

DOCUMENT RESUME

ED 462 563

CE 082 958

TITLE Case Study: North Laurel High School, London, Kentucky.
 INSTITUTION Southern Regional Education Board, Atlanta, GA.
 PUB DATE 1997-00-00
 NOTE 18p.; Part of the High Schools That Work (HSTW) Initiative. For other case studies, see CE 082 956-964 and UD 034 827.
 AVAILABLE FROM Southern Regional Education Board, Publication Orders Department, 592 10th St. N.W., Atlanta, GA 30318-5790 (97V06; \$1). Tel: 404-875-9211, ext. 236; Fax: 404-872-1477; Web site: <http://www.sreb.org/>. For full text: http://www.sreb.org/programs/hstw/publications/case_studies/North_Laurel.asp.
 PUB TYPE Reports - Research (143)
 EDRS PRICE MF01/PC01 Plus Postage.
 DESCRIPTORS *Academic Achievement; Academic Standards; Achievement Tests; Block Scheduling; Case Studies; Community Support; Education Work Relationship; *Educational Change; *Educational Improvement; English Instruction; Graduation Requirements; High Schools; *Instructional Leadership; Integrated Curriculum; Mathematics Instruction; Participative Decision Making; Partnerships in Education; Program Improvement; School Business Relationship; School Community Relationship; School Guidance; School Holding Power; Science Instruction; Staff Development; Teacher Administrator Relationship; Teacher Collaboration; *Teacher Expectations of Students; *Vocational Education
 IDENTIFIERS High Schools That Work; Southern Regional Education Board

ABSTRACT

When North Laurel High School, London, Kentucky, opened in Fall 1992, students and teachers entered a new facility and a new era of commitment to excellence for all students. In Spring 1993, North Laurel joined the Southern Regional Education Board's High Schools That Work initiative. The new school replaced the general track and raised graduation requirements. The guidance department developed a guide focusing on career majors. As students increasingly selected vocational majors, ties with the area vocational center were strengthened. Block scheduling was implemented. Many changes originated in the school's decision-making council whose members--two parents and three teachers--are elected by the community to one-year terms; the principal also serves on the council. These factors contributed to North Laurel's success: teacher participation, staff development, new ways of teaching and learning, authentic assessment, block scheduling, guidance, special programs to help students meet higher standards, closer ties with local employers, and use of available data. Performance of students on Kentucky reading, mathematics, and science exams improved steadily; the percentage of students taking the ACT increased from 47 to 61 percent, and the average score increased; and students were more apt to remain in school and attend regularly when they were focused and challenged. (YLB)

Case Study: North Laurel High School,
London, Kentucky.

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS BEEN
GRANTED BY

M. A. Sullivan

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

1

Case Study

NORTH LAUREL HIGH SCHOOL London, Kentucky

A Strong Sense of Purpose Leads to Higher Student Achievement

When North Laurel High School opened for the first time in the fall of 1992, students and teachers not only entered a new facility but a new era of commitment to excellence for all students. Residents of London and Laurel County, Kentucky, take pride in the handsome new school building, and educators from across the nation visit the campus each year to study its design. But the community is equally proud of the high school's outstanding academic and technical programs that maximize opportunities for every student.

North Laurel's strong sense of purpose permeates the community. District and school leaders, teachers, parents and community leaders have high expectations for all students and are working together to provide a first-rate educational experience. Their efforts are paying off in increased achievement, better attendance, fewer discipline problems and clearer pathways to jobs and further education.

"For years, we have done a good job of preparing students for college," Laurel County Superintendent Joe McKnight said. "Now we are preparing them for the demands of life and work as well as postsecondary education. Getting youth ready for college is easy compared to giving them the skills to be life-long learners and productive members of society."

Located in the foothills of southeastern Kentucky, the town of London has approximately 8,000 residents in a county of over 50,000 population. Laurel County is one of the fastest growing counties in the state. Small tobacco and cattle farms dot the area, but the economic landscape is changing. Access to the interstate highway system is helping the county become a distribution hub for the surrounding area and other states. New businesses include a cookie factory, a Wal-Mart distribution center and an electrical parts warehouse.

