TORONTO DISTRICT SCHOOL BOARD

REVIEW OF POLICY, P067, LEARNING OPPORTUNITIES INDEX

TO Planning and Priorities Committee June 10, 2015

RECOMMENDATION IT IS RECOMMENDED that the reviewed policy, P067, Learning Opportunities Index be received.

STRATEGIC DIRECTION
- Make every school an effective school
- Identify disadvantage and intervene effectively

CONTEXT According to the Toronto District School Board’s (TDSB) Learning Opportunities Index (LOI) Policy (P067) of February 9, 2009, a review of the LOI is to be conducted every five years. The latest review began in January 2014.

There are three components to the review:
1) an examination of the methodology and variables of the LOI;
2) an examination of how the LOI is being used in the TDSB; and
3) consultations with TDSB stakeholders.

As part of the review, staff prepared a summary of uses of the LOI over the 2014-15 school year. Consultation sessions took place over April and May 2015 and included TDSB elementary and secondary school Principals and Vice- Principals; Trustees; and members of the TDSB’s Community Advisory Committee and Community Liaison Groups. Executive staff and Superintendents also provided their comments and suggestions. Each session included a brief explanation of the calculation of the LOI, an overview of uses of the LOI, and an examination of the LOI Policy (P067).

Generally, suggestions and recommendations of the consultation groups focused not on the LOI Policy itself but rather on how the LOI is operationalized, including:
- communications (lack of knowledge, communication, and training around the LOI methodology, how it is used, etc.);
- challenges of the implementation of the LOI such as with cut-offs (e.g., schools may only marginally change after a recalculation but completely lose funding after falling below a cut-off);
- disruption to the functioning of programs/schools with the current two-year model of funding changes with the LOI;
- a greater examination of how school structures and programs may affect the LOI;
- suggestions on possible future changes to the LOI methodology, (e.g., examination of criminalization).
Following this review, no changes to the policy are recommended at this time.

NEXT STEPS

1. Initiate review and, if required, revision of the LOI Operational Procedure (PR526). The review will commence Fall 2015 and the findings will be presented to Board Fall 2016.

2. For the purpose of the PR526 review, establish a Learning Opportunities Review Workgroup comprising representatives from key departments involved in the development and implementation of the LOI and LOI Policy as well as the main stakeholders, including Trustees, Superintendents, Principals and Vice-Principals, members of the TDSB’s Community Advisory Committee and Community Liaison Groups.

3. As part of the review, the workgroup will examine the effectiveness of the LOI and its application, and develop recommendations for any required revisions to the Operational Procedure PR526 taking into consideration information and suggestions gathered during the consultation sessions.

APPENDICES

Appendix A: *Learning Opportunities Index Policy* PO67
Appendix B: *Learning Opportunities Index Operational Procedures* PR526
Appendix C: *Learning Opportunities Index Review: Consultation Sessions PowerPoint Presentation*

FROM

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Policy P067

Title: LEARNING OPPORTUNITIES INDEX

Adopted: February 11, 2009
Revised: June 2013

1.0 OBJECTIVE

To provide direction to staff regarding the use of the Learning Opportunities Index

2.0 RESPONSIBILITY

Director of Education

3.0 DEFINITIONS

Learning Opportunities Index: A Board-designed tool that ranks schools based on a range of indicators that measure external challenges affecting student success. Many of the indicators reflect levels of poverty. There are two indices, one for elementary schools (including junior high schools) and one for secondary schools.

The index measures external challenges in a way that compares each school to all other schools. It applies exactly the same set of consistent, reliable, and objective measures to each school and removes the subjectivity that may enter into the perceptions held about individual schools.

The index lists schools according to ranking. The highest ranking (number 1) indicates the school with the greatest external challenges to student success. The index also provides a score for each school. A higher score leads to a higher ranking.

External challenges Conditions that are outside the control or influence of the school or Board and that have an impact on student success.

Resources Funds, staffing, goods, and services allocated to schools in order to help students succeed.

