

Toronto District  
School Board



# Part 2: The EDI Cohort Study 1999-2000 to 2010 and Beyond

## EDI Symposium

January 13, 2010

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# Background

- Maps from the North York EDI, 2000
- EDI 2000 (North York and Toronto) and Grade 3/6 EQAO
- EDI 2000 and Grade 9 Achievement
- Next Steps



# Background

- JK and SK Students in the North York and Toronto legacy systems participated in McMaster's pilot EDI in Spring 2000.
- As students progressed through the TDSB system, they were monitored in terms of student achievement.

# Background

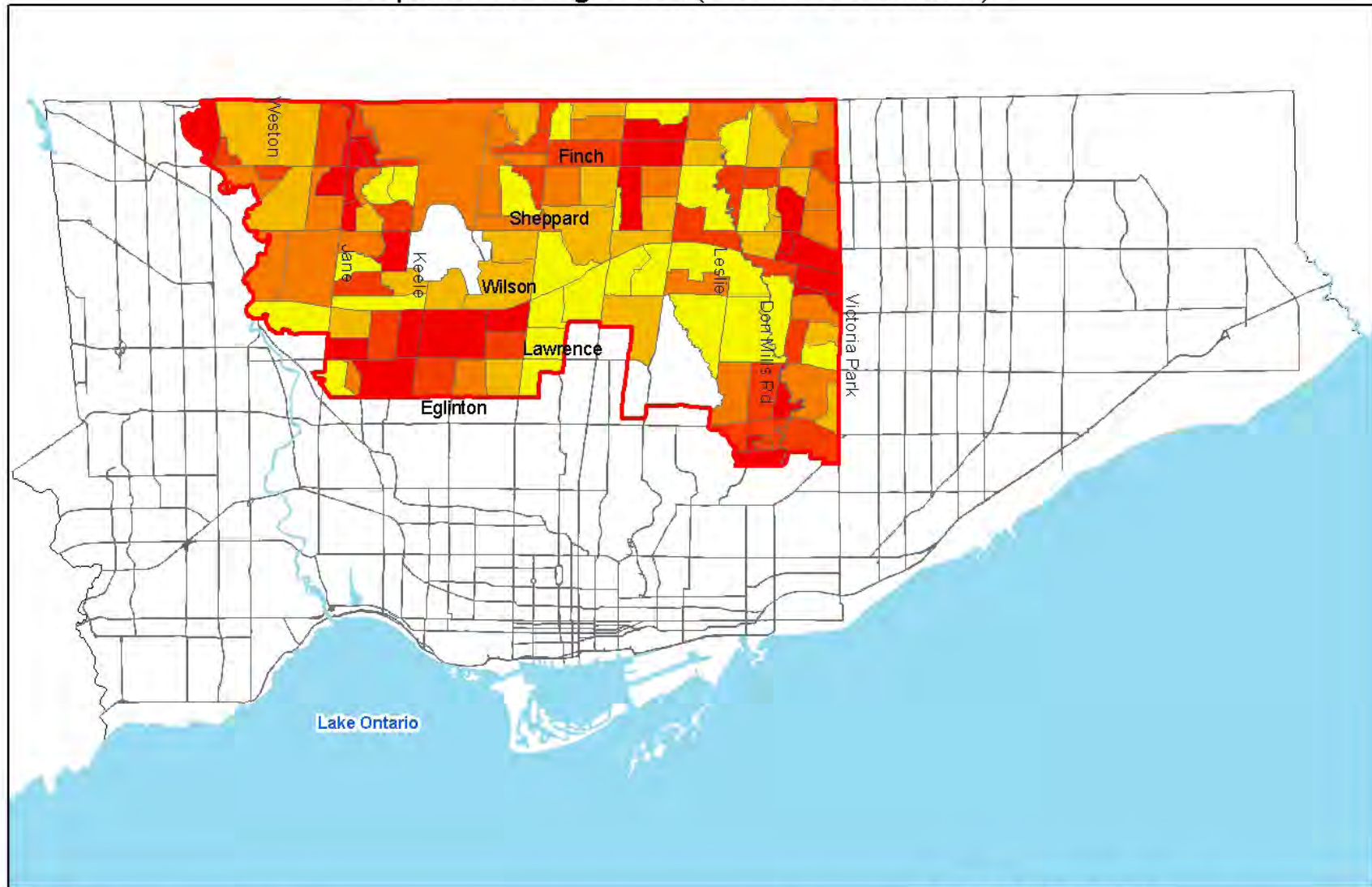


- **SK Student Milestones to 2009:**
  - **1999-2000**: SK (EDI Spring 2000)
  - **2001-2002**: Grade 2 report card
  - **2002-2003**: Grade 3 EQAO (Reading, Writing, Math)
  - **2005-2006**: Grade 6 EQAO (Reading, Writing, Math)
  - **2006-2007**: Grade 7 report card, TDSB Student Census
  - **2008-2009**: TDSB Grade 9 Secondary Success Indicators, EQAO Grade 9 Math

# 1. Maps: North York EDI, 2000

- **Map 1** shows the proportion of high-risk EDI students in each Census Tract (CT), according to student residence in 1999-2000 (proportion of high-risk students in each CT).
- **Map 2** shows the highest DENSITY of high-risk students.
- **Map 3** shows both CT trends and Density overlaid – both show similar geographical patterns of high-risk.

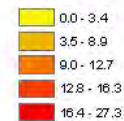
Map 1: Students Participating in North York EDI 2000-  
Proportion of High Risk (2 or more domains)



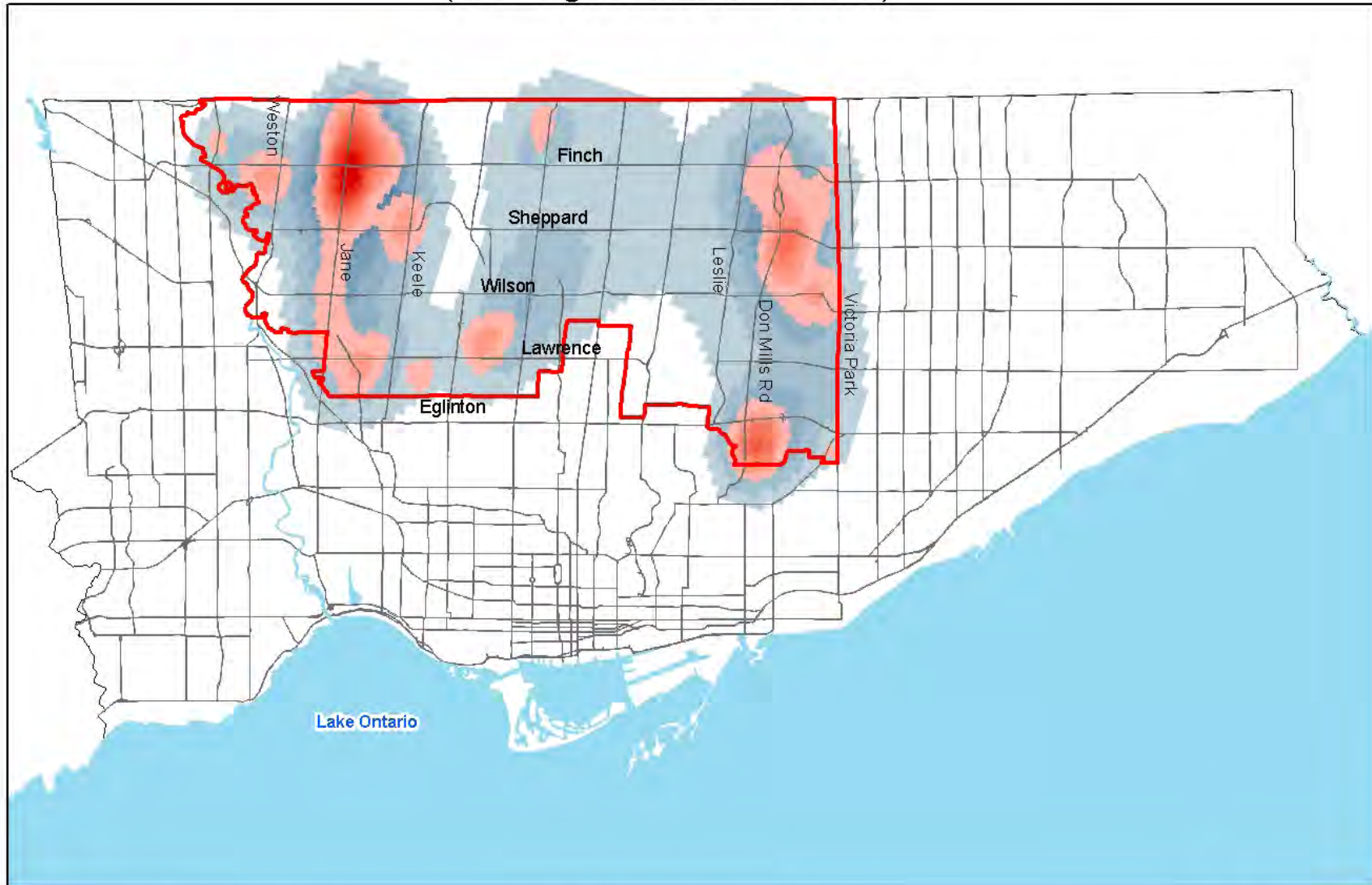
Produced by:  
Research and Information Services/Planning TDSB, May 2007  
Source:  
Base Map - Land Information Toronto/DMTI/Statistics Canada  
School Data - Research and Information Services/Data Warehouse, TDSB; EDI;

