The L. I. Education Review

Published in Cooperation with Dowling College’s Graduate Programs.

December 1, 2000

Inside this issue:

■ Designing The Future Of Teacher Professional Development In Puerto Rico
■ The Humanities.... Collaboration “par excellence”
■ The Taxonomy of Kindergarten Intervention Programs in New York State
■ Secondary Principals and Their Call for Training in Computers
■ The Digital Administrator For The New Age

Practical Research for the School Community

Published as a service for school people featuring practical research to help with school planning and curriculum. Readers may wish to join in a roundtable discussion on these topics sponsored by Dowling College.

For information call:
Professor Robert Manley, Editor
(631) 244-5093
e-mail: www.manleyr@mail.dowling.edu
Or Call SCOPE at 631-360-0800
e-mail: Dr. Joseph S. Verdone or Judy Coffey at www.Li-scope.org
SCOPE Board of Directors:

President
  Michael A. Maina,
  Superintendent, Elwood UFSD
Vice President
  Richard C. Malone,
  Superintendent, Southampton UFSD
Treasurer
  Les Black, Superintendent, Brentwood UFSD
Board Members
  Evelyn Blose Holman,
  Superintendent, Bay Shore UFSD
  William J. Brosnan,
  Superintendent, Northport-E. Nthpt. UFSD
  Jan Furman,
  Superintendent, East Hampton UFSD
  Roberta Gerold,
  Superintendent, Miller Place UFSD
  Joseph A. Laria,
  Superintendent, Connetquot CSD
  Kevin N. McGuire,
  Superintendent, Half Hollow Hills CSD
  Margaret A. McKenna,
  Superintendent, Lindenhurst UFSD
  James A. Ruck,
  Superintendent, Sachem CSD
  Richard N. Segerdahl,
  Superintendent, Island Trees UFSD
  Charles W. Rudiger,
  Dowling College Representative

Officers
  John J. Fagan, Jr.,
  Executive Director/CEO
  Joseph S. Verdone,
  Deputy Director for Operations
  Leonard Adler,
  Deputy Director for Management Services
  Leonard Kramer,
  Associate Director

Publishing Staff
  Judy Coffey,
  Assistant to the Executive Director

Long Island Educational Review

Editor: Dr. Robert J. Manley
  Dowling College
Assistant Editor: Dr. Joseph S. Verdone
  SCOPE

Editorial Board:

Dr. Jonathan Hughes, Dowling College
  Finance, Governance and Technology
Dr. Richard Swanby, Dowling College
  Special Education and Learning Theory
Dr. Robert Kotkamp, Hofstra University
  Teacher Education and Administration
Dr. Robert Manheimer, C.W. Post College
  Leadership and Management
Dr. Kevin McGuire, Superintendent of Half Hollow Hills
  Curriculum, Technology and Leadership
Dr. Roberta Gerold, Superintendent of Miller Place
  Standards, Testing and Curriculum
Dr. Jan Furman, Superintendent of Eastport
  Personnel and Staff Development
Dr. Nathaniel Clay, Superintendent of Hempstead
  Leadership, Fine Arts and Multicultural Education
Dr. James Brucia, Superintendent of Huntington
  Negotiations, Management and Science Education
Dr. Candee Swenson, Superintendent of Huntington
  Pupil Personnel, Curriculum and Management
Dr. Eric Eversley, Superintendent of Eastern BOCES
  Technical Education, Strategic Plans and Boards
Dr. David Gee, Superintendent of Western BOCES
  Governance, Leadership and Finance
Dr. Charles Rudiger, Dowling College
  Collective Bargaining and Business Management

Published by:

SCOPE
100 Lawrence Avenue
Smithtown, New York  11787

John J. Fagan, Jr., Executive Director/CEO
(email jfaganjr@li-scope.org)
Website: http://www.li-scope.org
## Contents

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Editor’s Perspective</td>
<td>4</td>
</tr>
<tr>
<td>Designing The Future Of Teacher Professional Development In Puerto Rico: A Survey of Teacher Perceptions Concerning Job Satisfaction, Rewards and Training Models</td>
<td>6</td>
</tr>
<tr>
<td>- Dr. Victor Fajardo-Velez</td>
<td></td>
</tr>
<tr>
<td>Opinion Center: How Do We Save Our Public Schools?</td>
<td>14</td>
</tr>
<tr>
<td>- by Edwin Hughes and Dr. Robert Manley</td>
<td></td>
</tr>
<tr>
<td>The Humanities.... Collaboration “par excellence”</td>
<td>16</td>
</tr>
<tr>
<td>- Vincent W. Foley</td>
<td></td>
</tr>
<tr>
<td>The Taxonomy of Kindergarten Intervention Programs in New York State</td>
<td>18</td>
</tr>
<tr>
<td>- Dr. Thomas E. Mangano</td>
<td></td>
</tr>
<tr>
<td>Secondary Principals and Their Call for Training in Computers</td>
<td>25</td>
</tr>
<tr>
<td>- Dr. Gail Borruso</td>
<td></td>
</tr>
<tr>
<td>The Digital Administrator For The New Age</td>
<td>27</td>
</tr>
<tr>
<td>- Dr. Robert J. Manley and Dr. Jonathan Hughes</td>
<td></td>
</tr>
<tr>
<td>Catching the Technology Wave - How One School District Leapt Forward to Embrace the Future</td>
<td>29</td>
</tr>
<tr>
<td>- Dr. Kevin McGuire</td>
<td></td>
</tr>
<tr>
<td>Schools That Learn - A Book Review</td>
<td>32</td>
</tr>
<tr>
<td>- Richard J. Hawkins</td>
<td></td>
</tr>
</tbody>
</table>

## Table of Contacts

| **Mail** | L.I. Education Review  
SCOPE  
100 Lawrence Avenue  
Smithtown, NY  11787 |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Telephone</strong></td>
<td>631-360-0800  x116</td>
</tr>
<tr>
<td><strong>Fax</strong></td>
<td>631-360-3882</td>
</tr>
</tbody>
</table>
| **Email** | manleyr@mail.dowling.edu  
jcoffey@li-scope.org |
| **Article Submissions** | L.I.Education Review is a peer reviewed publication that is published in May and December of each year. All submissions should be double spaced, in 12 point characters and accompanied by a disk in Word. Authors should follow the APA guidelines. |
| **Reprints & Photocopying** | Copying requires the express permission of L.I. Education Review. For permission, write to Dr. Robert Manley, L.I. Education Review, SCOPE, 100 Lawrence Avenue, Smithtown, NY 11787, call 631-360-0800, ext. 116, or fax requests to 631-360-3882. |
| **About SCOPE** | SCOPE is the Suffolk County Organization for the Promotion of Education. It is a not-for-profit, private, voluntary organization permanently chartered by the New York State Board of Regents to provide service to school districts. Founded in 1964 by school superintendents, it is a cooperative venture for sharing resources to deal with common concerns. It is governed by a Board of Directors of school superintendents and college representatives and serves as a regional School Study Council and School Board Institute. |
Editor’s Perspective

Initiating a new endeavor, whether it be as solitary as playing the piano or hitting a golf ball; whether it be as collaborative as starting a new business or publishing a new magazine, poses many surprises for the players. My first surprise came with the many volunteers who agreed to serve on our Editorial Board. I want to publicly thank them for their generosity and commitment to furthering the work of our schools in the mission of teaching and learning. In addition, a debt of gratitude is extended to the Board of Directors of SCOPE, and especially, the Executive Director, John J. Fagan, Jr., the Deputy Director, Joseph S. Verdone, and Special Assistant, Judy Coffey who made this publication a reality. Also, I wish to thank the authors who presented their work for review and who are the first writers and researchers to publish in The Long Island Education Review. Finally, I wish to thank the members of our Peer Review Committee, who conducted anonymous reviews of the articles and offered suggestions and judgments that improved each article for publication, or caused it to be sent back to the authors for further development.

The articles selected for this review will guide school, business and community leaders to work collaboratively in the design of effective schools that serve the needs of all children and staff. We are especially proud to have Dr. Victor Fajardo-Velez, Secretary of Education in Puerto Rico, provide our lead article: Designing the Future of Teacher Professional Development. Dr. Fajardo-Velez investigated teacher satisfaction with staff development and the teacher career ladder program in Puerto Rico. His methodology offers personnel administrators a model to assess the status of teacher satisfaction in Long Island districts at a time when all schools seem to be having difficulty retaining their teachers.

Our Opinion Center opens with an article that questions the wisdom of New York State’s high stakes testing model. Ed Hughes is a doctoral student in my public policy class and General Manager of the Free Lance Star Publishing Company in Fredricksburg, Virginia. He and I worked on this opinion piece to focus New York State’s leaders on the issue that we believe makes the most sense for the children of this diverse state. We would like to hear your opinion about the New York testing model and publish some of your letters in our May issue.

Vincent Foley retired recently from the West Babylon schools where he was Chairperson of the Foreign Language Department, and he coordinated a New York State Model Humanities Program for twenty-five years. His insight into collaborative leadership provides a guide for any innovator who wishes to have a long-term impact on learning and opportunities for students.

Tom Mangano graduated from Dowling College in June 2000 with a Doctorate in Education Leadership and Tech-

---

Attention Students:

SCOPE, the leading child care provider on Long Island, is looking for a few good students who want to earn money while gaining valuable experience in the field of early childhood education.

Students are needed to work in before and after school-based child care programs throughout Suffolk and Nassau Counties from approximately 7 AM - 9 AM and/or from 2:30 - 6 PM.

If your schedule allows you to work during these hours, give the SCOPE Cares for Kids Administration Office a call at (631) 360-0800.

---

Peer Review Committee:

Dr. James Brucia
Superintendent, Huntington UFSD

Dr. Corrine Taylor Dunlop
Dowling College, School of Education

Dr. Eric L. Eversley
District Superintendent, Eastern Suffolk BOCES

Dr. David Gee
District Superintendent, Western Suffolk BOCES

Dr. Roberta Gerold
Superintendent, Miller Place UFSD

Raymond J. Haberski
Adjunct Instructor, Teacher Education, Marist College

Dr. Jonathan Hughes
Dowling College, School of Education

Dr. Robert Manheimer
Department of Educational Leadership, L.I.U.- C.W. Post College

Dr. Barry McNamara
Dowling College, School of Education

Dr. Jonathan Nidds
Dowling College, School of Education

Dr. Charles Rudiger
Dowling College, School of Education

Dr. Richard Swanby
Dowling College, School of Education
technology. His dissertation investigated the differences in kindergarten academic intervention programs in ten regions of New York State excluding New York City. For principals and kindergarten teachers who wish to assess how comprehensive their academic interventions are, Tom Mangano’s *Taxonomy of Kindergarten Academic Interventions* is a good place to start.

Gail Borruso, who completed her doctoral studies in June 2000 at Dowling College, offers special insight into computer training for high school principals. Her research points out why generalized training frequently fails to develop the leadership behavior, attitudes and mastery that principals require to guide their staff in the application of the new technology. Read her article if you want to learn how to improve staff development efforts for principals.

Kevin McGuire, Superintendent of Half Hollow Hills, describes a new approach to networked technology that he calls *telecommunications for school systems*. He and his staff, the district Board of Education members and community representatives took the time to look into the future before settling on a design for an integrated telecommunication and security network. Anyone considering an up-grade in a school district communication network could benefit from reading this article: *Catching the Technology Wave*.

The last article has been selected to guide administrators and teachers towards the software and presentation skills that they will need in the new *digital age*. Jonathan Hughes is a well-known expert in the field of digital management. I have the privilege of working with him at Dowling College. In this article, he and I attempted to bring digital technology from the realm of cyberspace to the desk-top of administrators who need better presentation tools to share ideas and information with their staff in practical and effective ways.

When I placed these articles across the floor of our family room, I realized that this issue would weave a tapestry with three major threads: focused leadership, collaborative guidance and technological guidance. The editorial board hopes that you enjoy our first issue. We welcome your comments and we wish to thank the reviewers who evaluated the articles for this publication.

Robert J. Manley
Editor
DESIGNING THE FUTURE OF TEACHER PROFESSIONAL DEVELOPMENT IN PUERTO RICO: A SURVEY OF TEACHER PERCEPTIONS CONCERNING JOB SATISFACTION, REWARDS AND TRAINING MODELS

- by Víctor Fajardo-Vélez, Ed.D.