4.0 POLICY

4.1. The Board recognizes that the Learning Opportunities Index is an effective tool for measuring external challenges to student success.

4.2. The Board recognizes that all students can learn and succeed. A ranking on the index shall not be used as a negative label for a school or its students.
4.3. In order to provide a more equitable distribution of resources, the Learning Opportunities Index shall be used when resources are being allocated to schools, except where the need for an appropriate exception can be demonstrated.

(a) An exception to this direction is permitted where allocations are directed to all students and schools to meet basic needs (such as essential learning resources, heating and lighting) and to meet standards in legislation and collective agreements (such as teachers to meet class size requirements).

(b) Another exception to this direction is permitted where allocations are directed to needs that can be more appropriately measured by other means. (Examples of more accurate measurements include resources for English Language Learners based on students’ countries of origin, resources for Special Education based on students’ identified needs, and resources for major capital repairs in schools based on measures of facilities’ condition).

4.4. Applications of the Learning Opportunities Index in determining allocations to schools shall result in a greater concentration of resources in schools that have greater need.

4.5. Whenever feasible, the scores of schools on the index shall be used in preference to the rankings of schools when determining the amount of an allocation.

4.6. The index may be used in a variety of ways, including the use of cut-offs, stepped cut-offs, scaling, or a combination of these approaches. Information shall be made available to Board employees and the public outlining how to use the Index for best results.

4.7. The index is used in allocations among specific schools. As a result, nothing in this direction shall prevent decisions about allocations before they are distributed among schools. For example, an allocation may be directed only to students of a specific grade, and, once that direction is determined, the index would be used in decisions about distribution among schools with those grades.

4.8. The most recent version of the index shall be used when determining the allocation of resources.

4.9. The most recent index and explanatory information shall be easily accessible in the Board’s communications vehicles that provide information to staff and the public.

4.10. The factors used to calculate the index shall be reviewed every five years to ensure that they reflect current research concerning external challenges to student success and take account of changing availability of valid, reliable, and consistent data.

4.11. The index shall be recalculated and republished every two years.
Policy P067 Learning Opportunities Index

4.12. An analysis shall be generated every two years to assess the impact of the use of the index in allocation of resources to schools during the previous 24-month period. The analysis shall be presented to the Board and its advisory committees.

5.0 SPECIFIC DIRECTIVES

The Director is authorized to issue operational procedures to implement this policy.
Toronto District School Board

Operational Procedure PR526

Title: LEARNING OPPORTUNITIES INDEX

Adopted: March 24, 2009

Revised: June 2013

Authorization: Executive Council

1.0 OBJECTIVE

To provide instructions to staff regarding the application of the Learning Opportunities Index for resource allocation

2.0 RESPONSIBILITY

Director of Education

3.0 DEFINITIONS

Learning Opportunities Index  A Board-designed tool that ranks schools based on a range of indicators that measure external challenges affecting student success; many of the Learning Opportunities Index indicators reflect levels of poverty

External challenges  Conditions that are outside the control or influence of the school or Board and have an impact on student success

Resources  Funds, staffing, goods, or services allocated to students or schools in order to help the students succeed

4.0 PROCEDURES

4.1. About the Learning Opportunities Index

The index measures external challenges in a way that compares each school to all other schools. It applies exactly the same set of consistent, reliable, and objective measures to each school and removes the subjectivity that may enter into the perceptions held about individual schools.

The index lists schools according to ranking. The highest ranking (Number 1) indicates the school with the greatest external challenges to student success. The index also provides a score for each school. A higher score leads to a higher ranking.

There are two indices, one for elementary schools (including junior high schools) and one for secondary schools.
4.2. **Allocations**

When staff is allocating resources to schools, the Learning Opportunities Index should be used (exceptions can be found in the Policy P067, Learning Opportunities Index.

Resources can be allocated using different methods such as the use of cut-offs, stepped cut-offs, scaling, or a combination of these approaches.