0 1 2 3 4 5 6 7 8 9 10  
Kilometers

EDI At-Risk (2+ Domains) 2000



Map 2: Students Participating in North York EDI 2000- Density  
(red = high risk blue = low risk)

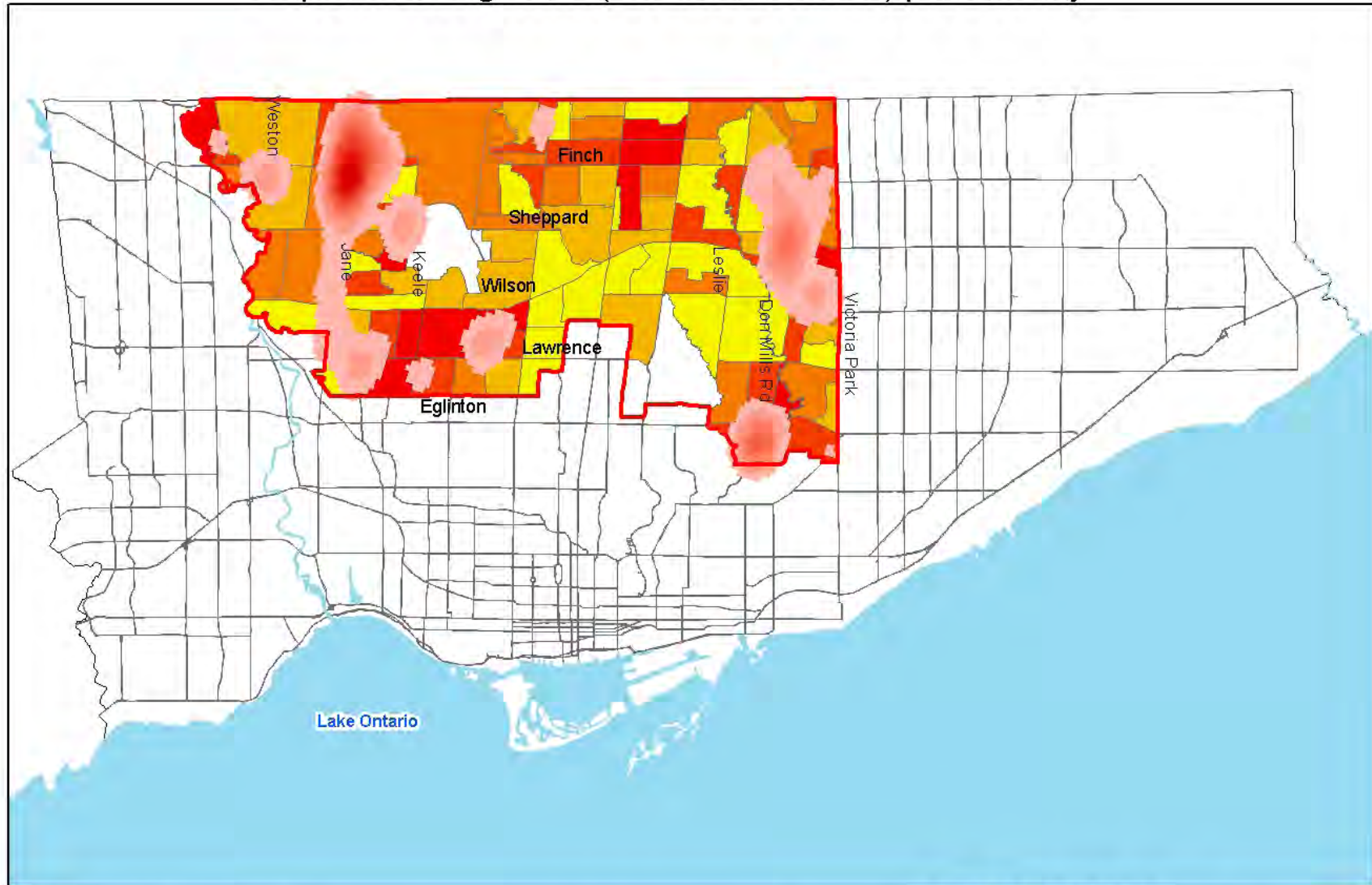


Produced by:  
Research and Information Services/Planning TDSB, May 2007  
Source:  
Base Map - Land Information Toronto/DMTI/Statistics Canada  
School Data - Research and Information Services/Data Warehouse, TDSB, EDI;

0 1 2 3 4 5 6 7 8 9 10  
kilometers



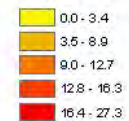
Map 3: Students Participating in North York EDI 2000-  
Proportion of High Risk (2 or more domains) plus Density



Produced by:  
Research and Information Services/Planning TDSB, May 2007  
Source:  
Base Map - Land Information Toronto/DMTI/Statistics Canada  
School Data - Research and Information Services/Data Warehouse, TDSB; EDI;