Abstract

This study explored the perceived strengths and weaknesses of teachers' job satisfaction, rewards and incentives, and training and retraining. Data gathered through a questionnaire and interviews provided insights for including 5 perceived strengths and 4 relative weaknesses in future planning. Recommendations for implementing a Teacher Career Ladder program were made.

Introduction

Researchers have pointed out that what students learn is affected by the qualifications and experience that teachers have (Webster, 1988). Without teachers, students would not be prepared for the challenges and opportunities in America's third century (U.S. Department of Education, 1998, p. 7). The Puerto Rico Department of Education supports professional development activities for its teaching personnel.

The problem

Due to issues of salary, job satisfaction, and promotional advancements, the only opportunities available for teachers to receive a higher pay exist at an administrative position or in leaving the agency. This situation leads teachers to enroll at the graduate level and obtain a higher degree that will enable them to be considered for a promotion. This affects the majority of the classrooms because excellent resources abandon teaching to become administrators. To help alleviate this situation, the researcher looked into these issues and made recommendations to revise, improve, restructure current professional development programs, and implement a Teacher Career Ladder program that would help train and retain teachers in the classroom.

Purpose of the study

This study had three foci: first, to examine and assess the perceived strengths and weaknesses of the current program model for teacher development in Puerto Rico; second, to compare the basic components of the current professional development program with those of successful Teacher Career Ladder models currently in place in other educational systems; and third, based upon the results of the study, to recommend modifications, improvements or revisions of the current professional development program to include those components in both models which successfully meet the identified professional development needs of teachers in Puerto Rico.

Methodology

The researcher used a combination of both a quantitative and qualitative research design. A teacher survey prepared by National School Services, Inc. was administered.

Sampling technique:
A stratified random sampling procedure, aimed at capturing and describing the central themes or principal outcomes that cut across a great deal of participant variation (Patton, 1990, p. 172), was used.

Sampling size:
The survey sample attempted to survey 1,009 tenured teachers (from a universe of approximately 43,000 teachers) of which 994 were returned. Of these, 973 were completed by valid respondents and thirty teachers were individually interviewed.

Research instrumentation:

The Questionnaire:
The questionnaire focused on whether the school system, based upon respondent perceptions, was addressing teachers needs in job satisfaction, rewards and incentives, retraining and training plans, and the Teacher Career Ladder program. It also explored the perception of respondents about the degree and direction of these in terms of their importance and existence.
SAMPLE SURVEY:

<table>
<thead>
<tr>
<th>II. JOB SATISFACTION</th>
<th>IMPORTANCE</th>
<th>EXISTENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The education system provides opportunities for a collaborative planning process involving all concerned.</td>
<td>5 4 3 2 1</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>2. Teachers’ needs are revised in an individual needs assessment process.</td>
<td>5 4 3 2 1</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>3. The school has a climate of high expectations as it relates to the teaching learning process.</td>
<td>5 4 3 2 1</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>4. Teachers’ needs are important criteria used in decision making.</td>
<td>5 4 3 2 1</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>5. Teachers are motivated to contribute towards achievement of the school mission.</td>
<td>5 4 3 2 1</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>6. The school climate promotes learning.</td>
<td>5 4 3 2 1</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>7. Teachers who have difficulties with the teaching learning process are identified and the necessary assistance is provided.</td>
<td>5 4 3 2 1</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>8. Teachers participate in their performance evaluation process.</td>
<td>5 4 3 2 1</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>9. Teachers have the necessary knowledge, skills and attitudes to integrate parents in the school process.</td>
<td>5 4 3 2 1</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>10. Teachers feel comfortable with the subject teach.</td>
<td>5 4 3 2 1</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>11. Teachers count with parental support about the educational and disciplinary methods and techniques.</td>
<td>5 4 3 2 1</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>12. Teachers know their students and include varied strategies, methods and techniques to address their needs.</td>
<td>5 4 3 2 1</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>13. Teachers feel satisfied with the technological resources available at their school.</td>
<td>5 4 3 2 1</td>
<td>5 4 3 2 1</td>
</tr>
</tbody>
</table>

Significance of the Problem

Several career ladder programs and plans have been implemented in the United States, however, no evidence exists that a career ladder program has ever been implemented in Puerto Rico. Chapter 1, Article 1.02, third principle of Law 68 of August 28, 1990, Ley Organica del Departamento de Educacion (Organic Act of the Department of Education) refers to the teacher as an essential constructive agent of change in the system. Law 68 (1990) indicates that it is the responsibility of the Department of Education to promote working conditions for the teachers that will consequently result in the improvement of the quality of learning. It further recommends that the Puerto Rico Department of Education adopt responsible, autonomous, and flexible measures for retaining the best teachers in the classroom. This is also encouraged in Law 149 (1999).

In Article 1.02, statement number 9, of Law 18 of June 16, 1993, Ley para el Desarrollo de las Escuelas de la Comunidad (Law for the Development of Community Schools), The Teacher’s Career Ladder is brought up. Law 18 (1993) indicates that the Department of Education is responsible for implementing a Teacher’s Career Ladder that will contain a ranking system in which academic preparation, professional performance, experience, and professional development become essential. Furthermore, the parameters of the Institute for Education Reform are presented in Article 5.06 of Law 18 which specify that a subsystem for ranking teachers needs to be designed as part of the Teacher’s Career Ladder.

Laws 68, 18, and 149 point to the existing need of a Teacher’s Career Ladder in Puerto Rico. They conceive the Teacher’s Career Ladder notion as an incentive to attract and retain the best teaching personnel in the classroom. By implementing a Teacher’s Career Ladder program in Puerto Rico, the Department of Education will have raised the bar for teaching by awarding teachers for meeting the established guidelines.

Career Ladder Programs

Different Career Ladder programs have been implemented in the United States for different purposes. Some of these programs, like the Fontana Career Ladder program, aim at having participants maintain their academic standing by making
steady progress until they earn a teaching credential. Others, like the Cleveland City and California Career Ladder programs, provide several options for professional growth and career development in which opportunities for becoming a certified teacher, earn college credit, and seek to improve teaching are available. Then, there are career ladder programs that support compensation systems with incentive components to have teachers reach different ranks as part of a reward system when they exhibit competencies in executing their responsibilities. Some of these programs have already been developed in Arizona, Georgia, Illinois, Indiana, Louisiana, Maryland, Missouri, Tennessee, and Utah. A recent survey of state career ladders conducted by the Southern Regional Education Board, Cornett and Gaines (1994), found that only four states funded career ladder programs: Arizona, Missouri, Tennessee, and Utah.

Ricklefs (1987) indicates that career ladders are aimed at helping schools retain high-caliber teachers. Career ladders allow teachers to move up without having to leave teaching and could transform a profession in which people have historically spent entire careers at the same level. According to Farber and Ascher (1991), career ladders show respect for experienced teachers demonstrating particular excellence by offering them promotional opportunities. They enable teachers to earn more money, take on new roles, and gain more prestige and professional fulfillment.

The four states that the survey by the Southern Regional Educational Board of state career ladders conducted and found to be funded are summarized as follows:

**Arizona:**

The Arizona career ladder program is presented in the *Arizona Revised Statutes* (A.R.S. 15-918-.02, 1998) and points out that in order to receive budget approval for a career ladder program in this state, the plan for implementation must contain the following components:

- Opportunities for professional career development based primarily on improved or advanced teaching skills, evidence of pupil academic progress and higher level instructional responsibilities.
- Provisions requiring all teachers new to the district to be evaluated.
- Provisions for ensuring that the placement of teachers on the career ladder shall be based on more than one measure of teacher performance incorporating the areas of instructional performance and pupil academic progress, and requirements for higher level instructional opportunities.
- Utilization of a compensation system which is based on a completely restructured salary schedule in which salary range is established for each career ladder level and a salary is set for each step within a level. The compensation system must be based on equal pay for equal performance and shall not be the traditional schedule based on experience and education with additional stipends for career ladder placement.
- Provisions for the administration of the career ladder program which includes a steering committee, communication of information, program management, and support.
- Provisions for periodic review and evaluation and procedures for refining program components based on the evaluation results.
- Provisions for providing appropriate amounts and types of staff development for teachers and administrators on the requirements and assistance in improving performance.

In addition to these components, the *Arizona Revised Statutes* also indicate that monies budgeted for the career ladder program may be used to support incentive components in which awards are based upon group, team, school, or district performance, except for the fact that the awards shall not be based upon extra pay for extra work. If this component is included as part of the career ladder program, the district shall have to develop an assessment plan for the measures of performance and the monies shall not exceed five percent of the monies allocated for the additional incentive components.

**SAMPLE SURVEY:**

<table>
<thead>
<tr>
<th>III. REWARDS/INCENTIVES</th>
<th>IMPORTANCE</th>
<th>EXISTENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teachers’ competence is acknowledged within the school community and society in general.</td>
<td>5 4 3 2 1</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>2. Teachers’ know the type of incentive they will receive and the established criteria to obtain them.</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>3. Teachers are satisfied with the salary they receive.</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>4. Teachers are acknowledged in the different levels of the school system for their achievement.</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td>☐ ☐ ☐ ☐ ☐</td>
</tr>
</tbody>
</table>
Missouri:

The guidelines included in The Missouri Career Development and Teacher Excellence Plan (1993) for implementing the Missouri Career Ladder Program in the Public schools define career ladder as:

A process to provide supplemental pay and incentives for established, quality teachers. This process is organized as a series of stages with each stage containing a set of predetermined criteria. The criteria are established to recognize teacher effectiveness, professional activities and growth, and include specific qualifications to be met and responsibilities to be completed for each level. (p.3)

In 1992, the Missouri Career Ladder Program was revised. A key emphasis was that it should provide direct and observable benefits to students and schools. The Missouri Career Development and Teacher Excellence Plan guidelines state that:

The model is organized to provide a “two-way look” at the value of a teacher to the school district. This is accomplished through the recognition of classroom effectiveness as demonstrated by performance-based evaluation and requirements of specific activities related to professional development and school improvement. (p.8)

In the Revised Statutes of the State of Missouri (168.500 R.S.Mo., 1998) the career advancement program is a matching fund program of variable match rates in the state of Missouri. It is known as the “Missouri Career Development and Teachers Excellence Plan,” also known as “career plan or program.” According to the revised statutes, the general assembly shall make an annual appropriation to the excellence in education fund for the purpose of providing the state’s portion for the career advancement program. The revised statutes also indicate that the department of elementary and secondary education, at the direction of the Commissioner of Education, shall study and develop model career plans which shall be available to local school districts and dispose of the following:

- Contain three steps or stages of career advancement.
- Contain a detailed procedure for the admission of teachers to the career ladder program.
- Contain specific criteria for career step qualifications and attainments.
- Be consistent with the teacher certification process recommended by the Missouri Advisory Council of certification for educators.
- Provide that public school teachers become eligible to apply for admission to the career plans after five years of public school teaching in Missouri.
- Provide procedures for appealing decisions made under career plans.

**SAMPLE SURVEY:**

<table>
<thead>
<tr>
<th>IV. TRAINING/RETRAINING</th>
<th>IMPORTANCE</th>
<th>EXISTENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teachers know the technical assistance resources available in the educational system.</td>
<td>5 4 3 2 1</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>2. Teachers are willing to change teaching methods according with the new pedagogical approaches.</td>
<td>○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>3. There are training and continuing education programs according with the teachers needs.</td>
<td>○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>4. Teachers know the selection criteria for participation in training and courses.</td>
<td>○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>5. Teachers prefer to be trained in small groups.</td>
<td>○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>6. Teachers prefer to be trained at school.</td>
<td>○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>7. Teachers have pedagogical reference materials in their schools.</td>
<td>○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○</td>
</tr>
<tr>
<td>8. Teachers feel prepared in the use of the technological resources available.</td>
<td>○ ○ ○ ○ ○</td>
<td>○ ○ ○ ○ ○</td>
</tr>
</tbody>
</table>
In addition to this, the revised statutes recommend that guidelines be established for all career plans established with criteria that must be met by any school district that seeks funding for its career plan. It also recommends that participating local school districts may have the option of implementing a career plan developed by the department of elementary and secondary education or a local plan which has been developed with the advice from teachers employed by the district and which has met with the approval of the department of elementary and secondary education. In approving local career plans, the department of elementary and secondary education may consider provisions in the plan of local districts for recognition of teacher mobility from one district to another within the state.

