

# **On Indicators of Equality of Opportunity in Education in Israel<sup>(\*)</sup>**

**A summary of the report prepared by Jacques Silber  
for the Committee in charge of updating educational indicators in Israel  
(Ministry of Education, Israel)**

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<sup>(\*)</sup> The Initiative for Applied Research in Education's *The Expert Committee on Guidelines for Revising the System of Education Indicators in Israel* commissioned the scientific survey.

– The findings are in the author's own words and the conclusions reached are his own.

– Any mention or quote from the survey must be referenced in the following manner: Silber J. (2008), On Indicators of Equality of Opportunity in Education in Israel, a Survey Commissioned by the Expert Committee on Guidelines for Revising the System of Education Indicators in Israel.

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During the past twenty years philosophers and social scientists (mainly economists) for whom equality matters have started to shift their attention from the concept of equality of outcomes to that of equality of opportunity. The latter concept is however far from being simple and there is yet no consensus on the way it should be defined. This report is an attempt to summarize various approaches to the concept of equality of opportunity, by philosophers as well as by economists. This review however is not purely theoretical because it also shows how in recent years economists have proposed various ways of implementing the idea of equality of opportunity in general, of educational opportunities in particular.

The report starts by presenting a survey of the concept of equal opportunity and explains the difference between this notion and that of equality of fair opportunity. It emphasizes in particular the very important contributions of John Roemer who makes a distinction between "circumstances" which are beyond an individual's control and "autonomous choices" which are within his/her control. As a consequence Roemer recommends that society compensates only the cases where bad consequences are due to circumstances or brute luck. There is no need to offer an insurance against the implications of an individual's autonomous choices. In Roemer's (1995) words "an equal opportunity policy must equalize outcomes in so far as they are the consequences of causes beyond a person's control, but allow differential outcomes in so far as they result from autonomous choice". Naturally this distinction requires us to be able to know which type of an individual's behavior is due to circumstances and which one results from autonomous choice. An alternative approach, well summarized by Ooghe et al. (2007), focuses on the "opportunity set" to which individuals have access, the idea being to make these sets as equal as possible.

Various proposals have recently appeared in the literature to implement this concept of equality of opportunity. Some of them took an ordinal approach to the topic, based on the concept of stochastic dominance (see, Lefranc et al., 2006, or Zheng, 2006). Zheng, for example, showed how to proceed to derive conclusions when the data on both circumstances (e.g. educational level of the parents) and "effort" (e.g. the income class to which the children belong) can be ranked by order of importance. There have also been suggestions to take a cardinal approach to the concept of equality of opportunity. Silber and Spadaro (forthcoming) thus recommended indices of equality of opportunity that amount to measure the degree of independence between the circumstances and the efforts of an individual, as they have just been defined.

Similarly Checchi and Peragine (2007) propose to make a distinction between factors beyond individual control which they call *types* (differences related to these factors should be compensated by society and this is called the *Principle of Compensation*) and achievements for which the individual is responsible (such differences should not be compensated and this is what is called the *Principle of Natural Reward* , following Fleurbaey, 1995). The authors then derive several indices of inequality of opportunity. Betts and Roemer (2005), used the framework of analysis originally proposed by Roemer to estimate the reallocations of educational expenditures required to equalize opportunities in the United States while Peragine and Serlanga (2007) try to find out when educational opportunities of individuals of different background are equalized and how to rank different systems according to the degree of equality of opportunity that they offer. Finally an original suggestion was made recently by Justman and Gilboa (2007) who based their analysis on the comparison of scholastic aptitude test scores of students who grew up in a kibbutz and of those with another background, the idea being that kibbutz children not only have equal access to various educational inputs such as class size, teachers, hours of instruction,...but also have similar levels of nutrition, health care and housing.

The second part of the report gives very simple numerical illustrations of the various methods mentioned previously so that the reader will be able to see the specificity of each approach.

The report ends by making precise recommendations concerning the way to measure inequality of opportunity in education in Israel. It thus proposes a list of indicators of differences in access to education (access to kindergarten, to primary and secondary school, to matriculation and to higher education) and of differences in the amounts of resources society allocates to educational purposes. It also suggests indicators that could allow checking for the equality of performances, based on the "Meitzav" data and on the scholastic aptitude tests for admission to Universities.

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