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Kilometers

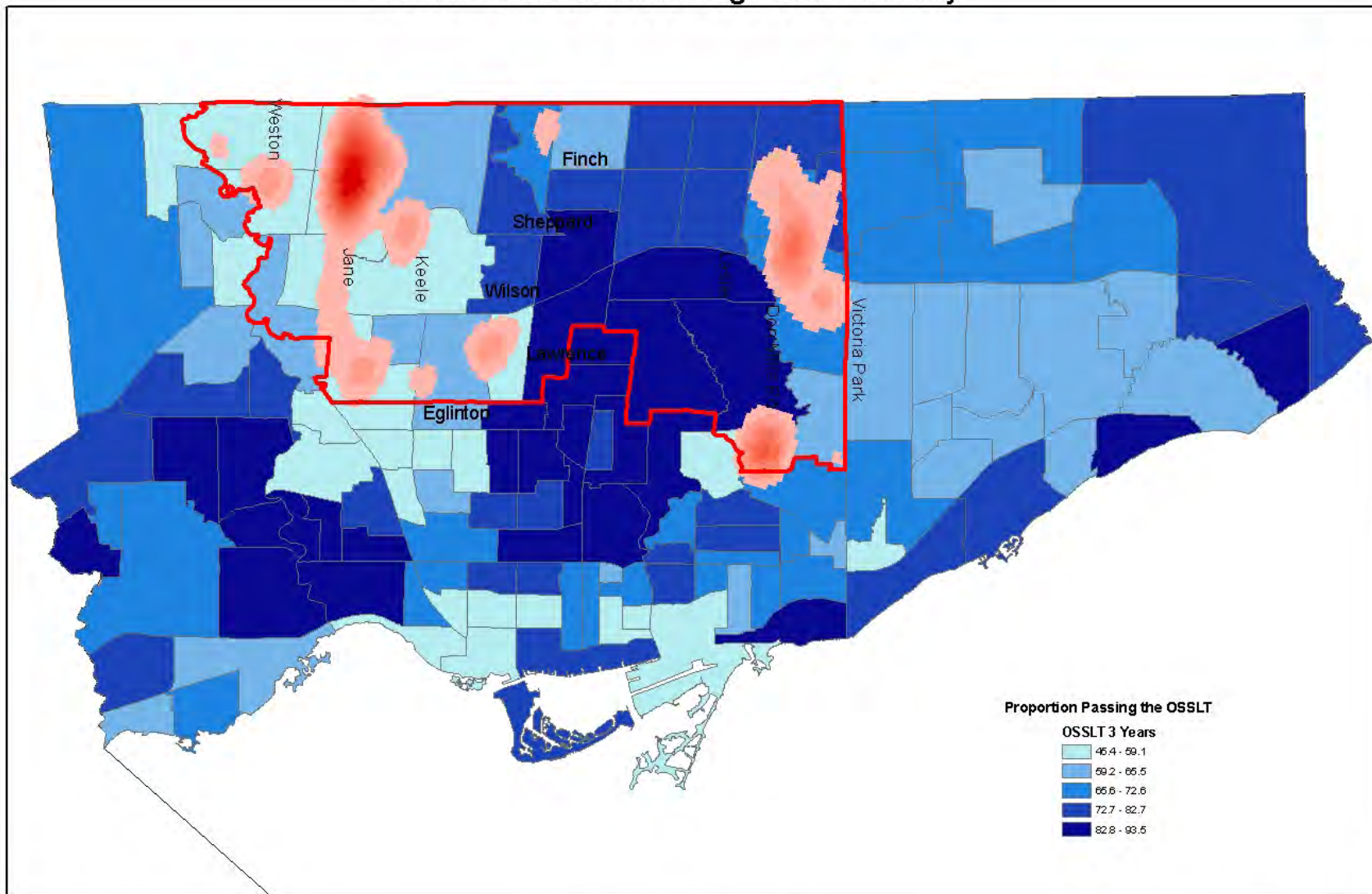
EDI At-Risk (2+ Domains) 2000



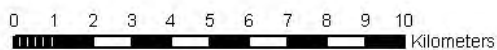
# Maps: North York EDI, 2000 and Other Achievement Patterns

- **Map 4** shows the 3 year averaged pattern of Grade 10 Literacy (OSSLT) achievement in City of Toronto neighbourhoods, with the EDI 2000 high-risk density patterns.
- The final map (**Map 5**) shows the geographical pattern of external challenge in the TDSB according to the 2009 Learning Opportunity Index (LOI), where elementary schools are ranked according to socioeconomic and related challenges external to the school.
- Even though these **last two maps** involve completely different students, assessments and geographical units, the patterns are similar.

Map 4: OSSLT Patterns 2005-2007 and North York EDI 2000 High Risk Density



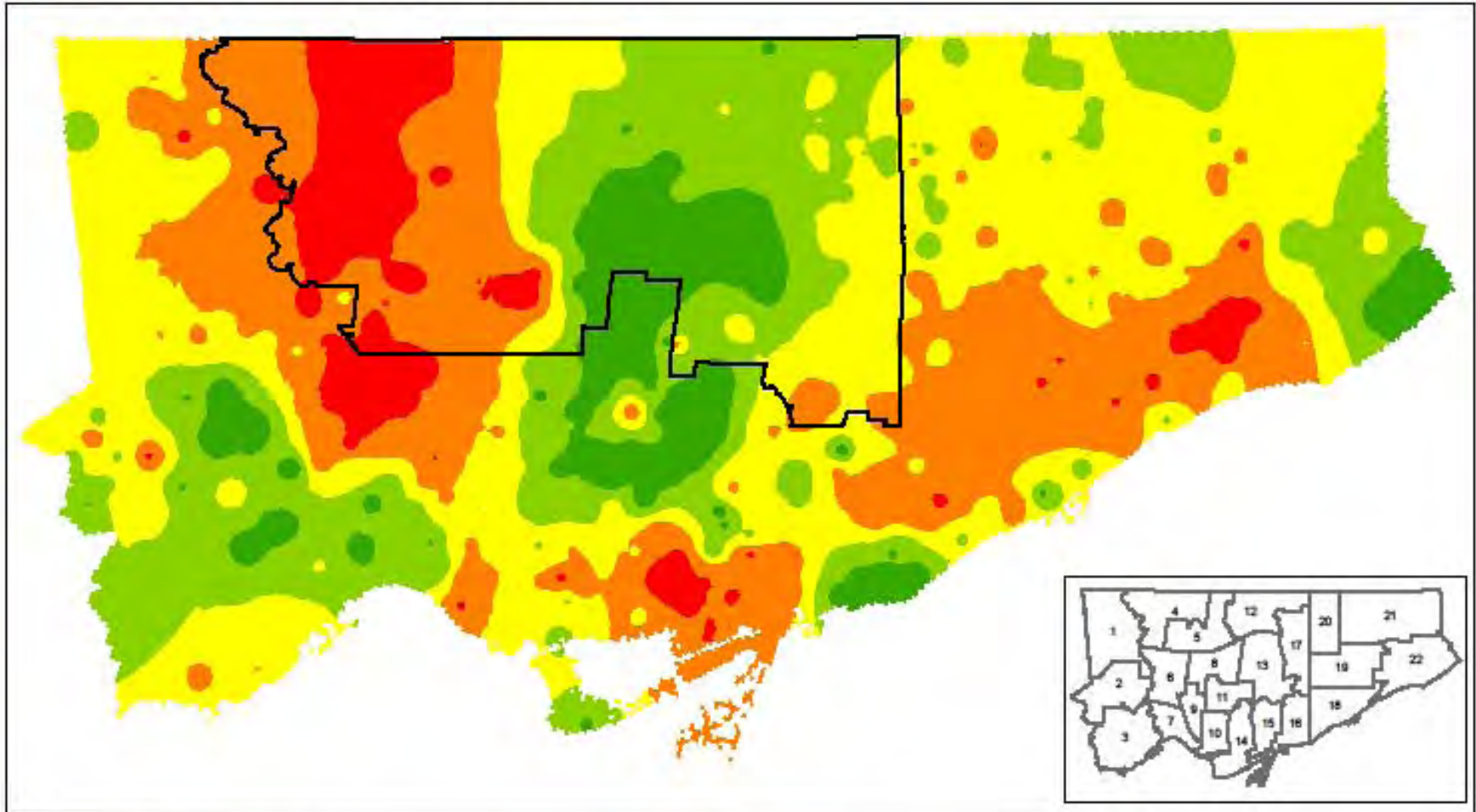
Produced by:  
 Research and Information Services/Planning TDSB, May 2007  
 Source:  
 Base Map - Land Information Toronto/DMTI/Statistics Canada  
 School Data - Research and Information Services/Data Warehouse, TDSB, EDI;