The revised statutes further state that the career plans of local school districts shall not discriminate on the basis of race, sex, religion, national origin, color, creed, or age. Participation is optional and any teacher who declines to participate shall not be penalized in any way.

The salary supplement for the participants in the career plan are presented under the revised statutes and summarized as follows:

- Each teacher selected to participate in a career plan and who meets the requirements of such plan, shall receive a salary supplement equal to the following amounts:
  (a) Career stage I teachers may receive up to an additional one thousand five hundred dollars per school year;
  (b) Career stage II teachers may receive up to an additional three thousand dollars per school year; and,
  (c) Career stage III teachers may receive up to an additional five thousand dollars per school year.

The career plan also indicates that all teachers within the same school district shall receive equal salary supplements.

**Tennessee:**

The Tennessee Code Annotated (Tenn. Code Ann. 49-5-5002, 1997) proposes the establishment of a new professional career ladder program for full-time teachers, principals, and supervisors. The program, as described for teachers, is summarized the following way:

- The career teacher program shall consist of probationary teacher, apprentice teacher, career level I teacher, career level II teacher, and career level III teacher positions.

- The program shall be designed to promote staff development among teachers, and to reward with substantial pay supplements to those teachers evaluated as outstanding and who may accept additional responsibilities as applicable.

- Supplements paid under the career ladder program shall consist of a supplement paid for outstanding performance of teachers.

- The general assembly’s intent is to award the salary supplements on the basis of outstanding performance and to keep high the standards utilized for this purpose.

- In the career ladder program the certificate issued to the educator shall be supplementary to the basic license issued to the educator.

- Participation in the career ladder program shall be voluntary for all educators.

In order to be eligible for career levels of teaching licenses and certificates in Tennessee, the state board of education has jurisdiction over the issuance of all licenses and career ladder certificates (Tenn. Code Ann. 49-5-5201, 1997). Teachers shall be entitled to undergo evaluation during the year in which they gain eligibility for career level I or II or III status. The evaluation procedure to be used with the teachers is described as follows and they shall be evaluated in accordance with only one of them:

- An evaluation process, including procedures, criteria and instruments, used and developed by a local education agency that has been validated and approved by the state board of education in accordance with the standards and criteria provided.

- The standard evaluation process developed by the state certification commission and approved by the state board of education for use by a local education agency with the approval of the state board of education.

- Where a local education agency has chosen not to or has failed to implement any evaluation process meeting the approval of the state certification commission, then the standard evaluation process developed by the state certification commission and approved by the state board of education, being administered under the state certification commission shall be used.

The criteria for evaluating teachers shall include, but not be limited to:

(a) Classroom position observation and assessment;
(b) Review of evaluations;
(c) Personal conference;
(d) Examination of professional development activities undertaken by the applicant; and
(e) Other appropriate criteria.

**Utah:**

The purpose of teacher career ladders as presented in the Utah Code Annotated (Utah Code Ann. 53A-9-101, 1998) is that the legislature recognizes the importance of rewarding educators who strive to improve the quality of education, of providing incentives for educators employed by the public
schools to continue to pursue excellence in education, of rewarding educators who demonstrate the achievement of excellence, and of properly compensating educators who assume additional responsibilities. In order to achieve these goals and to provide educators with increased opportunities for professional growth, school districts are authorized and encouraged to develop career ladder programs.

The Utah Code Annotated (Utah Code Ann. 53A-9-102, 1998) defines career ladder as:

“Career Ladder” means a compensation system developed by a school district, with advice and counsel from parents, teachers, and school administrators who represent the various schools throughout the district, which is in accordance with...policies and guidelines adopted by the State Board of Education, and approved by the State Board of Education. (p.5)

Under the Utah Code Annotated (Utah Code Ann. 53A-9-103, 1998) the career ladder may include the following components:

- An extended contract year for teachers, providing additional paid nonteaching days beyond the regular school year for curriculum development, inservice training, preparation, and related activities. School boards may approve individual exceptions to the extended year contract.

- At the option of the school board, an extended contract year for teachers, providing for additional paid workdays beyond the regular school year for teaching assignments in summer school, remedial, handicapped, specialized, vocational, gifted and talented, and adult education programs.

- A fair and consistent procedure for selecting teachers who will be given additional responsibilities. The selec-

---

**SAMPLE SURVEY**

**V. GENERAL**

Teachers need to be trained on:

- his/her major subject
- his/her teaching level
- classroom management
- administrative aspects
- others (please specify)

Teachers prefer to be trained:

- after school hours
- Saturday sessions
- During the summer recess

Please answer:

1. How do you think teachers can grow in the teacher career ladder and stay in the education system?

___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________

2. In your opinion, why does the system lose a significant group of teachers?

___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________
___________________________________________________________________________________________


The Utah Code Annotated (Utah Code Ann. 53A-9-104, 1998) also points out that each school district shall develop a program to evaluate its teachers for placement and advancement of the career ladder. The evaluation procedure shall take into consideration the following factors:

(a) be fair, consistent, and valid according to generally accepted principles of personnel administration;
(b) incorporate clearly stated job descriptions;
(c) be in writing;
(d) involve teachers in the development of the evaluation instrument; and
(e) prior to any evaluation, inform the teacher in writing about time frames in the evaluation procedure, the evaluation process, the types of criteria to be used in the evaluation and the factors to be evaluated and the procedure for requesting a review of the evaluation.

In the Missouri Career Development and Teacher Excellence Plan (1993) the state of Utah is cited as operating one of the most successful Career Ladder systems. The Utah Career Ladder system emphasizes a well-based philosophy, a sound evaluation procedure, and flexibility for districts in the development of local plans.

The following implications are discussed in light of the results of the analyses of data:

Job Satisfaction:

When data concerned with job satisfaction were being analyzed, several implications sparked inside the researcher’s mind. First, teachers need to be addressed according to the specific needs that they have. A generic recipe to handle their individual differences does not work the same way with all teachers. Second, when teachers are encouraged to participate in making decisions related to the work they do, their sense of ownership grows and they feel more satisfied and committed to the tasks they have to carry out. Third, when teachers receive the parental support that they need, they will feel more at ease and comfortable with the responsibility they have of educating students. Finally, as teachers are provided with the necessary tools and incentives to remain in the classroom, the number of teachers that seek opportunities outside the teaching profession and leave will be minimized. Undoubtedly, job satisfaction plays an important role in whether a teacher decides to make of teaching a career for a lifetime or decides to leave because he/she is unable to handle situations that develop on a day to day basis.

Rewards and Incentives:

As a result of the analyses concerning the rewards and incentives, teachers believe that they are underpaid for the job they do, and believe that they should get paid a higher salary. More incentives need to become available so that teachers can be compensated for the work they do. A Teacher’s Career Ladder will most certainly address this issue and teachers will be recognized for their efforts and dedication and be given the merit they truly deserve.

Training and Retraining:

Teachers who are well prepared and committed to their job always go that extra mile. When teachers become aware of the opportunities that are available as part of professional development activities they will become active participants and remain in the classroom, an optimal goal of the Teacher’s Career Ladder program.

Interviews:

Individual interviews (n=30) were used to corroborate the questionnaire data.
Statistical analysis:

Quantitative analysis:

The statistical analyses were conducted at three levels: descriptive analysis to describe the total sample; comparative analysis to compare the findings among and between several identified demographic sub-groups of the population; and summative analysis based upon constructed indexes and discrepancy analysis among and between sample sub-groups.

Qualitative analysis:

The analysis of qualitative data involved coding the data, searching for common patterns, relationships and explanations for their existence, and developing categories. The raw data gathered were broken down, conceptualized and reassembled. Strauss and Corbin's (1990) coding paradigm was used.

Findings

The data provided important insights on teachers' job satisfaction, rewards and incentives, training and retraining, and professional development for the recommendation of a Teacher Career Ladder program in Puerto Rico. Some of the areas that were perceived strongly and need be taken into consideration for further planning are:

Perceived strengths:
(a) Teachers' commitment of keeping a climate of high expectations as it relates to the teaching learning process,
(b) motivation to contribute towards achievement of the school mission,
(c) teacher’s comfort with the subject they taught,
(d) teacher’s knowledge of their students and inclusion of a variety of strategies, methods and techniques to address their needs,
(e) teacher’s willingness to change teaching methods according to the new pedagogical approaches,

Relative weaknesses:
(a) parental support concerning the educational and disciplinary methods and techniques,
(b) teacher’s satisfaction with the salary he/she receives,
(c) acknowledgment in the different levels of the school system for their achievement, and
(d) lack of pedagogical reference materials in their schools.

Concluding remarks

The majority of the teachers in the educational system are well-prepared, which means that there are excellent resources in the classroom that could benefit from a well-designed professional development plan and remain in the classroom as a consequence of a well-delineated and implemented Teacher Career Ladder program.

References


Where To Go and What To Do On Long Island

Indispensable for the native or the visitor, this handy, suggestion-packed guide will help you get the most out of Long Island. Museum lovers, beach goers, naturalists, hikers, history buffs - all will find complete, up-to-date information on places to go and things to do. Here are a few of the high points covered:

- Montauk Point Lighthouse
- Parrish Art Museum
- Bayard Cutting Arboretum
- Old Bethpage Village Restoration
- Sagamore Hill National Historic Site
- Whale Watching Tours

Enhanced with 25 black & white illustrations and a keyed map to help you locate points of interest, this 5 1/2 x 8 1/2, 200+ page reference book provides the latest information on visiting hours, fees, guided tours, eating facilities and other services.

This book is a must for parents, classroom teachers, club offices and any one who wants to plan an outing. $4.95 per copy plus tax, shipping and handling.

To order, call SCOPE’s Publications Office at 631-589-5700.
How Do We Save Our Public Schools?
By Edwin Hughes and Robert Manley

Is the New York public education system a disaster as some claim, or even worse, are the public schools unsafe in every way?

In New York, Mayor Rudolph Giuliani has declared that the entire system must be “blown up.” New York City has one of the nation’s lowest four-year high school graduation rates, at just over 60%. (Newsday, June 16, 2000). The Mayor has expressed his frustration with his bombastic remedy while offering little in the way of guidance or hope for public school parents, children and staff.

Drastic changes are clearly needed in some schools within New York City and New York State. Some high school graduates have been attempting to enter the work force even though they cannot interpret and follow written directions nor solve simple math problems. Technology and the information revolution have made these and other deficiencies in New York’s graduates even more debilitating. Scholars, parents, business and community leaders seem to agree that standards need to be raised to improve student performance. Exactly how these improvements should be achieved, however, has become a point of considerable contention.

In response to this need for higher academic performance, New York, along with roughly half of the states in the United States, adopted some form of standardized “high stakes” testing. The high stakes include these decisions: students will not graduate if they fail required state exams; public humiliation will be assigned to schools that do not make the grade as well as a loss of funding and even a loss of employment for principals and perhaps teachers and support staff in failing schools. Opinions differ in the debate to test or not to test and more precisely, to punish or not to punish. So divided and diverse are the pros and cons, it is reminiscent of the Abbott and Costello routine, “Who’s on First.” The answer depends upon who asks the question of whom.

A recent Newsday editorial (January 16, 2000) quoted education critic, Diane Ravitch: “When your expectations are low, that’s what you get.” In the same article, a reference was made to Rudy Crew as a strong advocate of higher standards. This is an accurate portrayal of a committed and effective educator, however, his departure from New York City serves as a strong indication that even the best efforts of sincere leaders can be derailed by a political process focused on patronage and control.

Many education officials and lawmakers view standardized tests as a way to hold the students and schools accountable. According to the Chronicle of Higher Education (April 5, 2000), in Texas, this group includes Governor George Bush, Republican candidate for the Presidency. Bush characterizes his state’s graduation test as part of “a strong accountability system” that has driven school improvements.

The Texas statewide-standardized test titled the Texas Assessment of Academic Skills (TAAS) is administered to children in grades 3-10. The TAAS system further divides and analyzes students’ test scores, drop-out figures, and attendance rates by racial, ethnic, and economic backgrounds. This data is used to rate schools and accredit districts. Gary Oldfield, professor of education and social policy and co-director of the Civil Rights Project declares: “Texas is often heralded as a successful model for the nation of how tests can improve the academic performance of students, particularly poor and minority students. These studies, however, raise serious questions about the wisdom of putting so much at stake on one measure.” (Harvard Gazette, January 20, 2000.)

