ACADEMIC DATA AND DATA ANALYSIS

INTELLI-SCHOOL MARKET

Pursuant to the school's mission, the target population includes the following groups:

- Students between the ages of 14 and 22
- Students who have Special Education needs
- Students who are learning disabled
- Students with disruptive behavior issues
- Students who are significantly behind in credits
- Students who have been identified as dropouts
- Students who are pregnant or parenting
- Students who have been adjudicated
- Students who are interested in careers in computer, technology and communications arenas
- Students who wish to obtain their high diploma

Again, these are some of the populations that Intelli-School always intended to serve. The next section will demonstrate with nearly 15 years of demographic data the specific details of the populations the school has actually served.

INTELLI-SCHOOL DEMOGRAPHICS

Due to the extraordinarily high mobility of the population of students that Intelli-School serves, a "picture" of our demographics taken at one point in time does not always match up with a "picture" of our demographics taken at another point in time. However, with 15 years of data a clearer, broader picture does begin to emerge. Additionally, it demonstrates that the 'At Risk" label in many ways over-simplifies the lives of these students, minimizes the reality of their lives, and minimizes the challenges of trying to educate this population:

- 66% have attended 5 or more schools in their academic career with a significant number having attended 8 or more schools.
- 40% have historical issues with school attendance, truancy and/or have been suspended for absence issues.
- Less than 20% lived with both biological mother and father.
- 55 to 60% lived in alternative, blended or single parent families.
- Of those students whose parents divorced the majority of those divorces occurred during the student's elementary school years and could possibly be the trigger issue for school related and learning related issues.
- 40% have been withdrawn, suspended or expelled from a prior school for behavioral issues.
- 17% were pregnant or parenting teens.
- 11% were adjudicated.
- 65 to 70% were not enrolled in a school (drop-out) when they enrolled with Intelli-School.
- 75 to 80% worked at least part-time and reported that work responsibilities and work hours negatively impact their ability to attend traditional schools.

ENROLLMENT DATA

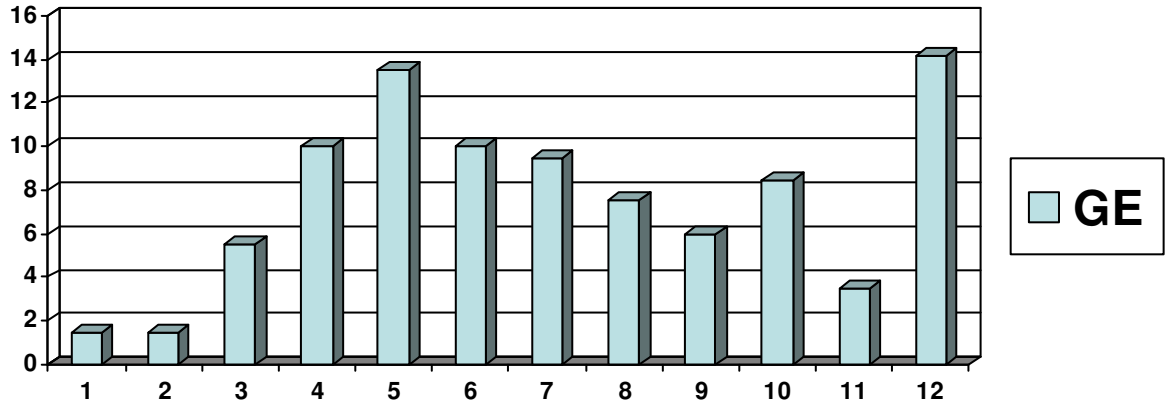
Intelli-School enrolls and educates students age 14 to 22. The school is non-sectarian, non-discriminatory and opens enrollment to all students. Typically, the school has a waiting list. If there is a waiting list the students are enrolled based on the date and time of the enrollment interview, the session preferred (8am-12noon, 12noon-4pm, or 4pm-8pm) and the availability of a seat/computer for enrollment.

The data collected over many years, shows that 65%-70% of enrollees at Intelli-School are drop-outs from a prior school. They live in fragmented/dysfunctional families, they experience incredible mobility, their lives are further complicated by various other risk factors such as prior suspension/expulsion from school, historic behavior problems, teen pregnancy, adjudication, and/or historic high absenteeism.