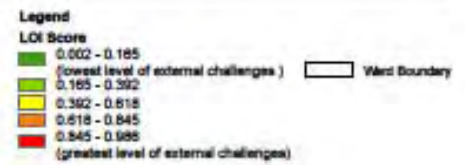
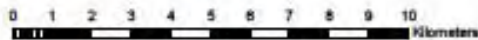


# MAP 5:

## Elementary Learning Opportunity Index - 2009



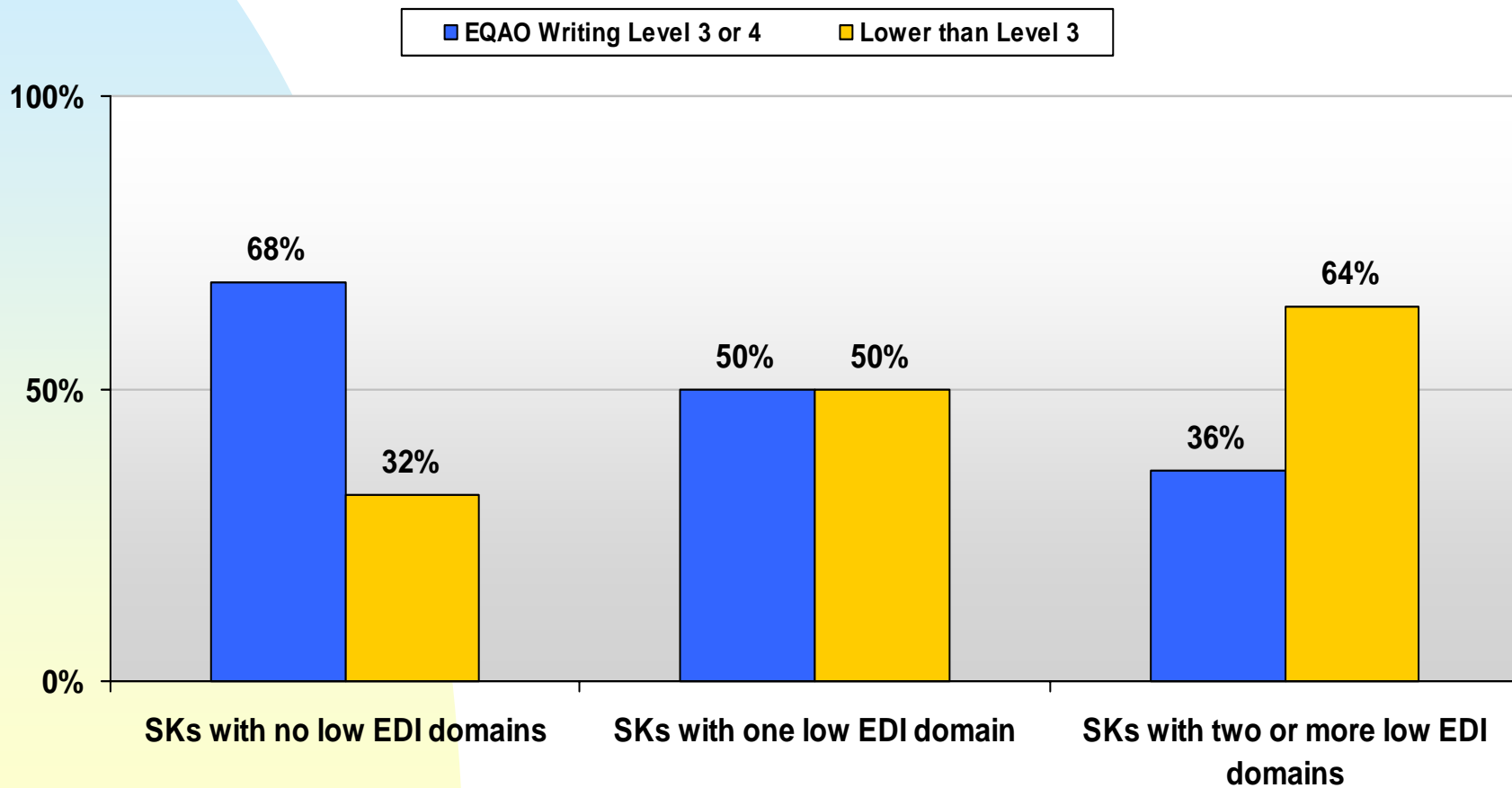
Produced by:  
Planning Division, Strategy, Policy and Planning  
Toronto District School Board, March 2009  
Source:  
Base Map - Land Information Toronto  
LOI Data - Research and Information Services, TDSSB  
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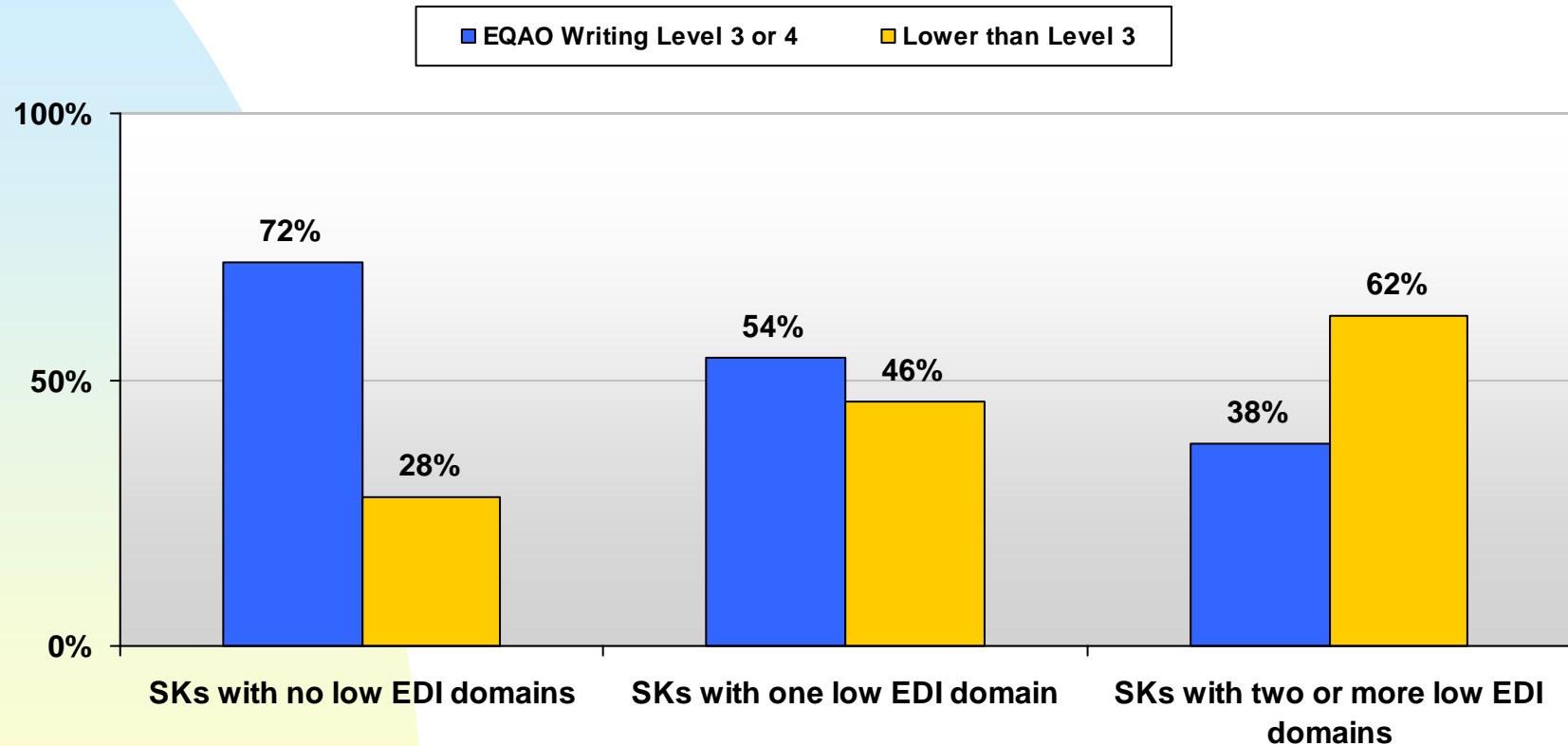
## 2. 2000 EDI and EQAO