In one study, Linda McNeil of Rice University and Angela Valenzuela of the University of Texas examined the impact of TASS on the quality of instruction, curriculum, and classroom practices in Texas schools, focusing on those schools that serve large numbers of minority and economically disadvantaged populations.

The authors’ overall conclusion was that “TAAS masks the real problems of inequity that underlie the failure to adequately educate children. By shifting funds, public attention and scarce organizational and budgetary resources away from schools and into the coffers of the testing industry vendors, the futures of the poor and minority children and the schools they attend get compromised.” (Harvard Gazette, January 20, 2000).

Linda Darling-Hammond, former Chair of the New York State Curriculum and Assessment Council, and currently professor of education at Stanford University has this to say:

“The greatest problem is that the school reform train has become disconnected from the testing engine... States like Georgia and South Carolina that pursued similar test based reforms in the 80’s showed no increase in student achievement on national measures, while the graduation rates declined. States like Connecticut that invested in teaching quality and low-stakes performance assessments showed dramatic improvements on achievement and graduation, even while their students became more low-income and language diverse. We need to realize that testing students is not the same as teaching them. If New Yorkers want a great education system once again, they will need to hold policy makers accountable for stitching together a wardrobe of effects that honors serious learning, supports local innovation, develops

“When your expectations are low, that’s what you get.”
- Diane Ravitch
teaching quality and invests in student success in all schools across the state.” (Newsday, June 16, 2000).

Will the Legislature, the Regents and the Commissioner of Education in New York invest in teaching and learning, local innovation, and student success rather than measuring student failure? Is the Connecticut model a better example for New York than the Texas model?

Is it possible that New York’s policy makers are expressing the same frustration exhibited by Mayor Giuliani when he suggested that the public school system in New York City should be blown-up? Is it possible that our state leaders realize that their proposal will not work in its current form? Have they grown tired of incompetent school boards, tenured administrators and faculty not really making the changes necessary to do the job that our global economy requires? Is it possible that our leaders intentionally created this level of discomfort and debate in order that these issues would finally get the attention that they so desperately deserve? Is it probable that all this money has been spent on high-stake tests and their designers to merely awaken the citizenry? Wouldn’t six a.m. wake-up calls have been less expensive and more effective?

Might our leaders be a lot smarter and visionary than they appear? Does Robert M. Johnson, former Publisher of Newsday, and current New York Regent representing Long Island, offer a clue to the Board of Regents’ strategy when he states: “We’re not going to do something stupid” like ignoring things that “go dramatically awry.” (Newsday, January 16, 2000). Does he mean to tell us that the Regents know what is wrong and will fix it or does he mean we can’t possibly know what doesn’t work, so wait for the Regents to tell us what works, or does he mean the Regents know these reforms won’t work in all cases and they intend to fix what doesn’t work as they go along? In any case, how long do we wait?

In his book, Political Leadership and Educational Failure, Seymour B. Sarason (1998) asks of parents: “When your child graduates from high school, what is the one characteristic you would want your child to have?” Sarason observes that grappling with this question forces one to consider what is the overarching purpose of schooling? He notes that Jefferson believed that the purpose of schooling was to enlarge and nurture the child’s knowledge and understanding of what it means to be responsibly free in a free society. Sarason offers an answer to his own question: “When a child graduates from high school, I would want him or her to want to continue to learn more about self, others, and the world. Put another way, I would want all children to have at least the same level and quality of curiosity and motivation to learn and explore that they had when they began schooling.”

Will high stakes testing develop curious and motivated students who wish to continue learning and who want to be responsible citizens? Or is Mayor Giuliani correct when he calls for the total disillusion of the myth that our public schools work?

To truly “blow up” the public schools that have failed to educate our students, we would have to eliminate incompetent boards of education and restrict local school board members from interfering in the selection and evaluation of personnel. Their responsibilities would have to be more narrowly defined to fiduciary and policy issues. State officials know
I was traveling this past August through the countryside of France with my wife and some very dear old friends when I was asked if I would be interested in writing a (short) story of the Humanities Program of Studies which I had directed for thirty-one years. It sounded like a good idea while I was relaxed and enjoying the historical sights of France. I was given a deadline which, at the time, seemed so far away. But time has a way of catching up with you and now I am faced with the task of writing my thoughts about our Humanities Program—a program that lasted for nearly thirty years during my tenure as its director at West Babylon High School. It changed from a one semester course to a full year program, to a double period full year program, that began with a selected group of thirty five seniors meeting in the auditorium and expanded to nearly 50% of the seniors in the Large Group Instruction Room: The Humanities Program had its humble beginnings on the high school level and its impact was recognized both on the state and national level. In its 30 years of operation 6,000 students completed the course and many are now doctors, lawyers, teachers, politicians, college professors, to mention only a few. Finally, the program provided students with as many as 6 college credits in several local and state-wide universities.

This summer, as we traveled through France, the topic of the Humanities Program came up many times. We exchanged many stories about the program, laughed so hard about some of the behind-the-scenes events at Lincoln Center that took place during the course of the program and raised the questions as to how such a program had lasted so long. As I look back over the years I have asked myself that same question: What had sustained such a program? What was the order of the day, and curiosity for great works was a “natural” for all students. When I left the program upon my retirement after 40 years in education, I felt very confident we had remained focused on what our students would learn.

Instructional methodology throughout the many years of the program was a prime concern of mine. Early on, I realized that there was no one instructional approach to capturing the interests of the students. My philosophy…give the teacher the freedom to teach and provide him/her with whatever is needed to do the task most effectively. And, by the way, don’t hesitate to tell that person how great his/her lecture was. Above all, learn from each other.

Keeping course content interesting and appealing to both the needs and interests of the students was a constant concern. What had appealed to the students ten years ago may still be appealing but the address must be in a different fashion. I guess the concern must be called change. Dealing with an older staff, in fact some of whom helped fashion the program, was a challenge of monumental size. Change for many doesn’t come easily, and as I learned later, to some it never arrives. My goal was to convince colleagues through example that change enriches intellectual appetites—it doesn’t diminish them. After all, I had been in education since the “Middle Ages” and if I embraced change couldn’t others at least give it a try? Students had a personal vested interest.
in the course. To many students, our program of studies looked like the courses they would select in their first year of college. To others, not going on to college, it was the college course they might never receive. So, we had to get the students involved. Get away from the totally “I lecture…you listen” approach. Make the students part of the presentation and test their respective critical thinking skills. I was pleasantly surprised to observe how comfortable the “seasoned” staff members became with this approach. And, to further the quest for student involvement, I invited several students in the program to sit down with the staff to talk about the program, its content, approach and methods of assessment. Imagine this…an Art specialist and Humanities students discuss ways of making certain aspects of art history more “au courant”. Interestingly, an outgrowth of these meetings was the formation of a carefully constructed student evaluation sheet which we asked each one to complete after each of the major themes in the program had been completed. In addition, course content was kept even more interesting and relevant through well planned trips, (at least 5 each year) to New York City to a variety of cultural presentations, in particular, the theatre. One that comes to mind instantly involved seeing a professional production of Sartre’s No Exit. The students had heard tapes and read, word for word, the entire play. In depth discussions had taken place, then the students went to the theatre to view the presentation of the play, and when we returned to school, we concluded with a seminar for students to critique the play.

Early in the program, and even as the program became highly successful, I became aware of “two schools of thought” among the larger faculty — the romantics (whom I mentioned previously) were dreamers and believed nothing was impossible when it came to teaching students, and the cynics, the voices of doom who believed nothing could really be done to change student learning patterns because our district “just didn’t have that quality of student.” This was somewhat of a shock to me and in some cases still remains a mystery to me. Why does anyone think in this cynical way? (What a message to deliver to any student.) The Humanities Program became an ideal avenue to overcome, at least to some degree, such thinking. How? Get the cynics involved. Don’t spend endless hours defending the program. Invite them in to participate on an instructional/lecture basis with a topic or an area of expertise related to the general themes of the program. Let them see that being a part of the program on a daily basis was really something special and allow them to use their knowledge on a much broader range than in their respective classes. Follow up their presentations with positive comments…make them feel special. It worked (for the most part). Only a few remained cynics. But, the nice outcome was that word quickly spread that staff members were being invited to lecture in the Humanities Program. I was pleasantly surprised to learn how many staff members wanted to come into the program. I was also keenly aware that the word “invited” had carried such a strong meaning.

The Large Group Instruction Room in which the Humanities Class met was a special place for seniors who pursued the course. So many of them admitted, then, and in later years, that they looked forward to coming to an environment where there was a relaxed but highly organized structure for learning available to them. It was a place where they weren’t afraid to take a chance in expressing an unpopular opinion. They felt that they belonged there, that they were important to the program, and that they could express themselves openly. Early on, one of the most difficult tasks I faced with both staff and students was to get them to listen and to respect the opinion(s) of another person. The staff were, of course, motivated, professional and mature. The students, on the other hand, lacked a certain maturity necessary to voice opinions in a large group setting. We had to be consistent and reinforce the need to listen to what someone else had to say. The key concept was to convince the students that they could, in fact, learn from their peers and most importantly, each could learn more about himself/herself. To get respect you must give even a greater measure of respect became a slogan in the open-ended discussions within the program.

Momentum in our program was the result of solid planning sessions that consistently kept the program’s outcomes always in focus. I constantly strove to maintain this momentum by (1) listening to the opinions of the team members on all aspects of the program regardless of how insignificant these opinions might appear on the surface and (2) to let them experiment and be creative. No idea or approach was ever totally dismissed. So often, I would tell staff members that if you think your idea has merit, or that your creative approach will produce the results you want, try it. If it doesn’t work, try something else and learn from what you did. There is nothing more rewarding for a staff member who tries something different, than to succeed and be told what a great job he/she did.

As I look back over the many years directing the Humanities Program, I have begun to realize that success in our program was the result of the collaborative involvement to one degree or another of an enormous number of people. So many, many people have been touched by our efforts to offer to our students another avenue to broaden their individual horizons and strengthen their thinking skills. It seems, however, that this involvement was, in many ways, defined by those involved. Our Board of Education supported its continuous existence, and, in fact, on occasions visited our program and required periodic evaluative up-dates on its progress. Both central and high school administrators were there if needed and did much to spread the word about a highly successful program. Most staff members participated in some aspect of the program annually. Outside speakers drawn from local, state and national levels consistently reinforced through their respective expertise interdisciplinary learning and its benefits for critical thinking. The impact of our Humanities students who, as a group, demonstrated the need to understand and respect people from a different culture was felt as far away as Russia, when many of our students became the hosts to Russian students in what was to be remembered as the longest and most successful Foreign Exchange Program in the history of the state. And yes, I re-
member so well the controversy I raised when I began to invite the school secretaries to chaperone our endless cultural trips to New York. So often I heard, “What do you have to do to get asked to chaperone a Humanities trip? Nothing really, just say that you are interested. Inviting them to come with us did so much to enhance our status as an open, caring and successful program.

The Humanities Program is now history for me. As its director, it occupied thirty of the forty years I spent in public education. The effort to sustain the Humanities Program taught me humility, patience, flexibility and an even greater respect for the dignity and worth of the individual. Many times I think of it as “the great balancing act” of my career, always trying to find a middle-of-the-road between student needs and teacher expectations. I had the wonderful opportunity to be the program’s catalyst who provided direction when needed and remained on the sideline when all was going well. Some prefer to define what I did as “leadership.”

I am certain that many of the ingredients of leadership were there. I prefer to view my role as someone who strove to bring out the best in everyone, to consistently treat each individual with kindness, and to make each person feel that he/she was really important to the whole picture of the program. And, of course, if I could do any menial tasks that would allow them to do the task before them, then, that was good, too! I prefer to view myself as someone who was highly organized but not one who forced any organizational gimmicks on anyone; rather, by example, I tried to demonstrate what can be accomplished when goals are clear and the means to those goals are flexible. Working productively with people is an art. Working collaboratively with people requires skill, trust, a high degree of self-confidence and, perhaps most importantly, a strong belief in the creative genius of each individual. When all is said and done, I guess our Humanities Program’s longevity was due in part to how strongly I believed in the creativity of people and our willingness to take chances.

