

Star Academy Effectiveness Report

Effectiveness of a model program for dropout prevention and acceleration

History: The Alpha Test Year

In May 2005, Dr. Mendel Stewart, superintendent of Pickens County School District, solicited help from Dr. J. Robert Couch, director of Career and Technology Education for the South Carolina Department of Education. Dr. Stewart's plea was to devise a model program that would intervene for and engage overage eighth grade students who had failed one or two grades and were identified by parents, guardians, and school officials as at-risk of dropping out.

Dr. Couch requested that Dr. Harvey Dean, founder and CEO of Pitsco, Inc. and Michael Robinson, of Princeton Assessment & Training Systems, Inc. meet with Dr. Stewart to determine a possible solution for the Pickens challenge. After meetings with Pickens administrative staff and interviews with a select sample of students and parents, Couch, Dean, and Robinson devised an initial model that incorporated career-focused, hands-on, differentiated learning in certain core academic areas. Those were Math Technologies 1 & 2, Applied English & English I, and earth & physical science. A local freshman success course and physical education rounded out the program.

The program's goals as devised by the team were to:

- Engage students in learning that would cause them to stay in school.
- Accelerate students through eighth and ninth grade so that they would be capable of beginning the next school year in tenth grade.
- Encourage students to enroll in the district's career tech school.
- Have the school district sustain the model (with experience-determined modifications) beyond the first year of operation.

Dr. Couch identified two primary funding sources: Appalachian Regional Commission and the SC Education and Economic Development Act's At-Risk Committee. Beyond that, Pitsco, Inc. and Duke Power provided funding for specific aspects of the model. One critical design criterion for the model was to avoid recurring costs, such as software licensing, that would hinder the model's sustainability.

Students identified as at-risk were 'conscripted' to enroll in the Star Academy the first year (August 2005), and a very hurried identification of teachers and counselors was conducted. Initial teacher preparation was completed, and the Star Academy began with the requisite 80 students.

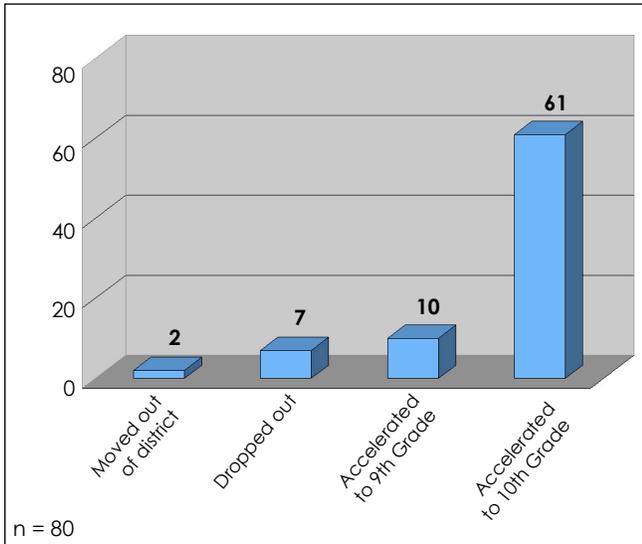
The need for certain additional program elements became evident during the school year. The math program reverted to a lecture program and needed to become more like the hands-on science program. The language arts courses needed hands-on group projects as unit culminating activities. Moreover, the staff requested assistance in communicating with students and parents/guardians.

These elements were considered and program modifications were made throughout the school year. In addition, the school's principal, Dr. Doug Limbaugh, and the part time administrator of the Star Academy, Dr. Shelly Fones, devised and embedded programs of mentoring, student awards, and field trips that further assisted in the engagement of students.

The effectiveness of the first year of this alpha test model can be seen in the two following graphs.



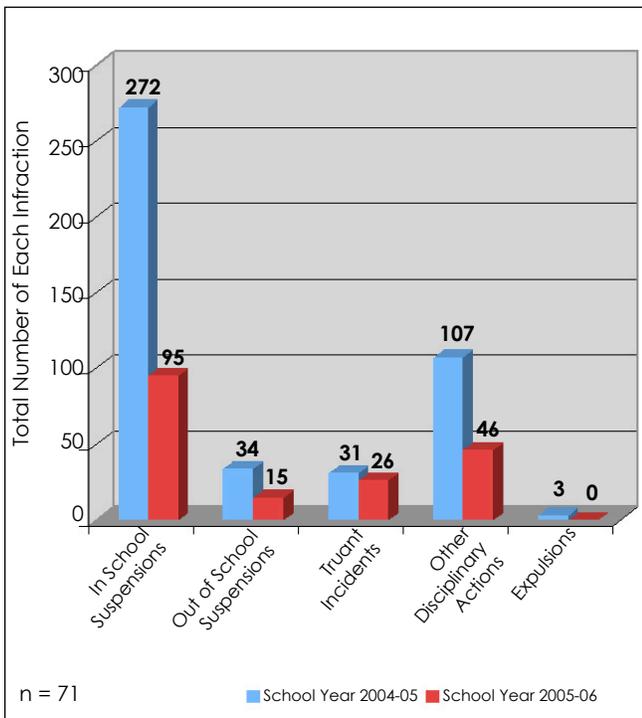
Graph 1: 2005-06 Star Academy Acceleration Program Results



