

# Technology & Innovation at *Northview High School*

A Brief look at Some of Northview High School's Exciting  
and Innovative use of Technology

## Intervention

### *New Worlds Within Reach*

A Short Review of Northview High School's  
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## Listening Center Testimonials & Experiences

Testimony and Experiences from Teachers &  
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## Kyle Lowry & Education Connect: *A Northview Success Story*

*A Short Bio of the Person Who Designed  
Education Connect, the Data/Information  
Management System that Powers Intervention*

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# Intervention

## *A Short Review of Northview High School's Intervention Program*

### A Brief History

January 2006 - June 2006

As Learning Specialist, I started working with Principal Lynn Carmen-Day and Northview senior Kyle Lowry to design a three-tiered intervention system, inspired by the mandatory intervention models of Rick DuFour. The first step was to implement a seven-period day, which was voted on and approved in March, 2006. Then, Lynn and I worked with Assistant Superintendent Lorie Gonja to strategize how PLCs, Guided Study, and Intervention would work.

The plan called for a seven-period day, which would allow students with a minimum GPA and no discipline issues to earn a free period. Students who were falling through the cracks could be given a Guided Study class, so they would be able to complete their homework and get help during the school day. If students were still falling behind, teachers then had the option from their PLC meetings to assign students to be pulled from Guided Study and taken to Intervention, where they could work with a Peer Tutor for a week on specific skills.

Kyle Lowry set to work to design a computerized system that would pull students from one of six Guided Study rooms throughout the seven periods. Students with a free period, advisory, or serving as a teacher's aide would also be pulled. Kyle's system, **Education Connect**, created a roster for each period of the day, as well as a learning log and an evaluation form for each student, so that Intervention could keep track of attendance and student progress.

Education Connect notifies the counseling office of the students who are being pulled from free periods so they can be notified via pink slip or **Teleparent** that they have been assigned. In addition, it keeps statistical data on test scores, number of times a student has been assigned, percentage of teachers assigning students each week, and so on.

September 2006 - June 2007

Four teachers and one full-time aide split the classes, and approximately 70 peer tutors were assigned, about 10 per period. They received three weeks of training on library skills, instructional strategies, AVID techniques, games and activities, the Listening Center (audio books) and technology such as Thomson-Gale Research tools, PLATO, Take Home Tutor, the Academy Book Search, Blackboard and more. In addition, they helped set up the library by making signs, moving books, organizing materials, and bar-coding. Tutors led library orientations for freshman English classes and assisted when teachers brought students in for research assignments.

Intervention began with math for the first few months. By December, as many as **220 students** from Algebra 1, 1A, 1B, 2, and Geometry were being assigned to visit intervention for the week. In the spring, we started also seeing students from English, the Success Academy, economics and government, Spanish, French, and CAHSEE prep.

Tutors took ownership of the program, and consequently we gave them much **responsibility**. In addition to helping students, tutors picked up students, kept attendance, got materials, graded tests, helped with discipline, collaborated with teachers, created displays, made promotional presentations, and mentored and trained other tutors. They participated in **monthly meetings** to exchange ideas and evaluate the success and possible improvement of systems.



As a result of their hard work, our program helped students achieve an average **14-point improvement** each week. So far in the 2007/2008 school year, students are achieving a 21 point increase per week. Furthermore, the library saw increased use and traffic, as did the **College & Career Center** and after-school tutoring. Students began using the library as a resource, and teachers started turning to the library staff for articulation and assistance with projects, or for innovative ideas.



### May 2007

Tutors prepared presentations and led recruitment seminars for the 2007/2008 school year. Tutors also represented the program at presentations to the school board and to local service clubs. These clubs were impressed enough to offer their **sponsorship** and **donations**, **hosting a banquet for tutors**, and promising **continued support**.

By the end of the semester, **90 applications** were submitted for peer tutoring for the next year.

### September 2007

This year we held an orientation day over the summer to get to know the prospective tutors and to introduce them to the program. Tutors again underwent three weeks of training, led orientations, and started keeping reflection journals.