- Students who participated as SK students in the 2000 EDI wrote the Grade 3 EQAO in 2003, and the Grade 6 EQAO in 2006.
- Results for both Grade 3 and Grade 6 EQAO are similar. Around 2/3 of those who had no low EDI domains were at Level 3 or 4 in Grade 3 Writing in 2003, with a similar result for Grade 6 Writing in 2006.
- Slightly under 2/3 of those who had 2 or more low EDI domains were below Level 3 or 4, in Grade 3 Writing 2003, with a similar result for Grade 6 Writing in 2006.

# 1999-2000 SK EDI and Grade 3 EQAO Results, 3 Years Later (TDSB, March 2007)



# 1999-2000 SK EDI and Grade 6 EQAO Results, 6 Years Later (TDSB, March 2007)

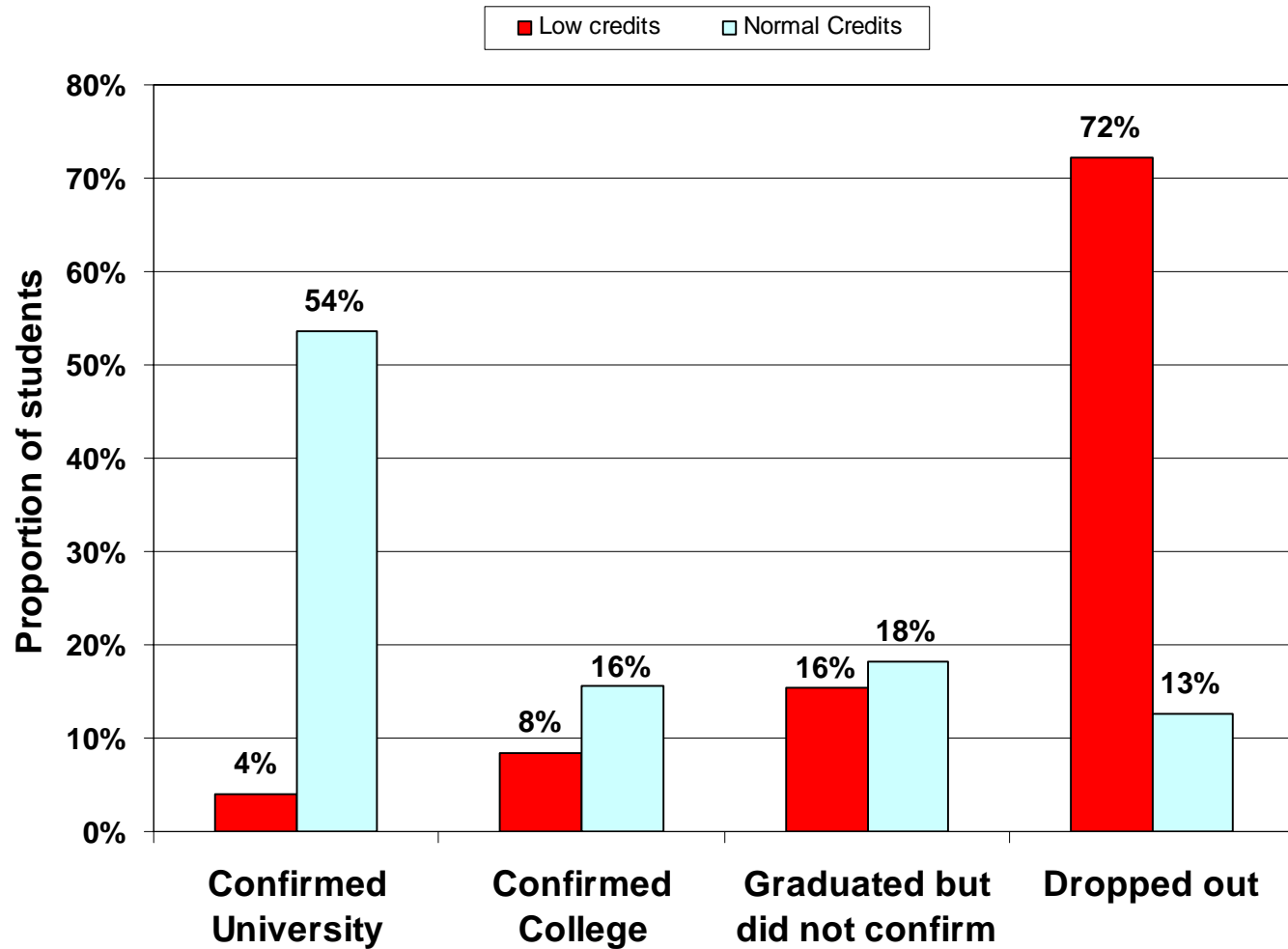


### 3. 2000 EDI and Grade 9 Achievement

- Previous cohort studies have found Grade 9 school variables to be strongly related to post-secondary achievement including:
  - Special Needs status,
  - Grade 9 credit accumulation,
  - Math achievement, and
  - taking a majority of courses in the Academic Program of Study.
- Examination of EDI students in SK and Grade 9 achievement of the same students shows that the EDI SK assessment is strongly related to student achievement patterns nine years later.
- Assuming trends of previous research remains constant, there will be a strong relationship between at-risk status of the EDI in Senior Kindergarten, and graduation/student access to post-secondary study, at the end of high school.



