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Destreaming Research Report

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Destreaming Research Report

Definition and Purpose

"Academic streaming" or "tracking" refers to the practice of assigning secondary students to instructional groups based on ability (Hallinan, 1994, p. 1), with the grouping process usually being based on *perceived* ability and/or *perceived* intelligence (Oakes, 1985; TDSB, 2015). Streaming has also been defined as the practice of student grouping based on their intended postsecondary destinations (Radwanski, 1987). Regardless of the definition, streaming has been recognized as a contributing factor in intensifying social inequity by resulting in marginalization of specific student populations and hindrance of their social mobility (Anisef, Brown, & Sweet, 2011; Clandfield et al., 2014; TDSB, 2013; People for Education, 2014; Social Planning Toronto, 2017). In order to mitigate the existing issues associated with streaming and provide students with equitable educational opportunities, some school boards in Ontario launched locally developed destreaming initiatives (People for Education, 2015; Social Planning Toronto, 2017; TDSB, 2015).

The purpose of the Destreaming Report is to review the advantages and disadvantaged of academic destreaming, to document current destreaming practices in Ontario, and to provide a series of program considerations regarding the design and implementation of destreaming at the Peel District School Board (PDSB).

The report consists of the following major sections:
- History of Academic Streaming in Ontario
    - Academic Streaming in Ontario Before 1999
    - Academic Streaming in Ontario After 1999
    - Questions and Issues Around Academic Streaming
- Impact of Academic Streaming
    - Canadian and American Streaming Research Literature
    - International Streaming Research Literature
    - Potential Benefits of Academic Streaming
    - Labeling and Self-categorization Theories of Streaming
    - Elementary School Streaming
- Streaming in Ontario and PDSB
- The present Day Streaming Agenda in Ontario
- Destreaming in the Media
- Destreaming Initiatives in Ontario
- PDSB Destreaming Pilot Design Considerations.

History of Academic Streaming in Ontario

Academic Streaming in Ontario Before 1999

Prior to 1999, there was an established practice of academic streaming in Ontario schools that offered Basic (workplace destination), General (apprenticeship or college destination), and Advanced (university destination) streams. Rushowy (2013) reported that this system was considered unfair primarily because Basic students were from low socio-economic areas and Advanced students were from high socio-economic areas.

In 1992, the New Democratic Party government under Bob Rae announced that they wanted to destream the curriculum (O'Sullivan, 1999). The Common Curriculum draft for Grades 1 to 9 was released in 1993. It stipulated destreaming of Grade 9 classes, outcome based learning, and the integration of specific subjects into four broad areas: language arts, mathematics and science, arts, and self and society (Anderson & Ben Jaafar, 2003; Ontario Ministry of Education, 1995). All Grade 9 students were to receive eight destreamed credits toward their high school diploma completion. The Common Curriculum went through a series of revisions and coincided with the major curricular and political changes.

Academic Streaming in Ontario After 1999

The destreaming plan outlined in the Common Curriculum set the stage for another destreaming initiative in 1999 by the Harris government (Kinnon, 2016). The new policy known as OSS:99 formally abolished streaming and instead stipulated that students could choose between Academic, Applied, Essential, or Open (arts, technology, health and physical education) courses in Grades 9 and 10. Grade 11 students select courses from the following categories: University, University/College, College, or Workplace courses. The 1999 Ontario reforms to streaming made course selection more nuanced with more options than the original three (Basic, General, Advanced) choices (Kinnon, 2016). Although this policy was intended to offer students greater flexibility in mixing applied and academic courses and to accommodate for different learning styles, it inadvertently created another streaming structure that is especially disadvantageous to low-income and marginalized students who end up being streamed into applied courses (Ontario Government, 2017; Social Planning Toronto, 2017). In addition, the streaming language was still present in the early 1999 curriculum documents (Kinnon, 2016). For example, the 1999 Ministry of Education curriculum documents contained the following statement, "the types of courses offered provide for graduated streaming of courses in grades 9 to 12" (Ontario, 1999, p. 13).