The new school is one of two high schools replacing a large comprehensive high school that had served students county-wide. North Laurel enrolls youth from the northern half of London and Laurel County. "Having a high school of their own has restored people's community pride," noted Principal Greg Smith.

North Laurel enrolls over 1,200 students in grades 9 through 12; it has a teacher-pupil ratio of 22 to 1. Most students have working-class parents, many of whom received no formal education beyond high school and may be so busy making a living that they have little time to spend with their children. Forty percent of the students are eligible for free or reduced-price lunches.

Educators and townspeople were presented with a “clean slate” when construction of North Laurel High School began. “The superintendent, the school board and I talked long and hard about what we wanted the school to be for our students,” Smith said. They encouraged input from local employers and parents as they designed a rigorous curriculum to prepare the next generation of Laurel Countians.

As community leaders toured the new facility, they expressed a need for better qualified employees and asked school leaders for curriculum and instruction that would equip youth to handle the tasks and responsibilities that characterize an increasingly complex workplace. Employers offered to help school officials identify the academic and technical skills that make the difference between success and failure in the real world.

“North Laurel has a good reputation in the community,” said Randy Smith, executive director of the London-Laurel County Chamber of Commerce. “Our employers are pleased with the progress the school is making and are happy to support work-based learning and other efforts aimed at getting youth ready for the workplace.” Smith is currently matching students to local employers who have volunteered to provide work-based experiences for these youth.

HIGHER EXPECTATIONS

The first decision concerning the new school was to raise expectations and give all students an opportunity to learn at a higher level. “We wanted to hold all students to high academic standards while increasing the number enrolling in postsecondary education, whether at a two-year community college, a vocational technical school or a four-year institution,” Smith said.

In the spring of 1993, North Laurel High School joined the Southern Regional Education Board’s *High Schools That Work* initiative. Smith heard about *HSTW* from a high school principal in a neighboring county who was enthusiastic about the gains his school was making by implementing the *HSTW* key practices. “We knew *HSTW* would give us access to the latest data and information for school improvement,” Smith said. *HSTW* has provided a framework for the major changes still taking place at North Laurel.

North Laurel has benefitted from being able to learn from other high schools in the *HSTW* network. “Through conferences, workshops, technical assistance visits, publications and videos, SREB generously shares information on outstanding school and classroom practices,” Smith said. “By participating in the *HSTW* Assessment, we receive data for measuring where we are now and how far we have to go to reach our goals.”

At the same time that North Laurel was beginning to implement the *HSTW* key practices, the state was moving forward with its Kentucky Educational Reform Act and the Kentucky Instructional Results Information System (KIRIS). The state paved the way for progress at North

Laurel by setting high performance standards, helping school leaders assess the results and mandating community involvement. In early 1996, the general assembly strengthened what Kentucky and its local schools were doing to upgrade academic and technical education statewide. The new legislation calls for a comprehensive school-to-work transition system involving business, education and government in developing a demanding school-based academic and technical curriculum and workplace learning.

In 1996 the Kentucky Board of Education began considering a proposal to raise high school graduation requirements from 20 credits to 22 credits. The credits would include an upgraded academic core similar to the one that SREB recommends and that many *HSTW* sites in Kentucky have adopted. Since North Laurel has already taken such action, school leaders are being asked by the state and other schools to share their experiences in implementing a more challenging program of study.

The state has supported North Laurel in its improvement efforts by providing technical assistance, workshops and funds for local staff development and materials. Smith offers a good example of state support: When too few students were enrolling in physics, a physics teacher requested information from the state on an applied physics course and attended a state-sponsored workshop on teaching the course. Since North Laurel added the course to the school schedule, the enrollment has doubled and student achievement has increased.

“We could have made superficial changes to meet state standards,” Smith said, “but we wanted our school to change fundamentally.” The result has been a challenging program of study for all students, instructional practices to actively involve students, and guidance and extra help systems to boost student performance.

