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ABSTRACT

Fixing the blame for low student achievement is not easy. As the example of the Los Angeles, California, school district shows, the problems schools face are complicated. They include overcrowding, low test scores, and the problems associated with numbers of students who do not speak English well. Low student achievement is not necessarily due to ineffective teachers. A good evaluation system should measure actual teaching. Standardized tests do not really show enough about the quality of teaching. Some alternative assessments, based on a constructivist point of view, can provide better information about student achievement. Portfolio assessment is an approach that can reflect what students actually have learned. Both testing and portfolios have roles to play in student evaluation. Adequate space and quality instructional materials are must-haves for schools before assessment takes place. (SLD)

An Analysis of Blame for a Lack of Student Achievement

Marlow Ediger

AN ANALYSIS OF BLAME FOR A LACK OF STUDENT ACHIEVEMENT

A considerable amount of criticism is given in news reports for a lack of desired student achievement in school. Where should the blame go toward? Who is responsible for a lack of learner progress, assuming this to be the case? Do teachers achieve less well than do others in society? These are questions which have not been addressed adequately. All individuals, no doubt, can achieve more optimally. This paper will reflect upon what can be done to assist each student to achieve more adequately.

Achieving as Optimally as Possible

Each individual, professional, or worker needs to evaluate the self and inquire about how to achieve more optimally in society. Insults and negative criticisms do not help persons to do well in life. If a lack of reaching goals is in evidence, why is this occurring? It is important to analyze causes for effects which transpire. Generally, there will be multiple causes. Simple answers do not work. There are many people involved in financially supporting the public schools. The voting population is a key factor in determining how much money will be spent on schools and their operation. This is one place where voters can vote "yes" or "no" on funding an organization. If people want to save money and vote "no" on a school bond or levy, they can exercise that right here. They may also vote "yes" such as in suburbia where schools are funded more adequately and students achieve at higher rates as compared to poorer areas.

Education Week, September, 2000) contains the following direct quote:

With his newest task, which requires him to lead and improve the nation's second largest school district, Romer (Roy Romer completed three terms as governor of Colorado) finally has met his match.

The "Hurricane forces" of which he speaks were enough to scare off many applicants from even considering the top job here. They attracted Romer--one of the small but growing number of people to lead a major American district (Superintendent of Schools, the Los Angeles Public Schools) without any experience as a school administrator.

The district faces severe overcrowding which will only get worse...

Add to the mix low test scores, lagging in part because of the influx who are only beginning to learn English. With low scores has come deep distrust of the district from the state school leaders who control spending for school construction in California.. The public's trust has also eroded. Some parents are campaigning for their communities to secede from the school district.

Even with substantial help from the state, the desperate need for

space simply cannot be fixed immediately, he says, even though $1.5 billion in construction projects have begun in the district, including some of them; leasing space in office buildings or any other place appropriate for classes; reviewing schedules to make sure schools use their space wisely; and exploring ways to teach more students at home using the Internet...

Solving the issue of space for students in Los Angeles requires several forms of attack, Romer says; building new schools, perhaps 200 of them

The Los Angeles School district has an annual budget of 8.9 billion dollars, nearly twice the size of that of the state of Colorado, where Romer previously served as governor.

The severity of the above named district's problems may be summarized as follows;

1. severe overcrowding with inadequate help from the state.
2. low test scores due, in part, to many students who speak another language than English.
3. the state not understanding that low test scores include a language spoken by many immigrant children that is different from the English language used in testing.

The lack of students achieving well on tests, in part, is not due to ineffective teaching. Lack of space for students has nothing to do with faulting teachers. School districts here have not shouldered their responsibilities. The lay public has shirked responsibilities by not voting to adequately fund the Los Angeles Public Schools. The severe over crowding of students in school correlates well with low test scores received by students. The author in supervising student teachers in the public schools in the early 1980s experienced a small classroom with 32 students therein. He could not walk between the rows to observe how well students were doing in a written exercise. The class was in an uproar with the student teacher doing the teaching. The student teacher cried about the discipline problems in one conference with the the author as supervisor of student teachers. When the cooperating teacher came into the classroom, the learning environment was a little better. The author still has the feeling that students, here, were only learning "bad" things with an over crowded classroom. The classroom size would indicate that one/half the students should be there, rather than the 32 total number (See Ediger, 2000, 20-29).