Streaming is still a stubborn problem across Ontario, one that persists in all schools despite changes to the system in 1999 that were supposed to put an end to the decades-old practice (Rushowy, 2015).

Questions and Issues Around Academic Streaming

The following contentious questions and issues around academic streaming are currently present in the Ontario educational landscape:

(1) Can students at the end of Grade 8 know if they want to go on to university, college, apprenticeship programs or to work?

(2) Can teachers or parents or students know a student's academic ability or potential by the end of Grade 8?

(3) Is it fair that students have a different secondary education experience solely based on academic ability?

(4) Is it fair that the stream that students end up in is determined by a student's socio-economic background, gender, race, or ethnicity?

(5) Does academic streaming in Ontario perpetuate social-economic, gender, race or ethnicity divisions?

(6) Is a streamed educational system working for students and teachers?

Impact of Academic Streaming

Canadian and American Streaming Research Literature

There is very little research into the effects and impact of academic streaming in the Ontario context. There is, however, a large body of literature both nationally and internationally that has demonstrated the negative impact of academic streaming.

The Canadian and American streaming research has consistently found:

(1) a correlation between demographic factors (low socio-economic status, race, ethnicity, gender) and placement in a low academic stream,

(2) that streaming reproduces the pre-existing social and economic disparities in society,

(3) that streaming often creates low expectations and aspirations among lower streamed students,

(4) that streaming is often associated with a reduction in the quality of instruction and learning environment in lower streamed classes,

(5) that streaming leads to low engagement, low motivation, and disaffection of students in lower streamed classes,

(6) that streaming is associated with an increased risk of dropping out of school, and

(7) that long-term streaming has the potential for reduced social mobility, occupational opportunity, and lifetime income

(Boaler, 2005; Boaler, William, & Brown, 2000; Canadian Education Association, 2010; Clandfield, 2014; Curtis, Livingstone, & Smaller, 1992; Duggan, 1995; Fiedler, Lange, & Winebrenner, 2002; Gamoran & Mare, 1989; Holm, Jaeger, Karlson, & Reimer, 2013; Krahn & Taylor, 2007; Hallinan, 1994; Oaks, 1985; Parekh, Killoran, & Crawford, 2011; Werblow, Urick, & Duesbery, 2013).

International Streaming Research Literature

The international streaming research in the United Kingdom, Spain, Germany, Italy, and Denmark has produced similar results. It has clearly demonstrated that streaming is associated with: unfairness, income segregation, dropping out of high school, and inequity of access to educational resources and educational outcomes (Ayalon, 2006; De Fraja & Martinez-Mora, 2014; Hidalago-Hidalgo, 2014; Holm, Jaeger, Karlson, & Reimer, 2013; Ono, 2001; Shavit & Muller, 2006; Werblow, Urick, & Duesbury, 2013). A recent OECD (2013) report concluded that the negative destreaming results observed in the research literature were likely due to the following reasons: lower expectations from parents, teachers, and students; slower-paced instruction; a fragmented curriculum; stigmatization; lower quality classroom environments; and reduced self-concept and self-esteem.

Potential Benefits of Academic Streaming

The main argument in support of academic streaming is that it allows students to progress at a pace that suits them, rather than feel that their work is constantly being compared with more academically-able peers (Ansalone, 2003). As a result, it may improve one's self development because applied students' self-esteem would not be harmed by comparisons with better performing students. Often, streaming is seen as beneficial for gifted students of high academic ability (Fiedler, Lange, & Winebrenner, 2002). Advocates of streaming also indicate that it can increase student achievement by allowing teachers to target instruction and resources more effectively (Kinnon, 2016). In a recent study of an elementary school streaming initiative in Malaysia, teachers found that streaming benefited the" teaching and learning process" and improved the attainment of educational standards (Mansor, Maniam, Hunt & Nor, 2016, p. 2550). In particular, the targeted instructions allowed different groups of students to learn more effectively and to more fully participate in class activities. Streaming also allowed schools to plan remedial education for students of lower ability and provide adequate resources based on different group needs.