Graph 1 indicates that of the 80 students:

- 2 moved out of the district.
- 7 dropped out.
- 10 gained all but one or two Carnegie units needed to complete ninth grade.
- 61 gained sufficient Carnegie units to complete ninth grade and accelerated to tenth grade.
- 88.75% remained in school and 76.25% accelerated to tenth grade

Graph 2: 2005-06 Disciplinary Referrals Compared Before and During Star Academy Year



Graph 2 indicates a marked improvement in behavior of the Star Academy students from the previous school year to the Star Academy year. The dramatic decline in suspensions and general disciplinary actions indicates improvement in students' attitude due to the program.

Beyond these benefits in academics and behavior, parents and students indicated certain things on surveys designed and administered by university researchers. Students felt safer in the Star Academy. Students had higher personal expectations and expressed a significantly higher level of engagement due to the methods of instruction and hands-on learning in the Star Academy versus typical school programs. In general students reported that they preferred single gender to mixed gender classes.

Next Steps: The Beta Test Year

The alpha program at Pickens County School District was sustained into the 2006-07 school year and, in fact, is using local funds to keep the program operating in the 2007-08 school year.

The following table reflects the 2006-07 alpha site second year performance.

Pickens County 2006-07 Star Academy Students

Resulting Action	2006-07
Enrolled in 10th grade	76%
Enrolled in 9th grade	8%
Did not drop out	84%

The Star Academy has had total staff turnover and in 2007-08 will be located, not in the middle school as originally established but in an adult education facility until the district's career tech school addition is completed. At that time the Star Academy will be operated as part of the career tech center.

The 2007-08 Pickens County staff professional development (training) has been conducted (August 2007) by Pitsco, Inc., the amalgamator of the Star Academy. Program enhancements were included in the training for the third year of the program in Pickens County. Certain new

features were not a part of this professional development.

Based on experiences during the alpha test year, the Star Academy model was enhanced and modified, and a beta test site was identified. The alpha test model was an 80 student model and the new beta test model was designed for 40 students. The beta test site was at the Hanna-Westside Extension Center (HWEC) that is a part of Anderson School District 5. HWEC services the district's two high schools as a career center clustered around programs in business, health sciences, and manufacturing/engineering.

It was agreed that a connection with a career center would provide direct reinforcement of the career focused academic programming and that a certain comfort would evolve for students in a career tech setting. Further, it was believed that a large percentage of at-risk students who have failed one or two years would be best served by career tech education as the next step for entry into high school education. In most cases in South Carolina, career tech students attend the career tech center half time and a comprehensive high school for the remaining half-day. This attendance model enables students to gain career competency while being able to participate in sports and the social life of their comprehensive high school.

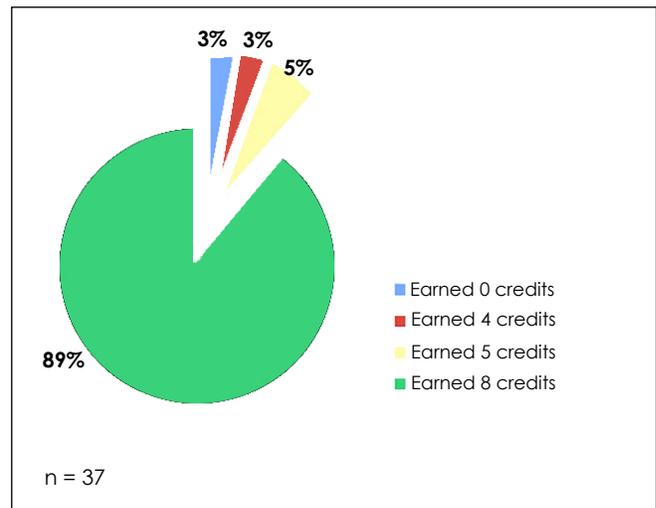
Moreover, in the state of South Carolina 97% of career tech students who enroll in a career tech center at the tenth grade level, complete their program of career studies and graduate from high school. This became a compelling reason to situate a Star Academy on the premises of a career tech center for the beta test model.