NO MORE GENERAL TRACK

The first order of business at the new school was to replace the general track. Three years ago, the school offered both college preparatory and “regular” English, mathematics and science courses. The college prep courses were taught at a higher level than the “regular” classes. Now, there is no distinction between students planning to pursue a four-year college or university degree and those planning some other type of postsecondary activity. To help students achieve at a higher level, school leaders created extended school services, including after-school tutoring and summer school programs.

North Laurel leaders and teachers did away with the general track by adopting a requirement that all students complete the SREB-recommended curriculum of four college preparatory level English courses, three mathematics courses (including two at an advanced level) and three science credits (including two in advanced courses). The requirements are being phased in and will be fully realized with the class of 1999.

In mathematics, the school dropped low-level courses such as Essentials of Math, Fundamentals of Math and Business Math. All students complete Algebra I and II and geometry. This solid foundation of mathematics concepts equips students with problem-solving skills that they will need in life beyond high school.

Previously, North Laurel students could graduate with only two science credits. The class of 1999 will need three, including two in advanced courses. Students are taking biology, physics and chemistry as well as advanced placement science courses.

To bolster their language arts skills, students take four college preparatory level English courses. They also complete a writing portfolio consisting of a personal narrative, a short story, pieces that explain and analyze topics, and a letter to the portfolio reviewer. Teachers have been trained in how to ensure quality portfolio entries and how to score the students' portfolios.

Students are gaining the confidence to take tougher courses. Last year, the number of students taking trigonometry tripled and the number enrolled in calculus doubled. Two additional sections of Advanced Placement calculus opened in 1996-97.

Progress in Students Completing an Upgraded Academic Core

	1992-93	1995-96
3 mathematics credits (2 advanced)	44%	85%
3 science credits (2 advanced)	50%	63%

In addition to an upgraded academic core, all students must complete four credits in a vocational major. Between 1992-93 and 1995-96, the percentage of students completing a college prep major increased from 40 percent to 55 percent and the percentage completing a career major almost doubled--from 25 percent to 47 percent. Some students complete the requirements for both types of major.

Progress in Students Completing a Major

	1992-93	1995-96
College prep major	40%	55%
Career major	25%	47%

Note: Some students complete both.

In the fall of 1966, the guidance department unveiled a guide focusing on career majors. The guide contains lists of required courses and recommended electives for a number of career majors that students can take at the high school as well as the area vocational center. "The career major requirement has turned some students around," said Eldon Harris, technology education teacher and work-based learning coordinator. "They are more focused on the future. In the past, many students said they wanted to enter a certain business or profession but never took courses in these areas in high school. Now, students are choosing courses to support future education and broad career goals."

As students increasingly select vocational majors, ties with the area vocational center have been strengthened. A steering committee composed of academic and vocational teachers from North Laurel, South Laurel High School and Kentucky Tech Laurel County Campus meets periodically to devise ways to satisfy current business and industry requirements through the curriculum. Over 120 North Laurel students took classes at Kentucky Tech in 1996-97.

North Laurel faced a number of challenges in replacing the general track. Some teachers doubted that career-bound students could successfully handle high-level content. Some parents were afraid that an academic core and a major for all students would jeopardize the performance of youth at the top and the bottom and benefit only those students in the middle. To overcome these doubts, school leaders have used staff development, increased involvement of teachers and students, and open communication between the school and the home. Teachers who were accustomed to years of tracking students into "easy" courses are becoming more confident about teaching challenging content to all students as they meet and talk with other teachers and witness what career-bound youth can achieve. Parents of students in grades 9, 10 and 11 attended meetings at the school to learn how a more rigorous program of study would benefit their children. Such meetings will be held for parents of ninth-graders annually in the future.

HIGHER GRADUATION REQUIREMENTS

North Laurel has made major changes in graduation requirements. When the school opened, students needed only 20 credits to graduate. Beginning with the class of 1998, students will need 28 credits to earn a diploma. The number is rising steadily as students move through high school. Block scheduling makes it possible for students to take eight courses per year (four per semester).