Despite the existence of some evidence in support of academic streaming, the majority of the reviewed research revealed consistent negative consequences of streaming at both individual and group levels (Kinnon, 2016; Oakes, 1985).

Labeling and Self-Categorization Theories of Streaming

From a theoretical perspective, the streaming literature has indicated that streaming practices often create "self-fulfilling prophesies" with regard to academic achievement. In the Ontario context, this is attributed to the power of the labels "academic" and "applied" (Boaler, 2005; Oakes, 1985; Oldmeadow, Platow, Foddy, & Anderson, 2003). Students may self-categorize as "I am a student in an applied program" and as a result of this self-categorization students may believe that they are not bright enough to be in an academic class. Tsuchida (2016) found that students in the academic stream are perceived as "smarter, more capable, and more successful" and that teachers speak with students differently about postsecondary options depending on their program of study (p. 94). As a result of this labeling or self-categorization process, students may act accordingly and display a reduction in effort that may in turn lead to academic under-performance (Kinnon, 2016).
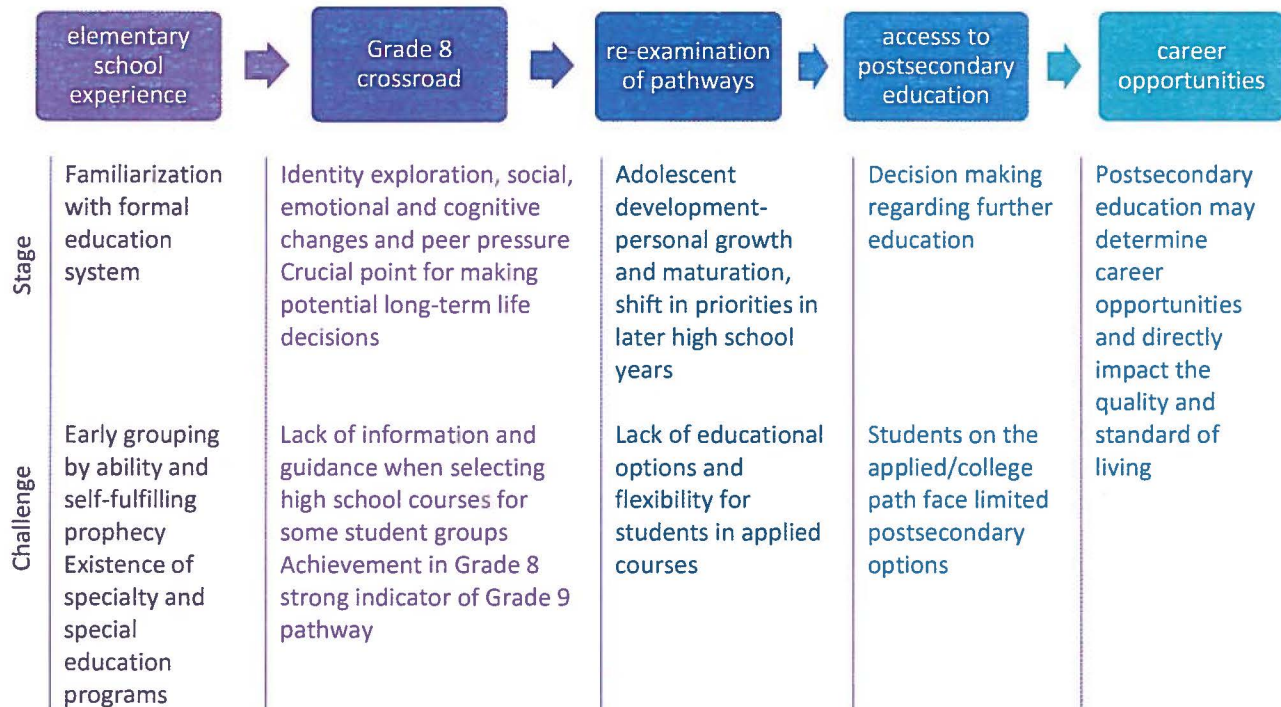
In addition, a recent study conducted with students from low-income racialized neighborhoods in Toronto found that the applied stream is the mainstream pathway in these schools (Social Planning Toronto, 2017). Students in these schools were often not able to describe the difference between applied and academic courses. The study also found that the lack of information provided to parents and inadequate supports were additional factors that led students to opt for applied courses. In comparison, students in the academic path are often allocated more resources and supports. These factors contributed to the academic and social gap between the two streams (Tscuchida, 2016).