The beta model also reflected changes in curriculum in an attempt to offer more ninth grade gateway courses into the Star Academy. A Math for Technologies program offered an Algebra I option and a Computer Applications course was added.

The beta model operated during the 2006-07 school year. The following graphs depict the

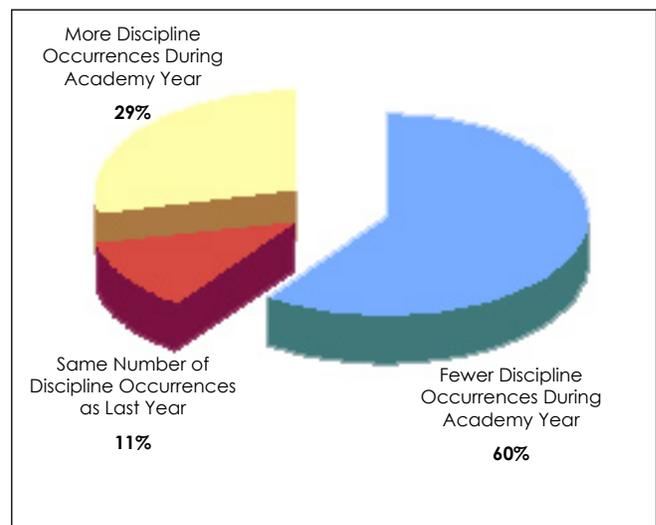
program's levels of effectiveness. Thirty-nine students were enrolled in the program.

Graph 3: 2006-07 Star Academy Acceleration Program Results



Graph 3 indicates that 89% of the students earned eight Carnegie units and 5% of the students earned seven Carnegie Units. Six percent earned four or fewer units. Thirty-five students of the 39 accelerated to tenth grade due to the credits earned.

Graph 4: 2006-07 Disciplinary Referrals Before and During the Star Academy Year



Graph 4 indicates that 60% of the Star Academy students had fewer disciplinary occurrences than the prior year. Twenty-nine percent had a greater number of disciplinary occurrences and 11% remained the same.

Not shown on the graph but gleaned by the university researchers, a full 61% of the

students reported that their attitude towards school during the Star Academy year was much better than the previous year.

Students in the beta program reported that the Star Academy was a place they definitely wanted to be. Furthermore, they indicated that they learned important content they wanted to learn and generally were not bored with their classes.

It was reported by the Anderson School District 5 that all the 35 students who accelerated to the tenth grade have enrolled in the career center for their tenth grade year (2007-08). This was an intended consequence of the placement of the Star Academy on the premises of a career tech center.

Funding for the beta test model was from the Appalachian Regional Commission, SC EEDA At-Risk Committee, Pitsco, Inc., and Anderson School District 5. The Anderson School District 5 school board unanimously voted to sustain the Star Academy into the 2007-08 school year and to increase available space to provide for an 80-student capacity.

The Emergent Star Academy Model 2007-08

The university studies conducted by Pittsburg State University (KS) and Furman University (SC) researchers have looked beyond the Star Academy's goals and provided quantitative and qualitative evidence suggesting the need for program modifications. Such modifications have been, and continue to be, crafted and incorporated.

Curriculum

The curriculum now includes the following courses:

- Biology I
- Physical Science
- Pre-Algebra (Math Tech I)
- Algebra (Math Tech 2)
- English I
- Global Studies

- One to two electives (Computer Applications, Physical Education, Freshman Success, or other course as suggested by the school or district)

The studies pointed out the need for specific programming in the area of preparing for end-of-course tests. In response, the 2007-08 model provides such work in the areas of Algebra I, Physical Science, Biology I, and English I. Star Academy students passed courses in sufficient measure to gain Carnegie units needed to accelerate. End-of-course test performance appears to be similar for Star Academy students with their racial and socioeconomic counterparts in the district high school's ninth grade.

A program of results-based communication has been designed and progressively implemented in the beta models to improve the communication among Star Academy staff, students, and parents/guardians. This work also pointed out the need for a productive parenting program, which was field tested in the beta model and is now a part of the 2007-08 model.

Grading

What gets measured gets studied and learned. In many learning situations that which is to be learned is not clearly understood by the student. Beginning in the 2006-07 school year a point-based grading system was devised, and it has now reached a stage of refinement for full implementation in 2007-08.

For each course, a scope and sequence document will be made available to the three important persons in the learning process: teacher, student, and parent/guardian. Each measured unit of content is listed and the number of points a student earns for proving mastery is cited. Further the number of points needed for a grade (A, B, C, D, F) in each grading period is shown. In this manner, each student and parent/guardian can track progress toward success, and the student, teacher, and parent/guardian will know when the students needs extra help and more time on task.

