Implications of OBE

by John M. Kudlak

The mention of Outcome-Based Education (OBE) will elicit a broad spectrum of emotional reactions. Some will proclaim the idea as a new and innovative educational method to be immediately embraced and implemented. Others will reject it as the next educational fad. Still others savor the concept, but voice concern with the delivery process and implementation expense. In recent months, strong criticism has put OBE supporters on the defensive.

In 1986, the Rochester, Minnesota, school district developed outcomes at the exit (graduation), program, and essential (course) levels. In spite of careful district planning, inputting opportunities, and communication attempts, controversy evolved and it became evident that OBE was not the panacea or the “silver bullet” for contemporary education problems. However, as an OBE vanguard, Rochester learned that OBE can promote educational success for all students, if appropriately implemented and delivered.

OBE first needs to be defined and clarified. OBE is not new! It is an age-old, common-sense approach to education. OBE is a process that focuses on what is to be learned—the outcome. The outcome is a demonstration of “learning.” It is what the student is to know or do. The process involves “sticking” with the student until he or she learns the outcome. OBE formalizes an already successful educational approach—caring about individual student success. OBE teachers strive for student achievement at each student’s individual learning level. Good teachers have always been OBE teachers; they are the teachers we all remember who insisted on student success.

However, before initiating OBE, the adventuresome district should be fully enlightened of its merits, be cautioned of its problems, and be carefully guided through its implementation. By recognizing the objections of naysayers, schools can avoid unnecessary obstacles and criticism.

POSITIVE ASPECTS OF OBE

OBE creates a successful classroom environment of focused learning, raised expectations, student accountability, and expanded opportunities for science-motivated students. With OBE, students focus on what is to be learned by knowing, in advance, the outcomes. These definitive, focused outcomes are imprinted on the students. They are encouraged to learn more “depth” and fewer unconnected “facts.” The emphasis is placed on developing quality problem-solving skills rather than memorizing a given quantity of science information.

Students can achieve greater success if they are expected to learn the outcomes before exiting the course. OBE teachers can be flexible when it comes to how long it takes a student to learn an outcome, but they also insist that student comprehension is at an “A” or “B” level. Assigning a grade of D-, asking a student to accept failure, and other forms of negative enabling are no longer acceptable. OBE teachers are more concerned with all student outcome completion than on sort-
ing out students according to ability. (This has drawn some criticism from “high-ability” students who find OBE limiting.)

More students can successfully attain outcomes if their learning styles are appropriately addressed. The typical lecture-test process is not the only learning-assessment style employed. As many of us in science education have learned, the kinesthetic (hands-on) laboratory approach rivets the mind to the learning process and needs to be exercised more thoroughly. Other learning styles and techniques as advocated in brain-based education—accelerated learning, and learning through multiple intelligences—can be effectively used with rewarding results. If one method fails, OBE teachers try another approach until the learning objective is achieved.

For OBE to succeed, students learn to accept more accountability for their learning. Some students erroneously expect the teacher to assume the impossible responsibility of generating and tracking all correctives and enrichments when, in reality, students should help guide their own learning. This accountability concept adds virtuous responsibility to the learning process.

Expanded opportunities for self-motivated science students is one of the most important attributes of the OBE enrichment process. Students who have learned outcomes have the wonderful freedom and flexibility to expand their learning by engaging in enriching activities. This aspect of OBE fits nicely with science because it provides the student with time, resources, and incentives to engage in work on special interest science research projects.

OBE PROBLEMS
Problems can be experienced with OBE delivery, especially within heterogeneous groups of students. OBE demands much greater effort on the part of the teacher to avoid certain traps. Teachers may have to face problems that include diluted expectations; student boredom; the outcome recording maze; grading confusion; student apathy and procrastination; problems with assessment, corrective, and enrichment preparations; and a lack of acceptance by the higher education community. Delivering and managing OBE can be a time consuming, laborious task.

There is the temptation to dilute the outcomes or lower the standards so all students can reach minimal standards simultaneously. This compromising of expectations can be disastrous when dealing with motivated student that need to be constantly challenged.

Some parents and students have complained of boredom experienced by the science-motivated student whose work is completed before other students. OBE must include enrichment options for these students. Without appropriate enrichments, the student might be stymied in an unproductive weary environment. Some of these students are willing to help as peer tutors, but often the competitive atmosphere inhibits cooperation.

Parents of self-motivated students may feel that their child is neglected and not receiving adequate educational opportunities needed to reach his or her full
potential because the teacher is busy with others' correctives. As stated earlier, special interest science research projects provide a wonderful open-ended avenue for enrichments. Enrichments should not be additional, toilsome busywork, but a student-sought opportunity for investigative depth into choice science endeavors. The magnetism of enrichments should accelerate motivated students through the outcomes and beyond.

OBE grading, or non-grading, can generate a great deal of confused concern. Some OBE zealots advocate eliminating grades from outcome completion. However, outcome completion and grade achievement can exist simultaneously. Traditional grades are motivational for many students and informational for parents. An appropriate, valid grading process can be an integral facet of OBE if grades are true measures of achievement and not used as behavioral indicators. Most OBE programs limit grades to A, B, and incomplete.

