

Community -Based Learning Environments: The Case of Discovery, an Urban Charter School

Speakers:

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This session will cover several topics of interest, addressing the subject with the help of visual media. The speakers will alternate in their presentation according to topics. After the speakers' presentation the participants will be invited to exchange ideas and experiences that would contribute to an assessment of conditions for the reproducibility of the Discovery approach. The speakers will present the following topics.

Discovery : A Brief History

Discovery Charter School, a small public middle school in downtown Newark, NJ was founded by experienced urban school teachers, Irene Hall and Barbara G. Weiland seventeen years ago. From the beginning, Barbara and Irene saw the exhilarating potential of the Charter School Movement to provide a place where families can join together with educators to raise their children, and where educators can turn ideas into action and deepen their understandings of how learning happens.

Eighty-nine percent of Discovery's students are African-American, 89% receive free or reduced price lunch, and about 10% of its student population have special needs. Stark achievement gaps along these racial, economic, and ability lines have become a well-documented, defining feature of the U. S. education system and they suggest that Discovery's students are less likely to succeed. But Discovery has managed to consistently beat the odds. This school outperforms 89% of schools statewide on the New Jersey Assessment of Skills and Knowledge and 100% of schools educating students with similar demographic characteristics.

To be Followed by Data Reference on Slides

(Example: Header of a Table on Longitudinal Test Results)

School Wide NJASK Test Results (Grades 4-8)					
	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
Data on English Language Arts, and Mathematics					

Discovery: A Small Community

From the beginning, the founders wanted the school to be a small, close-knit community. Discovery has 80 students in grades 4-8. The school leaders are skeptics of the "economies of scale" talk often cited in arguments for large schools. To us, the "getting-larger-for-the-sake-of-efficiency" business model doesn't make educational sense and it turns out, doesn't make financial sense either. The business model runs counter to the notion that schools should be community-based institutions that support real relationships between families, teachers, and children. As school systems get bigger they are often pushed to develop hard-fast formulas, formulas that may not be in children's best

interests.

In our small school, the leaders are close to the decisions that matter and can be flexible and responsive, making changes when necessary. The school does not have a central office away from where the action is. The school's administration has autonomy over how to use resources to best meet student needs—including flexibility over staffing, curriculum and time. The administration is continually generating innovative staffing options, developing schedules that match student needs, and creating curricula from scratch. All Discovery staff (except for the part-time business administrator) work directly with students. Educating kids to be successful in life should never be compared with efficient manufacturing.¹

Researching the paths to learning environments

To a researcher, Discovery School is a school of surprises, or lessons. I am citing a couple of those surprises that ran counter to my expectations. The first time Alessandro visited the school, Irene assigned a 4th grader to give me the tour. They walked through scores of little tables occupied by students intent on their assignments. Just a few out of 75 of them raised their head, watched the scene for a second and returned to their task. Hardly anyone paid attention to us. Only the voice of teachers could be heard. What changed was my assumption based on experience about expecting some form of behavioral change, such as noise because of our interruption of the status quo.

During another observation of this huge open classroom a most revealing finding followed a teacher announcement it was time to read. Surprise: Not moaning, no voices, no questions followed. Everyone seemed to know what to do. These surprises revealed an unusual school climate. The researcher realized he was wasting time with Hypotheses based on his experience and became convinced this school offered a new way of looking at things, a new trail to discover.

The spirit of enterprise

From the parents looking to find the best school for their child to the educational researcher studying the school, one of the most distinct findings is about the Discovery School's spirit of enterprise. From the founders to the faculty, the spirit of enterprise is a powerful presence of this learning environment. Starting from the shared awareness that no two children are alike, teachers can provide personal attention and guidance when needed to ensure the child has true understanding and retention of each skill learned. This approach is ultimately reflected in students attitudes and character formation that could be observed in several behavioral modes, such as their drive to the goal of admission to a good high school, the importance of learning

¹ KnowledgeWorks Foundation in Ohio completed two research studies, 2002, and 2005, analyzing the costs and effectiveness of small schools. Both reports provide evidence that small schools can operate cost-effectively and usually achieve above-average results. According to the NJ Department of Education, 2010 Taxpayer Guide to Education, available at: <http://www.nj.gov/education/guide/2010/> The Newark Public District spends \$22,600 per pupil, while Discovery spend \$12,500 per pupil.

by cooperating with peers, and an industrious interest in the operations of the Kids in Business enterprise.

The Discovery Village and the Power of Place

Architects have been studying the behavioral impact of space. The Antique Romans called it *Genius Loci* or the genie or spirit of place that has magical powers, hence it's called the "Power of Place". The architect Norbert Schulz developed a related theory and applied it to his work. Score of architects followed his theory. Then environmental psychologists developed knowledge by experimentation and findings based on research setting the basis for a science on the subject. Only lately this science has been applied to innovation in the planning of educational facilities. Here is an excerpt from Winfred Gallagher in his book: *The Power of Place* (1993).

"In the 1960s ... Roger Barker decided to chronicle entire days in the lives of children, recording all their interactions not only with people, but with places and things. After examining his data the psychologist came to a startling conclusion. Their "settings" (as he called the interactions with people, places, and things, (things, think of today's family of digital products) were more important determinants of his subjects' behavior than their personalities." Like Gallagher anticipated, this meant that "our surroundings shape our thoughts, emotions, and actions."

Barker developed the theory of "behavior settings" which was subsequently used in architecture particularly in applications to the work place and in health care facilities.

Remarkably, schools have not readily applied those finding to new facility planning. Integrating those settings constitutes a challenge for reasons that may be of interest to discuss in this session.

In any learning environment there are three fundamental settings: the interaction between teachers and students, their interaction with educational tools, i.e digital technology, and their interaction with the school place, particularly the classroom, what's in it, and the way it's organized. The critical issue for approaching the objective of optimal efficiency of a learning environment is to achieve a full integration of the behavioral settings.

Discovery School serves as a model of successful behavioral setting where teachers and students' interactions with the place, the physical settings of the school that is, stand to substantially contribute to educational outcomes in adaptable combinations with the school's pedagogical, and technology settings.

NOTE: Plan and photos of the school in operation, views and details of furniture, Kids in Business. Plants. Animals. Aquarium. Surface colors. Student Statements and Teachers statements. will be an integral part of this topic.

Conclusion: The Discovery Approach

Integrating the Settings with a Multigrade Teaching and Learning Practice

Learning takes place in a flexible, transparent space. Collaboration is literally built into the school's foundation. Teachers work together and consult each other readily. Children of different ages work together brings-in multiple perspectives, since kids of different ages have different understandings and viewpoints. Older kids help the younger kids, and the

younger kids bring a spirit of enthusiasm that the older students may no longer feel so readily. The students do not think of other students as, “the fourth graders down the hall,” instead, all students are viewed as fellow travelers in learning.

Participants' Discussion