be provided through ongoing professional development sessions and/or support of an instructional coach.
   - Create clear expectations regarding how teachers should implement this professional development in the classroom (e.g., one strategy utilized each day as reflected in lesson plans, authentic assessments at the end of each unit).
   - Identify how this professional development can be incorporated into scheduled teacher collaboration sessions.
   - Monitor implementation of professional development through classroom observations, lesson plan review, and student achievement results on common formative assessments.
3. **Develop examples of authentic intellectual work.**

   The following example can be used to help school leaders and teachers understand what authentic intellectual work might look like.

Examples of High-Scoring and Low-Scoring Measures of Authentic Intellectual Work

The research report *Improving Chicago's Schools: Authentic Intellectual Work and Standardized Tests: Conflict or Coexistence?* provides examples of two sixth-grade writing assignments: one that scored high and one that scored low on measures of authentic intellectual work. The authors conclude each example with a commentary of why the assignment received the score that it did.

High Scoring Writing Assignment

Write a paper persuading someone to do something. Pick any topic that you feel strongly about, convince the reader to agree with your belief, and convince the reader to take a specific action on this belief.

Commentary

In this high scoring assignment, demands for construction of knowledge are evident because students have to select information and organize it into convincing arguments. By asking students to convince others to believe and act in a certain way, the task entails strong demands that the students support their views with reasons or other evidence, which calls for elaborated written communication. Finally, the intellectual challenge is connected to students' lives because they are to write on something they consider to be personally important.

Low Scoring Writing Assignment

Identify the parts of speech of each underlined word below. All eight parts of speech—nouns, pronouns, verbs, adjectives, adverbs, prepositions, conjunctions, and interjections—are included in this exercise.

1. My room is arranged for comfort and efficiency.
2. As you enter, you will find a wooden table on the left.
3. I write and type.
4. There is a book shelf near the table.
5. On this book shelf, I keep both my pencils and paper supplies.
6. I spend many hours in this room.
7. I often read or write there during the evening...

Commentary

This assignment requires no construction of knowledge or elaborated communication, and does not pose a question or problem clearly connected to students' lives. Instead it asks students to recall one-word responses, based on memorization or definitions of parts of speech.

DOING WHAT WORKS: Examples From Real Schools

Perrysburg High School

Perrysburg High School in Perrysburg, Ohio serves students in Grades 9–12. Perrysburg is a suburb of Toledo.

Perrysburg is the sole high school in the Perrysburg Exempted Village District in Wood County. Nate Ash teaches physics to eleventh and twelfth graders. Ash has taught professional development programs at the Northwest Ohio Center of Excellence in Science and Mathematics Education, and at Bowling Green State University in Ohio. He acts as a mentor to new science teachers.

Ash teaches physics using an inquiry approach. Students do lab activities and solve problems together to understand key concepts in physics. In each lesson he poses higher-order questions to help his students build explanations: How do you know that? What would happen if we changed this variable? How is this similar or different? Ash uses whiteboards in a number of ways: for group problem solving, representing a phenomenon with pictures, and student presentations.

Each new unit/topic is introduced with a hands-on activity. Ash presents a physical situation to students, has them manipulate the variables, and then narrows down their list of variables to design an experiment. Every experiment is introduced with an open-ended question (What would happen if…? What happens when…?). Students work in small groups to describe what happens with graphs, pictures, mathematical equations, and written expression. When they are finished, students present their work to the class in whiteboard sessions.

Ash explains how the whiteboard sessions give important insights into student thinking: "We can really see if the students understand on every different level how that problem works or how that situation works. And if there is a disjoint between any of those representations, that gives us someplace to go, that gives us something to talk about, something to work through."

Students appreciate being in charge of their own learning, having the opportunity to challenge their peers, and develop critical thinking skills as they explain their ideas in front of a group. As Ash says, "Students really like this approach because, instead of just giving them the answer, it gives them a chance to explain to each other what's going on. And I like it because all the times that I have done physics problems on the board and gone through the answers, I got pretty good at doing physics problems but my students never got any better at all."

