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Authentic assessment at the middle level

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Abstract

Middle School students are unique. As burgeoning adolescents they are going through some of the most profound physical, emotional, social, and intellectual changes of their lives. Compounding this diversity is the fact that individuals do not begin changes at the same time, nor progress at the same rate through this developmental stage. Anyone who has worked with a group of seventh graders can attest to the great variability within the group, as well as the great variability from one developmental domain to another within an individual. The boy with the size 12 shoes may still be operating at a very concrete level intellectually.

Authentic Assessment at the Middle Level

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It is the very uniqueness of this age group which mandates that both curriculum and assessment be developmentally appropriate. As Chris Stevenson (1992) so aptly points out, "It is vital that middle grade teachers serve a highly diverse constituency in ways that are responsive to the students' contextual and developmental circumstances" (p. 76.)

Purpose of the Study

In order to assess all educational goals, we need a more complex view of student assessment than is currently prevalent in education. Authentic assessment and

purposes and attributes of assessment in general will be discussed in this paper. Guidelines for creating authentic measures and examples of relevant data to assess progress on educational goals will be shared. Finally, parent communication and implications for middle school teachers will be examined.

Defining Authentic Assessment

Being responsive to young adolescent needs includes utilizing authentic assessment measures. But what does it mean to be "authentic" in assessment? Newmann and Wehlage (1993) define "authentic" as the distinguishing factor between "achievement that is significant and meaningful and that which is trivial and useless" (p. 8). Archbald and Newmann (1988) concur that authentic tasks are "worthwhile, significant, and meaningful" and measure not just any kind of achievement, but "valuable or meaningful forms of mastery" (p. 1). For Archbald and Newmann (1988), meaningful achievement includes "substantive and procedural knowledge, in-depth understanding, and moving beyond prior knowledge" (p. 50), and it requires assessment practices which move beyond traditional tests to exhibitions, portfolios, and profiles.

Another aspect of this multifaceted term which particularly affects middle school students refers to the authenticity of the task. Young adolescents need to be able to make a connection between their learning and the world in which they live. Meyer (1992) maintains that if assessment is truly authentic "the student not only completes or demonstrates the desired behavior, but also does it in a real-life context" (p. 40). Archbald and Newmann (1988) refer to the need for "integration of knowledge" and "value beyond evaluation" (p. 50). Students need to make connections and may demonstrate acquired knowledge through productions and performances.

At any developmental level, assessing student progress means looking at all goals set for a student's education, not just those goals which can be adequately evaluated by pencil-and-paper tests. Consequently, at any level, but especially at the middle school level, knowledge objectives are supplemented with "significant goals in attitudes, behavior, and social relationships" (George & Alexander, 1993, p. 118). These goals can be addressed by the multidimensional nature of authentic assessment. Meyer (1992) lists the following facets of authenticity: "stimuli, task complexity, locus of control, motivation, spontaneity, resources, conditions,

criteria, standards, consequences" (p. 40). When a performance or response is expected of the student, the goals and consequent significant criterion must be pre-determined, defined, and communicated to the student.

Purposes of Assessment

Evaluating and reporting student progress is a necessary component of education, but the means to complete that assessment should be tied to the reason, or purpose, for completing it. Payzant and Wolf (1993) maintain that two conflicting purposes are often inherent in assessment programs: "the responsibility to use any assessment to respond to student work and encourage growth and the demand that assessment provide reliable, quantifiable information about student learning" (p. 45).

Historically, the purpose of educational testing was tied to efforts to gauge the success of schools in their various functions, including the efficient use of taxpayers' money. The means used to assess and justify the large school-building programs around the turn of the century relied heavily on standardized tests for efficiency. More recently, the expanded use of standardized tests during the last 30 years has been a response to the demands for evaluation of various mandated and specially funded programs and the desire by

some to compare the performance of various schools within a district. (Resnick & Resnick, 1985)

Yet it is becoming obvious to more and more educators and parents that standardized tests have several limitations. The significance of different percentile rankings is uncertain, scores are heavily influenced by family background, and the tests neglect to assess depth of understanding or integration of knowledge (Archbald & Newmann, 1988).

The original claim of the middle school movement is that middle schools are for young adolescents (Beane, 1992). For this reason, assessment in the middle school should go beyond comparison with standardized tests. The primary purpose of assessment of young adolescents should be to respond to student work and encourage growth and to assist students in maintaining progress toward becoming self-directed learners (George & Alexander, 1993; Manning, 1992). Another important purpose is to communicate with parents so that they can also assist student progress, an issue which will be addressed later in this paper. Finally, data on student progress should be provided for the purpose of school evaluation and program planning (George & Alexander, 1993). This

includes diagnostic decisions by individual teachers to improve classroom strategies.

