DOCUMENT RESUME

ED 451 208 TM 032 435

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TITLE Assessing Recent Theories of Student Learning.
PUB DATE 2001-00-00
NOTE 8p.
PUB TYPE Reports - Descriptive (141)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Constructivism (Learning); Curriculum Development; Educational Objectives; *Educational Theories; Elementary Secondary Education; *Learning; State Standards; *Student Evaluation

ABSTRACT

Recent theories of student learning have changed how education is viewed by educators and the public. One current concern is assessing the objectives of instruction. To be successful, state mandated standards must represent what students should achieve. Constructivism, a currently popular theory, stresses helping students do well in school and emphasizes that teachers must do the best job possible regardless of the circumstances. Theories of learning opportunities emphasize the alignment of learning opportunities with the state mandated objectives. Regardless of the theory of interest, it is evident that relying entirely on one approach is not conducive to student learning. Theorists must continue to study, with the goal of providing the best learning opportunities for each student. (SLD)

Assessing Recent Theories of Student Learning

Marlow Ediger

ASSESSING RECENT THEORIES OF STUDENT LEARNING

Recent theories of student learning have changed how education is viewed by educators as well as by the lay public. At the apex of considerations is how much students can be expected to achieve. Another consideration is to determine how students may indicate what has been learned. The issues therein will be analyzed and conclusions drawn for each theory. Perhaps, the issue here is an old distinction. Thus, whatever exists, exists in some amount, and that amount can be measured, be it in knowledge, skills, or values/attitudes (See Ediger, 1995, Chapter Seven). Toward the other end of the continuum, the thinking of student development and learning may be referred to as being open ended, not final nor fixed.

Assessing Objectives of Instruction

The objectives students are to achieve for measurement theory emphasizes setting high standards for students to achieve. Along with the high standards, teachers should stress high expectations for all students in the classroom. A major problem here is to ascertain how high these standards should be set. A further problem involves if there should be differentiated objectives for fast, average, and slow learners to achieve. There is much subjectivity as to how high the bar should be set for students to hurdle in achievement. Thus, the following occurred:

In 1998, when Massachusetts test results were reported for the first time, 81% of the ninth graders were either failing or in need of improvement on the English/language arts exam; 71% of 8th graders faired just as poorly in the Science/technology tests; and 74% of 10th graders got failing or needs improvement ratings on the math test. In Virginia, 98% of schools were given failing marks on the first Virginia Standards of Learning Test in 1998 (Education Week, January 11, 2001).

From the above, it is quite obvious that the state mandated tests had set the bar excessively high. If only 2% of Virginia students were given passing marks on their state mandated test, then 98% were of such poor quality in achievement that they should be labeled as failures! What does this do to the self concept of the learner?

Assumptions made by those advocating high standards and expectations from students are the following:

1. the state mandated standards represent what students should achieve, regardless of ability and talent levels possessed.

Toward the opposite end of the continuum, constructivism theory of learning stresses students with teacher guidance setting objectives of instruction. It emphasizes considerable student input into the curriculum.

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2. the gap needs to be closed among those of different ability and socioeconomic levels. Thus, for example, students from low income levels can achieve just as well as those from higher socio economic levels.

In contrast, constructivism theory emphasizes that each student is unique and deserves to achieve as optimally as individual differences provide.

3. the teacher with good teaching needs to expect more of students. Low teacher expectations has always hindered optimal student achievement.

Toward the other end of the continuum, constructivism stresses that teachers motivate learners to put forth as much effort as possible into learning.

4. teachers need to do a better job of teaching students if this nation is to continue its leadership role in the world.

In contrast, constructivism stresses helping students to do well in school to become good citizens and productive workers in society.

5. alibis for a lack of student achievement on tests should not be accepted. Each teacher needs to be held accountable for student achievement.

Constructivists, with an opposing point of view, emphasize that teachers are human as are all individuals on the planet earth. Teachers need to do the best job possible of teaching regardless of circumstances.

6. poorly achieving students should be permitted to attend voucher schools, charter schools, or choose freely from among high performing public schools. Bankruptcy laws should be incorporated by each state so that the latter may take over poorly performing schools.

Constructivists advocate adequate funding for all schools, including the poorly performing schools. Many times poorly performing schools are in areas of poverty and need adequate funding for buildings and school supplies.

7. tests are the best way to secure objective data pertaining to student achievement. Numerical results from machine scoring of tests provide data on how well students are achieving in the public schools.

Constructivism advocates that there are numerous sources from which information can be gathered pertaining to student achievement, including the latter's personally developed portfolio.

8. merit pay should be provided to teachers whose students do well on achievement tests.

Constructivism stresses that trust be developed toward teachers and extrinsic rewards, such as merit pay, may destroy camaraderie and interest in teaching and learning.

9. standardized tests or state written tests may be used to measure student achievement in the public schools.

Constructivists advocate that informal daily assessment of student achievement in products/processes produced provide the best opportunities to provide diagnosis and remediation assistance.

10. high standards and high expectations for student achievement become goals for teachers to emphasize in teaching and learning. These are considered to be noble goals and they are indeed .

Constructivism stresses that objectives arise within a learning opportunity as students are actively engaged in pursuing activities and projects. Thus, a student may need assistance in writing a business letter in context. Whatever assistance is needed is provided such as in handwriting, using a word processor, margins, proper form, and/or spelling (See Ediger, 2000, 244-249).