Ash has found that with this approach his students are no longer trying to find equations that fit the problems, but working to develop a deep understanding of the underlying concepts.

(Description from *Doing What Works* website: http://dww.ed.gov/media/CL/OIS/TopicLevel/case_perrysburg_52708rev.pdf)

QUICK LINKS: Online Sources for More Information

NYCDOE: Summer School and Flexible Scheduling Options (Websites)
Two NYCDOE guides to summer school opportunities and flexible scheduling options.
http://schools.nyc.gov/ChoicesEnrollment/SummerSchool/default.htm
http://schools.nyc.gov/NR/rdonlyres/9EF23CC9-8520-4C55-BE46-8BFD468F0E28/0/FlexibleSchedulingOptions.pdf

Afterschool in New York (Website)
A collection of information about afterschool programs in New York.
http://www.afterschoolalliance.org/policyStateFacts.cfm?state_abbr=NY

Research Review for School Leaders, Vol. III (Publication)
This book, partially available through Google Books, includes a section on scheduling options, including trimesters.
http://books.google.com/books/about/Research_Review_for_School_Leaders.html?id=TxtzewY8aDYC

Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies (Publication)
http://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf

Doing What Works: Increased Learning Time (Website)
http://dww.ed.gov/Increased-Learning-Time/Maximize-Attendance/practice/?T_ID=29&P_ID=76

Recommendation 3: Credit Recovery

Continue to enhance existing programs to improve credit recovery efforts. Ensure that these credit recovery programs flexibly meet students' needs, motivate students, monitor their progress, and include a college/career-oriented community.

Urban Assembly School for Media Studies employs a major academic intervention support: third trimester, where students are offered a variety of opportunities to ensure they will acquire their credit needs. In light of their success in this area, this recommendation is provided to help the school improve on an already successful program.

LINK TO RESEARCH

"Credit recovery options should be rigorous yet flexible, and should allow students to build their skills and credits at an accelerated pace toward on-time graduation" (Almeida, Steinberg, Santos, & Le, 2010, p. 18).

The recommendation identifies four key aspects of a successful credit recovery program: flexibility, student motivation, community, and data tracking. Each of these is rooted in research and practice. Together, the four work as a system in which strength in one area strengthens the other three, just as weakness weakens them.

The Importance of Flexibility. The program should be flexible so that it meets each student's schedule, learning pace, and needs. The population of students requiring credit recovery includes both the student who has missed one credit and the one who has missed several. The credit recovery program should be able to serve each of those students, despite their disparate needs (Watson & Gemin, 2008, p. 6). The students who also are considered at risk likely have home and work concerns that affect their ability to attend and focus on school. "Effective programs take a comprehensive approach, not only addressing […] school credits, but also addressing other factors that prevent students from succeeding" (p. 15). These factors may include having a child, being a runaway, having already dropped out, rarely attending class, and using drugs or drinking alcohol. The student's learning style, for example if the student is a visual or tactile kinesthetic learner, also may affect the ability to succeed in traditional classes (Trautman & Lawrence, 2004, p. 9). Flexibility, the ability to adapt to fit the students, also is an important part of ensuring that the students are motivated to succeed in their credit recovery programs.

Student Motivation. "Motivating students who have failed in the traditional classroom setting is a key to success for credit recovery programs" (Watson & Gemin, 2008, p. 14). Unfortunately, ensuring motivation can be a difficult task. According to motivational theory, students require two beliefs in order to be motivated. These are the beliefs that the goal is both worthwhile and attainable (Ames, 1992 as quoted in Roderick & Engel, 2001, p. 200). After failing once, students may not see that they can succeed. Additionally, they may not see the value of earning credits or graduation. Unless students have a high level of self-efficacy, their inability to see the high school's relevance may result in a lack of effort (Surland, 2010).