The new requirements include an individual graduation plan, a portfolio of high school achievements to show to employers and postsecondary officials, a senior project, a writing portfolio, a mathematics portfolio and an exit review. The senior project is being piloted in an 11th-grade English class in 1996-97. The components include a research paper, a project and a presentation to a panel of teachers, community members and experts. Now in development, the school's exit standards will require students to demonstrate proficiency before they can receive credit. Initially, North Laurel students will demonstrate proficiency by passing an exit exam in

each course. Ultimately, students will be expected to score at the proficient level on state reading, mathematics and science exams. The standards will be linked to the six learning goals and 57 academic expectations of the Kentucky Education Reform Act and to the 10 key practices of *HSTW*.

PARTICIPATION IN MAKING THE CHANGES

Many of these changes originated in the school's decision-making council, which meets monthly. Council members--two parents and three teachers--are elected by the community to serve one-year terms. The principal also serves on the council. Using *HSTW* and other school improvement models as a framework, these leaders made the tough decisions to drop low-level courses and increase graduation requirements. They also adopted block scheduling and introduced an advisor-advisee program.

In considering school improvement actions and policies, the council receives recommendations from 10 school committees that meet monthly to evaluate, plan and implement improvements. The committees address topics such as instruction, guidance, home and school relationships and evaluation of progress.

Council actions needing school board approval or support are submitted to the superintendent, who makes recommendations to the board of education. Both the superintendent and the school board have been very supportive of changes at North Laurel.

"Our school district is fortunate to be in excellent financial condition. Therefore, if it's good for the kids, we can do it," Superintendent McKnight said. For example, the district office and all schools in the county are now linked by computer. This county-wide technology will make it possible for students to engage in "distance learning" and teachers to participate in staff development.

HIGH PERFORMANCE GOALS

To keep track of changes, a school transformation plan was developed and is revised annually. The plan includes staff development, school improvement action plans, cognitive and non-cognitive data and financial allocations. SREB's *HSTW* formed the backbone of the plan. Assessment drives the process.

One of North Laurel's goals is to have 95 percent of students score at the "proficient" level on the Kentucky statewide student assessment. Another goal is to have 95 percent score at or above the 50th percentile on basic skills tests. School leaders also want to raise the percentage of students scoring at the "distinguished" level on the statewide assessment and enroll more students in higher level English, mathematics and science courses.

STRATEGIES FOR MAKING THE CHANGES

High schools don't eliminate the general track overnight. Changes--especially major ones such as dropping low-level courses and increasing graduation requirements--can take several years. A number of factors contributed to North Laurel's success as the school improved incrementally. They include:

Teachers Participation

Greg Smith praises the support of his faculty in making drastic changes in school and classroom practices. "We are blessed with teachers who are willing to go 'out on a limb' with me to improve the school," he said. The staff has volunteered many hours in developing and implementing the changes.

Staff Development

Staff development is an essential element of school change. In support of the school's goals, many North Laurel teachers have participated extensively in local, state and national professional development programs. In doing so, they have gained knowledge for implementing organizational changes such as block scheduling and instructional changes such as interdisciplinary teaching and applied learning. Teachers and administrators discuss school and classroom changes in committee meetings and faculty meetings.

To facilitate staff enrichment, North Laurel more than doubled each teacher's professional development time (from four days to nine days per year). "The training we have received on student portfolios, active learning and new assessment methods is valuable, but the best part of staff development is being able to get immediate answers to our questions and concerns," one teacher said. "This type of feedback is vital when teachers are learning new skills."

New Ways of Teaching and Learning

To help students succeed with more rigorous content, teachers have dramatically changed their instructional methods. Instead of lecturing to the class and relying heavily on textbooks, teachers use hands-on instruction, real-life applications, cooperative learning and joint projects with other classes. Students are asked to demonstrate what they have learned, compile portfolios of their work and engage in projects that blend academic and technical knowledge and skills.

Reading skills are emphasized school-wide as the basis for learning in every subject. In the English department, students are encouraged to read the novels of prize-winning authors who write for an audience of young people. Reading about topics that affect the lives of teenagers often "sparks the interest" of students in exploring other literary works.