Based on the demographics of the Intelli-School student population, one could make the assumption and predict that the entry level grade equivalent or functional education levels of the students would be lower than expected for high school students. Indeed, the data supports this assumption and the following table is a multi year composite (math and reading pre-test grade equivalent) (GE) scores of the student who enrolls in Intelli-School:

TABE Pre-test data gathered over years shows that the majority of students perform at the 4th through 6th grade level, but surprisingly the second largest group of students are those that perform at 12th grade level or higher.

GRADE EQUIBALENT PRE-TEST SCORES 2001 – 2009



From the data in the graph above, it is clear that there is a vast difference in functional grade levels of the students who enroll at Intelli-School. It is also clear that the majority of students are not at grade level when they enter this high school. Most are in the fourth through seventh grade in functional academics.

The other piece of data is that the academic abilities are bifurcated. Not only are there a great number of students who are under-performing, but the largest group of students is highly performing and functioning at 12th grade level or higher. It is interesting to note

that both groups can be very successful and have been successfully educated in the same classroom, with the same teacher, using the same computer based curriculum…because each student is in his/her customized lesson path, working at his/her own pace.

ACADEMIC PROGRAM

Intelli-School students complete the majority of their coursework on a computer program called the A + Learning System (ALS). Over the past 12 years teachers and curriculum staff have edited the school's version of ALS to offer a complete and personalized education that has allowed the school to narrow the achievement gap between the highest and lowest performing students. With the customizations in place, the school has a complete, research-based, academic program management system that delivers a rich standards-based computer curriculum, aligned to Arizona Academic Standards that covers from grade 1 to 12.

ALS is an individualized and self-paced program which allows students to move from lesson to lesson at their own speed depending on their own ability to read, take notes, pass tests and complete writing assignments. The program also allows for the modification of classes to specifically fit a particular student's needs. This can be very effective for students who enroll at varying low levels of reading and math.

DATA COLLECTION

Intelli-School uses the Test of Adult Basic Education (TABE) to pre-test all students when they enroll. Those students still enrolled with Intelli-School after at least 6 months are then Post-tested using the same instrument. TABE assesses basic reading, mathematics, and language skills; including spelling, vocabulary and language mechanics. The assessment yields objective mastery information for basic skills, and provides Percentile, Scaled scores, and Grade Equivalent (GE) scores. The scores reveal whether students have mastered skill sets similar to those covered by the 2002 GED. The scores from the Pre-test also reflect a student's gaps in learning, so the teacher can identify academic skills from prior years instruction that were either never learned or forgotten, but essential to move forward successfully.

Once the Pre-test scores are made available, the teacher can customize the student's educational path in each of the core academic areas tested. Because ALS is a spiral curriculum that encompasses first (1st) grade through twelfth (12th) grade skills, a student has the opportunity to learn a concept that was not mastered in earlier years. The teacher can customize the student's lesson path based upon that student's functional levels and gaps in learning.

As an example, fractions (3rd grade to 7th grade math skills) are a common problem for students entering our school. Regardless of the reason, once the TABE math scores are interpreted and the teacher identifies this as an issue, the teacher can assign the specific ALS 'fraction' lessons from the 3rd through 7th grade math lessons. This practice enables the student the student to re-learn fraction concepts and in that

process bring the student up to grade level in math so the student can move forward into higher level math lessons successfully.

ROLE OF THE TEACHER

Teachers are responsible for constantly monitoring student progress in ALS. They regularly check-in with students, offer direct instruction and encourage students to stay motivated and productive. If production slows the teacher immediately discusses the issue with the student and, if necessary, a parent.