Elementary School Streaming

Although the notion of streaming in Ontario is often discussed in the secondary school context, it is pertinent to recognize that streaming whether intentional or unintentional, explicit or implicit, has its origins in elementary school (Clandfield et al., 2014). This early streaming practice can determine the rest of students' educational trajectory, which may in turn impact their career paths.

Figure 1 depicts the critical points in a student's educational journey in Ontario and provides a description of key challenges associated with streaming at each stage. It also illustrates how decisions made at each stage may impact students' further educational and career opportunities.

Figure 1. *Critical stages on students' educational journey.*

	elementary school experience →	Grade 8 crossroad →	re-examination of pathways →	access to postsecondary education →	career opportunities
Stage	Familiarization with formal education system	Identity exploration, social, emotional and cognitive changes and peer pressure Crucial point for making potential long-term life decisions	Adolescent development-personal growth and maturation, shift in priorities in later high school years	Decision making regarding further education	Postsecondary education may determine career opportunities and directly impact the quality and standard of living
Challenge	Early grouping by ability and self-fulfilling prophecy Existence of specialty and special education programs	Lack of information and guidance when selecting high school courses for some student groups Achievement in Grade 8 strong indicator of Grade 9 pathway	Lack of educational options and flexibility for students in applied courses	Students on the applied/college path face limited postsecondary options	

Note. Adapted from: Clandfield et al., (2014); Erikson (1968); Ontario Government (2012); Social Development Toronto (2017); TDSB (2015).

Streaming in Ontario and PDSB

Tables 1 and 2 provide Ontario and PDSB related streaming statistics for applied and academic students. It is evident from both tables that a much lower percentage of students in the applied stream achieve the provincial average on EQAO Grade 9 math assessment and The Ontario Secondary School Literacy test (OSSLT). The percentage of applied students at the provincial standard for applied level students is below 45% for the OSSLT and Grade 9 math, whereas the percentage for students in the academic streams is above 80%. Graduation rates are lower for applied students. There is also a large discrepancy between academic and applied streams in postsecondary application and acceptance rates. Specifically, very few students from the applied stream apply to university, and of those who apply very few obtain acceptance into college. For example, 30% of the Peel students from the applied stream apply to college, and 30% of the applied students in Ontario obtain college acceptance.

Table 1. *Streaming Statistics - Ontario.*

	Program of study in Grades 9-10	
	Academic	Applied
Proportion of students who met the provincial standard for Grade 9 Math in 2017	83%	44%
Proportion of ELL students who met the provincial standard for Grade 9 Math in 2017	78%	33%
Proportion of students who met the provincial standard for Grade 10 literacy in 2017	92%	44%
Proportion of students with special education needs who met the provincial standard for Grade 10 literacy in 2017	81%	36%
Five-year graduation rate	95%	74%
Proportion of students accepted to university	54%	3%
Proportion of students accepted to college	19%	30%

Note. Data from Government of Ontario (2017); OCAS, OUAC (2010-2015); EQAO(2017).