Whenever possible, scores should be used in preference to rankings when determining the amount of allocation. Schools’ scores on the index are a more accurate indication of relative external challenges than schools’ ranking on the index. Schools that are several rankings away from one another may have similar levels of need.

4.3. **Allocations of Resources Directly to Schools**

The index may be utilized for the direct allocation of resources to schools.

(a) **Cut-offs**

When cut-offs are used, all schools above the cut-off value receive the resource and all those below the cut-off point do not receive it.

(b) **Stepped Cut-offs**

When stepped cut-offs are used, all schools above a specified cut-off value receive a specified level of resource, all schools above a lower specified value receive a lower specified level of resource, and all schools below the final cut-off point do not receive any additional resource. There may be few or many steps (specified cut-off value) used in this allocation method.

Where cut-offs are used, stepped cut-offs are preferable to one cut-off, in order to minimize arbitrary differences in allocations to schools with similar external challenges.

(c) **Scaling**

When scaling is used, allocation of the resources is tapered so that more resources are given to schools high on the index than schools low on the index proportionate to each school’s score in the index. Each school receives a slightly different allocation, scaled accurately to its score on the index.

A scaled allocation is most appropriate when resources are readily divided into small units (such as dollars). In most instances, scaling is inappropriate in allocation of staff, because staffing full-time equivalents are not appropriately divided into small fractions.
Scaling should not be used when it attenuates the resource so much that it is not beneficial. It is more appropriate to use cut-offs when the resource to be allocated is scarce, and as a result, should be focused on students and schools with the greatest need. It may be appropriate to combine scaling with a cut-off so that allocations are scaled but only for schools above a specified level of external challenge.

4.4. **Allocations of Resources to Families of Schools**

The index may be utilized for central allocations to superintendents of education for use in their Families of Schools to achieve an equitable allocation of resources for different areas of the City. The amount received will be based on the score or ranking of individual schools on the Learning Opportunities Index in each Family of Schools.

(i) Where central allocations using the index are made to Families of Schools, the superintendent has full discretion to allocate the resource among schools and students within his or her Family of Schools, based on what- ever criteria the superintendent deems appropriate.

(ii) Superintendents are encouraged to collaborate with principals in determining appropriate criteria for allocation within the Family of Schools.

4.5. **Measuring the Impact of Allocations Using the Learning Opportunities Index**

The impact of allocations received by schools will be assessed by gathering information from a random sample of schools chosen based on their placement on the index. Schools will be representative of different levels of external challenge.

Specific information collected will include details about type of resources schools are receiving based on the Learning Opportunities Index; the value of these re- sources, how they are used, and the benefit to student learning. Resources received through the regular school budget allocation process will not be included in the analysis.

Information will also be collected about the use of resources allocated to Families of Schools for distribution by superintendents of education.

The information will be collected and analyzed every two years. The results of the research will be provided to the Board and shared with the Inner City Advisory Committee and other community advisory committees.

**5.0 REFERENCE DOCUMENTS**

Policy P067, Learning Opportunities Index
APPENDIX C

Learning Opportunity Index Review

Consultation Sessions
April/May 2015
The Learning Opportunity Index in the Toronto District School Board
Learning Opportunities Index (LOI)

Introduction

- There are two indices, one for elementary (including junior high schools) and one for secondary.

- Under various names, the Toronto District School Board and its legacy systems have calculated some variation of the index for over thirty years.

- In 2009, after a year-long review and external consultation with stakeholders, the current calculation of the index was recommended by a steering committee consisting of board staff and representatives from the Inner City Advisory Committee.

- In 2014-15 another review has started.
Learning Opportunities Index (LOI)

Purpose

- The LOI ranks each school based on measures of external challenges affecting student success.
- The school with the greatest level of external challenges is ranked #1 and is described as highest on the index.
- It is important to acknowledge that students in all schools have some external challenges, even those schools that are ranked very low on the LOI.
- The LOI measures needs in a relative sense that compares all schools on exactly the same set of data collected in a consistent, reliable, and objective manner.
- The LOI removes much of the subjectivity that may enter into the perceptions of need that may be held about individual schools.
Learning Opportunities Index (LOI)

Applications

• There is a wide range of applications of the LOI within the TDSB to help determine allocation of staffing and other resources to schools.