To assist students in maintaining progress, middle schools need to provide opportunities for students to strive toward becoming independent thinkers who accept responsibility for their own learning. Learning requires communication with oneself, peers, and knowledgeable adults (Hamm & Adams, 1991). Probing their errors and being aware of their own thinking processes will help students to assess mistakes. This can be accomplished through group discussion, brainstorming, and keeping a journal.

At the same time, students need an effective system which allows them to let teachers know what they understand and what is unclear (George & Alexander, 1993; Stevenson, 1993). Similarly, for students to be partners in their own learning and development, they must use and understand techniques of self-evaluation, such as completing individualized checklists, checking papers by pairs, and self-correcting tests.

This is not to say that the teacher becomes obsolete. On the contrary, teacher assistance is increasingly vital as instruction becomes more individualized to accommodate the great difference in the

learners of middle school age. In fact, George and Alexander (1993) maintain that immediate knowledge by the student of his/her progress is probably "the most powerful force in maintaining continuous progress" (p. 119). Teachers' anecdotal records and observation logs of students and conferences with students are excellent methods for encouraging, documenting and sharing student growth.

Probably the most difficult purpose to accommodate is the school improvement planning process. An assessment instrument must be chosen which allows teachers to gather and record data which in turn will interpret and report evidence of growth toward common standards. Models and rubrics must also be created to provide concrete demonstration of what is known and what is not known (Evans, 1993). Within the classroom, as students document their own development and growth and share their thinking processes, teachers can more readily design instruction to match students' needs.

Attributes of Assessment

A variety of strategies and instruments are used to develop a complete view of student progress. Yet the assessment option chosen should always be based on sound principles, or attributes, of assessment. The first is

that assessment is a continuous and dynamic process (Stevenson, 1992; Valencia, McGinley, and Pearson, 1990). Assessment data is used to provide feedback and support to students and to foster growth. This principle dovetails well with the "failure is not fatal" philosophy of the middle school--challenging students, yet allowing them to make mistakes, reflect and grow (Connors, 1992). However, assessment is different than evaluation. Evaluation helps students understand standards and quality, and uses specific criteria for the purpose of judging or critiquing a final product (Stevenson, 1992). Part of authentic assessment may be to provide students with the opportunity to acknowledge what they do not know and formulate questions which will lead to further knowledge (Krovetz, Casterson, McKowen, & Willis, 1993).

A second attribute of assessment is that it is multidimensional, using a range of formal and informal assessment measures (Barringer, 1993; Valencia et al., 1990). Learning varies greatly from situation to situation. This fact, combined with the very nature of adolescents and their extreme variability both between and within individuals, creates a need for a variety of measures to monitor progress and encourage self-evaluation. In addition, learning styles, including

elements of cognition, affect, and the physical environment, vary considerably (Jenkins, 1991). Using differing measures will allow broader perspectives and new insights. Allowing students some choice in how to demonstrate mastery of a concept will also address these issues. For example, requiring a student to respond to two out of four broad, complex questions and giving him/her the option of modes of response (such as writing, oral presentation, graphs, and video) gives that student the opportunity to demonstrate his/her best understanding and effort.

The third attribute of assessment is that assessment should be collaborative (Stevenson, 1992; Valencia et al., 1990; Weber, 1992). The responsibility of the middle school teacher is to assist student learning. Students must have ownership of an assessment or portfolio and see the value of documenting what they do. Being specific and open about criteria and giving students examples of excellent work provides them guidelines for improvement (Diez & Moon, 1992). An even more collaborative method would be to include students in determining criteria for demonstrating success in meeting course objectives. Utilizing additional techniques, like requesting feedback through open-ended questions, will

make the student re-think the idea and engage in self-evaluation. Also, as in all effective teaching, prompt feedback from the teacher is essential and should be positive and specific.

Finally, the primary guiding attribute of authentic assessment is that it be bound to tasks which have genuine purposes and relate to daily life, such as writing reports, presenting talks, and solving problems (levy, 1991; Meyer, 1992; Valencia et al., 1990). Middle school students want to know how what they learn is tied to real life. Therefore, performance-based assessment should be linked to the learning tasks and accurately reflect the learning objective. As in traditional evaluation, form should follow function.

Guidelines for Creating Authentic Measures

As previously mentioned, providing reliable, quantifiable information about student learning is one of the primary purposes of assessment. In order to connect teaching, learning, and assessment in a meaningful way, standards, guidelines, and criteria need to be developed to ensure accurate accountability.