Table 2. *Streaming Statistics - Peel District School Board.*

	Program of study in Grades 9-10	
	Academic	Applied
Proportion of male students in Grade 9 in 2017	51%	57%
Proportion of students in Grade 9 Math in 2017	77%	23%
Proportion of students in Grade 9 English in 2017	83%	17%
Proportion of students from single parent families in Grade 9 in 2017	12%	30%
Proportion of ELL students in Grade 9 Math 2017-16	20%	27%
Proportion of students with special education needs in Grade 9 Math 2016-17	4%	33%
Proportion of students who met the provincial standard for Grade 9 Math in 2017	84%	39%
Proportion of students who met the provincial standard for Grade 10 literacy in 2017	90%	37%
Five-year graduation rate	94%	78%
Proportion of students who applied to university	57%	8%
Proportion of students who applied to college	17%	30%
Proportion of students from the three highest SRI deciles	15%	22%

Note. Data from OCAS, OUAC, EQAO, Environics, SIS and SSP PDSB (2017).

In Ontario, 62% of students who take applied mathematics also take three or more other applied courses (People for Education, 2015). Once students select the majority of their courses in a specific stream, they tend to remain in that program of study for the rest of their high school years (People for Education, 2013; Social Planning Ontario, 2017). In a survey conducted by People for Education (2013), principals reported that students either 'never' or 'not very often' switch from applied to academic level courses. This lack of program crossover defines

their career path and results in a default selection of college or workplace courses in higher grades. Even if students wish to transfer from applied to academic courses, there are procedural barriers that impede a smooth transition. In particular, students need to take a transfer course, which is usually offered during the summer break, at a different school, or online, or they can repeat the course (Social Planning Toronto, 2017).

From an equity perspective, it is disconcerting that Black students, Indigenous students, students from low-income families, students with special education needs, and students from single parent families are over represented in applied and essential courses (Ontario Government, 2017; TDSB, 2013). For example, over a five-year period 53% of Black students were enrolled in academic courses in the TDSB compared to 81% of White students and 80% of students from other racial groups (James & Turner, 2017). At both the PDSB and TDSB about 30% of students in applied courses come from single parent families compared to 15% in the academic stream (PDSB Internal Data, 2017; TDSB, 2013).

Additionally, students who take applied and essential courses are less likely to do well academically, are less likely to complete high school, and are less likely to pursue postsecondary education (People for Education, 2013, 2014; TDSB, 2013). EQAO has reported that students with special needs who take academic courses experience more success compared to students who take applied courses (Artuso, 2017). Many students in the applied stream are not aware of the consequences that their Grade 9 choices may have on their postsecondary opportunities (Tsuchida, 2016).

The Present Day Streaming Agenda In Ontario

The Toronto Star reported that "low-income" streaming is alive and well in Ontario (Rushowy, 2013). Ontario is the only Canadian province that reinforces the selection of applied or academic courses as early as Grade 9 (Ontario Government, 2017). Course selection in other provinces does not begin before Grade 10. A comparative Canadian study discovered that high school students in Ontario do not have the same postsecondary opportunities as their peers in other provinces due to streaming limitations (Kinnon, 2016; Krahn & Taylor 2007).

The 2014 Toronto municipal election had a number of candidates who made academic streaming a focal point (Kinnon, 2016). Social Planning Toronto produced a campaign brochure on "Education and Streaming" that highlighted the unfairness of academic streaming (Social Planning Toronto, 2014). Furthermore, the Ontario's Education Equity Action Plan (2017) specifies that one of the priority items for the newly created Education Equity Secretariat is to introduce " *a renewed approach to Grade 9* in which all students are supported in achieving their maximum potential and choosing appropriate pathways to work, college, apprenticeship, or university" (p. 16). As part of its three-year action plan, the Secretariat intends to evaluate the outcomes of the current academic system and to collaborate with different partners in implementing and evaluating the renewed approach.

Destreaming in the Media

Streaming has received a lot of media attention in the last several years, especially after the introduction of the first TDSB destreaming initiatives. The media has covered the destreaming issue from an equity and student outcomes perspective. Table 3 provides a list of destreaming articles from some of the GTA newspapers.

