

Educators' Notebook
Reviews of Research of Interest to Educators

**The Place of 'Opportunity to Learn'
in the Standards Debate**

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Abstract here

September 2000

Volume 12 Number 1

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The Place of 'Opportunity to Learn' in the Standards Debate

Introduction

Over the past decade there has been an increased interest among educators and the public in student academic performance, particularly with respect to standards and high-stakes testing. Canadian students are involved in international standards tests such as the Third International Mathematics and Science Study (TIMSS), and pan-Canadian tests such as the School Achievement Indicators Project (SAIPO). As well, most provinces have forms of standards-based testing or indicators programs, such as the Manitoba Standards Tests. The term 'standards' in this context typically refers to student performance, that is, the measured outcomes of education such as achievement in language, mathematics or science. When the results of these assessment programs are reported, questions are often raised about: (i) how results should be interpreted and used, and (ii) the accountability of educators for those results.

Recently, researchers and policy-makers have turned their attention to those factors that may affect student performance and may explain differences between and within jurisdictions. For example, differences in math scores between provinces may be attributable to different curricula or intended learning outcomes or indeed to differences in teacher training. This attention is not new, except that the framework for the examination is a relatively new one, that is, the concept of opportunity-to-learn (OTL). OTL is seen to provide a way to better understand students' performance. It is an answer to the question: "What combination of variables and factors directly or indirectly affects student learning?"

Background

The term "opportunity-to-learn" has appeared in educational research and opinion in various contexts since the 1960s. Carrol (1963) is generally credited with focusing attention on classroom conditions that might explain differences in student learning. Over the years researchers have explored the notion of OTL from various perspectives such as classroom interactions (Yesseldyke and Christiansen, 1987) and factors that influence learning (Wang, Haertel and Walberg, 1990).

OTL became linked with the international standards movement in 1994 when the American Goals 2000; Educate America Act introduced the idea of opportunity-to-learn as a set of standards more specifically school delivery standards. In conjunction with performance standards (e.g. school outcomes) and content standards (e.g. curriculum expectations), OTL standards would be a way of assuring equal opportunity for students (Elmore & Fuhrman, 1995; Porter 1993, 1995; Banks 1997; Noddings, 1997). The intent was to not only identify OTL factors as conditions that affect learning, but to set standards, that is, a set of generally accepted expectations. What was not made clear at

the time was whether the purpose of OTL standards was to improve students learning or a way to obtain accountability from school systems (Porter, 1995).

OTL as a research concept

Conceptually, OTL can be organized into three broad categories. First there are personological (e.g. individual student) factors such as motivation or persistence; second are classroom factors (such as the quality of the curriculum or teaching methods), and third, policy factors (e.g. resource allocation). Following is a brief overview of some of the recent research and opinion that has been based on one or more of the three dimensions of OTL.

Some researchers (Guiton and Oakes, 1995; Noddings, 1997) have examined the basic principles and assumptions of OTL, particularly with respect to the assertion that OTL is a basis for equal opportunity and can promote equity. Others (McPartland and Schneider, 1996; Dougherty, 1996) have provided sociological critiques of the applicability of OTL in schools today, typically from the perspective of equity and social capital. Other researchers have explored ways to measure OTL factors at the classroom level. This research often focuses on the effect of OTL, such as new teaching and assessment methods or student achievement. For example, Muethen (1995) examined how OTL effects can be used to predict mathematics achievement and Tate (1995) expanded the application of OTL standards in a study of the effects of mathematics achievement among African-American students. Wang (1998) studied the effects of four OTL variables (content coverage, content exposure, content emphasis and instructional quality) on student achievement in grade eight science, and Wang and Goldschmidt, (1999) examined the effect of OTL on the mathematics achievement of limited proficiency language students.

The results of this research, though not definitive, are promising particularly in that there is an emphasis on classroom factors. There is evidence that instructional methods, student-teacher interactions and the quality of curriculum have an important influence on students' OTL. These are all factors that teachers can affect in their classrooms.

OTL has also been used by researchers interested in educational finance. Elliott (1998) for example, examined the relationship of OTL on student achievement from the perspective of financial resource allocation. She concluded that there was both a direct and an indirect effect on student achievement.

Discussion

Although there is an expanding body of literature related to OTL there are a number of issues that researchers need to address. First, there are important measurement problems associated with examining the effects of multiple, correlated, independent OTL variables. Consequently researchers are employing more sophisticated statistical techniques such as hierarchical linear modeling. However, such techniques are often not accessible to researchers. Second, there is a need to address problems of validity. For example, if one is measuring the effects of curriculum expectations there needs to

be a way to ensure the instructional validity (overlap) between what is intended and what is actually taught.

Third, a discussion on OTL raises questions as to what it is that is being measured.

Most if not all of the research considers achievement as academic performance. However, most contemporary school curricula also place a strong emphasis on developing social and personal skills. Cognitive and constructivist approaches to learning suggest that the definition of achievement needs to be broader than in the past, and this is especially true in cases where achievement results are used for accountability purposes. Changing classroom assessment practices with a concentration on using techniques other than tests may require a different understanding of OTL.

A fourth issue related to OTL is how it can best serve the education community. A review of the literature suggests two different perspectives. Porter (1995), Noddings (1997), and others have suggested that OTL may serve either as a way to improve student learning or as a function of accountability. On one hand is the assumption that OTL factors can be manipulated to improve student learning. On the other hand, from an accountability perspective, the role of OTL may be quite different, that is as indicators of how an education system (local, provincial, national) is performing. In this case the focus may be more on the sufficiency of the OTL factor, with no direct link to student performance. There may be little causal relationship assumed between an OTL such as the quality of instruction and student performance.

Finally, there is the important practical problem of clarifying the nature of OTL standards. There is little information on which of the three factors (personal, classroom, or resource) has the greatest effect on student achievement and the extent to which they should become a 'standard' for all students and teachers. A project developed by the Department of Education in Saskatchewan may provide some information on the applicability of OTL standards. Instruments have been developed to identify and to measure student, family and resource factors as part of the provincial indicator program. (Saskatchewan Education, 1998, 1999).

Perhaps the most encouraging effect of the focus on OTL is that it brings attention to student learning and reminds educators that accountability to students is also part of the standards debate.

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ISSN 1181 - 9480

This is a brief review of a complex body of educational research. Since no brief review can capture a full body of research, readers are urged to consult the references which have been cited. The views expressed in this notebook are those of the author. The sponsors welcome your comments on this issue and your suggestions for future issues of Educators' Notebook.