Newmann and Wehlage (1993) propose the following five standards of quality to challenge students to use their minds while working on real-life tasks: "higher-

order thinking, depth of knowledge, connectedness to the world beyond the classroom, substantive conversation, and social support for student achievement" (p. 8). Because of the need for these standards to accommodate a great variety of activities, they must represent quality of academic work without being tied to a specific learning activity or behavioral objective.

Guidelines for creating assessment measures to support standards of quality tend to fall into three stages (Diez & Moon, 1992; Wiggins, 1992). First, teachers must choose which outcomes to assess by deciding what they want the students to know and be able to do. Next, they must design the tasks and criteria which will count as demonstrations of acceptable performance. Finally, they administer the assessment and determine how to judge the quality of students' work.

When choosing outcomes, teachers may want to identify specific knowledge or skills they want students to gain, and they may want to think ahead about multiple methods of demonstrating knowledge or mastery of the outcomes. At this stage the concepts which will be required to be included in a final response are identified. The teacher may also be considering how many

or which choices for expressing those concepts will be acceptable.

Choosing which tasks to accept involves determining criteria which would indicate a student had reached a specific mastery level. The difficulty lies in identifying "any and all competent performance, without being tied to the specifics of a particular performance" (Diez & Moon, 1992, p. 38). Because instruction is so complex, quantification can often be both misleading and informative (Newmann & Wehlage, 1993). For this reason, creating scales which further identify qualitative aspects of the criteria established are useful for providing both students and parents a more comprehensive view of progress.

Administering the assessment and determining quality of work can be approached from two different angles. Assessing a variety of activities and classroom experiences encourages the use of portfolios. In this case, assessment involves gathering evidence to support whether each criterion is met. Criteria which are clearly developed and written and have specific levels of qualitative mastery are easier to assess. A collection of examples of work over an extended period provides a

more accurate picture of a student's work, development, and growth.

Administering assessment might also be approached from the focus of how restrictive the environment should be (Wiggins, 1992). The teacher must determine what time and resource restraints are appropriate for the response requested. The ultimate goal is to determine the student's level of independent understanding while remaining as authentic to the situation as possible.

Modes of Assessment

"Portfolio assessment" is certainly one of the current buzzwords in education, but what exactly is a portfolio? A portfolio is basically a container of evidence, the contents of which varies depending on its purpose (Hamm & Adams, 1991). It can range from a record of total learning, containing many samples of a student's work and anecdotal records of his/her experience (Stevenson, 1992; White-Hood, 1992), to a selection of excellence, containing only a student's best work (Costa, 1993; Evans, 1993; Rief, 1990).

The decision about which pieces of student work should be included in a portfolio, or what guidelines to use for deciding what to include, ultimately lies with the teacher or school district. Data sources are

practically limitless, including writing samples, parent communication, reading records, journals, plays, media presentations, concept maps, charts, conference records, tests, logs, inventories, profiles, videos, recordings, peer evaluations, teacher observations, a variety of traditional records, and projects or tasks. Learning logs might contain personal reactions and reflections, feelings, investigations, problems, and continuing questions. Profiles are forms that teachers, students, and sometimes parents fill out with ratings and summary judgments or descriptions of achievement (Archbald & Newmann, 1988).

The most important determiner of what to include in the portfolio should be its purpose. If the portfolio is being used as a tool for discussion with parents it may include different items than if it is being used as evidence of growth or self-reflection by the student. Having students select what they want to represent themselves often provides additional insight into a student's depth of thinking. In this case, students might be asked to choose something that was difficult, an example where they learned something new and where they needed to keep searching for ideas, two things they were

proud of and two things they would like to forget (Hamm & Adams, 1991).

If the portfolio is used to reflect growth, students might choose an assignment or activity for the portfolio at the end of a grading period. They could assess why this was their best work, how they went about completing it, problems they encountered and how they solved them, goals they had set for themselves and how they accomplished them, what makes this work better than previous work, and goals for the next grading period (Rief, 1990).

As students are encouraged to self-assess, the modes of assessment must focus more on the total child--his/her motivation, self-esteem, and learning style (Hamm & Adams, 1991; Jenkins, 1991; White-Hood, 1992). Students must be encouraged to assess their own learning experiences and growth, and be motivated to seek new learning. Modes of assessment should "ensure equity of experience, promote cooperation among students, and encourage students to seek new learning (White-Hood, 1992).

Similarly, grades in the middle school should not be indicators of success or failure, but incentives to continue growth (White-Hood, 1992). As students choose

data to include in their portfolios, they should be able to predict their grades and defend their predictions. Collecting data and organizing their own portfolios also requires students to clarify and evaluate their own thinking, while giving teachers yet another tool for understanding student achievement, knowledge, and attitudes (Hamm & Adams, 1991).