The Need for Community. A college/career-oriented community allows students more time with their teachers and provides a clear goal for students in which their credits matter: life after high school. Learning communities positively affect "student achievement, school

climate, school attendance, and graduation rates" (Dynarski et al., 2008, p. 30). The smaller communities provide students with more opportunities to interact with their teachers on a one-to-one basis, which is something students desire. During an evaluation of an online course, a group of students was asked how the program could be improved. Sixty percent said that they wanted "more direction and communication from the teacher" (Oliver, Osbourne, Kleiman, & Patel, 2009, p. 42). The community also needs to guide students toward college and career options. This way students may more easily visualize the relevance of a high school diploma. According to a What Works Clearinghouse panel, "a focus on learning and high expectations for student achievement" enhanced the learning community's efforts (Dynarski et al., 2008, p. 30).

Data Tracking and Analysis. A good data tracking system allows the school to identify the students who are in need of credit recovery and track them toward completion. The data system, providing it is comprehensive, also can allow for early interventions, lowering the need for intense credit recovery programs (Almeida et al., 2010, p. 12; Gewertz, 2009). For example, the school could target students with low attendance and provide academic intervention services before their habitual truancy caused them to lose a credit. Data also could inform the pacing of the credit recovery programs, enabling higher levels of flexibility and personalization.

IMPLEMENTATION CONSIDERATIONS

The best credit recovery program(s) will vary by school. Urban Assembly School for Media Studies has already addressed its credit recovery needs, yet still has capacity to improve. The first step in optimizing or implementing a credit recovery program is to *identify the school's need, resources, and capacity*. Then, based on this information, the school will need to *select a model*. The model has two main components, most easily summarized in the following questions: when and what. Finally, the school must *monitor its chosen program(s), evaluate the effectiveness, and make adjustments as necessary*. At each step, the school should focus on maximizing flexibility and student motivation, while maintaining a college/career-oriented community and including data tracking and analysis.

1. **Identify needs.**

   The identification process is twofold. First, the school must examine its student data and determine which students are in need of the greatest number of credits. This will allow the school to target its efforts where the need is greatest. In addition, the school should determine what it can and cannot offer in-house. For example, if the school does not have many computers available, an on-site, computer-based credit recovery program would be ill advised.

   Second, the school should determine students' preferences regarding credit recovery programs. One of the easier ways would be to give students and their guardians a short survey asking when the students could and would prefer to attend credit recovery programs, and about the students' interests. If most students have work after school, an afterschool program would not be the best option for the school. The questions about the students' interests would allow the school to tailor programs and develop alternative credit-bearing courses that fit student needs and interests (Beckett, 2009, p. 21). For example, if several students express interest in automobiles, the school could structure a science or math class around automobile mechanics and design.

2. Select a model.

Selecting a model first requires deciding *when* the program will take place, and then determining *what* that program will be. Not all of these options will be immediately feasible for every school. For example, if a school does not already have an afterschool program in place, it would require a school-based option vote in order to offer one. As school-based option discussion and voting typically take place in the spring, the afterschool program may not be possible for the 2011–12 school year. The school could, however, discuss the program in spring 2012 and ratify it for the 2012–13 school year.

Credit Recovery Programs

Options Based on When the Program Will Take Place

Afterschool, Evening/PM School, and Saturday School

This option lengthens the school day or week. Classes during these times may be particularly engaging for students when they incorporate preparation for college/careers (Pennington, 2006; Afterschool Alliance, 2009). These options do not take away from and are more flexible than the regular school day. However, students may not attend due to other commitments or a lack of engagement. The school also would need access to its facilities and staff during these times. Finally, these options would require a school-based option vote to implement, as well as an extended use permit.

Summer School

Another option is lengthening the school year. Summer school may take place on campus—a matter that would require a school-based option vote—or at another school with a program. A summer program does not take time from and may be more flexible than classes during the regular school year. In addition, summer programs can make learning more continuous over the long holiday, possibly increasing knowledge retention. However, ensuring staffing and facilities can be difficult for the schools, given concerns such as budgeting and air conditioning. While students can attend off-campus programs, they may not know how to enroll or, having enrolled, may not attend. If the school opts to use off-site programs, it should provide support during enrollment and check in with students once the summer programs begin.

