Case Study: Sustaining Excellence Through Action Research
Academy for Information Technology

Reaching Greater Heights

The hallmark of some of the best performing schools around the world is that no matter how great they are they continue to push to be even better. The Middle States Association Commissions on Elementary and Secondary Schools helps high-performing schools, including career and technical schools, reach even greater heights through action research-based accreditation.

Under the Middle States Sustaining Excellence protocol, rather than complete a traditional self-study for reaccreditation, leading schools have the option to focus their time, energy and resources on developing, implementing and sharing an action research project for achieving their goals. A key component of the protocol is the requirement for schools to hold a colloquium to share their research results with the broader education community with the goal of improving education on a wider scale.

Action research IS:
- A problem-solving process
- A quest for knowledge on how to improve
- About people with a common interest working together to investigate best practices in a quest to adapt skills, techniques and strategies

Action research IS NOT:
- A process simply to learn more about a topic

Notes From the Field: Academy for Information Technology

Great Schools INSPIRE

The Academy for Information Technology (AIT) is a small, four-year career academy based in Scotch Plains, N.J., that fosters critical thinking skills in its culturally diverse student population. By stressing intellectual curiosity, hard work, ethical behavior and technological expertise with business integration, the school community guides its students to achieve their greatest potential. The AIT graduate is prepared academically, technologically and interpersonally for the challenges of the future.

AIT earned reaccreditation through Middle States in 2016 under the Sustaining Excellence protocol with the goal of using action research as a framework to develop career readiness skills in students in all grades. The school posed seven research questions:

1. What more can be done to prepare our students for careers in Business and in Information Technology?
2. How can we increase the frequency and efficacy of networking events?
3. How can we expand the role of school counselors in student career exploration?
4. How can we increase the frequency and efficacy of structured learning experience?
5. As a faculty, how can we better integrate business and information technology skills and concepts across the curriculum?
Because business and information technology requires a lifetime commitment to learning, how can we better prepare students to conduct independent, academic research?

How can we expand our relationships with local universities to ensure our students xcel at the university level and have the potential to earn college credit?

In setting out to answer the questions, AIT engaged the entire school community, including faculty, administration, members of the AIT advisory board, parents, students, and outside business leaders. As a group, they researched and identified specific areas of focus and adopted an initiative called “Great Schools INSPIRE.”

Interdisciplinary commitment to:
- Networking Through Career Events
- Structured Learning Experiences
- Portfolio Development and Presentation Skills
- Integration of IT and Business Skills and Concepts
- Research Skills
- Early College Credit

Working with its stakeholders and guided by action research, AIT implemented a variety of successful plans and programs within these areas. Among the highlights:

- Career events including Statistics Career Day, Novo Nordisk Career Day, Novo Nordisk Field Trip, Bell Labs Guest Teacher, 12 Days of Code, Cyber Security Month, HACKUC III
- Pre- and post-surveys for interns
- Adoption of the Career Interest Profiler
- Development of a student career interest survey
- Development and incorporation of a presentation rubric throughout the curriculum and across disciplines
- Adoption of an e-portfolio requirement for all students beginning freshman year
- Acceptance into the Waksman Student Scholars Program, which provides opportunities for high school students and their teachers to conduct an authentic research project in molecular biology and bioinformatics and publish their findings.
- Adoption of AP Capstone program
- Development of a research rubric to evaluate student research

By developing and implementing a multi-tiered approach to continuous school improvement, based on action research, AIT is building on its success to further prepare its students for a viable future.

The Middle States Sustaining Excellence Protocol provides an accreditation option for schools that can demonstrate:

1. Their efficacy, over time, in producing the levels of student performance desired and expected by their community of stakeholders

2. What Doug Reeves calls a "leading school." Leading schools are those that are achieving high levels of student performance, have an excellent understanding of the necessary antecedents for those results, and are likely to continue achieving those high results over time.

(Reeves, Doug. (2006). The Learning Leader: How to Focus School Improvement for Better Results. Association for Supervision and Curriculum Development.)