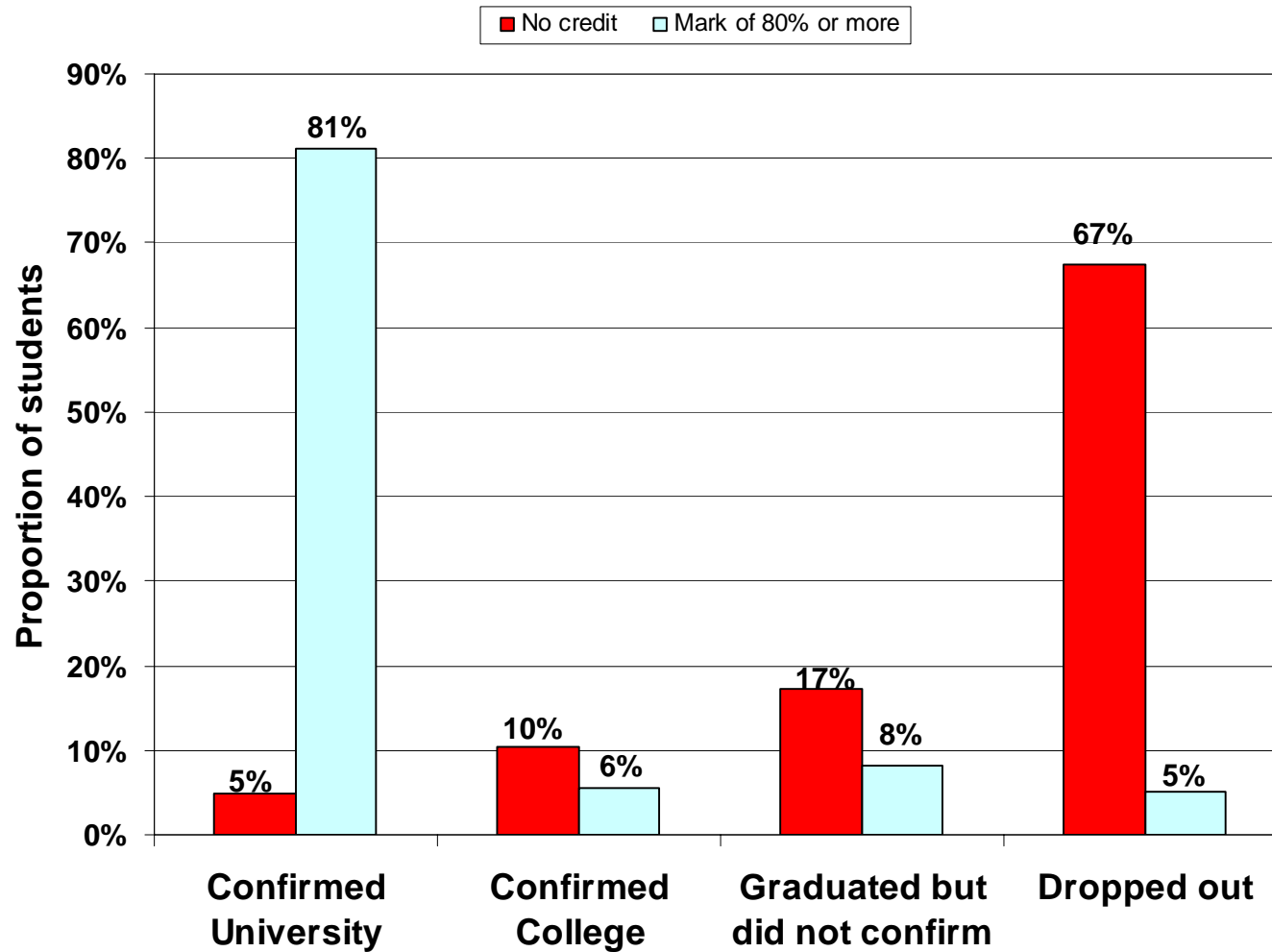
## Post-secondary Pathways: Low Credit Accumulation in Grade 9



Source: Anisef, Brown and Sweet, 2009

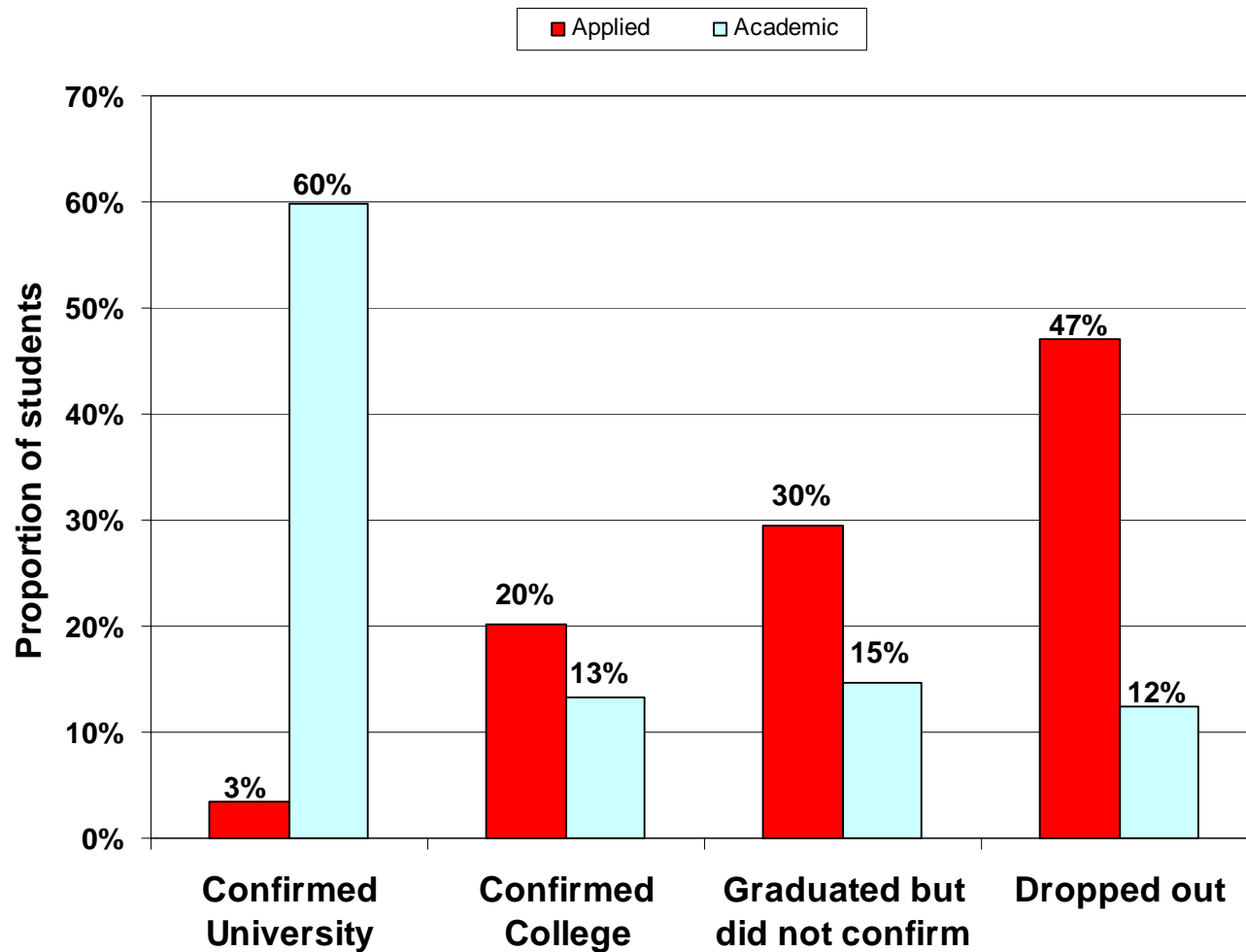
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## Post-secondary Pathways: Low and High Math Achievement in Grade 9