Table 3. *(De)streaming Articles in the Media.*

Source and year	Title	Major focus/message
Toronto Star, Sept 2017	Ontario to end Grade 9 streaming	Grade 9 destreaming as part of the new equity plan Students in applied courses less likely to graduate and peruse postsecondary education Grade 9 should be an opportunity for students to explore pathways instead of becoming disengaged Disproportionate number of students from low-income and racialized backgrounds in applied courses Schools boards to collect data on race and ethnicity in order to adequately allocate resources
CBC News, Sept 2017	Racialized, low-income Toronto students at disadvantage from school streaming, report finds	Overrepresentation of marginalized, children of colour and lower income students in the applied stream Students too young to make educational decisions at 13 Educational decision-makers urged to come up with a destreaming solution
Toronto Star, Sept 2017	End unjust and ineffective practice of academic streaming: Editorial	Inhibiting students from reaching their full potential Perpetuation of income-based educational disparities Reinforcement of racial inequalities Subtle form of institutional racism Vulnerable students affected the most
Mississauga News, Sept 2017	Education ministry announced equity action plan	Examination of academic streaming as part of the three-year action plan announced by the Education Minister Not only removing the streaming structure but changing the mindset The Peel Board is studying the feasibility of launching a de-streaming pilot.
Toronto Sun, Sept 2017	Most students in applied stream fail to make the grade	More than half of students in applied courses do not achieve the provincial standard in math and literacy Students with special needs more likely to be in applied courses Outlines the disadvantages of streaming at the age of 13
Toronto Star, Sept 2017	Toronto high school ends streaming for all Grade 9 students	A high school in the TDSB eliminated applied courses for all Grade 9 students Supports in place for students who need extra help
Toronto Star, Sept 2017	Educators raise alarm over declining scores for applied students	Approximately 3 out of 10 applied students met the provincial standard in 2017 At PDSB, 39% of students in applied math passed the provincial standard versus 84% in academic courses Negative consequence of streaming should be re-examined Students in special education programs who take academic courses have higher EQAO success rates Teach to the academic curriculum, and you get rid of labels

Toronto Star, Sept 2017	Crucial choices, little advice for new high school students	Grade 9 students too young to make important educational choices Some students unknowingly on a path that prohibits them from reaching their full potential TDSB schools that launched small scale destreaming initiatives reported an increase in pass rates
Record, June 2017	Destreaming pilot could be in the works for Peel Board	Early streaming limits postsecondary educational choices Success of the destreaming pilots in Toronto
Toronto Star, April 2017	Black students hindered by academic streaming, suspensions: Report	Black students twice as likely to take applied courses compared to other racial backgrounds Streaming has a particularly negative impact on low-income students and students from specific racial groups The Peel District School Board will follow the TDSB lead on collecting race-based statistics
Toronto Star, April 2013	Low-income 'streaming' in Ontario high schools alive and well, report says	In schools where the average family income is $60,000 more than 50% of students are enrolled in applied math Streaming exacerbates social inequality
Toronto Star, Oct 2015	School board to expand de-streaming pilot project	Destreaming expansion recommended, but the article noted that it would have to take place in a measured, evidence-based manner to maintain the pilot project's success
CBC News, April 2015	End streaming in Ontario high schools	Too early for Grade 9 students to make critical decisions about their educational pathways Students in applied courses struggle and are much less likely to go to university Low-income students more likely to be in applied courses Low teacher expectations result in poor academic performance Recommendations to delayed streaming at least until Grade 10
Globe and Mail, Feb 2014	Report casts doubt on two curriculum streams for Ontario's Grade 9 students	Students in applied courses less likely to graduate Low-income students disproportionately enrolled in applied courses Description of schools that will pilot destreaming in Grade 9 Closing the achievement gap between applied and academic students is a key priority for the Ministry of Education