Trimesters

New York allows schools to restructure their school days and year in several ways, including allowing the school to divide the year into three terms rather than two. The basic trimester system is three cycles of 60 days. The other system, which the NYCDOE refers to as the 75-75-30 Plan, divides the school year into two long terms and one short term. The short term may also be divided into two 15-day terms. These systems provide time for credit recovery, as well as enrichment programs, short electives, and compressed courses (NYCDOE, n.d.).

Credit Recovery Programs

Options Based on What the Program Will Offer

Credit-Bearing Alternatives

Rather than require students to recover their credits by retaking the class, the school may repackage the credit-essential elements of the class within an elective course. This is an area in which knowing the students' interests and goals would be helpful. The school also may offer credit for community service or internships supplemented with a project, essay, or other form of assessment. While students may find these alternatives more engaging, designing the courses and, in the case of community service and internships, finding opportunities may be difficult. This credit recovery option requires that the school make opportunities for its students, although programs such as Learning to Work and relationships with other community organizations can help.

Virtual Schools and Online Courses

The use of computer-based learning, both off and online, is growing and spreading. New York has recognized the potential of such programming through its creation of the School of One and Innovation Zone (iZone), which piloted iLearnNYC—an online credit recovery and elective program—during the 2010–11 school year. Courses may take place within a single program, in conjunction with online elements (e.g., message boards, video chat), or blended with face-to-face classroom instruction. They also may take place on campus or wherever a computer and Internet connection are available. The most effective courses, however, are those that include student-instructor interaction and individualization, both in the program's adaptability and the student's control over content (Means, Toyama, Murphy, Bakia, & Jones, 2010; Oliver, Osborne, Kleiman, & Patel, 2009; Watson & Gemin, 2008; Witta & Witta, 1999). If the school already has a computer-based credit recovery program in place, then it may wish to increase the student-instructor interaction through a blended face-to-face approach or introduction of a message board or other form of online communication. The school also may seek ways to individualize the program through better pacing and differentiation, or by giving the students more control over their programming and, if possible, course content.

DOING WHAT WORKS: Examples From Real Schools

Wichita Falls High School

The "[Continuous Achievement Placement System (CAPS)] is an intensive credit recovery program that relies on technology-delivered curriculum content" (Trautman & Lawrence, 2006, p. 1).

In order to combat its dropout rate, Wichita Falls High School decided to provide credit recovery through the Continuous Achievement Placement System. Rather than just provide students with online content, in this case the American Education Corporation's A+dvanced Learning Systems (A+LS), the Continuous Achievement Placement System builds a community and culture around the online programming. The Continuous Achievement Placement System operates out of two classrooms in Wichita Falls High School, maintaining a 20–1 student-to-teacher ratio. Each of these classrooms contains 18–24 computers. The program is a morning-to-afternoon (7:45-2:45) school within a school (Trautman & Lawrence, p. 9) in which students learn at their own pace within a collegial atmosphere and receive personal attention and guidance. While "students primarily work independently," new students to the program are paired with successful peers. Students enter the program by counselor referral, although the school study team may suggest students to the counselors. The program is not targeted for students with behavioral problems.

An in-house evaluation of the Continuous Achievement Placement System found that students in the program had better attendance rates than their peers outside the program, and that they earned credits at a swifter pace. Standard education students earned an average of 4.47 credits per student, while Continuous Achievement Placement System students earned an average of 10 credits. As for attendance, Continuous Achievement Placement System students outperformed the standard education students by almost three percentage points (Trautman & Lawrence, p. 14). The study also found that the Continuous Achievement Placement System "appears to be exceptionally effective for limited English proficient and economically disadvantaged students" (Trautman & Lawrence, p. 21). The study compared pass rates on the Texas Assessment of Knowledge and Skills between limited English proficient students within the program and limited English proficient students in the whole state. For mathematics, Continuous Achievement Placement System –limited English proficient students had a 92 percent pass rate. Texas–limited English proficient students had a 59 percent pass rate. The difference for the ELA pass rate is nearly as great. Continuous Achievement Placement System – limited English proficient had a 68 percent pass rate, while Texas- limited English proficient had a 42 percent pass rate (Trautman & Lawrence, p. 16). Wichita Falls High School blended computer-based credit recovery with a personalized community and data tracking and analysis to create a program that fit the school and worked for the students.