Mastery in the Star Academy is reachable by all. Time and access to extra help are the unique variables for each student. The use of Saturday school (experimented with at Hanna-Westside this past year) could provide the needed access and extra time.

Star Academy Goals

Universally understood Star Academy goals were needed and the following emerged after much interaction with the test model schools' staff and groups such as the At-Risk EEDA Committee and the National Dropout Prevention Center. These goals will be reviewed annually to assure that they remain viable.

Primary Goals

- Reduce the number of overage students dropping out at the eighth/ninth grade level
- Engage overage students in relevant, career-focused academic learning, employing differentiated instruction
- Accelerate the learning of overage eighth grade students who have previously failed so that they complete the eighth and ninth grade in one school year

Progressive Goals

- Enroll Star Academy completers in a structured career tech program
- Get students closer to functioning in their school peer group
- Re-engage parents in the education of their child
- Provide students with coping skills that enable them to "survive" the tenth, eleventh, and twelfth grades in an unsupported regular school environment

Star Academy Liaison

It became evident that a model as comprehensive as the Star Academy could not be just installed with staff being trained in a one-time manner. During the beta test year a Star Academy Liaison role was created and tested. This was a person retired as a teacher and school administrator and trained in all programmatic aspects, who visited the Star

Academy a full day every other week. The Star Academy Liaison (SAL) sits in on each course, interviews teachers, the administrator, the counselor, and a sample of students and parents. The SAL uses a specially designed checklist (with attendant rubric) to collect the needed information and electronically sends it to the Star Academy administrator and a person designated to communicate with the program developers. It was found that this process provided immediate feedback that identified necessary staff development before a negative trend becomes too serious. It is expected that during the 2007-08 year the SALs will be able to identify areas of professional development needed across a number of new and existing Star Academies.

Star Academy Symposia

As the number of Star Academies grows in South Carolina, a process for sharing successful strategies among Academies and for efficiently providing updated professional development becomes evident. During the 2007-08 year two Star Academy Symposia will be conducted. These day-long sessions will be attended by Star Academy teachers, administrators, and counselors, as well as the Star Academy Liaisons and representatives of the various program developers. Update sessions will be held. Input from the SALs will serve to formulate these sessions. A Star Academy staff feedback session will be audited by program developers so that they might determine if modifications need to be designed. Beyond these sessions a general professional sharing session will be held.

Star Academy Operation and Reference Manual

The studies of the alpha and beta sites established a need for clearly documented baseline operating procedures. It was the tendency for each school to immediately vary operation from the intended design. In order to reduce this effect, a comprehensive operation and reference manual has been produced and will be used with each new Star Academy. The input from the Star Academy Symposia and the Star Academy Liaisons will be used to extend and modify policies and procedures. Further, as Star Academies go into second year operation

and beyond, there will invariably be staff changes. The *Star Academy Operation and Reference Manual* will provide the new persons with a clear understanding of philosophy and expected operation procedures.

2007-08 Star Academies

District	School	Students	Year
Pickens County School District	John T. Simpson Alternative Center for Education	80	3rd
Anderson School District 5	Hanna-Westside Extension Campus	40	2nd
Richland School District One	Olympia Learning Center	80	1st
Richland School District One	TBA: Eau Claire High School or Heyward Career Tech Center	80	1st
Greenville County Schools	Emoree Career Center	80	1st
Allendale County School District	Allendale-Fairfax High School	40	1st
Hampton School District 2	Estill High School	40	1st
Charleston County School District	R.B. Stall High School	40	1st
School District of Newberry County	(TBA)	40	1st

Please note that all of the new models except for Olympia Learning Center and Emoree Career Center are funded exclusively by EEDA At-Risk Committee funds. Olympia Learning Center and Emoree Career Center make use of EEDA funds augmented by local district funds.

The Olympia Learning Center has organized and selected staff who have received the Results Based Communication training. As soon as the school board approves the grant,

the Academy can be ordered, delivered, and the final training can be conducted.

Summary

The Star Academy dropout prevention and acceleration program, through extensive field-testing and university study, has provided evidence that it meets its primary goals.

Through the good offices of the EEDA At-Risk Committee, the ARC, the State Department of Education’s Office of Career Technology Education, and Pitsco, Inc., the model was uniquely designed, developed, implemented and is conscientiously updated for South Carolina’s needs. The Star Academy is a public/private collaboration developed to dramatically reduce the number of eighth grade and ninth grade dropouts in South Carolina and such diminution will be realized as the model proliferates.

There is evidence that the model will be sustained by districts who have benefited by initial grant purchase of the necessary instructional systems and materials. In this way public (state) funds are not expended on one-time programs evidenced in the past.

The Star Academy-Career Tech Center continuum will provide a direct economic development benefit to the State of South Carolina.