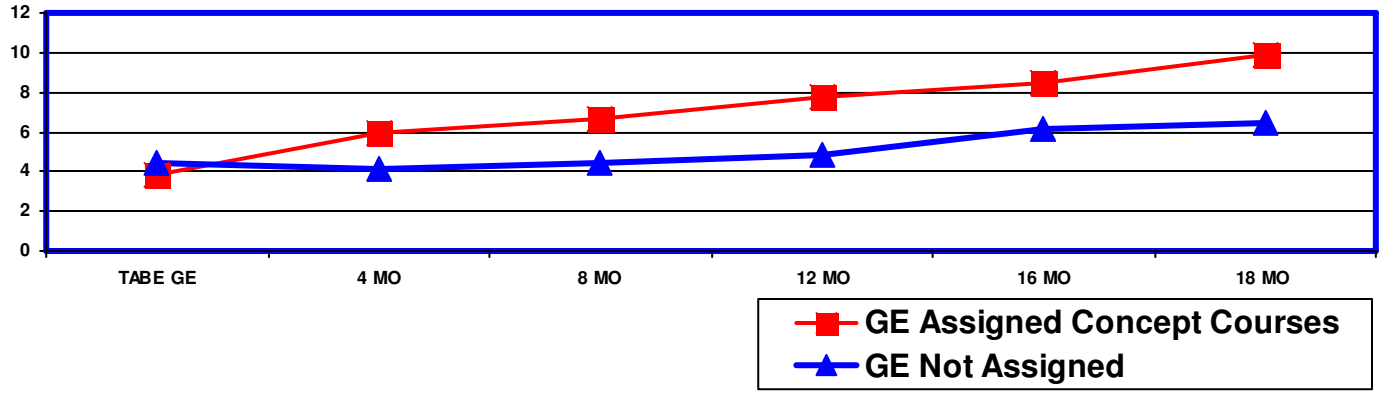
Certain ALS lessons tend to consistently frustrate students. Teachers are aware of these lessons and are prepared to step in with one-on-one or small group instruction when these lessons come up. The staff is very aware that with teacher interaction and intervention, the ALS academic program does not serve the students in learning the material. Teachers are mentors, guides, facilitators and coaches and ensure that the students get the most our of the ALS curriculum

THE ROLE OF CONCEPT COURSES

As part of the teacher's role in the classroom, once the TABE scores are available, the teacher begins to individualize the lesson path for the student. For example, if a student shows low math skills (based on the TABE Pre-test done on enrollment), the teacher has the option to construct a class which caters to these low levels. The teacher can design a class that will fit the student's level and provide a quicker path to the skill levels expected at this point in high school. These classes are called Concept Courses and count as elective credit.

The school's data, collected over the past five (5) years clearly demonstrates that students placed in Concept Courses demonstrate increased gains when compared to students placed in regular classes. Many frustrated students are highly encouraged by making progress in these classes and some quickly overcome gaps in their learning. We have also found these classes to be especially effective with students that have been away from school for an extended period of time and just need to review some forgotten concepts.

IMPACT OF ASSIGNING CONCEPT COURSES



From the above data, when assigned a Concept Course students gain specific skills that either were forgotten or never learned in earlier schooling. Once the Concept Course is completed the student is placed in the regular standards aligned classes and continues to demonstrate gains. On the other hand, students not assigned Concept Courses did not master the earlier skills and their growth profile was a flat line with little growth over time.

REGULAR EDUCATION STUDENT DATA

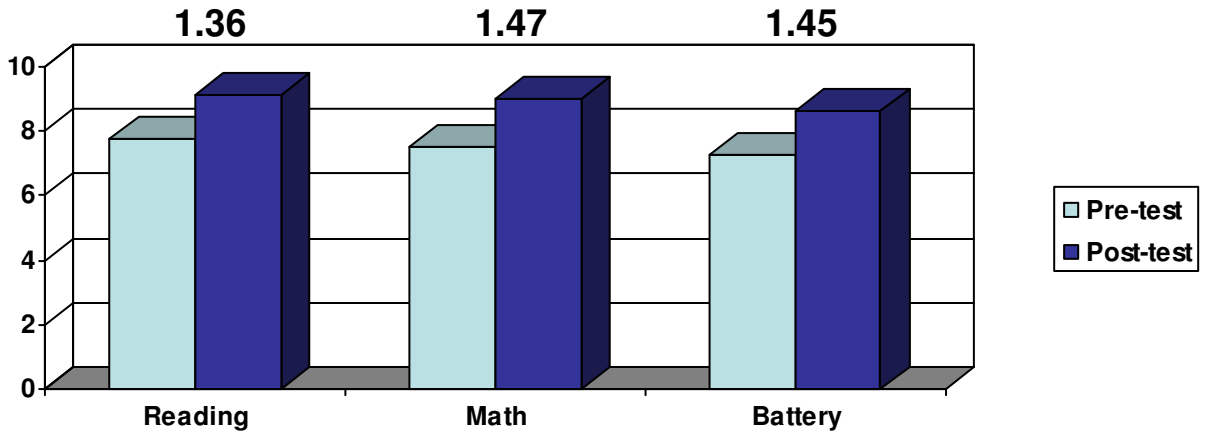
Using 10 years of data, Pre-test Grade Equivalent scores for Regular Education students demonstrate, on average, that students enter Intelli-School with the functional skills of:

- **7.73** GE Reading
- **7.51** GE Math
- **7.25** GE Full Battery

However, the Post-test data shows these gains, using the customized ALS computer based spiral curriculum, the average Post-test Grade Equivalent scores are:

- **9.09** GE Reading
- **8.98** GE Math
- **8.60** GE Full Battery

GAIN IN YEARS



What is demonstrated in the above graph is the growth experienced between the pre-test and post-test (at least 6 months later). The data demonstrates in excess of ONE years growth in less than ONE academic year which exceeds standard growth expectations.

SPECIAL EDUCATION STUDENT DATA

Historically, the school ran approximately 30% Special Education students (45-50) (state average is 11%). Staff was concerned that the one SPED instructor was unable to provide adequate one on one direct instruction and that the students were being short-changed. In 2008 it was decided to set a cap of 8 students per session (24) for

one SPED instructor to facilitate the direct instruction and interaction that staff thought was missing by carrying the higher numbers of SPED students. The decision and subsequent action has been too recent to generate hard data, however the reaction from staff members is that the intentional decrease in numbers of SPED students has had several positive results:

- SPED teacher reports less time involved with paperwork necessary to conduct MET/IEP meeting
- SPED teacher reports having more time to interact with students and communicate with parents
- All site staff report less disruptive classroom behavior.

When looking specifically at Special Education students (which account for on average 30% of Intelli-School's student population) the data demonstrates the following Pre-test Grade Equivalent upon enrollment at Intelli-School:

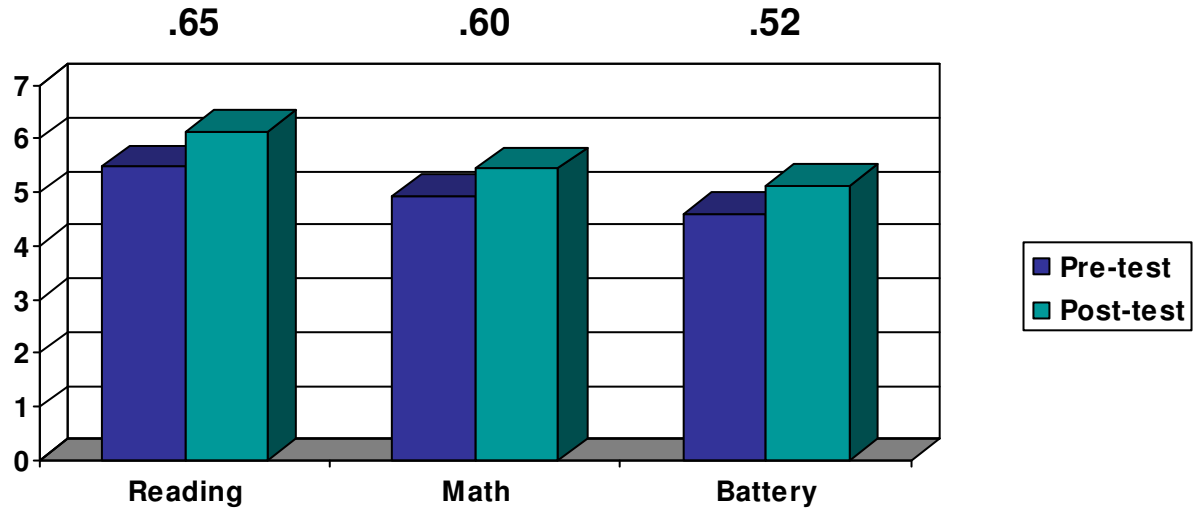
- **5.48** GE Reading
- **4.94** GE Math
- **4.60** GE Full Battery