When statewide tests for certified teachers are given, the test items therein may be written at a very complex level. Few teachers then receive an appropriate rating from test resuits. The state of Massachusetts tested teachers with a statewide test and 59% failed the first test (Flippo and Riccards, 2000). There were questions here about

several major problems:

1. testing is not teaching. To measure quality teaching, one would want an evaluation system that measures or assesses actual teaching. If Corporate Executive Officers (CEOs) were tested using a paper/pencil test of multiple choice items, would this assess the quality of their work? The answer would be a resounding, "no." What the CEO actually accomplishes at the work place, involving decision making, is of paramount in importance, not his/her measured test results. This is true of all workers in society.

2. validity is important in testing. Perhaps, one can say immediately that a paper/pencil test is not valid for assessing the quality of teaching. Tests have little practice value.

3. reliability in testing is also salient. Would the raters give the same rating to a teacher, or would there be wide disparages? If, for example, on a five point scale, one rater would give a 5 rating, another a 3, and a third rater would give a 1 rating. Then, the results mean nothing since the ratings would go from 5, the highest, to 1, the lowest, for the same teacher. Reliability then is greatly lacking. Certainly, there should be general agreement as to the quality of teaching exhibited by the teacher and observed by the raters.

With the strong measurement movement in the United States, can the same reasoning be applied to testing students in different subject matter areas, as was stated above about teacher testing to determine quality of instruction? Should students also show in practical situations that which has been learned? Do standardized tests indicate learner achievement, especially with a lack of alignment with the school curriculum? Even if a state has mandated objectives for teachers to implement, do the aligned criterion referenced tests (CRTs) truly measure what is important?

Gardner (1993) has proposed alternatives for students to indicate what has been learned, other than paper/pencil testing. He identified eight intelligences whereby individual students may show/reveal what has been learned. These are the following:

1. verbal/linguistic, such as in taking paper/pencil tests.

2. visual/spatial, as in an art project revealing that which has been learned in an ongoing unit of study.

3. logical/mathematical, such as in a student showing learnings obtained through reasoning and thinking logically.

4. interpersonal in which students do best in achievement in a group setting and working together with others.

5. intrapersonal such as in a student individually revealing what has been learned, rather than in a committee or in cooperative learning.

6. musical/rhythmic as in writing lyrics and setting the words to music within the framework of what has been studied.

7. bodily/kinesthetic as in school work requiring movement and motion. Here, the gross and finer muscles of the student are being used to indicate achievement in any unit of study in the school curriculum.

8. scientific includes objective thinking as in the science school curriculum. Objective thinking may be stressed in any lesson each day. Then too, science subject matter may be integrated across the curriculum (See also, Ediger, 2000, 503-505).

ABC News with Peter Jennings (September 27, 2000) focused a news item on Senator John Glenn's Senate Committee which reported from a study on the status of science and mathematics teachers in the nation. The poor quality of science and mathematics teaching was elaborated upon. At the beginning, it sounded as if the teachers were incompetent and thus deliberately did a poor job of teaching. In that segment of the TV newscast, the reasons for inadequate teaching of science and mathematics in high school ultimately revealed the following:

1. the scarcity of qualified teachers in these two academic areas.
2. the poor salaries received by teachers, such as $30,000 a year.
3. the comments from professionals from other fields of endeavor, who had entered teaching as a second profession such as those who were engineers, statisticians, and corporation lawyers. These individuals were not only amazed at the low salaries of public school teachers, but also the amount of work required to prepare and implement teaching plans each day.

As a prerequisite to high school science and mathematics teaching, educators and the lay public should also study and report on the elementary and middle school curriculum. Questions which may be raised here include the following:

1. what is the status of the present day elementary and middle school science and mathematics curriculum?
2. which materials of instruction are needed to provide quality in teaching of mathematics and science?
3. how should teacher education programs be devised to stress quality of teaching in the public schools?
4. what may be done too involve parents and the lay pubic to assist teachers in quality teaching, such as students coming to school ready to learn.
5. What can the home setting do to help their offspring to achieve more optimally (See Ediger, 1999, 280-285)?