The school has also installed a computerized reading program that awards points based on books that students read outside of class. The program is for students in English courses at all grade levels.

In 1992-93, no integrated academic and vocational learning existed at North Laurel. Since then, teachers and students have come to realize that cross-curricula learning is more effective than independent instruction. Teachers have been involved in numerous projects with teachers from other disciplines as well as from Kentucky Tech Laurel County Campus. One project involved building an aquatic habitat, complete with nature trails, a bridge and a pond. This project engaged teachers and students from science, mathematics, agriculture and technology education.

In another project, students from two academic areas--French and art--and two vocational areas--home economics and health services--created a French cafe. Art students decorated the walls; home economics students created the menu, bought the supplies and prepared the food; health services students used the U.S. Department of Agriculture's food pyramid to address the nutritional aspects of food preparation and consumption; and students speaking French greeted and served the parents, friends and teachers who visited Le Cafe. Students wrote personal portfolio entries about their experiences and the knowledge they gained through the project.

North Laurel teachers also emphasize hands-on learning that connects students to the world of work. Students in the school's media class write and report school news for the local radio station, produce school events segments for the local television station and write articles for the local newspaper. "These activities reach beyond the scholastic realm into the real world," the media teacher said. "This is what we need to be doing for our students."

Authentic Assessment

North Laurel has fully incorporated Kentucky's six learning goals and 57 academic expectations in assessing students. By using the standards of the Kentucky Educational Reform Act, teachers measure student learning in new and relevant ways. No longer is it good enough for students to know something; they need to be able to apply their knowledge. Traditional methods such as multiple choice tests and essay questions are just not enough for gauging the progress of today's students.

The school also uses external standards to measure student achievement. The school bank is a good example. It serves the financial needs of students while giving them real-life experiences in the banking field. Here's how it works: A local bank offered to help business students set up the facility and learn the principles of banking. Bank officials interviewed students for various "jobs," including president, vice president of lending, vice president of operations, new accounts representative, loan officer, teller, bookkeeper, auditor and collections manager. The interview process required students to meet the expectations of an actual bank as well as those of the high school. Students developed the policies and procedures for the in-school

facility as well as the interest rates for savings accounts and loans. Business skills are improving significantly as students see the real-life relevancy of their school-based activities.

In another project, students in Health Services II acquire clinical experience by working as nurses aides at the Laurel Heights Home for the Elderly. These students receive the same training as regular employees. They also follow the facility's standards of safety and confidentiality. After completing classroom and workplace requirements for the nurses aide course, the students take a state test of written and practical skills. Those who successfully complete both tests are placed on a state registry of nurses aides. With credentials in place, these youth can seek a job at any nursing home, hospital or home health agency in the state.

Block Scheduling

To provide more time for students to take core courses and a major and for teachers to plan and deliver hands-on instruction, North Laurel revamped the school schedule. The new schedule calls for four 80-minute classes per day instead of six shorter classes. Teachers have time to introduce a concept and engage students in activities that reinforce the concept--all in the same day. "It used to take three days to do what we now do in one day," a North Laurel science teacher said. "This really helps students make sense of what they are learning. They see the correlation in steps in the scientific process more clearly when they can finish an activity in a single lab."

Students and their parents like block scheduling because it allows students to take more courses during high school. "Block scheduling has made it possible for me to take all of the academic courses I need and to complete a vocational major as well," one student said.

Guidance

The guidance and advisement process at North Laurel is ongoing throughout four years of high school. Each grade level has its own guidance curriculum which is reviewed annually with the input of teachers who taught the curriculum the previous year. The changes are based on the needs of students at each level.

North Laurel's Academic Plus guidance and advisement program debuted at the same time as block scheduling three years ago but underwent major improvement for the 1996-97 school year. Each counselor oversees one grade level in which teachers and students engage in guidance activities for 35 minutes each day, Monday through Wednesday. Each teacher is assigned to a group of no more than 25 students in one grade level. On Mondays and Tuesdays, the teacher-advisors and their students address a topic-of-the-month using worksheets, videos, discussion groups and other methods. The topics-of-the-month are different for each month throughout a student's four years of high school. On Wednesdays, students work on their academic or career majors, individual plans, graduation requirements, etc.

