Growing Hope as a Determinant Of School Effectiveness

The EdVisions model of secondary schools grew out of the belief that there must be a better match between the educational environment and the core needs of adolescents. Mr. Newell and Mr. Van Ryzin present convincing evidence that focusing on these needs is not at odds with NCLB's focus on raising student achievement.

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DEFINING an effective school has always placed educators in a difficult position. The passage of No Child Left Behind (NCLB) and the rapid growth of state testing systems are complicating matters rather than simplifying them. Standards and standardized tests fail to take account of students' characters or their attitudes toward life and learning. The focus of such measurement is squarely on a single kind of ability at a single point in time. Such data can be useful when diagnosing individual needs in basic skills and knowledge, but they are insufficient when judging the effectiveness of teachers and schools.

What we need if we are to judge school effectiveness is a means by which schools can be assessed as *cultures* that create sets of relationships, norms of behaviors, and values and obligations that lead to the de-

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velopment of healthy and productive adults. Although such elements appear difficult to judge, it is possible to use a series of scientifically sound self-perception surveys in conjunction with a set of school design concepts created to produce growth in the dispositions needed for success in life.

Focusing on youth development is a legitimate means of determining the effectiveness of schools. In a previous *Kappan* article, Dr. James Comer outlined how the Yale Child Study Center Project was able to effect significant academic growth in children when "teachers and administrators bought into the value of basing their work on the principles of child and adolescent development." Comer argued that "many practices in education that have been developed over the past two decades have been less successful than they might have been because they have focused primarily on curriculum, instruction, assessment, and modes of service delivery."[1] We could not agree more.

Our experience reveals that when certain concepts are built into a learning community — concepts that value "personhood" over ruthless efficiency and encourage student self-directedness and teacher/student ownership instead of top-down hierarchies — then that community can indeed foster healthy development. EdVisions, an intermediary organization funded by the Bill & Melinda Gates Foundation to create and sustain secondary schools that use teacher ownership and student-directed learning, now has more than six years of experience in designing and implementing schools that pay attention to adolescent development *as a means to academic success*.

Over the years, EdVisions schools have consistently achieved adequate yearly progress (AYP) under NCLB in both reading and mathematics. Moreover, many of the schools have posted additional indicators of success, such as performance levels in the top 25% of comparable schools, and the schools reliably meet NCLB standards for attendance and graduation, despite serving student populations that often have higher-than-average numbers of low-income, special education, and limited-English-proficient students.

To support our efforts to expand our network of schools, EdVisions not only has created the design essentials, the characteristics, and the tools by which such schools can be built, but also has constructed a school-wide measurement instrument to assess how well each individual learning community is using the EdVisions toolkit to meet the developmental needs of its students. This instrument is called the Hope Study.

The Hope Study was originally designed to evaluate whether our educational setting would produce more positive student outcomes than the traditional model of a secondary school. The basic proposition of our model grew out of the theory of adolescent development known as "stage/environment fit," which hypothesizes three core, overarching needs of adolescents: autonomy, belongingness, and competence.[2] (Autonomy refers to the opportunity for self-management and choice, belongingness refers to the depth and quality of interpersonal relationships, and competence refers to the desire to be effective and successful.) According to this theory, a mismatch between these developmental needs of adolescents and the educational environment can result in such negative outcomes as disengagement, dropping out, or behavioral problems. However, a better match between the needs of adolescents and the educational environment should result in higher levels of motivation, engagement, and achievement.[3] In addition, placing students in a more developmentally appropriate environment should have a positive effect on student psychological health.

Thus the major questions we have asked in evaluating EdVisions schools have been, Is our educational environment developmentally healthier for adolescents, and, if so, how do they respond?

To assess an educational environment, we measure the degree to which the school context supports the students' core developmental needs of autonomy, belongingness, and competence. Measuring the first two components is relatively straightforward, but measuring competence is not so simple. In the Hope Study, we measure support for student competence by means of a concept known as "goal orientation."

In examining student outcomes, academics and standardized test scores are just one piece of the puzzle. From a developmental psychology perspective, student beliefs about themselves (i.e., psychological health) and their attitudes toward school (i.e., motivation and engagement) are also important contributors to academic achievement. Thus, in addition to measuring student perceptions of the environment in terms of autonomy, belongingness, and competence, we also gathered data on how students respond to the environment in terms of engagement and psychological health.