Intervention officially began on October 1 with 70 students assigned for Algebra 1A, 12<sup>th</sup> grade English, CAHSEE Prep, Success Academy, Economics and homework help for Geometry. We have already seen more use of the **Listening Center**, and our continued relationship with Recorded Books promises to be a helpful resource for even more of our students.



## Intervention: The Weekly Process

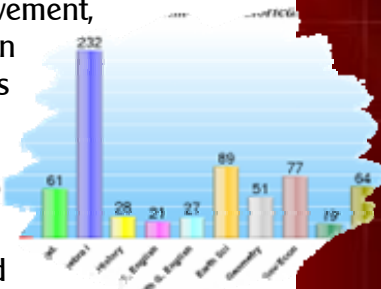
Teachers meet once each week in their collaborative groups (Professional Learning Communities, or **PLCs**) to discuss best

practices, lesson study, and to plan common formative assessments.

After evaluating their students' achievement using tools such as **Data Director**, teachers decide on a plan for re-teaching in their classroom.

Some students need individualized help before or during the lesson, and they would be candidates for Intervention to keep up with the class. For instance, students reading Hamlet were assigned to listen to the play on CD so they could keep up with their reading. Others need help after the unit to readdress **foundational skills** before they move on. Still other students just need help with their **daily homework assignments**.

Teachers assign students via **Education Connect**, which asks for student ID numbers and instructions. Assignments must be made by Thursday at 12:50, and materials are due to the library at the end of the day on Thursday. Education Connect then pulls the student names from **Aeries** and sorts them onto rosters according to their Guided Study room and period, or their free period. Education Connect also keeps **detailed statistics** on students assigned, such as number of times, content areas, and overall improvement, and more. Education Connect also prints Learning Logs and Evaluation sheets for each student, with the name of the teacher who assigned the student and the content area printed at the top. In addition, it sends a notice to the counseling office about who was assigned from a free period so that the student can be notified on Friday to come for the following week.



Education Connect **alerts teachers** if a student has been assigned to more than one content area, or if they must be assigned to **after school tutoring** due to a schedule conflict.

The rosters are printed on Friday, and tutors are alerted as to the different content areas to be addressed the next week. They have time to look over materials and find additional resources to help them. Tutors sign up for stations.

On Monday morning, tutors pick up the rosters on clipboards and go to the Guided Study rooms to pick up students. One copy of the roster is left with the teacher. Tutors take roll and bring students to the library, then direct them to the appropriate station and get all materials for them. Using small **dry-erase boards**, extra **textbooks**, and **manipulatives**, they work through the materials provided by the teachers. Every day students fill out a **Learning Log** which asks them to reflect on their own progress. On Friday, students may retest for grade recovery, or they may simply be finishing a packet or typing an essay. Tutors fill out an evaluation sheet to return to the teacher indicating how the student performed during the week.

Tutors collect all work and teachers help assemble packets to return to teachers by Friday afternoon.

## Listening Center Testimonials & Experiences

Carleen Cannon, a 12<sup>th</sup> grade English teacher, assigned four students to use the **Listening Center** to read Hamlet. They came to Intervention and worked with a peer tutor for five days, listening to the play and writing

summaries and discussing the text with the tutor. At the end of the week, those four students were the **only ones in the class of 25** who were caught up in the reading. When Sonny, a 12<sup>th</sup> grader who reads at least two years below grade level, was asked how it felt to be at the top of the class for this assignment, he said, **"It feels cool."**

Late in the spring semester, eight students were assigned to read To Kill a Mockingbird. Although not one of the Recorded Books titles included in the original grant, two copies of the book on CD were purchased from the **local bookstore** to accommodate these students. Each student was **teamed with a peer tutor**, who was assigned to listen along with the student and then stop the tape at the end of each chapter and fill out a worksheet answering questions about that chapter.