Too frequently, newscasters separate the school from other institutions in society which also need to be involved in assisting students to achieve well, such as being involved in adequate funding of

education.

Alternatives to Testing to Determine Learner Progress

Somewhat recently, constructivism as a philosophy of teaching and assessment has received considerable attention in the educational literature. AS opposed to the testing and measurement movement, constructivism does not

1. place major emphasis upon test results of students to ascertain learner achievement. A single test score then does not, by any means, "teil it all."
2. isolate assessment from the daily work of students in the classroom. What learners achieve on a daily basis is by far more important than a single test score or statistic. Thus, assessment is ongoing and continuous.
3. emphasize numerical results to show student achievement. Percentiles, standard deviations, and stanines then are not as important as contextual assessment of what students need to do well. Numerical results stress isolated attempts to describe learner achievement. Rather, constructivism emphasizes student achievement in terms of processes and products of learning. Portfolios may then be used beyond paper/pencil tests to ascertain learner achievement in school. Portfolios emphasize a purposeful collection of what students achieve in the classroom setting. Students individually are involved in developing their own portfolios. A portfolio developed by the learner with teacher guidance may contain the following of his/her artifacts:

1. written work consisting of narrative, expository, and creative content in long hand as well as use of the word processor when readiness is in evidence.
2. snapshots of project method products including murals, dioramas, art work, friezes, and construction items completed in different lessons or units of study.
3. cassette recordings of participating in discussions, reading a given selection aloud, as well is of presenting a book report.
4. a video-tape pertaining to working in a cooperative learning opportunity to assess the quality of interactions.
5. teacher evaluation of learner involvement in performing experiments and demonstrations.
6. student self evaluation in terms of desired criteria, including reading comprehension (Ediger, 2000, 22-31).

Portfolio contents are contextual in that they provide information of student achievement in the classroom at definite periods of time. They provide information on how well a student is achieving school wide as well as state mandated objectives. There are ample opportunities to

diagnose what a leaner is deficient in and what needs remediation. The portfolio should be shared with the parents in parent/teacher conferences.

Portfolios are difficult to evaluate, especially if they become voluminous. If two or three appraise the same portfolio, the chances are the ratings will not be the same, even with the use of carefully designed rubrics. Interrater reliability then can become a problem. The lay public definitely cannot exam each portfolio, nor would they know, in many cases, what to look for in terms of quality. It is much easier to view test results with a numeral indicating achievement of any individual student.

There are academic areas in which paper/pencil tests do not measure student achievement adequately, such as in the science curriculum. State exams and other norm-referenced tests have their limitations in assessing science learnings of students. Science emphasizes a hands on approach in learning. The quality of hands on learning in experimentations and demonstrations then need to be assessed through teacher and student observations, and this cannot be done with a paper/pencil test. Science literacy emphasizes that students work and think as scientists do (Demers, 2000). Students need ample opportunities to identify problems, gather information from a variety of sources, develop an hypothesis or tentative answer to the problem, evaluate the hypothesis as to accuracy and completeness, and revise the hypothesis if needed. Science should not become a reading class, but reading is a good way, among others, in gathering information in problem solving (Ediger, 2000, 58-67).

Conclusion

How should students be evaluated to notice achievement in academic areas? There are no easy answers to this problem. The testing and measurement movement advocates using test results to ascertain learner progress. Portfolio advocates emphasize that a single numerical result from testing tells little about student achievement. They emphasize viewing the actual school work from daily lessons to notice how well learners are doing in the academics. Both procedures can be used to ascertain achievement. However, the two philosophies differ much from each other. Continual improvements need to be made in testing students to determine progress in school. Increased validity and reliability should then be in the offing. Portfolio advocates need to ascertain which products and processes should be available for others, interested in improving the curriculum, to observe, view, and study. Thus, improved portfolios to show student achievement may be available. Both testing and portfolios have roles to play in the assessment process.

Adequate space and quality materials of instruction need to be available for student achievement. These are basic musts.

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