THE MEASUREMENTS

Autonomy. Erik Erikson argued that the need for

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autonomy is innate in all human beings and that a frustration of this need during childhood or adolescence leads to maladaptive behavior and neurosis. Subsequently, research in education has demonstrated the value of student autonomy in encouraging academic success and personal development. Giving students autonomy doesn't mean that they "get to do whatever they want"; rather, it means that the student's personal point of view is acknowledged and that students are given some level of choice in satisfying learning requirements. These types of high-autonomy learning situations stimulate student motivation, engagement, and persistence. These in turn result in higher levels of achievement and lower dropout rates.[4] In contrast, a controlling approach in the classroom reduces perceptions of autonomy, which can interfere with student learning and creativity, especially with regard to more complex tasks.

Autonomy is also essential to healthy adolescent development.[5] Higher levels of autonomy are associated with positive coping strategies in school, whereas less autonomy is associated with higher levels of anxiety and negative coping strategies. Lack of autonomy in childhood and adolescence, when the need for increasing amounts of autonomy is critical to psychological development, can lead to various forms of psychopathology and increased participation in externalizing or high-risk behaviors.

The Hope Study measures student perceptions of autonomy in terms of self-reported reasons for taking certain actions in school. To do this, we make use of the Academic Self-Regulation Questionnaire, originally developed by Edward Deci of the University of Rochester.

Belongingness. The need to belong or to form strong, mutually supportive relationships and to maintain these relationships through regular contact is a fundamental human motivation. It can affect emotional patterns and cognitive processes alike.

In school, positive peer relations and teacher/student relationships are vital to maintaining high levels of motivation, engagement, achievement, and positive behavior.[6] By contrast, socially rejected students show lower levels of engagement, have higher levels of academic and behavioral problems, and can be at significant risk of dropping out of school.[7]

Belongingness also has a profound impact on adolescent mental heath and well-being.[8] Intimate, supportive relationships can enhance adjustment, perceived competence, and self-esteem; they can also reduce emotional distress and suicidal thoughts and lead to lower levels of involvement in high-risk behaviors.

The Hope Study measures belongingness in terms of student perceptions of support from educators and from the general peer group in the school. To do this, we use the Classroom Life Scale, originally developed by David Johnson of the University of Minnesota.

Competence. A student's "goal orientation" refers to the reasons behind his or her efforts to achieve. A "learning" or "mastery" goal orientation represents a desire to achieve purely for the purpose of obtaining knowledge and increasing skills. A "performance" or "ego" goal orientation, on the other hand, represents a focus on appearances rather than on real learning. Thus, for a student with a "performance" goal orientation, the purpose of all activity in school is not to enjoy learning or to satisfy personal interest but to demonstrate superiority or to avoid the appearance of failure.

Research has found that the perceived goal orientation of a school can significantly affect a student's own goal orientation. Students who perceive that their school exhibits a "learning" goal orientation seek challenges, show persistence in the face of adversity, use more effective learning strategies, have more positive attitudes, and are more cognitively engaged in learning.[9] A "learning" goal orientation in a school fosters a desire among students to learn for the sake of learning, without need for external comparisons. As a consequence, it has been linked to higher levels of motivation and, in turn, of academic achievement.

On the other hand, students who perceive a "performance" goal orientation in their school seek to avoid challenge and, in the face of failure, exhibit a "learned helplessness" response.[10] As a result, a "performance" goal orientation in a school leads to reduced motivation and lower academic achievement.

The Hope Study measures students' perceptions of the goal orientations of their schools. To do this, we make use of the Patterns of Adaptive Learning Survey, developed by Robert Roeser of Tufts University.

Engagement. Engagement refers to a student's behavior and attitudes in school. Being behaviorally engaged, for example, means that a student works hard, concentrates, and pays attention. A student who is not behaviorally engaged is bored, distracted, and doing just enough to get by. Being emotionally engaged means that a student enjoys being in school and learning new things, whereas an emotionally disengaged student worries or feels discouraged and believes that school is not a fun place to be.

The quality of students' engagement in school correlates with the amount of effort and persistence they put into their learning.[11] Students who are not engaged are more likely not to be able to complete their work on time and not achieve to their potential. An engaged learner, however, attacks schoolwork with passion and regularly achieves solid results. The quality of the learning is also superior for engaged learners, who obtain a deeper understanding of the material and retain knowledge for a longer period of time. Finally, engaged learners are more likely to complete school.[12]

Engagement in learning is encouraged when students' core developmental needs are met in school. In other words, if the school environment is perceived as providing opportunity for autonomy, support for belongingness, and a "learning" goal orientation instead of a "performance" goal orientation, then students will be more engaged in their learning.[13]

The Hope Study measures students' self-reported engagement from both a behavioral and an emotional perspective. To do this, we use the Engagement vs. Disaffection with Learning scale, originally developed by Ellen Skinner of Portland State University.