Source: Anisef, Brown and Sweet, 2009

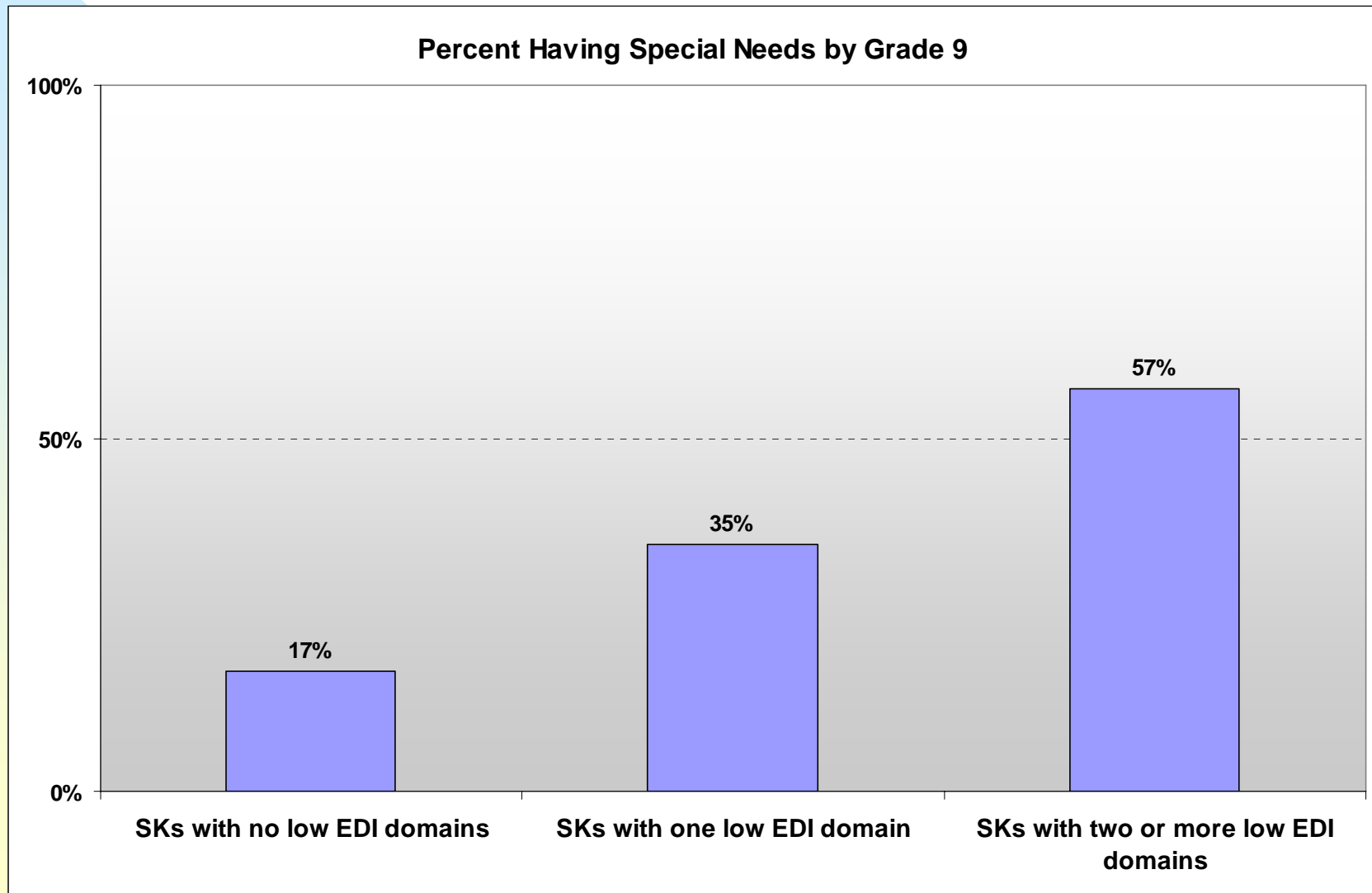
## Post-secondary Pathways: taking Applied and Academic Courses in Grades 9-10