“To thine own self be true, for it follows as night the day, thou canst not then be false to any man”. (Shakespeare, Hamlet)

---

**Taxonomy of Kindergarten Intervention Programs In New York State**

*by - Thomas E. Mangano, Ed.D.*

**Abstract**

This study identified the characteristics of kindergarten early intervention programs in New York State with an eye toward the development of a taxonomy which would be useful in program implementation and enhancement. The common components of early intervention include language development, spatial relationships and concepts, readiness skills, transitions between pre-kindergarten and kindergarten, and kindergarten and first grade, and parent participation in the screening, assessment and implementation of intervention services.

**Introduction**

Children enter kindergarten with a variety of readiness behaviors, many of which are consistent with developmental expectations. Others enter kindergarten with behaviors that indicate that they may be academically at-risk. Kindergarten early intervention programs identify children who are academically at-risk and provide opportunities for the children to develop the skills they will need to prevent future difficulties from occurring. Early intervention programs attempt to ensure that children are not given the opportunity to fail (Slavin, 1996).

Children at-risk may demonstrate a variety of difficulties in the area of speech and language development, which would include phonemic awareness, the ability to follow directions and the ability to understand spatial relationships. These children may also demonstrate negative socio-emotional behaviors that may or may not be related to cognitive deficits. Even though they may not have been identified as having special needs, these children may still be at risk of not achieving success in future school years (Slavin, Karweit, and Wasik, 1993). Without intervention, such deficits are likely to predefine failure in the early school grades and beyond. Ensuring that every child enters school ready to learn is a basic tenet of good education and early intervention is a means by which children at-risk can be provided with the opportunity to develop essential language and reading readiness skills. While a variety of kindergarten intervention programs have evolved and the components of these programs are diverse, many similarities exist among the programs as well. The taxonomy presented in this article serves to illustrate diverse elements of intervention programs and provides an opportunity to identify those core elements integrated within these programs. Research questions included: Which schools in New York State report that they are currently offering kindergarten intervention programs for at-risk children?, What are the characteristics of the various types of kindergarten intervention programs currently offered in New York State?, Do the ten regions of New York State differ in the approach to kindergarten interventions for at-risk children?, What are the elements of kindergarten intervention programs that could be included in a taxonomy?

**Genesis of the Intervention Taxonomy**

Ramey and Ramey (1992) and McClean & Cripe (1997) identify characteristics consistent with kindergarten early intervention programs currently being offered. These characteristics are similar in nature and provide the construct for the follow-up kindergarten intervention program survey developed for this study.
Table 1.2 - represents the relationship between McClean and Cripe, Ramey and Ramey and kindergarten intervention programs that were surveyed:

Table I.2 – Kindergarten Characteristics Examined. McClean & Cripe – Ramey & Ramey Intervention Components

<table>
<thead>
<tr>
<th>Survey Components</th>
<th>Recipients</th>
<th>Provider</th>
<th>Duration</th>
<th>Delivery</th>
<th>Program</th>
<th>Intensity</th>
<th>Timing</th>
<th>Maintenance of Gains</th>
<th>Comprehensiveness</th>
<th>Attention to Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Population</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Screening</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Staffing</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Instruction</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Table I.3 represents the linkage among McClean and Cripe, Ramey and Ramey, and the kindergarten intervention program taxonomy.

Table I.3 Program Taxonomy and Model Linkage

The taxonomy of early kindergarten intervention program characteristics includes assessment, instruction, population, screening, staffing, and structure.

Environmental Factors

Children coming from disadvantaged families are clearly at-risk when they enter public school. In addition to any specific learning disabilities, which may or may not be detected, these children face cognitive disadvantages as well (Hunt, 1961; Scarr-Salpeter, 1971; Zigler & Styfco, 1994).

Early educational programs such as Head Start were developed in order to improve students’ chances of succeeding in schools. The Consortium for Longitudinal Studies provided evidence of the effectiveness of such programs by conducting studies of 11 experimentally designed programs implemented between 1962 and 1973. The findings indicated that children in intervention groups were placed in special education classes less often and retained in grade less often (Lazar, Darlington, Murray, Royce, Snipper, 1982; Royce, Darlington and Murray, 1983). Poverty is one of the many possible contributors to at-risk behaviors and poor school performance. Other contributors may be low birth weight, single parenthood, lack of effective parenting skills, parental stress issues, fewer resources and less access to support and services (Huston, McLoyd and Garcia, 1994; Ceci, 1994).

The Pre-literacy-Literacy Component

Several investigations have sought to determine the relationship between phonological skills and reading acquisition. A direct relationship is evident between phonological awareness instruction and pre-literacy skills in kindergarten children.

Four studies (Castle, Riach and Nicholson, 1994; Davidson & Jenkins, 1994; McClure, Bisanz, & Ferreira, 1996; Morris, 1993) found that a direct relationship exists between segmenting spoken words into phonemes and better skills for beginning readers reading in kindergarten. Two of these studies (Castle, Riach, and Nicholson, 1994; Davidson and Jenkins, 1994) support the conclusion that direct instruction in phonemic awareness results in increased pre-literacy success.

Focus of the Study

The study focused upon the considerable changes that occur during the transition periods the child undergoes. Development is reorganized and new competencies emerge, often with consequences for the child that mark qualitative change. When the competencies of the preschooler interact
with the demands of the school environment the child can emerge socially competent, literate, and capable of higher levels of mastery and self-reliance.

The developmental view illustrates the influence of early experiences on future development (Greenspan, 1989; Sroufe, 1989). The longitudinal view focuses upon the relationship between adjustments in the early school years and behaviors manifested in the period between infancy and preschool (Ramey and Campbell, 1991). The use of both perspectives, the developmental and longitudinal, serves to broaden an all too often narrow frame of reference (Pianta and Walsh, 1996).

Theoretical Construct

The characteristics of structure, population, instruction, staffing, assessment, and screening represent the underlying factors consistent with research literature that characterizes effective intervention in general. A relationship is evidenced between the six characteristics identified by Ramey and Ramey (1992), which include: intensity, timing, direct versus indirect provision of services, environmental maintenance of gains, comprehensiveness, and attention to individual differences and McClean and Cripe’s (1997) intervention program model which includes: recipients of services, timing, methods of implementation, and service providers.

A preliminary survey was distributed in order to determine those school districts which were offering a kindergarten intervention program, and to which a follow-up kindergarten intervention program survey would be sent. The survey contains a variety of categories including demographic data, name of school district, name of person completing the survey and their title. The format contained both open-ended questions and nominal selections. A data base was created to organize respondent information. The surveys were organized by the county and region in which the responding school district was located.

Limitations

The sample of school districts included in this study represent approximately one third of the school districts throughout New York State with the exception of large cities such as New York. Similarly, the taxonomy of kindergarten intervention program characteristics generated for the study is based upon such early intervention constructs as developed by McClean and Cripe, and Ramey and Ramey, and is consistent with related intervention research. The study in no way intended to represent other programs not included within the survey and which may currently be in effect.

Delimitations

The study recognizes that districts from which responses have not been received may be offering kindergarten intervention programs and that findings of the study are based only upon the responses provided by the 191 school districts which completed kindergarten intervention program surveys.

Results

A total of 751 preliminary questionnaires were distributed to school districts in 10 regions throughout New York State. The return rate was 41% with 309 returned. Upon examination of the surveys it was determined that 194 school districts were offering some form of kindergarten intervention program, 77 districts did not have an intervention program, and 38 reported an intervention program on a grade level other than kindergarten.

The Taxonomy of Kindergarten Intervention Characteristics

The taxonomy comprised of those characteristics which are included in kindergarten intervention programs offered by the school districts in New York State that participated in this study.

The column entitled Characteristics includes those elements which were reported in the areas of screening, structure, population, assessment, staffing and instruction. Space is provided in the column entitled District Checklist for the user to compare a local district to regional similarities or differences.

The columns entitled Utilization by Region provide a summary of program characteristics on a regional basis. The regions were represented by the responding school districts located in each of the ten regions in New York State that participated in this study.

Components which were least frequently reported by participating school districts, that is between 0 and 20% are noted by the use of the letter R (Rarely). Components which were reported with moderate frequency by participating school districts, that is between 21% and 50% are noted by the use of the letter M (Moderately).

Components which were reported with the highest frequency by participating districts, that is between 51% and 100% are noted with the letter O (Often).
### Taxonomy of Kindergarten Intervention Program Characteristics

#### Utilization by Region

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Adirondack</th>
<th>Capital</th>
<th>Catskills</th>
<th>Central</th>
<th>Chautaugua</th>
<th>Finger</th>
<th>Hudson</th>
<th>Long</th>
<th>Niagara</th>
<th>Frontier</th>
<th>Thousand</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Staffing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instructional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kindergarten Teacher</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Speech/Language Specialist</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Reading Specialist</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Pre-Kindergarten Teacher</td>
<td>M</td>
<td>R</td>
<td>M</td>
<td>R</td>
<td>M</td>
<td>R</td>
<td>R</td>
<td>M</td>
<td>M</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td>Intervention Teacher</td>
<td>M</td>
<td>O</td>
<td>O</td>
<td>M</td>
<td>M</td>
<td>O</td>
<td>M</td>
<td>M</td>
<td>O</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td>Teacher Assistant</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>M</td>
<td>O</td>
<td>M</td>
<td>O</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td>Math Specialist</td>
<td>R</td>
<td>R</td>
<td>M</td>
<td>R</td>
<td>M</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td><strong>Staffing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support/Supervisory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Psychologist</td>
<td>O</td>
<td>O</td>
<td>M</td>
<td>M</td>
<td>O</td>
<td>M</td>
<td>O</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Social Worker</td>
<td>M</td>
<td>M</td>
<td>O</td>
<td>M</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>M</td>
<td>M</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td>Director</td>
<td>R</td>
<td>M</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>M</td>
<td>M</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>Coordinator</td>
<td>R</td>
<td>R</td>
<td>M</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td><strong>Instruction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vocabulary</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Sound Symbol Relationship</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Letter Identification</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Listening</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Following Directions</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Sequencing</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Math/Spatial Concepts</td>
<td>M</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Handwriting</td>
<td>M</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>
# Taxonomy of Kindergarten Intervention Program Characteristics

## Utilization by Region

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Adirondack</th>
<th>Capital</th>
<th>Catskills</th>
<th>Central Leather-stocking</th>
<th>Chautaugua</th>
<th>Finger Lakes</th>
<th>Hudson Valley</th>
<th>Long Island</th>
<th>Niagara Frontier</th>
<th>Thousand Islands</th>
<th>District Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Language Delay</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Developmental Delay</td>
<td>M</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Economic Disadvantage</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>M</td>
<td>M</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Cultural Diversity</td>
<td>R</td>
<td>M</td>
<td>R</td>
<td>M</td>
<td>R</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>ESL</td>
<td>R</td>
<td>M</td>
<td>M</td>
<td>R</td>
<td>R</td>
<td>O</td>
<td>O</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Bilingual</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>R</td>
<td>R</td>
<td>O</td>
<td>O</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td><strong>Program Assessment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Referral</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Student Achievement</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Teacher Survey</td>
<td>M</td>
<td>O</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>R</td>
</tr>
<tr>
<td>Parent Survey</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>R</td>
<td>M</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>M</td>
<td>R</td>
</tr>
<tr>
<td><strong>Student Assessment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Testing</td>
<td>R</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>R</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>R</td>
</tr>
<tr>
<td>Anecdotal Records</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Student Profile</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Parent Survey</td>
<td>R</td>
<td>M</td>
<td>R</td>
<td>M</td>
<td>M</td>
<td>R</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>R</td>
</tr>
<tr>
<td><strong>Parent Involvement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conferences</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Screening</td>
<td>O</td>
<td>O</td>
<td>M</td>
<td>O</td>
<td>O</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Training</td>
<td>R</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>R</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>R</td>
</tr>
<tr>
<td>Surveys</td>
<td>R</td>
<td>O</td>
<td>M</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>R</td>
</tr>
<tr>
<td><strong>Follow-up Opportunities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade One Intervention</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Resource Room</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>M</td>
<td>M</td>
<td>O</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Retention</td>
<td>O</td>
<td>M</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Self-Contained Class</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Summer School</td>
<td>M</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>M</td>
<td>M</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Transition Class</td>
<td>R</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
</tbody>
</table>
# Taxonomy of Kindergarten Intervention Program Characteristics