To prepare teachers for their role as advisors, the guidance department conducts a six-hour inservice program and a three-hour refresher program before school opens in the fall. Teachers become familiar with the curriculum or with changes since the previous year. Teachers have chosen to remain with students in the same grade each year instead of moving up with the students from one year to the next. By “staying put,” the teachers “specialize” in the curriculum and gain a better understanding of students’ needs at that grade level.

Counselors at the high school and at North Laurel Middle School have created a strong bond that benefits students at both schools. All eighth-graders take a nine-week career awareness course that introduces them to career fields, the high school’s core academic curriculum and 14 career clusters, high school graduation requirements and individual graduation plans. “The career awareness course makes incoming ninth-graders much more aware of what will be expected of them in high school and in the future,” Counselor Rachel Gaynor said.

In the spring before they enter high school, students from the middle school visit North Laurel for one day of shadowing with a high school student. In the evening, they bring their parents to an open house event where students and parents meet with a counselor to plan a four-year program of study. In the spring of 1996, 80 percent of incoming freshmen brought a parent with them on registration night.

“Parents like the fact that through block scheduling their children are able to take more courses, including ones that are more challenging,” Gaynor said. “but we need to continue to make them aware of the types of courses that are available.” The school uses newsletters, student articles in the local newspaper, radio announcements and cable TV programs to acquaint parents with curriculum offerings.

Programs to Help Students Meet Higher Standards

When general mathematics was eliminated from the schedule, many North Laurel students needed extra help to meet the algebra requirements. That need gave rise to an after-school tutoring program which is offered on Tuesdays and Thursdays from 3 p.m. to 4:30 p.m. The program is free and includes bus transportation home. Fourteen teachers tutor groups of six to eight students each who need help in language arts and science as well as mathematics.

In addition to the after-school program, North Laurel offers a free five-week summer school program. Students can make up credits in one class per summer. In addition, some students choose to repeat a course to get ready for a higher-level course in the coming year.

North Laurel also offers special programs such as Upward Bound, the educational program that aims to increase high school students’ academic skills and motivation. Upward Bound serves students who have the potential to succeed in college but whose educational performance does not reflect that potential.

The Educational Talent Search program helps young people complete or resume their education. It is designed to give students an extra boost in realizing their ambitions. To qualify for this program, youth must be at least 12 years old and show potential to succeed in postsecondary education at either a college or a vocational school. This program offers educational counseling, career counseling, financial aide information and assistance, and support services.

Closer Ties with Local Employers

North Laurel has won the support of local business leaders, who volunteer their time and resources to give youth a realistic picture of the business world and help them prepare for future careers. Local chamber of commerce officials and several employers are serving on a committee to help school leaders develop and implement a plan to place every student in grades 9 and 10 in a job shadowing experience and every student in grades 11 and 12 in a work-based learning experience. The chamber of commerce will match students to the employers.

A representative of a local automobile dealership helped the school conduct a needs assessment of teachers in relationship to the business community. The survey is expected to yield requests from teachers for more opportunities to become familiar with workplace requirements. "Teachers and students need a chance to see how English, mathematics and science skills are used in a work setting," said Ritchie Curtis of the local Kain Family auto dealership. "By observing and talking with people in the workplace, students learn why high school academic studies are important and how to make themselves more marketable."

Using Data

Assessment is the driving force for changes at North Laurel. School leaders pay close attention to the KIRIS scores and SREB survey results. When data from the 1996 *HSTW* Assessment became available, Smith took it to the council for discussion. The members examined the scores, compared them to national and regional norms, considered reasons that the scores weren't higher, and began planning ways to raise the scores in the future. "We believe that what gets measured gets done--and we measure everything we do," Smith said.