Learning Tools on the Internet

Following is a sample of some online educational resources that can be used to build or provide additional means for schools to provide enrichment and/or additional academic support to students in need. The links are provided as examples of tools available to schools and students on the Internet. Learning Point Associates recommends that schools take advantage of the myriad websites and learning tools available to them, but we neither recommend nor endorse resources included in the following list any more or less than any other similar services. Additionally, this list is not intended as a comprehensive library of online tools and resources available but rather as a small sample.
*+ free with paid options; * free for individuals, paid for a group*

Online Flashcards

Students may create their own deck of flashcards or download a previously created deck. Teachers can create decks for student use. Several services also allow syncing between computers and cell phones. The decks all use some form of a spaced-repetition system. This system tracks student progress with the cards, ensuring that they review cards they struggle with more frequently than those they do not.
Anki (http://ankisrs.net/)
Mnemosyne (http://www.mnemosyne-proj.org/)
Study Stack (http://www.studystack.com/)
Head Magnet (http://headmagnet.com/)

Online Whiteboards

Teachers can use online whiteboards much as they would the ones in their classrooms. This would allow teachers to share visual notes with students who are unable to be physically present and tutor students at a distance. Students also may use the whiteboards to work on projects together.
+Dabbleboard (http://www.dabbleboard.com/)
ScribLink (http://www.scriblink.com/)
+Twiddla (http://www.twiddla.com/)
Stixy (http://www.stixy.com/)

Wikis

A wiki is an easy way for one or more people to collect and link notes. Students may build a wiki together, creating a potentially useful study tool. A wiki could facilitate discussion of class materials and help students organize class concepts.
+Wikispaces (www.wikispaces.com)
+PBWorks (http://pbworks.com/content/edu+overview)

Presentations

The Internet offers several means of creating and sharing presentations online. Teachers could share presentations with students who are not able to be physically present and supplement classroom lectures. Students also could use the presentations to revisit class topics near test time.
+Glogster – Create interactive, online posters (http://www.edu.glogster.com/)
+Prezi – A creative alternative to PowerPoint (http://prezi.com/)
+Slideshare – Host and share presentations online (www.slideshare.net)

Brainstorming and Collaboration

The Internet has many options for facilitating cooperative thinking and creativity. Students may create mind-maps together or edit a document together in real time.
Bubbl.us (https://bubbl.us/)
+Mind Meister (http://www.mindmeister.com/)
Google Docs (https://docs.google.com/)
Storybird – Collaborative, visual storytelling (http://storybird.com/teachers)

Web Conferencing

Web conferencing allows a group of people to share materials, talk together, comment on a presentation, and more. Each service has its own strengths and weaknesses. If students are unable to attend an academic intervention service, a teacher could offer long-distance tutoring through a web conference.

Wiggio (http://wiggio.com/)
+Skype (http://www.skype.com/intl/en-us/home)
Mikogo (http://www.mikogo.com/)
+Yugma (https://www.yugma.com/)

Video Lectures and Demonstrations

Many professors share lectures and lecture series online. Other websites include demonstrations on a variety of topics. Teachers may pull from these resources, or use them as inspiration in creating their own resources.

Wolfram Demonstrations (http://demonstrations.wolfram.com/)
Vialogues – Allows real-time commenting on a video (https://vialogues.com)
*Voice Thread – Allows various forms of commenting on online media (http://voicethread.com/)
Khan Academy – Videos and practice exercises on a variety of topics (http://www.khanacademy.org/)
Youtube (http://www.youtube.com/education?b=400)
Videolectures.net (http://videolectures.net/)

Blogging

Blogs are online journals. Teachers may check for updates regularly and leave comments on student posts. A Rich Site Summary (RSS) feed would allow the teacher to check one page for updates, rather than visit each blog individually. Students could keep an online journal of their study progress. They also could share where they are having difficulties, allowing teachers or fellow students to provide help in the comments.