Destreaming Initiatives in Ontario

In the early 1990s, the Peel District School Board piloted a destreaming initiative in one of its newly opened secondary school. All students in Grades 9 and 10 were enrolled in destreamed courses. The school also developed an integrated curriculum that emphasized a transdisciplinary approach to teaching and learning that erased the labeling and divisions between subject areas and involved extensive collaboration among teachers. Grade 9 students were grouped into 3 cohorts, which allowed for the efficient organization of classes. A destreaming plan was developed prior to implementation, and teachers worked together on developing cross curricular activities for every destreamed course. Teachers who participated in the pilot indicated that the destreaming pilot required extensive resources as a key element to its successful implementation (e.g., additional educational assistants, tutors, counsellors, smaller class sizes).

The Limestone District School Board in Eastern Ontario piloted a destreaming project in the 2011-2012 school year. The pilot de-streamed Grade 9 English in the first year and academic Grade 9 math in the following year (referenced in Sifting, Sorting, and Selecting TDSB Report, 2015). The initial results were anecdotally positive, but there was no systematic evaluation of the pilot and no reports on longitudinal results. A recent case study of three teachers who taught in both streamed and destreamed environments found that the major observed benefits of the destreaming initiative were a positive learning community and effective administrative support (Fogliato, 2017). Specifically, teachers observed that due to positive peer pressure of higher performing students, lower performing students were inspired to exert additional effort and achieve higher academic standing.

Expansion of destreaming initiatives are being planned at the TDSB (Rushowy, 2015; Taekema, 2015). As of 2016, seven schools in the TDSB launched local grassroots destreaming initiatives that were expanded to 16 schools in 2017 (Pelley, 2017). These destreaming initiatives were small in scale and experimental in nature. Given the organic nature of the pilot destreaming projects and the lack of systematic longitudinal data to evaluate their effectiveness and impact, the TDSB pilots should be interpreted as documenting the design, implementation process, and descriptively articulating the pilot project short term outcomes.

Table 4 lists the implementation processes and reported initial short-term outcomes of several Ontario developed destreaming initiatives.

Table 4. *Destreaming Initiatives, Implementation Process, and their Initial Outcomes.*

School	Subject	Implementation Process	Initial Outcomes
Limestone District School Board	English 2011-12	Two small classes (23 students each) with a mix of applied and academic students Lessons set at a mid-level of ability Differentiated instruction provided Assessment for all students Occasional peer tutor Extra section in timetable to provide assistance to pilot class	Academic and applied students earned an academic credit Teachers indicated that class composition, team teaching, and the use of educational assistants were important success factors
Limestone District School Board	Math 2012-13	Two small classes (15 students each) Classes were academic and taught yearlong on alternative days All students took the Brainology Program based on a growth mindset Students requiring extra support took a math-focused GLS course instead of core French course	All students remained in the Academic course The majority of students wrote the academic EQAO math Grade 9 assessment. All students met or exceeded the provincial standard. Destreaming increased teachers' stress levels

Winston Churchill C.I. Leonard Brathwaite Program (TDSB)	Africentric English Math Geography Science and French 2013-14	17 students (7 had IEPs) Classes designed using an academic layered curriculum approach (students move towards the same expectations taking different paths)	Over three quarters of students earned an academic credit for Africentric English Students in Math, science, geography, and French earned an academic credit Teachers identified high student expectations and educational assistant support as success factors
C.W. Jefferys Collegiate (TDSB)	Africentric English 2014-15	56 students divided into 3 small classes All classes were academic Students provided with additional classroom supports, extra tutoring, and lunchtime and after-school support	Almost all students earned an academic credit More than three quarters of students taking applied English passed the academic level course Applied Grade 9 English, geography, science, and French no longer offered at the school Applied Grade 10 history, English, and science no longer offered at the school
Runnymede C.I. (TDSB)	STELL@R (Science, Technology, Engineering, Logic & Literacy) 2014-15	21 students in the first destreaming cohort Students take English, Math, Science, and Computer Technology for half of the day Students select two elective courses for the second half of the day The school uses Inquiry Based Learning Model (students design and implement solutions to real-world problems)	Almost all students passed all four core academic courses
Oakwood Collegiate (TDSB)	English, Math, Science, Geography, Science, and French 2017	All Grade 9 students and subjects destreamed Classes were capped at 25 students Only academic courses Staff collaborate in planning instructional practices and provide extra support to students	No formal or informal outcomes documented to date The school will review the plan for Grade 10 applied courses
Eastdale Collegiate & Pickering High School (DDSB)	Math 2017-18	Reach Ahead Math Program (RAMP) offered for 4 weeks during the summer at the end of Grade 8 The summer program was intended to fill in gaps and equip students with necessarily skills for success in Grade 9 academic math 40 students participated in RAMP	All students who took RAMP were placed either in mixed or academic level math course in Grade 9 Students who participated in RAMP also received a "guidance and learning strategies" credit