RESULTS

The road to excellence at North Laurel High School has been filled with long hours and hard work, but the results have been worth the effort. The performance of North Laurel students on Kentucky reading, mathematics and science exams has improved steadily due to changes in school and classroom practices. Between 1992-93 and 1995-96, the percentage of students scoring at the "novice" level in reading dropped from 57 percent to 19 percent. This means that the percentage of students at the "apprentice" level increased from 29 percent to 66 percent, while the percentage at the "proficient" and "distinguished" levels increased from 3 percent to 15 percent.

Reading Performance

	1992-93	1995-96
Novice	57%	19%
Apprentice	29%	66%
Proficient/Distinguished	3%	15%

The same holds true for mathematics performance. In a three-year period, the percentage of students scoring at the "novice" level in mathematics declined from 59 percent to 28 percent. The percentage at the "apprentice" level rose from 29 percent to 38 percent, and the percentage at the "proficient" and "distinguished" levels almost tripled from 12 percent to 34 percent.

Mathematics Performance

	1992-93	1995-96
Novice	59%	28%
Apprentice	29%	38%
Proficient/Distinguished	12%	34%

In science, 32 percent of students scored at the "novice" level in 1992-93. Three years later, 80 percent scored at the "apprentice" level and 12 percent at the "proficient" and "distinguished" levels.

Science Performance

	1992-93	1995-96
Novice	32%	8%
Apprentice	64%	80%
Proficient/Distinguished	4%	12%

In the spring of 1996, almost 17,000 12th-graders completing a vocational major at 555 *HSTW* sites in 21 states participated in the *HSTW* Assessment of reading, mathematics and science. North Laurel was among a large number of sites administering the tests for the first time. Results showed that North Laurel students exceeded the *HSTW* reading goal and scored significantly higher in reading than students at all *HSTW* sites and at high-scoring *HSTW* sites with similar demographics. On the mathematics and science tests, North Laurel students scored about the same as students at all other *HSTW* sites.

Comparison of Average Scores at North Laurel High School and Other *HSTW* Sites on the 1996 *HSTW* Reading, Mathematics and Science Assessment

	North Laurel	All <i>HSTW</i> Sites	<i>HSTW</i> Goal
Reading	286*	273*	279
Mathematics	284	285	295
Science	283	283	292

*Scores are significantly different.

Note: All scores are rounded to the nearest whole number.

North Laurel students reported classroom experiences that contributed to their achievement on the *HSTW* reading assessment. For example:

- Eighty-one percent had read an assigned book outside of class more than twice a year, compared to 57 percent at all *HSTW* sites;
- Eighty-seven percent completed more than two writing assignments of one to three pages in length each year, compared to 73 percent at all *HSTW* sites;
- Eighty-three percent said their academic and vocational teachers worked together to prepare writing assignments, compared to 74 percent at all *HSTW* sites;
- Seventy-six percent said their vocational teachers often stressed writing, compared to 46 percent at all *HSTW* sites.

North Laurel has been more successful than other sites administering the *HSTW* assessment in 1996 in enrolling career-bound students in advanced mathematics and science courses. For example, 64 percent of North Laurel’s career-bound students in 1996 took Algebra II, compared to 51 percent at other sites; 81 percent took geometry, compared to 63 percent at other sites; and 30 percent took Algebra III or trigonometry, compared to 11 percent at other sites.

The number of mathematics courses taken by North Laurel students seemed to make a difference in achievement. Forty-three percent of North Laurel students took four or more mathematics courses (compared to 37 percent at other *HSTW* sites). These students exceeded the *HSTW* mathematics goal and outperformed students at the other *HSTW* sites that participated in the 1996 assessment.

In science, the North Laurel career-bound students who took college preparatory biology met the *HSTW* science goal and exceeded the performance of students at all *HSTW* sites. Sixty percent of career-bound students at North Laurel took chemistry, compared to 44 percent of career-bound students at other *HSTW* sites testing in 1996.

Student test-taking patterns and performance on college entrance examinations are other measures of success. In a recent two-year period, the percentage of North Laurel students taking the ACT test increased from 47 percent to 61 percent. Even though more students are taking the ACT, the average score increased from 19.2 in 1992-93 to 19.5 in 1994-95. More students are planning to enter college after high school graduation and are scoring higher on the ACT.