## Utilization by Region

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Adirondack</th>
<th>Capital</th>
<th>Catskills</th>
<th>Central Leather-stocking</th>
<th>Chautaugua</th>
<th>Finger Lakes</th>
<th>Hudson Valley</th>
<th>Long Island</th>
<th>Niagara Frontier</th>
<th>Thousand Islands</th>
<th>District Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Screening</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall Pre-Kindergarten</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Spring Pre-Kindergarten</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>M</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Fall Kindergarten</td>
<td>R</td>
<td>O</td>
<td>M</td>
<td>M</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>R</td>
</tr>
<tr>
<td>Spring Kindergarten</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td><strong>Structure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Days</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One Day</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Two Days</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Three Days</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Four Days</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Five Days</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Program Begins</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>September</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>October</td>
<td>R</td>
<td>M</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>M</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Program Ends</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>June</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Length of Day</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full Day</td>
<td>M</td>
<td>M</td>
<td>O</td>
<td>M</td>
<td>O</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Half Day</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>R</td>
<td>M</td>
<td>R</td>
</tr>
<tr>
<td>Extended Day</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Class Size</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One - Five</td>
<td>M</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>M</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Six - Ten</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>M</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Eleven - Fifteen</td>
<td>R</td>
<td>O</td>
<td>R</td>
<td>R</td>
<td>O</td>
<td>M</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Sixteen - Twenty</td>
<td>M</td>
<td>R</td>
<td>M</td>
<td>M</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Twenty Plus</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>M</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
</tbody>
</table>
Discussion of the Findings

Clearly, literacy and literacy related skills were reported as primary instructional elements. It should be noted that vocabulary, sound symbol relationships, letter identification, and listening were reported by at least 90% of the participants and represent as well the framework for literacy and literacy development. These findings are consistent with the notion that the components are reflective of supplying those supports and mechanisms that provide multiple strategies to children rather than a simple idea or curriculum. (Ramey and Ramey, 1992).

Approximately 80% of kindergarten intervention programs appear to be full year programs, beginning in September or October and ending in June. The full year quality of the program is complemented by findings which indicate that many reporting districts screen the population in the spring, prior to the beginning of kindergarten in September. Furthermore, the ongoing nature of screening is reflected in the findings that indicate districts are conducting screening at a variety of times before, during the start-up month, and in a few cases, after the programs begin.

Conclusions

Responding districts indicate that approximately 65% offer kindergarten intervention programs. The majority of districts screened children during the child’s pre-kindergarten years. The structure and infrastructure of kindergarten intervention programs were flexible and compatible with the school calendar. A diversity of socio-economic, cultural, and instructional needs characterized the pre-kindergarten at-risk population. The instruction focused upon the development of literacy and language skills, and also included, though less emphasized, math concepts, spatial relationships, and problem-solving skills.

Program and student assessments are primarily related to student performance. Staff “clusters” providing the instructional services include kindergarten teachers, speech/language specialists, and reading specialists. Limited parental involvement was discernible. Intervention was generally continued in grade one although the retention option was still considered as a viable alternative.

Implications for Further Research

Further research in the areas of class size, length of program, student characteristics, long-term benefits of continued intervention, and effective intervention instruction is certainly worthy of consideration. Furthermore, the topic of parental involvement in relation to early intervention would benefit from increased research attention. It is apparent that the ways in which parents’ beliefs change as their child develops is critical to successful intervention outcomes.

Recommendations

Effective screening and assessment should be ongoing in kindergarten intervention programs and should support classroom teaching. Class size should foster an optimal learning environment which allows for high quality interactions between the teacher and each child. Student assessments performed by teachers should include observations, anecdotal records, student profiles, and parental input. Collaborative instructional teams must employ a comprehensive eclectic approach to literacy and literacy related skill building. Recommendations to extend the intervention concept to the other primary grades will also help minimize use of the retention option and are consistent with the New York State academic intervention services scheduled to be implemented in grades kindergarten through twelve in September 2000.

Summary

The effectiveness of early intervention does not guarantee success throughout the early school years but rather, the issue that failure during these early years may result in failure in future years. Children who are identified as academically at-risk demonstrate behaviors, delays and deficits which, if left unattended, could establish a pattern of failure more complex and pervasive as they move through the grades. Effective kindergarten early intervention serves to identify and alter these patterns and develop essential readiness and language skills.

Kindergarten intervention will play a pivotal role in meeting the needs of children at-risk and preparing at-risk students for the primary grades. Responsiveness to the diversity among children, proactive parental involvement, availability of support services and a continuation of developmentally appropriate practices throughout the primary grades will serve to foster student success.

The Taxonomy of Kindergarten Intervention Program Characteristics developed in this study is a tool for districts developing or modifying a kindergarten intervention program to help meet the needs of children and assist children facing the challenges of the 21st century. Intensive K-2 intervention programs are a powerful positive influence on the school performance of at-risk children and are a far more viable alternative to retention.

References


Acknowledgement

All purposeful research is truly a collaborative effort and this article is no exception. I wish to extend my appreciation to Karen Ritter, Jennifer Kapps-Fleming, and Linda Gifford for their dedication to scholarly research and their exceptional commitment to education. These exceptional graduate students diligently reviewed the breadth of my study in order to contribute to an article which was both salient and comprehensive.

---

Secondary Principals and Their Call for Training in Computers

by Gail Borruso

The secondary principal is responsible for every aspect of managing and leading the school staff into the new age of accountability. Computer software programs offer tools which can assist principals to organize, manage and analyze complex information. According to Witten, Richardson and Prickett (1991) computers have been widely used in the classroom for instructional purposes, but their use for administrative functions in secondary schools has received limited attention. According to Boone (1991) schools and businesses both face similar leadership challenges and need to use computers to facilitate data driven decisions.

In 1999, I conducted a study of secondary principals in Nassau and Suffolk Counties, Long Island, New York asking for the following information:

- Demographics
- Perceptions about computers as an information tool
- Frequencies of computer tasks
- Level of computer use for job related tasks
- Computer training (past and projected needs)

The survey was mailed to 128 secondary principals in Nassau and Suffolk Counties; Long Island, New York and 72 principals (56%) responded. Analysis of the data revealed several interesting findings:

Demographics of responding secondary principals:
- 15% were female
- 65% were between ages 50-59, with a mean of 51 years of age
- More than 93% have a computer at home and in the office
- The majority of principals use a desktop computer and a combination of desktop and laptop computers
- 70% report having used a personal computer for approximately 6-15 years

Computer Training:

The survey revealed that although 75% of the responding principals took computer in-service courses, 93% of them perceived they were self-taught. Most computer train-
ing courses were about specific applications: word processing, databases, bar graph presentation, spreadsheet, desktop publishing, digital graphs/charts, multimedia digital presentations, Internet for Research and computer mapping. Survey results showed there is still a high demand for computer training on all applications, even though principals reported having been previously trained in the use of these applications. Except for word processing, over 50% of principals indicated the need for training in all categories. The survey results are in Table 1.

Table 1
Principals Prior Computer training compared to new computer training requests

<table>
<thead>
<tr>
<th>Applications</th>
<th>Prior Computer Training</th>
<th>New Training Requests</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Word Processing</td>
<td>56</td>
<td>77.8</td>
</tr>
<tr>
<td>Databases</td>
<td>51</td>
<td>70.8</td>
</tr>
<tr>
<td>Bar Graph Presentation</td>
<td>37</td>
<td>51.4</td>
</tr>
<tr>
<td>Spreadsheet</td>
<td>44</td>
<td>61.1</td>
</tr>
<tr>
<td>Desktop Publishing</td>
<td>30</td>
<td>41.7</td>
</tr>
<tr>
<td>Digital Graphs/Charts</td>
<td>26</td>
<td>36.1</td>
</tr>
<tr>
<td>MM Digital Presentations</td>
<td>27</td>
<td>37.5</td>
</tr>
<tr>
<td>Internet for Research</td>
<td>48</td>
<td>66.7</td>
</tr>
<tr>
<td>Computer Mapping</td>
<td>14</td>
<td>19.4</td>
</tr>
</tbody>
</table>

Computer staff development courses taken by these secondary principals were structured to teach principals individual applications in isolation. This staff development practice seems to have resulted in ineffective instruction because principals continue to request training in the same applications.

Today’s new software tools link analyses together for the computer user. For example, Microsoft Office Suite contains Microsoft Word, Access, Excel and PowerPoint, which allows for many levels of data analysis, while utilizing just one software package. Because of the availability of these new integrated software packages a significant shift in the thrust of staff development programs must take place. If principals were trained using an integrated software package it would allow them to link analyses and also assist them in their job related tasks. Their requests for training, in turn, would not be as high as the survey results indicate.

Sixty-five percent of principals reported a mean age of 51 years old. They are rapidly approaching retirement and must be replaced by new administrators, who may not have the necessary computer training or technological skills to make data driven decisions needed for the new millennium. Therefore, it becomes urgent for college administration preparatory courses to intensify integrated computer training into their current programs. The computer training must be aligned with a principal’s job-related tasks in order to be meaningful. Integrative, digital skills that assist principals to complete their job-related tasks in an efficient manner are the fundamental prerequisite skills of the 21st century school leader. Staff development and pre-service courses for secondary principals must gear up now to meet the accountability demands of the new millennium.

References
The Digital Administrator for the New Age
- by Robert J. Manley and Jonathan T. Hughes

For educational leaders information is a vital resource that makes the job of the school administrator easier and harder; easier because some technical hurdles for managing this information are now available, affordable, and learnable; and harder because the demands for better, richer information continue to grow. Such demands include improving the process of information management, upgrading presentation skills, changing communication venues and expanding information-analysis techniques.

The traditional view of management assigned equal emphasis among three endeavors: leadership, administration and coordination. Today, this emphasis has been replaced with a new triangle of management: information, technology and communication. Don Tapscott (1996) in his book, The Digital Economy, describes the efforts of Xerox Corporation to restructure its organization to bring items to customers quickly as they were required “…with one person having the ability to satisfy a customer’s needs by using tools and information to accomplish the task.” The new digital manager who communicates and markets ideas clearly and succinctly will have the edge over those who are bound to more traditional speeches and paper-driven reports. With the advent of faster hardware and more sophisticated, menu-driven software, multimedia presentations are becoming a crucial part of meetings. An effective presentation has an impact on the decisions of a meeting. Some studies confirm that the average executive spends more than 50 percent of a typical day in meetings. In a November 1990 editorial in Presentation Products Magazine, Lindstrom made the following comment:

Is there anyone who has not at some time attended a seminar, business meeting, or training session in which the stimuli were so light they could barely be detected? In a study of 200 U.S. corporate vice presidents by Motivational Systems in West Orange, New Jersey, 4 out of 10 of the executives admitted they have dozed off while listening to a presentation. When asked to rate the average business presentation, 5.15 percent of the subjects said ‘interesting or stimulating,’ while 44.5 percent said ‘boring or unbearable.’

As presenters and meeting leaders become more effective communicators, personal and company business productivity should increase. Accurate and visual communications linked to effectively organized information advance productivity in any organization. The persuasive power of a multimedia presentation makes the difference in a manager’s overall success. What is multimedia? The phrase really says it all. Multi-media combine a variety of communication tools that enable a presenter to create a story much as a filmmaker creates a movie from a screenplay.

The multi-media presenter mixes five major attributes in one presentation: graphics, audio, video, interactivity and simultaneous control of the presentation.

Three Types of Communication Strategies

Howard Gardner’s (1985) seminal work on learning intelligences pointed to several distinct ways that we learn including visual, motion, musical, interpersonal, linguistic and mathematical. The multi-media presenter deals effectively with these learning styles by allowing the author to build the message and present it in a variety of ways so that the audience engages in the interpretation of the information.

There are three distinct formats a presentation can take (Hughes, 1998):

**The Passive Kiosk**

If you were a European citizen during the Renaissance, you would be familiar with town kiosks; large wooden or brick obelisks standing in the town square where written and verbal information was made available. People congregated around these obelisks to hear of war stories, regional events and even world travel. A passive kiosk, therefore, is a presentation where the presenter prepares a set of slides and narrates those slides in a pre-arranged order.