On a smaller scale, assessment of a specific content objective could also consist of a variety of choices, including journals and learning logs, peer assessment, self-evaluation, and projects. Just as Gardner (cited in Brandt, 1993) refers to providing "multiple entry points" (p. 7) for learning, effective assessment provides multiple exit points.

Communication With Parents

A variety of assessment instruments may be useful for the purpose of communicating with parents. Normative and criterion-referenced evaluation are both useful for sharing, but must be explained carefully. Parents also need to know that these forms of evaluation provide only a partial view of the whole child.

Important documentation of effort, attendance, and improvement is also often effective in helping parents understand the student's progress (George & Alexander,

1993). Regardless of the specific instrument chosen to report this type of data, it should be clearly written and reflect the philosophy of the school. For example, if the basic philosophy of the school emphasizes growth, then the evaluation process should produce an estimate of progress and the criteria for identifying adequate progress must be based upon the stated objectives (George & Alexander, 1993).

Because many authentic assessment processes go beyond normative evaluation and comparison within a group, reporting of a student's progress must go beyond letter grades to help parents better understand individual student progress. There seems to be no one right way to communicate effectively with parents, but George and Alexander (1993) propose three principles to consider. Communication should be as direct and personal as possible, the report form should be intelligible to parents, and the ultimate purpose of the report should be to increase cooperation for the student's progress.

Instruments used to communicate student progress to parents might include a standard report card, but for maximum effectiveness additional forms should be developed by the district which are consistent with their educational goals and objectives. These might include

checklists of skills and behaviors, records of attendance and effort, evaluation of progress, and narrative summaries of course content and individuals' strengths and weaknesses. Beyond sending a regularly scheduled report home, opportunities for communication between students, parents and teachers should be encouraged. Midterm reports, phone calls, personal progress notes, and triad conferences (led by the student and facilitated by the teacher) all enhance school-home communication, ultimately benefiting student progress and achievement.

Implications for Middle School Teachers

As the educational goals of this generation undergo a paradigm shift (Costa, 1993), the obsession with content knowledge as an end to the means will be replaced with the more global view of learning as a process. Lifelong learning, problem solving, and the ability to utilize vast amounts of technological information available will reduce the traditional emphasis on product-oriented assessment techniques.

Middle school teachers will need to continue to explore assessment measures which are meaningful to both their students and the world-class educational goals confronting them. Collecting and sharing assessment data regularly will be essential to collaboration and cross-

grade planning (Andrade & Ryley, 1992). Fortunately, it will have the added bonus of empowering teachers to deal with the real issues confronting their students, renewing their enthusiasm and focusing on continuous improvement.

Enhancing the authentic learning community created in effective middle schools is an integrative curriculum involving interdisciplinary communication. Utilizing authentic assessment measures poses special implications for student progress in these situations. Searching for answers and constructing meaning (Beane, 1992) involves greater interest in those meanings and how they are formed than in recognizing right or wrong answers. For this reason, projects, journals, and self-evaluation instruments are far more effective than traditional paper and pencil evaluations. Again, accurate accountability should be established by pre-determined standards and criteria.

In addition, the role of grading becomes even murkier. If an experience is constructed across two or more disciplines, how is each subject area graded? Furthermore, if this is a cooperative learning situation, how does the assessment count toward each individual student's grade? Vars (1987, p. 28) recommends addressing these issues with the students before the

project, determining as a group which activities will be considered for a grade, in which subject areas, and assigned to which students. The traditional report card could also be supplemented with anecdotal memos, student self-evaluations, and samples of student work to accommodate interdisciplinary educational programs. This could be done through a portfolio system with standard, consistent, criterion-referenced pieces of data collected in each portfolio. A grade in middle school should not be an indication of success or failure, but rather an incentive to continue thinking and learning (White-Hood, 1992).

Summary

The basic premise of authentic assessment is that today's educational goals are too broad to be adequately evaluated only by conventional measures and tests. The writer's premise is that at the middle school level this dilemma is compounded by the broad variability of adolescents' needs. In order to be responsive to their developmental and educational needs, authentic assessment measures must be utilized. The wide range of available measures ensures that reliable information and evidence of learning can be collected to meet the multiple purposes of assessment.

Regular, direct assessment which is not used for assigning grades but for "maintaining students at an appropriate instructional level" must be an integral part of instruction (Hargis, 1987, p. 51). Too often tests exist independently from curriculum and are used for comparison purposes or to classify children. Authentic curricular activities and delivery in the classroom, coupled with authentic assessment measures, will ensure that instruction and assessment are fused and learner-directed. The agendas of all stakeholders, including the students, parents, teachers, and other educational personnel, can be met through authentic assessment.

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