Again, after at least six months of enrollment at Intelli-School the average Post-test Grade Equivalent scores are:

- **6.13** GE Reading
- **5.44** GE Math
- **5.12** GE Full Battery

While not as dramatic as the school's regular education students, the gains for Special Education students are consistent with IEP goals and objectives.

GAIN IN YEARS

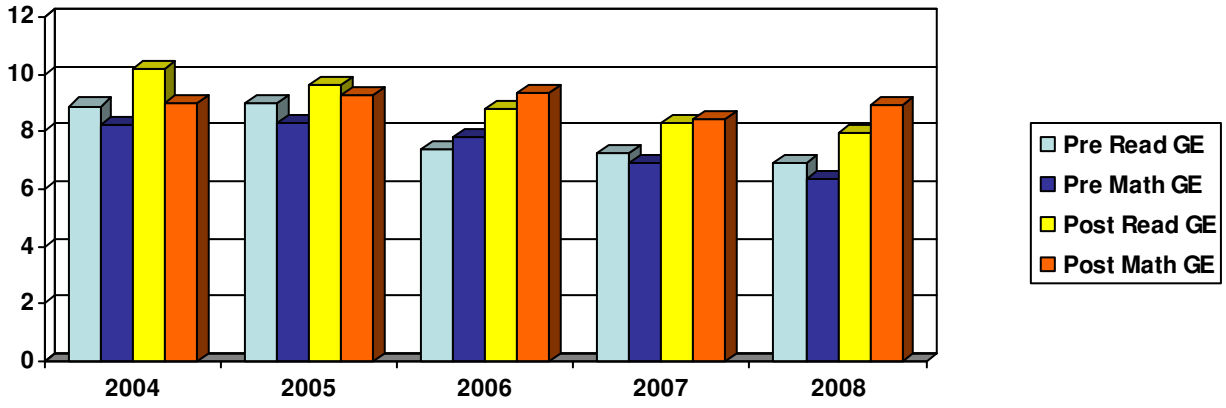


AIMS ASSESSMENT

The policy has been to administer the AIMS test to all of the special education students for the duration of their enrollment at Intelli-School. The standard at most schools that deal with a similar population is that special education students are required to test once in the spring of their sophomore year, after which, they never test again, thereby improving the schools' overall scores.

Intelli-School has chosen to elevate the expectations of the students by including in nearly all IEP's the opportunity to approach the AIMS multiple times. The students who fall far below as sophomores generally continue to score low, however some eventually meet the standard and pass the AIMS. However, this practice had the un-foreseen consequence of artificially dropping the AIMS score below the state average. If we factor out the special education students from the AIMS results, the AIMS reading scores would have been **14% higher** and the AIMS math scores would have been **12% higher**. The school's emphasis has clearly been on attempting to help the students to make the greatest strides possible, regardless of whether the student has a disability or not.

In an attempt to improve this success rate the school has implemented several interventions. It has established a limit 8 to 1 student teacher ratio, enabling teachers more time to interact and provide needed direct instruction. In addition the school has implemented a mechanism to increase testing confidence with the special education students by holding "mock" testing sessions. The tests are given according to the students' functioning level, test taking strategies are provided and the situation allows the student to experience some sense of success. Finally, the school has put more emphasis on preparing these students to attain career readiness skills in addition to building their academic skills.

INTELLI-SCHOOL ACADEMIC PERFORMANCE

In analyzing the data on academic progress, the school analyzed the Pre-test GE and compared them to the Post-test GE each year since 2004. There is not yet enough data to analyze the 2008 and 2009 gains, so data is from 2004 to 2007, inclusive. We observe several items, it appears that grade equivalent pre-test scores are dropping slightly over time, which appears to make the post-test grade equivalent growth appear to increase each year