Psychological health. We assessed students' psychological health using a measurement known as Dispositional Hope. The concept of "hope" reflects an individual's perceptions regarding his or her ability to clearly conceptualize goals, develop specific strategies to reach those goals, and initiate and sustain activity based on those strategies. According to hope theory, a goal can be anything that an individual desires to experience, create, obtain, accomplish, or become. A goal may be related to grades in school or activities outside of school, but the important thing is that the goal have value to the individual.

Hope can benefit students during their time in school as well as in other parts of their lives.[14] Students who are more hopeful not only set more challenging school-related goals for themselves when compared to lower-hope students, but they also tend to perceive that they will be more successful at attaining their goals even if they do not experience immediate success.

More hopeful students also perform better in college.[15] Hope scores can predict final grades in a college class, after taking into account the grades on the midterm exam. In addition, hope scores can predict college grade-point averages, after controlling for entrance-examination scores on the ACT. Higher-hope students are also more likely to graduate. In other words, for students of relatively equal ability, the higher-hope students have a greater chance of success in college. Finally, higher-hope people report more optimism about life, better physical health, and greater levels of happiness, as well as less anxiety and depression.

The Hope Study measures the students' self-reported levels of hope. To do this, we use the Dispositional Hope Scale, originally developed by Richard Snyder of the University of Kansas.

THE EDVISIONS MODEL

How does the EdVisions learning model support the development of these constructs? In brief, EdVisions' design essentials provide space, relationships, and opportunities for students to develop autonomy, belongingness, and a "learning" goal orientation. Out of this design emerge engagement, achievement, and psychological health. The EdVisions design is characterized by four main themes: a student-centered democratic culture; a self-directed, project-based learning program; the use of authentic assessment; and teacher ownership and accountability.

Democratic culture. A democratic learning community thrives in a small school of 200 students or less. Upon enrollment, students join a long-term advisory of 16 to 18 students and generally stay in this advisory during their entire time at the school. The physical makeup of a learning community consists of a series of personal student workstations organized within advisory spaces, an arrangement that gives ownership to students. Teacher/advisors meet twice daily with advisees, oversee student projects, keep track of advisee progress, and provide personal support and coaching. Students are also encouraged to support one another, and a restorative justice system is used.

To encourage active student participation in the school community, each school has a student congress or student senate. These organizations give students a real voice in the management of the learning community. Students are active decision makers and even have

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seats on committees for hiring new staff. Students also contribute to the school community through processes of peer tutoring and peer mediation.

Project-based learning. The learning program is centered on self-directed, project-based learning. Each student's uniqueness is nurtured and respected, and individual learning styles are taken into account. The design of projects is guided by student interest and facilitated by teacher/advisors to ensure compliance with state standards for learning.

Each student has a personal learning plan that emphasizes student interests, goals, strengths, and weaknesses, and, starting in ninth grade, each student has a postsecondary education plan. Student movement through state learning standards is tracked with an electronic project-management system that also supports the design of project proposals, reflection and journaling, documentation of time and learning, and self-assessment. Thus student choice and self-sufficiency are reinforced while academic rigor and accountability are ensured.

Students undertake both individual and group projects, with collaborations often spanning more than one school and sometimes including community members. Teacher/advisors help students locate community experts and resources, actively engage parents in the learning program, and support students' public presentations with community and parental input. Students are encouraged to engage in place-based and service-learning projects that contribute to the local community. Senior projects are expected to exhibit students' life skills and learning-to-learn skills prior to graduation.

Authentic assessment. Project products are assessed by teacher/advisors and parents, and opportunities are provided to make improvements before learning credits are awarded. Each student is required to present multiple projects to the public each year, to use technology effectively, and to choose appropriate presentation methods. Rigorous rubrics are used to assess learning-to-learn skills and individual development, as well as performance, time management, and project outcomes. These rubrics provide a standard set of evaluation criteria while also allowing assessment to be customized according to the idiosyncratic nature of each project. As a result, students have the opportunity to excel and benefit from high expectations without undergoing direct comparison to others.

Our electronic project-management tool allows us to aggregate individual and schoolwide growth and enables students to develop electronic portfolios of their work. Standardized test scores are systematically gathered, tracked, and used to inform the personal learning plans of each student as well as decisions about the learning program and continuous improvement plans at the school level.

Teacher ownership. Not only are students valued highly, but so are teachers. The EdVisions model calls for teacher leadership and ownership of the entire school enterprise. This provides staff members with the opportunity to be involved in whole-school decision making and ensures the highest levels of personal accountability. It may be true that the teacher/advisors in EdVisions' schools work very hard — and in some cases for less money than their peers in traditional environments. However, they have complete control over their schools and their professional lives.