Keeping track of outcomes can be difficult if a large numbers of them are used and assessments are vague. An ideal number of outcomes for a course is 8 to 20, which can easily be recorded in the grade book. Assessments should be designed to accurately measure outcome completion. The focus needs to be on the few important delineated outcomes. To track and retest every unit and lesson outcome is a frustrating statistical maze. Tracking essential course outcomes is manageable.

Student apathy and procrastination can evolve from the mundane test-retest process if correctives or reinforcements are not administered and students are given unlimited assessment license. Well-designed, formative assessments prescribe student needs, which are addressed with correctives or reinforcements, before additional assessments. If additional assessments are administered without corrective work, students will "put-off" studying for tests, developing a destructive attitude.

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**FIGURE 1. Suggested OBE delivery model.**

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OUTCOME ACHIEVEMENT

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Summative assessment
(Achievement/Grades)

Correctives/Remediation

Formative diagnostic assessment

Initial Instructional Strategies

Pretest option

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Enrichments/Enhancement

Start
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Start—Could start with either lesson/unit/course outcome. Outcomes are distributed in advance so students have full knowledge of expectations.

Pretest option—A non-graded quiz/assessment to determine the student's command of the outcome. Those with a grasp of the outcome have the flexibility to engage in long term enrichment projects or peer tutor other students who need help.

Initial instructional strategies—A functional instructional approach the teacher first employs that will be successful for a large spectrum of student abilities, interests, and motivations. This approach is based on the teacher's training, experience, and research.

Formative/Diagnostic assessment—Observation/Informal assessment or quiz which allows the instructor to determine the degree to which the learner knows or is able to perform a learning task, and to ascertain what the pupil does not know or is unable to do. Students needing help receive correctives/remediation. Students demonstrating outcome knowledge/skill advance to enrichments.

Correctives/Remediation—Some form of learning utilizing a different instructional approach than used initially. Students are not reassessed without correctives/remediation. Correctives/remediation should involve student responsibility.

Enrichments/Enhancements—Learning opportunities that are provided to students who demonstrate knowledge/skill of outcomes on formative assessments. These are learning activities that allow students to enrich competence after having achieved a given outcome(s). Elements of enrichment are activities students prefer, involve higher level of learning, and are new and interesting. Enrichments may be focused on the individual, small groups, or the total class. Enrichments are not more work, offensive, teacher dictated, or necessarily related to present content. Students should have the major voice in enrichment selection. Enrichments may involve acceleration, curriculum compacting, or long-term ongoing projects.

Summative Assessment—A judgment measuring the degree of student knowledge and skill. Usually associated with grades or levels or achievement.

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toward study habits. Correctives should be an alternative way to learn the outcomes and developing adequate correctives may require teacher research and creativity. New technologies, such as computer-based tutorials, can help.

OBE is laborious to develop and expensive to implement. There are no “canned” curricula that include outcomes and assessments that would be acceptable by all teachers/schools/communities, so time and patience are essential to foster a workable transformation. An investiture of time, talent, and resources is necessary to generate measurable outcomes, meaningful assessments, and appropriate learning experiences.

Another area of student and parent concern has been the non-acceptance of OBE grades by some colleges and universities. Although this concern has been addressed by some institutions of higher learning, more cooperative understanding is necessary among all learning institutions.

IMPLEMENTATION PROCESS

Once committed to OBE, the implementation process needs to be carefully planned before the project is initiated. The following recommendations should be considered to ensure transformational success, to reduce apprehension, and to attain an attitude of trust among staff, administration, and community.

- Follow appropriate protocol. Know and follow the steps for curriculum change within the district as prescribed by the administration and school board.
- Go slow to go fast. Build on others’ successes and failures. Try to “plan out” problems other districts encountered.
- Start small to grow big. Total district transformation is difficult. Begin with key enthusiastic staff to develop the program. The OBE project does not need to be a district-level initiative, but might be initiated with one teacher, one depart-

**Change is inevitable and necessary because more functional instructional strategies continue to evolve.**

- Staff development is essential for success. Teachers need to be versed in OBE, assessment writing, and various delivery methodologies to feel comfortable and successful.
- Delivery should dictate scheduling. For example, a two-hour lab eliminates 10 to 15 minutes of clean-up time required between two one-hour labs. This saved time can be invested in purposeful instruction rather than room maintenance.
- Design appropriate authentic performance assessments that will validate outcome learning. Assessments are one of the most misunderstood and neglected essentials of OBE.

Change is inevitable and necessary because more functional instructional strategies continue to evolve. The changes should be understandable, based on solid needs and research, comfortable for all stakeholders, including teachers, parents, and students. Everyone needs to be involved, especially students, who are the most affected yet least consulted group when change is implemented.

Functional curricula are dynamic and ever changing. Similar to a living organism in a fertile environment, it needs nurturing, care, and sometimes pruning. Within this analogy, OBE is not the final answer, but it can be a progressive step. Curriculum is more process than product.

Most important is the spirit of OBE: striving for high standards for all students. This attitude of caring can easily spill over into study skills and onto society. Curriculum should sustain teachers who care—a personal connection and commitment to student success.

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