Randy P., a senior, was assigned to read 1984. While in the library one day, I overheard him complaining that the book was difficult to understand and that he had fallen behind. I suggested he come in and listen to it on CD. He was reluctant until I offered to make him a **cup of cocoa!** The next day, he came in with two friends, who also wanted to listen (and to have some cocoa). True to my word, I made him cocoa every day he came in and listened, and **he continued to come in until he finished the book.**

"I know I got a better grade," said Randy of the experience. "It's **easier for me to understand**. Before, we would read it in class, but I would doze off or start getting distracted. When I started listening to it, **I was able to pay attention** to it way better. The book is so dry, the reader gets the character real good. Some of it is a little confusing, but for the most part I got it. My friend Eric and I did it together. We would stop and talk about it and take notes. I



participated in the discussions in class. Oh yeah, I would definitely recommend it, especially when you're struggling and trying to get your grade up, it helps."

## Kyle Lowry & Education Connect

*A Northview Success Story*



**Kyle Lowry**  
*Education Connect Administrator  
Currently attending Mt. Sierra  
College, Monrovia, California  
Northview High School graduate,  
class of '06*

### Education Connect: Origins

Education Connect was born out of another project designed by Kyle – the **Academy Book Search**. Students enrolled in Northview's Literacy Academy used a separate library collection where each book had an assigned Lexile level and a corresponding quiz from Reading Counts. However, these books were not entered into the regular patron's catalog, so the Academy students had no way to look them up. Kyle designed a **database of titles** that allowed students to search for Academy books by title, author, Lexile level or point value. The site also linked to Lexile.com, so students could **read summaries of the books** before selecting one.

The success of the book search led to the creation of **Education Connect**, a management system that runs Northview's intervention program, and hosts a number of other on-line features such as the Book review Blog, photo-gallery for our digital-photography students to exhibit their work, tools for teachers, and more.



### Intervention & EC

Education Connect houses the Intervention System. This system is used to handle all the enrollments, score tracking, roster and form generation, as well as the detailed statistical reporting, and other functions necessary for the Intervention program to operate.

Education Connect is a key component of our intervention system. It pulls student schedules from our attendance database, sorts students into rosters according to which period and which room they have for Guided Study, details which content area they need help with, lists their teacher, and shows which assignments they will be working on – either book work, computer programs or the listening center. In addition, it offers an administrator function that keeps statistics on weekly improvement, number of times a student has been assigned, content areas, and much more.

### Still to Come

Education Connect is programmed in **PHP and MYSQL** code, and is designed to be as **simple and easy to use** as possible. Kyle's ultimate goal is to turn Education Connect into a central source of information and resources for students, parents and teachers that includes the ability to host **podcasts**, post **video-blogs**, look up



**scholarship information**, create and **share lesson plans** and more, all in one easy-to-get-to place. He says his experience with Northview has given him a lot of insight into how teachers think and what schools need, which has helped him create a program that does a better job incorporating these needs than most other programs available today. Kyle customized the system for our individual school, and as he learns what other schools want, he will be able to program the ability to configure options, so the possibilities for customization will grow wider.

A big advantage of Education Connect is that it is **all managed on-line**, so there is **no extra software or servers to purchase**, and **anyone can access it from any computer**.

## **Kyle Lowry: A NHS Success Story**

When Kyle was a student at Northview High School, he was known by teachers as the go-to guy for computer and technology help. Not only did he help troubleshoot software issues, he designed and set up many teachers' websites and grading programs.

When he was a junior, he collaborated with the Digital Photography teacher and Santa Monica Press on a project called **My So-Called Digital Life**, in which students from across the state were loaned digital cameras to document their daily lives. He took the position of **Head Student Editor** and was responsible for seeing that all the editing and design tasks were completed within the tight deadlines. The finished book was then published to high acclaim from students, parents, and educators.

After working closely with Kyle to design the Intervention System during his Senior year, Northview hired him to continue to develop his systems and websites for our school.

Kyle is currently attending his first year at Mount Sierra College in Monrovia,

California. He is continuing to develop the Intervention System and working to develop and make Education Connect available to schools across the country.