Wordpress (http://wordpress.com/)
Blogger (http://www.blogger.com/)
Google Reader (RSS) (http://www.google.com/reader/)

Study Groups and Social Networks

Students may connect with others who are studying similar material. The groups are especially useful for foreign language study. A social network is an easy way to connect students with similar needs together to facilitate additional learning.

Edmodo – Social networking site created for teachers and students (http://www.edmodo.com/)
Open Study – A place to connect with others studying similar topics (http://openstudy.com/)
Livemocha – A place to study foreign languages with native speakers (http://www.livemocha.com/)
+Yammer – Private social networks (https://www.yammer.com/)

Miscellaneous

Moodle – Open source Course Management System (http://moodle.org/)
Wallwisher – Online notice board (http://www.wallwisher.com/)
Connexions – Course management system (http://www.cnx.org)
LiveBinders – Online three-ring binders (http://livebinders.com/welcome/home)
+Evernote – Facilitates online notetaking, notebooks may be shared (https://www.evernote.com)
Google Art Project – Virtually visit several famous museums (http://www.googleartproject.com/)
+Dropbox –Online flash drive for easy file sharing (http://www.dropbox.com/)
+SpiderOak – Similar to Dropbox (https://spideroak.com/)

Recommendation 4: Professional Development and Collaboration

Provide structure and purpose of collaboration between teachers and connection to school goals and professional development.

Urban Assembly School for Media Studies provides plentiful, meaningful professional development and encourages professional collaboration. The school also uses teachers' abilities to modify curriculum to meet the needs of students, collaborate, and discuss solutions to student issues to help students succeed. This recommendation, as requested by Urban Assembly School, provides information on the latest research and sources on how to improve an already excellent program.

LINK TO RESEARCH

Research has found that professional development for teachers is most effective and boosts student achievement when it is embedded in their daily work and sustained, as opposed to a one-time workshop model (National Staff Development Council, 2001; Steiner, 2004; Wei, Darling-Hammond, Andree, Richardson, & Orphanos, 2009; Yoon, Duncan, Lee, Scarloss, & Shapley, 2007). Effective professional development also provides teachers with opportunities for collaboration, coaching, and peer observation, which allows them to be actively involved in their own development and more frequently practice learned skills (Center for Comprehensive School Reform and Improvement, 2006; Joyce & Showers, 2002). In addition, professional development is most effective when it is directly connected to teacher practice and focuses on content (National Staff Development Council, 2001; Wei et al., 2009; Yoon et al., 2007). Content areas should align with school improvement needs and goals to target improvement to those areas.

By refining the process by which professional development is offered, ensuring that it is embedded, sustained, and allows for active teacher participation, and by focusing the development on teacher practice and content, schools can improve teacher practice and student achievement (Wei et al., 2009; Yoon et al., 2007).

IMPLEMENTATION CONSIDERATIONS

Creating a professional development plan that addresses both student learning and teacher learning can be a complex task, one that Urban Assembly School for Media Studies has already completed. Professional learning activities should be designed with student achievement as both the impetus and outcome. School improvement goals should be related directly to a review of student achievement data. Urban Assembly School for Media Studies uses data well to inform teacher collaboration regarding student success and placement. Subsequently, teacher learning activities should be related directly to the goal of improving student outcomes. At minimum, successful schoolwide professional development plans include the following sequential steps:

1. **Analyze student data/conduct a needs assessment.**
   - Review student learning data such as an item analysis of state test results, interim assessment results, school quality review, or ESCA report.

QUICK LINKS: Online Sources for More Information

Public Impact—Professional Development for Educators (Website)
http://www.publicimpact.com/teachers-leaders/professional-development-for-educators

National Comprehensive Center for Teacher Quality–*High-Quality Professional Development for All Teachers: Effectively Allocating Resources* (Publication)
http://www.tqsource.org/publications/HighQualityProfessionalDevelopment.pdf

- Identify areas of low proficiency, slow learning progress, drops in proficiency between grades, and subgroup and gender differences.