• During the staffing allocation process, the LOI is used as one input along with other types of information such as school enrolment.

• LOI is used for research purposes as a school-level proxy for socio-economic challenge.
Learning Opportunities Index (LOI)

Key Points

Characteristics of the NEIGHBOURHOOD of the SCHOOL itself are irrelevant.

- Characteristics of the neighbourhood of the school are not significant
- Characteristics of the students in the school/school structure are highly significant


- Many students do not live in the neighbourhood of the school.
Learning Opportunities Index (LOI)

FSA Comparisons

Students with Same FSA and Different FSA, TDSB, Oct 31 2013

What this shows: FSA's are the first three digits of the postal code. There are about 100 in Toronto. This shows a general relationship of grade to leaving the neighbourhood. Many students in Grades 7-8 and most secondary school students live away from the school.
Learning Opportunities Index (LOI)

The following maps show the density of student residences in three schools that are very close to each other.

The schools are neighbours, but many of the students come from quite different locations.
Learning Opportunities Index (LOI)

Density of Humberside Student Residence

- Humberside location
- Ursula Franklin and Western Tech location

Projection: NAD-1983 UTM Zone 17N
Date: August 2011

Presented by: Research and Information Services
Sources: TDSB, ESRI
Learning Opportunities Index (LOI)

Density of Western Tech Student Residence

Projection: NAD 1983 UTM Zone 17N
Date: August 2011

- Humberside location
- Ursula Franklin and Western Tech location

Sources: TD59, ESRI
Learning Opportunities Index (LOI)

Density of Ursula Franklin Student Residence

- Humberside location
- Ursula Franklin and Western Tech location

Projection: NAD 1983 UTM Zone 17N
Date: August 2011

Source: TDSB, ESRI
Learning Opportunities Index (LOI)

With the LOI, the postal code of each student is matched to key socio-economic characteristics of the neighbourhoods where the students live.

This is aggregated to the school level.
Learning Opportunities Index (LOI)

Components of the LOI – Tax Data

The LOI is composed of variables which are combined into a single index. The variables used are:

- **Median Income**
  - A measurement of income levels, at which half the residents earn more and half of them earn less. This is measured at the level of the student’s neighbourhood.

- **Percentage of Families whose income is below Low Income Measure (before tax)**
  - Also known as the Low Income Measure. The percentage of families in a student’s neighbourhood whose income is at or less than half the median income in the city.

- **Percentage of Families Receiving Social Assistance**
  - The proportion of families in a student’s neighbourhood whose income comes from government sources.

**Source:** Tax Data (families with school-aged children) matched with student postal code
Learning Opportunities Index (LOI)

Components of the LOI – Census

**Adults with Low Education**
- The percentage of people in a student’s neighbourhood without a high school diploma.

**Adults with University Degrees**
- The percentage of people in a student’s neighbourhood with at least one university degree.

**Lone-Parent Families**
- The proportion of families with children living in a student’s neighbourhood with a mother or a father with no spouse or common-law partner present.

*Source: Federal Census data (now Environics Analytics) at Dissemination Area (DA) level, matched with student postal code*
Connection to Achievement

- The variables that constitute the LOI have been tested against the student success indicators of TDSB students and have been shown to correlate with measures such as EQAO Grade 3 and 6 test results, OSSLT, and credit achievement.