**The Active Kiosk**

The active kiosk presents a story in a pre-arranged order, and moves automatically from slide to slide with built-in narration, or background music or video to support the message. Active kiosks can be shown on computers in the back of an auditorium, for instance, prior to a major report so that the audience can become familiar with some of the background information before the discussion begins.

**The Interactive Kiosk**

Interactive kiosks allow the learner to move through the presentation at a personal pace. Buttons or screen aids allow users to move randomly through ideas presented, focusing on those of more interest and bypassing those of known or lesser interest.
What does a digital manager place in a software toolbox? Presenting the information is usually the final step in the process of communication. Choosing the way to collect and analyze information are the first steps. There are a variety of new software programs that enable the digital manager to organize, analyze and synthesize data. These software packages generally fall into three broad categories.

Diagramming

Lines, boxes or arrows are helpful in making flowcharts, organizational charts or other diagrams to show sequencing or the natural order and flow of events. Lines and shapes help people grasp concepts better than word lists. The actual process of data gathering and analysis is sometimes more important than the result. Flowcharting programs enable the presenter to "snap" a sophisticated diagram together in minutes. Pyramids show steps, circle diagrams illustrate important process elements, comparison tables show bench marking, and Venn diagrams help the audience see relationships. All of these diagrams and many others are available in inexpensive software packages, in many cases, for under $100.

Graphs and Graphics

Graphs and Graphics are image enhancements, such as, lines, boxes, backgrounds, art, clip art, scanned images, and photographs. Graphs, on the other hand, refer specifically to numerical types of charts such as pie or bar charts. The number and types of graphing programs has increased geometrically in the past five years. Today, a presenter builds graphs of data in bars, line, pies, area, bullets, spider, or pictographs so that relationships among and between data segments become clear. Business graphics packages like Harvard Graphics and Powerpoint offer all of these tools. Moreover, statistical packages, like the Statistical Package for the Social Sciences, allow the user to do survey analysis and immediately build a normal curve. Again, the purpose is to discover new relationships and new ways of understanding the complexity of today's organizations.

Figure 1: The Digital Administrator's Software Toolbox

<table>
<thead>
<tr>
<th>Diagramming</th>
<th>Analysis</th>
<th>Mapping</th>
<th>Web Design</th>
<th>Photo/Graphic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flowcharter</td>
<td>Harvard Graphics</td>
<td>MapInfo</td>
<td>Front Page</td>
<td>ThumbnailPlus</td>
</tr>
<tr>
<td>Active Office</td>
<td>Delta Graph</td>
<td>ArcView</td>
<td>Webwacker</td>
<td>MGI PhotoSuite</td>
</tr>
<tr>
<td>Authoring</td>
<td>SPSS</td>
<td></td>
<td></td>
<td>HiJack Pro</td>
</tr>
<tr>
<td>Harvard Graphics</td>
<td>Analytica</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Astound</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Director</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Geographics

Mapping is by no means new. The capability to analyze demographic and geographic data using mapping software with mainframe computers has existed for decades. Only corporations with giant systems and mega-budgets for marketing research, however, could take advantage of the data visualization power of mapping programs. Today, the power of the personal computer is bringing these sophisticated programs down to the laptop level, making mapping analysis available to any school district with a personal computer, a color monitor and a printer.

Mapping research involves the analysis and integration of population demographics and statistics, a subset of educational research that is vital to communities and critical to schools at all levels. With only a few hours of practice using desktop mapping programs a digital administrator can:

- Expose demographic trends in student enrollment.
- Analyze student test score patterns across the district or town.
- Redefine school attendance boundaries based on the projected number of potential students in an area.
- Establish the best location for a new school or a school extension in your community.
- Realign a school facility's grade levels based on shifting student populations.
- Discover trends in community demographics that require possible policy changes.

Desktop mapping enables public relations experts to generate exquisitely detailed maps and charts that interpret statistics for schools, districts, communities and regions. Because maps make statistical data easier to comprehend, the ability to plan and track educational decisions improves. The power and low cost of decision mapping research is no longer the domain of the Fortune 500. It is a basic tool for school district administrators who wish to meet the public demands of an information age.

An administrator who wants to influence audience perception and improve decisions should be an astute user of digital information tools. When information is organized into meaningful images, a story appears that all viewers find easy to interpret. The twenty-first century brings with it a new set of audience expectations that require administrators to know how to use presentational tools in a digital age. As the demand for information that is organized, pictorial, and understandable continues to grow, the digital presentational skills of administrators will become more and more valuable in every enterprise.

References

Several years ago, a non-fiction title was published that contributed interesting perspectives on the development of American society in terms of how we live and work. *The Edge City* focused on one writer’s perspective of the socio-logical aspects of corporate evolution, technology, new learning environments and lifestyles. The living and working spaces described by Joel Garreau, are new centers of corporate and office development that emerged within suburban environments. His book carefully notes the implications when commerce, the workplace and other core activities shift away from downtown centers, and move to newly-developed suburban centers.

As Superintendent of Schools in a district that is partly composed of an edge city: a geographic area that is home to a significant number of corporate parks and freestanding corporate headquarters, I try to take advantage of corporations who want to be good neighbors. Our student body has benefited through exposure to high-tech professionals and resources located in their backyards.

Today, as it has been for at least a dozen years, people are calling for the public schools to reflect “more business” practices and strategies. Schools are adopting – or having imposed upon them – a new economic model. From school choice, charter schools, and voucher movements to statewide efforts in the use of standardized testing and quantifiable “results” to evaluate schools, business practices and strategies are permeating school structures and procedures. Even though school districts are agencies entrusted with developing human capital, not shareholder value, it is fair to suggest that school districts should be run in a business-like manner.

### How School Districts Approach Technological Challenges

One of the most significant difficulties school districts face is the necessity for investment in school construction and renovation, use of innovative classroom materials, and, perhaps most importantly today, technology. Despite cries for conformance to a business model, school districts can face taxpayer reluctance to invest in these critical areas. Technology can be one of the most daunting subjects to address. I have visited school districts that define student exposure to technology as keyboarding skills on creaking 15-year-old Apple Ille computers. Failing, insecure, or slow network connections make technology impossible for widespread use in many districts. Infrastructure aside, educating a teacher workforce to a new technology is an equally challenging task. A new age is upon us, and school districts must organize their thinking in such a way that we can utilize the advantages offered by rapid technological development.

Bill Gates, founder of Microsoft, noted in his recent book *Business at the Speed of Thought: Using a Digital Nervous System*, that businesses must develop a “digital nervous system.” Gates wrote, “The most meaningful way to differentiate your company from your competition is to do an outstanding job with information. How you gather, manage, and use information will determine whether you win or lose” (p.3). Substitute school district for company and the conclusion is the same. We are in the business of education, and our information management must be taken to a higher competitive level in order to serve our students and ensure that they succeed.

Too many public school districts have approached the issue of technology without an overall strategic direction or consideration for future advances. A piecemeal approach to technology implementation means that districts are not optimizing the use of resources and, therefore, they provide a poor return on the taxpayer’s investment.

While most non-education professionals recognize the need for public schools to effectively integrate technology into the classroom, few appreciate the enormity of the challenge. Fully 60% of all new jobs created in our economy, over the past year, have required the use of computer technology resources. Our ability to successfully introduce more technological resources in the classroom, to assist teachers, and expose young people to specific applications as business has done in the workplace is the new challenge.

**Identifying an Area of Potential**

Few areas of business practice are more topical than telecommunications. Corporate synergies, massive financial mergers, new products, and alliances make telecommunications one of the most interesting and quickly-evolving businesses today.

But the area of telecommunications is perhaps one of the last topics that people associate with their public schools. The qualitative discussions that I have conducted with business leaders and educators suggest that today, at a time of revolutionary workplace and societal change, few school-business partnerships consider the potential benefits of comprehensive telecommunications solutions for public schools. I’m thinking of precisely the manner in which insurers, hospitals, governments, financial institutions, and other corporate concerns are successfully engaged in meeting their goals. They have a strategy for the growth of their services and they incorporate technology into their long-term strategic plan.

Like many districts, when we addressed facility needs, we relied upon our business partners to create a comprehensive telecommunications solution as a key element in our strategic plan. Why telecommunications and not technology? Our best thinking suggested that the selection of a “back-
bone” or network infrastructure and service would be the most important decision we could make. While many school districts have recently “wired” their buildings as part of major facility infrastructure projects, few have attempted to integrate all aspects of telecommunications thinking into a strategic plan that can touch every aspect of a school district’s functions, including student management, instruction, security, telephony, business management, and financial procedures.

The uncertain future of technological development must play a significant role in strategic thinking. Instead of focusing on the hardware in the classroom, we looked ahead towards future communications. How would we be able to expand the system to account for growth? What would be the ramifications of new technologies on this infrastructure? Where could we realize cost efficiencies in current and future practices, especially in the area of telephony and Internet access? In short, we realized that public school districts, and our corporate counterparts, were faced with crucial telecommunications choices that would affect services for years to come.

The Evolution of a Committee’s Thinking

Half Hollow Hills Central School District is a highly collaborative environment. Establishing a research process to identify a comprehensive network infrastructure and related technological imperatives was the work of two separate committees of teachers, administrators, central technology staff, and community members. First, the Districtwide Technology Committee formulated the original Long-Range Technology Plan, a map that called for computers in every classroom and for all management team members. The second, a Central Technology Committee accepted the responsibility of contributing to the networking vision beyond classroom instructional needs.

Corrine Carriero, Half Hollow Hills’ Director of Technology, noted that technology issues can be difficult for school districts to corral and harness. The rapid pace of change can frustrate and limit the vision any group of people tries to establish. Our collaborators continued to remind us that patience would be the key to a successful plan, and that despite the stampede of school districts rushing to “get wired,” we should devote more study and thought to the design so that our infrastructure would accommodate future growth, as well as new technologies.

In fact, before making a major district-wide infrastructure investment, the Committee focused on several related issues to ensure that a networking vision would be effectively realized. Chief among these initiatives was that instructional and administrative staff would be trained to be computer literate at a level where computer use would become naturally integrated into all aspects of their operations. Strangely enough, this is perhaps the most overlooked and ultimately daunting part of the equation for school district technology investment. On a national basis, countless stories exist of new computer equipment lying dormant because the training of instructional personnel was limited or ignored. Providing the proper training to staff became a top priority in our district.

Did this deferred implementation of a network infrastructure mean that current students weren’t getting the instructional technology resources they required? Not at all. The Long-Range Plan called for the initial acquisition of non-networked hardware and software and the immediate integration of this new technology into the curriculum. Students and teachers had the ability to create, present, manage, and analyze information, but the highway that would bridge them to electronically stored and shared information, as well as electronically accessed resources from around the globe, was not in place. Building the highway was our next challenge.

Identifying the Challenges

There is nothing revolutionary in the primary goal of creating an effective network infrastructure. Like all school districts, we wanted to promote technological literacy and practical application through the use of cutting-edge software, Internet and multimedia tools, plus a host of other resources. But the specific mechanics of the network’s applications and usage were a critical component of our committee’s work. The system had to provide students with high-speed Internet access and be user friendly.

The collaborators determined the students and staff should be able to access their own work from any location in the school building, ensuring optimal use of the technology resources. System speed and storage capacities had to be significant, as memory-grabbing multimedia files became the core of student work through the evolution of a standards-based curriculum. Creating a system that would not get in the way of teaching and learning, but instead would support instruction in a transparent way was our primary goal. We wanted to avoid technological glitches that slow down work production, hamper broad student involvement, and minimize the effectiveness of technological tools.

Highly sensitized to the rate of technological change, the committees wanted the network to be expandable and responsive to growth. The lesson learned from other districts was that in the rush to “get wired,” not enough attention was paid to network systems that would quickly become overwhelmed by technological innovation and expanded use. Our system would grow with the district and the rate of technological change.

Instructional goals were not the only area of concern that a state-of-the-art network infrastructure would address. The district possessed an antiquated phone system that compromised internal and external communication and limited the ability to refine safety and security planning. Financial management and record keeping was still practiced in a cumbersome and time-consuming manner. Comprehensive student records management and retrieval, so crucial in an age of increased accountability, was established as a priority for our system.

The identification of goals for the network started with instructional technology, but were not limited to this area of school function. On a practical level, our planning teams
came to the conclusion that all other aspects of school management affect instructional effectiveness, and that the network infrastructure must necessarily support all of these endeavors in an unbiased manner.