Learning Opportunities

Learning opportunities for the high standards theory of learning advocates emphasizes the following:

1. alignment of the learning opportunities with the state mandated high standards/objectives is a necessity. The closer the alignment, the more likely it will be that students will be successful in goal attainment.

Toward the other end of the continuum, Constructivists emphasize that a plethora of objectives reside within the student. Thus, students do have interests, questions, and problems which are ongoing in unit teaching. These, along with the teacher's ideas, provide objectives for instruction.

2. learning opportunities which do not align with the objectives or state standards should not be implemented. Teaching for/to the test to up students test scores is recommended. Higher student test scores indicate improvement in academic achievement.

Constructivists are not strong advocates of testing students to ascertain achievement. Rather the achievement of students is noted within the learning opportunities provided. In an ongoing learning opportunity, students reveal what has/has not been learned. What has not been learned provides a basis for choosing learning opportunities to remedy deficiencies. Then too, students have questions and problems pertaining to contextual experiences.

3. student achievement in realizing the higher standards and objectives emphasizes learning that which is important. Much time and effort has gone into selecting the state mandated objectives. "Eureka" or "I have found it" represents what the state feels all students should learn.

Learning opportunities, according to Constructivism, are chosen on the basis on student needs, interests, and purposes. Flexibility is a key term involved in choosing learning opportunities for students (See Gardner, 1993).

4. information on what to teach students may be found from tests such as the National Assessment of Educational Progress (NAEP) or the Third International Mathematics Science Study (TIMSS), as well as from academic subject matter specialists. After all, these tests and specialists, too, might well indicate what is salient to teach and to learn.

Toward the other end of the continuum, Constructivism stresses determining what to teach within the classroom setting, not by those outside the classroom arena such as test writers of state mandated tests.

5. numerical results are wanted when using machine scored, state mandated tests. A precise number then indicates how well each student is achieving within a curriculum area.

Constructivists believe the single numeral to show student achievement is greatly inadequate. There is much more to assess learner achievement in within the different curriculum areas. A single curriculum area such as reading, for example, can be divided into many component parts including oral and silent reading; vocabulary development; critical and creative reading, as well as reading to solve problems, word recognition techniques to master such as using phonics, syllabication skills, and contest clues; along with many other facets of reading achievement to evaluate. Constructivism emphasizes evaluating student achievement in an ongoing lesson or unit of study in the classroom. It is definitely possible then to provide assistance as needed to students.

6. the gaps in achievement between students from wealthier and poorer areas need to be eliminated. Too often, teachers have done a poor job of teaching to reduce this gap. Students in poorer socioeconomic areas are not getting a fair shake in being taught well.

Constructivists advocate that each student be assisted in context to achieve as well as possible. The teacher needs to guide optimal achievement for each student.

7. the same expectations should be held for all students. If the "slow learners" do not receive the same sophisticated knowledge as do the more talented, then the former will be left behind in society. They will not be able to obtain the jobs nor be the kind of participating citizens as compared to others in the societal arena.

Constructivism stresses the importance of motivation, encouragement, and guidance for all so that the individual student may flourish, grow, and develop as well as possible.

8. all students can learn. This means that each and every student may truly compete with others in the classroom setting. Equality is important in the learning arena.

Toward the other end of the continuum, constructivism emphasizes the importance of caring, helping, respecting, and working with individual differences in the classroom. These kinds of situations will guide optimal achievement from each student.

9. teachers need to teach the academics only. This is the purpose of teaching. To focus on other facets of life minimizes the teacher's role in the school setting.

In contrast, constructivism stresses there is more to life than the academics. Thus, students, among other things, need to become good citizens and develop appropriate social skills to function well in society. Educating the whole child is important!

10. High standards and high expectations need to be emphasized so that students do their best possible in life's endeavors. Testing students will truly reveal if the best is put forward by each and every student in achieving the academics.

Constructivists have no argument with students individually achieving as optimally as possible. However, test results will not indicate how well a student is achieving. In the classroom and in the school, students indicate how well they are doing in academic achievement as well as in other facets of development. Focusing upon academic knowledge is very narrow indeed. There is much more to life than the academics only. The fine ares, the practical arts, creativity, getting along well with others, being humane, and civility are all major objectives. A single numeral will not show student achievement. Rather, within context, each learner will indicate sequential progress in science, the social studies, reading and the language arts, mathematics, among the other important objectives of a well rounded person. The classroom teacher will understand and know each student better and what the needs are as compared to test writers, removed in time and space, from the local classroom (Ediger, 2000, 36-47).

In Conclusion

There needs to be improved ways of assessing student achievement when comparing the testing and measurement movement with that of constructivism. Attempts should be made to harmonize the two theories of how students learn. Going overboard on one approach is not sound theory of student achievement. For example, using one numeral from test results leaves out the every day experiences of students. Certainly, what students do each day in the classroom is of utmost importance. Here is where diagnosis and remediation can take place within a developmentally appropriate curriculum. Students may then be helped to achieve as sequentially as possible. A single test score may provide the teacher with little help in teaching students unless the test results indicate specifically what students do not understand and do need to learn. Then too, how worthwhile is the subject matter to be learned when viewing test items on a standardized mandated test? How important is this to the student who must do the learning. Learners do need to perceive purpose and reasons for learning.

Theorists need to continue to study, reason, solve problems, and cooperatively develop the best of objectives, learning opportunities, and assessment procedures for students. Each student is important for his/her own sake as well as in being a worthwhile member in the societal arena.

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