- The LOI is one of the TDSB's ways to respond to external challenges to get students to the same starting line.
Learning Opportunities Index (LOI)

EQAO Grade 3 and 6 Composite (2010-13) and the 2011 TDSB LOI
Learning Opportunities Index (LOI)

Learning Opportunities Index, 2014

LOI 2014 -- Highest to Lowest Challenge

Value
- Highest Challenge
- Lowest Challenge

Projection: NAD 1983 UTM Zone 17N
Date: October 2014

Produced by: Academic, Research and Information Services
Sources: TDSB, ESRI, DMTI
Learning Opportunities Index (LOI)

Percentage of Students in the Grade 9 Cohort (2006 - 2011) who Confirmed Offers of Admission to Universities by Toronto Neighbourhoods

[Map showing learning opportunities index]
Learning Opportunities Index (LOI)

What is Excluded?

- During the review, a number of other variables were considered for inclusion in the LOI, but have not been included.

- For some variables (for example, crime), ways to consistently link the information to each student are not available (student-level information serves as the basis of the LOI).

- For others such as crowding, there is no clear consensus in the literature on the importance of what the variable is, or whether it has any noticeable effect on student achievement.

- Some other proposed variables were too blunt a measure, and do not show a strong correlation to student achievement.
Learning Opportunities Index (LOI)

Variables Removed

- The Immigration variable was not included because research and analysis of TDSB data shows that immigration status is not well correlated with student achievement. Some groups of recent immigrants show higher achievement levels than Canadian-born students, so status as a recent immigrant per se is not a valid measure of external challenge to student success.

- Other variables removed because they did not increase the strength of the Index:
  - average income
  - housing
  - mobility
Census to Environics Analytics

• With the removal of the 2006 Long Form Census in 2011, we examined information from Environics Analytics for high education, low education, and lone-parent families.

• The same postal codes (October 31 2011) connected to both the 2006 Census and updated 2011 DA’s from Data Analytics.

• Correlations were extremely high:
  • .991 for high education
  • .975 for low education
  • .936 for lone parent families.

• The two sets of information are therefore extremely similar, albeit not totally identical.
Learning Opportunity Index: Uses
Learning Opportunities Index (LOI)

Definition of the Learning Opportunity Index

The Learning Opportunity Index (LOI) is an index, based on measures of external challenges, that ranks each school by measuring relative need and comparing all schools on the same set of data collected in a consistent, reliable, and objective manner.
Learning Opportunities Index (LOI)

The LOI is...

- A tool for student equity ensuring that children who have access to fewer resources at home and in their neighbourhoods will have increased access to available resources in their schools
- A tool that assists in steering additional resources to the schools serving students who face greater external challenges
- An index that recognizes socio-economic variables impacting educational achievement: measures of income and poverty, parents’ education, and proportion of lone-parent families
- An extremely accurate and statistically sound method for representing differences among schools
- A tool comprised of variables statistically consistent in their correlation between external challenge and student achievement

The LOI is not...

- A grant or funding of any kind
- A Learning Opportunities Grant (LOG) - An LOG is a Special Purpose Grant from the Ministry of Education that is additional funding for special programs aiming to improve the educational achievement of the students
- Grants for Student Needs (GSN) which are generated primarily by student enrolment
- A component of the provincial model of Grants for Students Needs (GSN)
- A tool that uses student achievement in its calculation
Learning Opportunities Index (LOI)

LOI Uses in School Budgets

School Budget contains several components including base school allotment, general per pupil allocation, library allocation, school office per pupil allocation, learning opportunity grant, student Financial Assistance, program supplements, School Council Allocation, PD, IB. There are two components of the school budget which are based on the LOI.

- **Learning Opportunity Allocation**
  The LOI is applied to the corresponding school's enrolment to establish its weighted enrolment and then multiplied by $15 for Elementary and $8 for Secondary to determine the LOG amount. The higher the LOI index, the higher the allocation.

- **Student Financial Assistance (Secondary School only)**
  The LOI is applied to the corresponding school's enrolment to establish the school's weighted enrolment and then multiplied by $13 to calculate the student financial assistance allocation. The higher the LOI, the higher the allocation.
Learning Opportunities Index (LOI)

LOI Uses in Staff Allocation

**Elementary Teachers**

- 115.0 Elementary Teachers are allocated to schools in the Top 200 ranks of the 2014 Learning Opportunity Index.