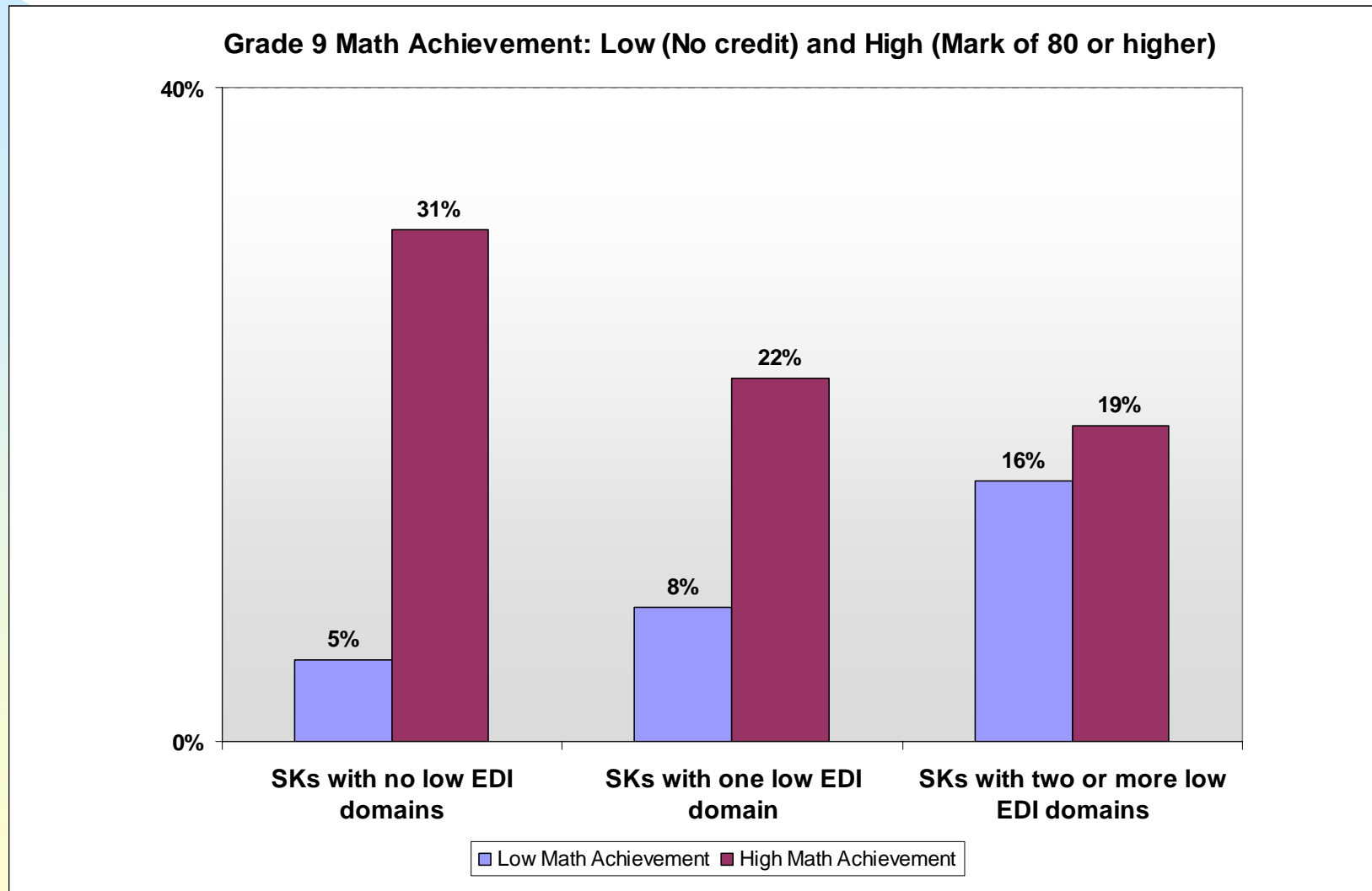
Source: Anisef, Brown and Sweet, 2009

# EDI and Special Needs by Grade 9

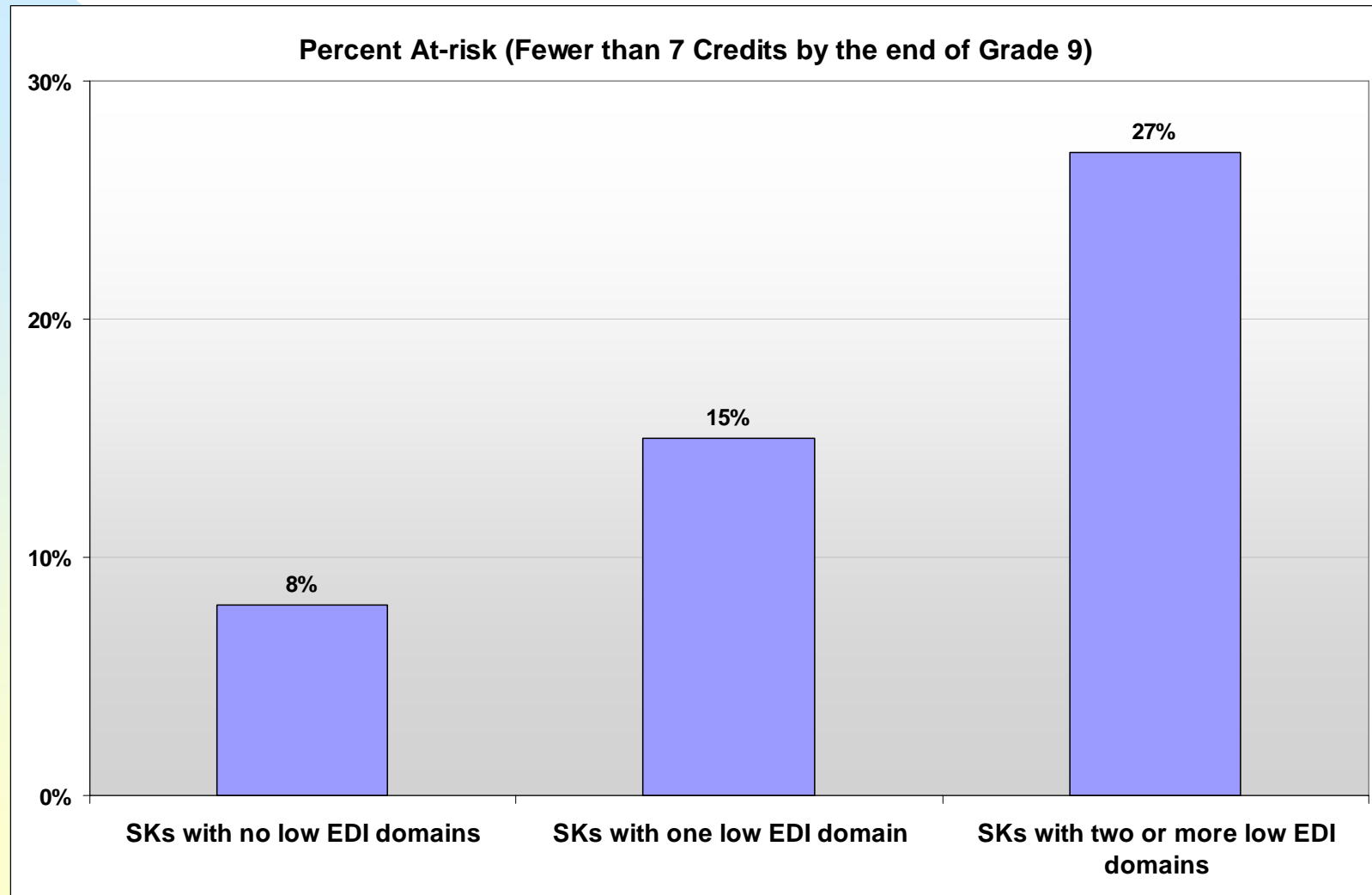
(Preliminary findings)



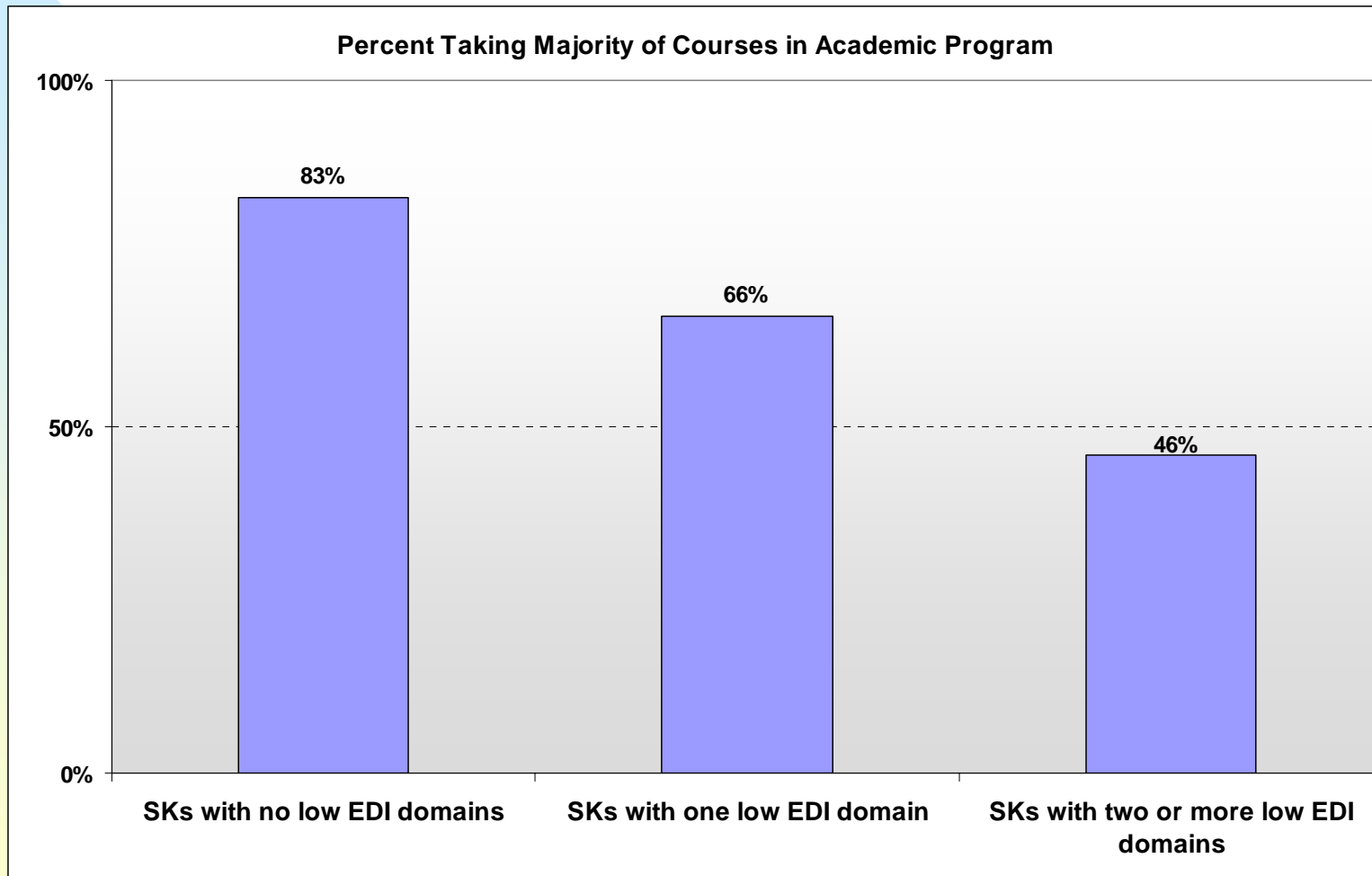
# EDI and Grade 9 Low/High Math Achievement



# 1999-2000 SK EDI and Grade 9 Credit Accumulation, 9 Years Later (TDSB, Fall 2009)



# 1999-2000 SK EDI and Grade 9 Courses Taken, 9 Years Later (TDSB, Fall 2009)



## 4. Next Steps

- Collaboration with Offord Centre, McMaster University
- Regressions – Grade 3/6, Grade 9
- Grade 10 (OSSLT) in 2009-10 school year
- Post-secondary Confirmations in 2011-12 and 2012-13 school years



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# Thank you

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