2. **Select goals for student learning.**
   - Identify specific and measurable (SMART) learning goals for students.
3. **Select professional development goals for teacher learning.**
   - Identify specific and measurable teacher learning goals, directly related to student learning goals.
4. **Select professional development activities to meet goals.**
   - Determine what activities will best meet teachers learning needs (e.g., workshops, coaching, collaborative inquiry, intervisitation).
   - Consider available resources (time, money, materials) and a range of professional development activities and match with the needs of adult learners.
5. **Implement professional development activities.**
   - Ensure that teachers have time and resources for activities (e.g., research, articles, video clips, coaches, opportunities to observe master teachers).
   - Provide teachers with clear expectations for integration into their pedagogical practice, structures and protocols for activities, and opportunities for reflection.
6. **Evaluate impact.**
   - Develop an evaluation plan.
   - Identify what to measure, how to measure it, and when to measure it.
   - Create a frequent and ongoing schedule of evaluation.
7. **Modify professional development plan.**
   - Determine the impact of the professional development activity.
   - If the activity achieves or fails to achieve its desired results, modify the plan accordingly.

Sample Professional Learning Plan

- **Needs Assessment.** A significant drop in mathematics proficiency between fourth and fifth grade. Further review of test item analysis indicates that students did not demonstrate proficiency in fractions.
- Student Learning Goals. At the end of the third quarter of fifth grade, 75 percent of all students will pass an end-of-unit test on fractions.
- **Professional Development Goals for Teachers.** At the end of the spring semester, all fifth-grade teachers will demonstrate an improved ability to teach fractions as measured by their implementation of new instructional strategies and improved student learning.
- **Professional Development Activities.** In the fall, before teachers begin the fractions unit, fifth-grade mathematics teachers will meet twice a month to discuss and share new curriculum materials related to fractions and design joint interim assessments to measure student progress. Teachers will receive the assistance of a mathematics instructional coach. In the summer, review schedules to ensure that fifth-grade teachers have common planning time to meet. Gather curriculum materials and meet with instructional coach to discuss implementation.
- **Evaluate Impact.** Measures of evaluation include (1) percentage of students meeting objectives, and (2) staff pedagogy measured by regular and ongoing observations conducted by the school's instructional leaders.

Adapted from *Apply What You Know: Designing Effective Professional Development* (Steiner, 2009).

Professional Development Plan for New Vision High School (2004–08)

The New Vision High School plan was the culmination of four years of work. Each year, the school made incremental changes in how teachers experienced professional development. They engaged in small, school-based interdisciplinary learning teams (that met three times a week for 45 minutes) developing their own learning plans for the year.

YEAR ONE

The new principal, Leslie Richardson, began the process by focusing on student learning needs and how large schools could be structured to provide a more personalized learning environment for students and teachers. The principal took the following actions:

- Made brief walk-throughs of classrooms
- Interviewed faculty members to collect perception data
- Used faculty meetings for small-group discussion about alternative structures for large schools and research-based teaching strategies
- Formed a team of 10 who visited a high school that had divided into houses

YEAR TWO

The faculty divided itself into small study groups. Each group focused on a specific topic related to a restructured high school format. Topics included block scheduling, advisor-advisee programs, problem-based learning, and senior projects. Each team also was responsible for creating and implementing interactive activities about their topics for faculty meetings.

YEAR THREE

The faculty voted to divide into interdisciplinary houses that use a modified block schedule advisor-advisee system and senior projects. The school offered five- or 10-day summer workshops on how to teach in a block schedule, problem-based learning, cooperative learning, and serving as an advisor. Teachers were assigned to a multidisciplinary team and a subject-area team. These teams supported and followed up on the same topics offered during the summer institute and conducted problem-solving discussions to help support the desired changes. A small team representing each content area attended a summer institute, joined a school-to-school network, and attended three follow-up meetings designed to provide support and assistance to the entire school as the faculty worked through this change.

YEAR FOUR

Teams took on the responsibility of forming their own learning plans based on the analysis of student data. The data included state achievement tests, district-based interim assessment data, and classroom projects. Teacher teams created their own learning goals for students as well as plans for their own learning and refinement of expository writing in their classrooms. These plans were reviewed by administration and shared with other teams in order to promote cross-team collaboration.

(Ozarks Unlimited Resources Educational Service Cooperative, 2008)

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