INITIAL FINDINGS

The first set of data was obtained in 2004 from students in both EdVisions schools and traditional secondary schools. After verifying that the correlations were very strong between autonomy, belongingness, goal orientation, engagement, and hope, we performed more detailed analysis and noticed some marked differences between EdVisions schools and the traditional schools.

For one thing, student perceptions of autonomy, belongingness, and a "learning" goal orientation were generally higher in EdVisions schools, even though the school populations generally included more low-SES, special education, and limited-English-proficient students. Even more interesting, the EdVisions students showed a higher level of engagement than did students in traditional schools, and EdVisions students showed an upward trend in hope, while students in traditional schools showed a flat trend in hope. This finding is in line with existing research showing that engagement generally goes down over time in most

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secondary schools. The fact that it was higher in EdVisions schools encouraged us to move forward and gather more data.

Our next step was to directly compare three schools located in the same rural area southwest of Minneapolis. The three schools contained demographically similar students, and the qualifications of staff members were comparable. One of the schools was a long-term EdVisions site, one school was a relatively new EdVisions site, and one school was a traditional comprehensive secondary school, not unlike many others in rural Minnesota. Surveys at all three schools were administered multiple times, so longitudinal measures of change could be captured for the same students.

The data indicated that student perceptions of autonomy, teacher support, and a "learning" goal orientation were significantly higher at the EdVisions sites, while perceptions of a "performance" goal orientation were significantly higher in the traditional high school. Only measures of peer support were relatively similar, although EdVisions students showed slightly higher levels.

Students in the EdVisions schools also demonstrated significantly higher levels of engagement, and student hope scores grew over the relatively short span of one semester, while hope scores fell slightly for students in the traditional high school over the same period. In EdVisions schools, hope grew from an aggregate score of 48.87 to 50.69 at the older site and from 47.47 to 49.45 at the newer site. Both increases were statistically significant. Hope fell slightly from 48.59 to 48.35 at the traditional site. The growth in hope among the EdVisions students is remarkable given that research has generally found hope scores to be quite stable during adolescence and adulthood, unless a significant intervention is introduced.

The increases in hope scores were accompanied by other indicators of success at EdVisions sites. Scores in reading and math went up at every EdVisions site where data were available for three years, increasing a total of 6.3 percentiles in reading and 8.7 percentiles in math. ACT scores at the nine oldest EdVisions sites averaged 22.4 in 2004-05, which is higher than the Minnesota state average (22.2). These data suggest that growth in hope and growth in standardized test scores are correlated with each other, and it seems likely that the joint rise in scores is the result of the higher levels of engagement seen in the EdVisions schools. In other words, the "progressive" educational goal of creating happy, healthy, self-motivated students is not superfluous in the era of NCLB. Indeed, such students also happen to be higher achievers than their less happy, less healthy, less motivated peers. More research remains to be done, but the results thus far are quite promising.

LESSONS FROM EDVISIONS

The EdVisions design involves wholesale school reform and the re-creation of the secondary school environment from the ground up. To obtain similar results, it might be necessary to engage in change at a similarly fundamental level. However, traditional secondary schools can benefit from the experience of EdVisions by taking into account adolescent needs for autonomy, belongingness, and competence. By incorporating some of the design concepts mentioned above or by developing home-grown practices aimed at supporting adolescent needs, it is possible that traditional secondary schools could reverse the downward trend in student engagement over time and show some growth in hope among their students. The methods of the Hope Study can be used to judge how reforms at the school level are viewed by the students, since student reaction will ultimately determine whether the reforms are successful.

By using a set of scientifically designed surveys that can determine how students perceive their environment, schools can be encouraged to adopt reforms aimed at enhancing the psychological "healthiness" of educational settings. The desire to create a psychologically healthy school environment should not be seen as another example of progressive educators tilting at windmills, nor should it be rejected out-of-hand as beyond the scope of education in the era of NCLB. In fact, our experience indicates that seeking to create psychologically healthy schools offers an opportunity to promote *higher levels of achievement*.

In sum, much has to be done to overcome the present fixation on assessing school effectiveness solely by

standardized tests and other traditional measures. We believe, as does Comer, that improvement in school culture must come first, "or the relationships needed to engage students in a powerful way won't be created."[16] Putting in place rigid curriculum, instruction, testing, and delivery systems in an environment that fails to meet adolescents' needs will not lead to long-term effects for students. Our experience at EdVisions has led us to believe that the new three R's (relationships, relevance, and rigor) are at least as important as the old ones. At EdVisions schools, creating environments that allow for good relationships, relevant learning experiences, and rigorous assessment has created passionate, self-motivated, lifelong learners.

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