**Putting Into Practice Our Broad and Specific Goals**

After careful research of vendors, the district selected Cablevision Lightpath, a Long Island-based telecommunications provider, to be the district’s network architect. A division of Cablevision, the large public company that provides television cable services in the NY metro area, Lightpath was chosen for its ability to provide fast, trouble-free fiber optic-based service that could address all of the district’s identified networking needs.

The concept of using Lightpath in the Long Island marketplace is unique because the region is presently dominated by a single telecommunications provider. Intensive exploration satisfied the committees that breaking ground with Lightpath was an appropriate business move. One of the advantages in working with Lightpath was the ability to combine services – phone, fax, data and video – under one roof, as opposed to using multiple vendors who might not be able to integrate the separate systems.

**Private Fiber Network**

The *Private Fiber Network* custom-designed by Lightpath for the Half Hollow Hills Central School District is the first of its kind in a Long Island school district. More than 16 miles of network fiber connect the district’s schools to each other and the outside world. This network provides transfer capabilities that are literally hundreds of times faster than anything previously in place, and are immune to factors like poor weather conditions. Large data file transfers, that would previously have taken hours, are accomplished in a matter of seconds. The time factor cannot be overstated. Immediate access to information in today’s world increasingly defines successful endeavors. Day-to-day instruction and academic goals should not be compromised by slow connection speeds or download times.

The use of a fiber optic network for our collective needs provides several other district advantages. Connections are more secure, have tremendous reserve capacity, and are much less prone to breakdown and maintenance. The ATM network protocol used across the fiber optic cable (Asynchronous Transfer Mode) allows for the integration of voice, video, and data all on the same transport system along with multiple networking capabilities. This is of extreme importance to school districts as our instructional technology resources gradually require higher bandwidth. Our expectation is that video on demand will become a significant application in the classroom, and no one can envision this new world without the establishment of a fiber network. One of the benefits of the system is that telephony in this geographically sprawling district has been consolidated. Phone services were previously divided into four different exchanges. We now use one exchange, which is more economically rewarding to the district.

Internet access provided by Lightpath through the fiber system has an overt educational focus and is extremely high-speed. Multiple transfers, often the bane of overworked networks, are easily handled by the system, even those downloaded files of significant size, i.e., multimedia files. Unlike the past, the time it now takes to load a web page is nearly instantaneous from start up. The network has ample resources to support real-time video conferencing. As a partner with Lightpath, the district is provided with value-added content and services for our instructional community. Cablevision’s powertolearn.com community gives teachers access to instructional tools that allow the entire community to expand the district’s instructional reach.

**Assessing the Future**

We haven’t even scratched the surface of our network infrastructure’s far-reaching capabilities. It operates at speeds that facilitate the use of instructional technology without any negative impacts on students and staff. Its capacity is so broad that we eagerly embrace new technologies and applications that require high bandwidth and provide untold experiences and resources to students.

The evolutionary process of network design and implementation has inspired me to consider the way in which our public schools will evolve. I believe that careful, patient collaboration can be achieved in public schools not only to address current challenges, but to aggressively embrace the uncertain world of the next century. We are in the middle of a genuine revolution. The information technology surge has been compared to the introduction of the telephone or automobile. Certainly, digital technology will change the way we live, work, and interact with each other. For school districts, coming late to innovative technologies or practices, the time to act is now. Our nation’s school leaders must transform our schools into centers of learning where telecommunications play a significant role; where teachers evolve from isolated knowledge sources to broad knowledge navigators. Will our schools ever get ahead of the technology curve and realize that these tools are one of the most effective paths to higher student achievement? A crucial leadership factor is the willingness of professional school leaders to confront the necessity of technology-inspired change. They must wrest control of the dialogue from the parochial thinking, articulated all-too-frequently, that technology is a “frill” or isn’t about “the basics.” Technology is one of the basics, whether used as a tool to learn instructional fundamentals, or to become practically equipped to function in a new world. School leaders must guide us and help us make digital information easily accessible to our teachers and students. A carefully developed strategic plan is the first step in conquering the frontiers of information transfer.
Schools That Learn
- A Book Review by Richard J. Hawkins,
Superintendent of Schools,
William Floyd School District, Long Island, New York


In the world of business, change is a constant. Failure to read shifts in markets or to anticipate new markets can be fatal to the short and long-term success of a company. Businesses have been forced to create more facile “learning organizations” that can bring a product from idea to market in six months or less. Unlike schools, corporate America designs for a constant state of ambiguity. Schools are complex organizations that mirror the complexities of most major corporations. Given these complexities and the realization that the world our children and their children will live in will be very different from the world we know today, why is it that the essential design elements and core operating principles of classrooms and schools across America have made little substantive change in over fifty years? The fact is that in all too many schools, change is usually met with both fear and contempt. Schools are just beginning to feel the “new reality” created by the world economy, higher standards, and high-stakes testing. And, for the first time, competition for public dollars is very real with vouchers, charter schools and private for profit schools as potential options to the public school system. Schools That Learn by Peter Senge (2000) provides insight into these unfamiliar waters. This book gives educators the theories and the tools to build schools into vibrant, research-based, high achieving learning organizations suited for success in the twenty-first century.

Imagine if our country made a commitment to that vision as opposed to the notion that schools will somehow miraculously improve through no additional resources, high-stakes tests and newspaper stories comparing one neighborhood school to another.

In the world of business, change is a constant. Failure to read shifts in markets or to anticipate new markets can be fatal to the short and long-term success of a company. Businesses have been forced to create more facile “learning organizations” that can bring a product from idea to market in six months or less. Unlike schools, corporate America designs for a constant state of ambiguity. Schools are complex organizations that mirror the complexities of most major corporations. Given these complexities and the realization that the world our children and their children will live in will be very different from the world we know today, why is it that the essential design elements and core operating principles of classrooms and schools across America have made little substantive change in over fifty years? The fact is that in all too many schools, change is usually met with both fear and contempt. Schools are just beginning to feel the “new reality” created by the world economy, higher standards, and high-stakes testing. And, for the first time, competition for public dollars is very real with vouchers, charter schools and private for profit schools as potential options to the public school system. Schools That Learn by Peter Senge (2000) provides insight into these unfamiliar waters. This book gives educators the theories and the tools to build schools into vibrant, research-based, high achieving learning organizations suited for success in the twenty-first century.

Schools That Learn is the latest work by Peter Senge and his noted team of co-authors; Nelda Cambron-McCabe, Timothy Lucas, Bryan Smith, Janis Dutton and Art Kleiner. In addition, Schools That Learn is filled with many wonderful stories and vignettes from practitioners and authors who highlight and illuminate key ideas that Senge introduced in his prior works, The Fifth Discipline, The Fifth Discipline Fieldbook, and The Dance of Change. Previously, Senge focused on “systems thinking” and creating “learning organizations” in the business environment. In Schools That Learn, Senge offers the latest research on learning, learning theory and cognitive psychology from the five disciplines of a learning organization and translates and applies these principles in scenarios that any educator can readily see, absorb, reflect upon, and apply in the classroom and the school. Schools That Learn provides lessons that may guide the transformation of America’s schools into exciting, engaging places for students and staff. The joys of learning and high academic performance become synonymous with schooling in Senge’s new book. This book should be on every educator’s list of “must read.”

Senge states, “It is becoming clear that schools can be re-created, made vital, and substantially renewed not by fiat or command, and not by regulation, but by taking a learning orientation.” (p.5) Schools That Learn proceeds to demonstrate through the latest research on teaching and learning as well as the application of the five disciplines of a learning organization how such a transformation can take place. At the outset of the book, Senge provides a “primer” outlining the five disciplines that comprise a learning organization; Personal Mastery, Shared Vision, Mental Models, Team Learning, and Systems Thinking. He then proceeds to discuss in great depth how these concepts and associated skills apply to the classroom, the schoolhouse and the community. The five disciplines of a learning organization were first stated in The Fifth Discipline. The “fifth” discipline for those new to Senge’s work is “systems thinking.” In Schools That Learn, Senge and his team seem to be practicing what they preach about the notion of continuous learning throughout this and his prior books. The explanation of the five disciplines is more succinct and easier to understand than in previous iterations. As a result, we can easily see the complex elements surrounding learning organizations with greater clarity and gain a deeper understanding about how to apply these operating principles to the classroom, school and the communities they serve. We also gain great insight into human behavior and Senge provides the tools to encourage dialogue, not conversation, particularly in settings where learning is the goal.

Beginning in the classroom, Senge explores a wide range of issues facing the classroom teacher and provides wonderful insights and examples of how a classroom could become a highly charged learning community. Schools That Learn provides example after example of classroom practices which promote the high level thinking required for success in a standards rich environment. In fact, embedded throughout this book are brief reviews of other books for those requiring or wanting a greater depth of understanding on the
topics covered. There are also numerous, outstanding websites rich in resources for any teacher or educator interested in research-based “best” practices. One of the most powerful and thought provoking chapters in this section deals with understanding and “demystifying the child” (p.124). The authors expand on the notion that “there is no such thing as a regular child” (p.130). They describe the “deficit perspective” (p.37) of education in most classrooms today and the need to engage children “through their dignity” (p.120). This section of the book is particularly powerful and thought provoking. Senge and his co-authors explain the use of causal loops, stock and flow diagrams, and computer modeling. They demonstrate how such tools can be used to enrich the classroom learning environment as well as provide students with experience to make inferences and connections.

Senge reflects on the schoolhouse by discussing the need to create classrooms with an “ethical endeavor” (p.276) for schooling. Cambron-McCabe writes, “…teaching is a moral undertaking. Teaching is not simply a set of technical skills for imparting knowledge to waiting students. It involves caring for children and being responsible for their development in a complex democratic society. In other words, teachers need to think not just about the means by which they teach but the end they are teaching for. Doing that places a heavy obligation on those who teach…” (p276). We are challenged to become aware of our own mental models and reflect on our practice, not only through our lens, but also through the lens created by the collective wisdom of the system (all stakeholder groups). Insightful statements and observations like this are embedded in this book. On the practical side, Senge discusses “current reality” and “shared vision” in great detail as they apply to schools and school districts. The question, “How do we know what we think we know?” is a challenge heard like a clarion call throughout this book. Establishing a truthful version of current reality is the starting point for creating the “shared vision” of where we need or want to go in the future. Again, the tools to create a “shared vision” are there for the taking.

Senge and his colleagues, as would anyone truly fluent in systems thinking, turn their attention to the community. Their notion of community is far reaching. It extends to the Statehouse, your house, the corporate boardroom, the school board room, as well as the neighbor next door. Here, Schools That Learn explores and challenges the creation of communities of learners at every level. The goal is to build a shared vision for what education and learning could and should be like. If one embraces the notion of systems thinking, one can not expect substantive educational reform to take place until facts are separated from fiction. Schools that focus on re-design efforts to yield the highly engaging learning environments that every child deserves and needs for success in the twenty-first century, are winners. One of the contributors to Schools That Learn, Tan Soon Yong, discusses a school reform effort in Singapore where they have set out to design every school as “thinking schools.” She states, “In our view, ‘thinking schools’ form the foundation of a ‘learning nation’—a people dedicated to lifelong learning and thriving in a knowledge society and economy” (p.483). Imagine if our country made a commitment to that vision as opposed to the notion that schools will somehow miraculously improve through no additional resources, high-stakes tests and newspaper stories comparing one neighborhood school to another.

Schools That Learn is a must read for anyone interested in children, learning and the future of our country. The book is intimidating at first glance due to its size, but it is elegantly written and moves quickly—at least it would if it didn’t make you stop, think, and reflect so often that your head begins to hurt. This book will change the way you view children, learning, and the core ideology of education forever.

---

Who's Who In The School Districts?
1. Directory of Suffolk County Public Schools and Educational Associations, Organizations and Unions serving L.I.
2. Directory of Private and Parochial Schools on L.I.
3. Directory of Mid-Hudson Public Schools

All three directories are updated each year and can be purchased now:
Directory of Suffolk Public Schools, Etc. $15.00
Directory of L.I. Private & Parochial Schools $ 8.00
Order both together and save! $20.00
Directory of Mid-Hudson Public Schools $15.00

Note: Prices shown do not include 8.25% NYS sales tax or shipping and handling. For information on ordering and discounts, call (631) 589-5700.