ACT Test-Taking and Scores

	1992-93	1994-95
Taking the ACT	47%	61%
Average Score	19.2	19.5

Postsecondary Enrollment

1992-93	1994-95
44%	50%

North Laurel leaders have found that students are more apt to remain in school and attend regularly when they are focused and challenged. In a two-year period, the dropout rate declined one percent. At the same time, average daily attendance rose from 91.5 percent to 92.3 percent. School changes at North Laurel have included revising the attendance policy. In 1992, a student could miss 16 days and still receive credit for course work. Now, a student is limited to five unexcused days in each class and two notes from parents.

Dropout Rates and School Attendance

	1992-93	1994-95
Dropouts	9%	8%
Attendance	91.5%	92.3%

DRAMATIC AND FAR-REACHING CHANGES

The improvements at North Laurel High School have been dramatic and far-reaching. Students have had to become more accountable for their education. Teachers have had to abandon "tried and true" practices in favor of more diversity in learning.

Students and teachers have gained new respect for each other and are working together to make learning more meaningful. One student recounts how her biology teacher involved the entire class in gathering snake eggs found on the school grounds. "She could have rushed out and picked them up herself, but she chose to make finding and identifying the eggs a class assignment," the student said. "None of our labs could match the thrill of examining these eggs in their natural habitat. By letting us participate, the teacher was showing us that learning is important."

Another student told a story to illustrate the bond between teachers and students. "My Academic Plus teacher brought homemade cookies and brownies every morning during test week to encourage us to do our best. It helps to know that your teacher is supporting you all the way."

CHALLENGES IN CONTINUING TO IMPROVE SCHOOL AND CLASSROOM PRACTICES

Despite a large turnout of parents at a pre-registration open house event in the spring of 1996, Principal Smith lists "parental apathy" as the number one challenge facing the school. "When parents don't emphasize the importance of an education, it's easier for students to skip school or drop out entirely," he said. School leaders seize every opportunity to connect with parents. Newspaper articles and radio-TV announcements inform parents of changes at the school and meetings of parents, students and teachers. To step up these communication efforts, teachers this year are phoning parents at home when their children skip school or have trouble with their studies. They are also reporting the positive things that students do.

North Laurel has made no progress in the percentage of students enrolling in four-year colleges and universities, but a coordinated high school and postsecondary program is resulting in increased enrollment by North Laurel graduates in the local Kentucky Tech-Laurel County Campus. Kentucky Tech faculty members work closely with North Laurel teachers and administrators in developing programs to benefit the community's youth.

Because over one-third of students scored in the "novice" range in the Practical Living/Vocational Studies portion of the 1994-95 KIRIS test, North Laurel's transformation plan includes a goal of increasing the amount of academic and vocational integration taking place at the school. A school survey showed a lack of integrated learning across curriculum areas.

The school's involvement in work-based learning consists mainly of traditional cooperative education. However, major expansion plans are already in effect. The school's plan to offer job shadowing and more structured work-based learning to every student is moving forward with the support of the local chamber of commerce and its members. Teachers also need to spend time in the workplace to see first-hand what is being expected of employees today.

The school's transformation plan calls for reducing the dropout rate by monitoring students who do not return to school. It also includes developing a new discipline policy that will be implemented by May 1998.

North Laurel typifies a high school that knows where it wants to go and is making steady progress in that direction. When schools set out to replace the general track, everything doesn't happen at once. The process takes long-term commitment to a clear goal of higher achievement for all students.

"I am excited about this high school," Principal Greg Smith said. "We have moved steadily forward, and we will continue to make progress in the future."

Contact: Greg Smith, Principal
North Laurel High School
1300 E. Daniel Boone Parkway
London, KY 40741
606/877-1712

Southern Regional Education Board
High Schools That Work
592 Tenth St., NW
Atlanta, GA 30318
Phone 404/875-9211
Fax 404/872-1477

(97V06)

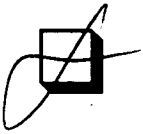


U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)



NOTICE

Reproduction Basis



This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.



This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").

EFF-089 (3/2000)