- Allocation is based on the LOI Score and the Grades 4-8 Projected Enrolment.

- Allocations are made in 0.5 increments.

- Allocations are expected to be utilized to reduce Grade 4-8 class sizes.

- LOI allocations include Preparation Time Allocation.
LOI Uses in Staff Allocation

Secondary Teachers

- 30.0 Secondary teachers are allocated to schools in the Top 30 regular schools based on the 2014 Learning Opportunity Index.
- Allocation is based on the LOI Score and the Projected Enrolment.
- Allocations are made in 0.5 increments.
**Learning Opportunities Index (LOI)**

**LOI Uses in Staff Allocation**

**Elementary Vice- Principals**

- The LOI is included as a factor in the allocation of Elementary Vice-Principals.

- Schools ranked in the Top 100 of the LOI receive .2 additional points for each student in the VP formula calculation. Schools ranked 101-200 receive an additional .1 points for each student.

- The LOI factor makes up approximately 5% of the total points in the formula calculation.
Learning Opportunities Index (LOI)

LOI Uses in Staff Allocation

Secondary Vice-Principals

- The LOI is included as a factor in the allocation of Secondary Vice-Principals.

- Secondary Vice-Principals are allocated on the basis of the number of teachers in each schools. Teachers are a proxy for enrolment, program, Special Education and Learning Opportunities.

- The LOI factor makes up a small proportion of the total secondary formula calculation.
Learning Opportunities Index (LOI)

LOI Uses in Staff Allocation

Elementary Special Education Resource Model (CBRM)

- The LOI is included as a factor in the allocation of elementary CBRM teachers.

- LOI score is one of the factors along with the net enrolment of the school, student need (# IEP), and students returning to their home schools as a result of the Inclusion Strategy.
LOI Uses in Staff Allocation

Secondary Special Education Resource Teachers

- The LOI is included as a factor in the allocation of Secondary Special Education Resource Teachers.

- Beyond the base allocation made to schools depending on enrolment, the LOI score is one of the factors used along with the needs of students (#IEP, #IPRC), as well as, EQAO Grade 9 Applied Math scores.
Model Schools for Inner Cities

*150 elementary schools, not including congregated schools and academies attached to schools
Structure and Staff Allocation

150 Schools grouped into 7 Clusters

Clusters: A1, A2, B3, C4, D5, E7, F6
Each Cluster receives extra supports, both financially and with staff, to bring to life the 5 Essential Components of a Model School

The Model Schools Resource team:
- One Portfolio Superintendent
- One Central Coordinating Principal
- One Program Coordinator
- Two Central Lead Teachers
- Fourteen Teaching Learning Coaches
- Twenty-four Community Support Workers
Learning Opportunities Index (LOI)

LOI Uses in Teaching & Learning

All areas in Teaching & Learning are “cognizant” of the LOI when offering any sort of support, prioritizing of schools, interventions, Ministry initiatives, and professional learning of schools and teams.

Some specific examples are included on the following slides.
Learning Opportunities Index (LOI)

LOI Uses in Teaching & Learning

The Arts
• Used as one of the criteria to distribute subsidized and/or free tickets to Arts events and Performances

Central Library
• Work with SO’s to spread support for specialized programming/projects (e.g., the Adolescent Leading & Learning Strategy)

English Literacy
• Support for the development of professional learning communities in schools and FOS
• Guided Reading Support
• Levelled Literacy Intervention Project
Learning Opportunities Index (LOI)

LOI Uses in Teaching & Learning

Health & Physical Education
- LOI is used for OFSAA allocation of funds for student/athletes and schools

Music
- Placement of programs
- Distribution of resources

Outdoor Education
- User Fees discounted for LOI schools 1 – 150

Student Nutrition Programs
- Funding based on criteria which incorporates the LOI as one indicator for reaching a percentage funding formula.