PDSB	All subjects were destreamed in one PDSB high school Early 1990s	All students in Grades 9 and 10 were enrolled in the destreamed courses Restructured integrated curriculum Students grouped into cohorts Destreaming plan developed prior to implementation	There we no labels because everyone was in the same class Differentiated instructions and support for students of all academic abilities was provided Destreaming worked well for social science and technology Subjects that involved layering of skills (e.g., English and math) were less successful Academically weaker students and gifted students did not fully benefit from the pilot Large class sizes was a barrier to full implementation of the destreaming pilot Parents reported that their children's educational needs were not fully met with destreaming Teachers were not comfortable with different ability levels, large class sizes, and the level of support provided

Note. Data from OSSTF (2015), PDSB Internal Data; TDSB (2015), Toronto Star (2017).

PDSB Destreaming Pilot Design Considerations

Closing the achievement gap between students in applied and academic courses is a priority for the Ministry of Education (Rushowy, 2015). The research literature, educators, education advocacy groups, and the Ministry of Education suggest that the current streaming practices in Ontario schools be eliminated and new approaches to Grade 9 learning be introduced. "High expectations and rigorous, differentiated curricula/ programming" are often suggested as key elements of destreamed programs at both elementary and secondary levels (Sifting, Sorting & Selecting, 2015, p.23).

The OECD has recommended deferring streaming choices until the late high school years (OECD, 2013). Likewise, some advocacy groups in Ontario suggest that streaming decisions should not be made until Grades 11 and 12 (Artuso, 2017; People for Education, 2015; Social Planning Toronto, 2015).

In order to fully implement destreaming, Slavin suggests that instructional practices should be changed first (as cited in Tsuchida, 2016). Effective teaching pedagogy and positive teacher attitude toward destreaming were found to be the most powerful predictors of student success (McPartland & Schneider, 1996). Destreaming research has also indicated that instructional differentiation, teacher expectations, teacher and whole school preparation and appropriate resources are key factors for success (e.g., Kinnon, 2016; Social Planning Toronto, 2017; Tsuchida, 2016).

Based on the available research from the destreaming initiatives in the Ontario context, the following parameters are presented as a guide to the design, planning, and implementation of the PDSB destreaming pilot.

Key Considerations for the Design and Implementation of a Destreaming Project:

1. Design the destreaming pilot project within the context of K-12 education,
2. Develop a comprehensive implementation plan that specifies the destreaming structure and the roles of all stakeholders in the implementation process:
   o Create an interdepartmental task force or a committee
   o Consider one grade and one subject at a time (e.g., Grade 9 English)
   o Smaller class size
   o Create specific pathways from destreamed classes to higher grades,
3. Pilot the destreaming initiative on a small scale and develop an evaluation framework for the pilot,
4. Develop a longitudinal evaluation plan for destreamed cohorts (over 4 or 5 years) in order to evaluate long-term impacts of destreaming,
5. Allocate additional human and financial resources at the board and school level (e.g., teaching assistants, peer tutors, counsellors),
6. Develop a comprehensive communication plan for parents regarding the destreaming pilot,
7. Utilize innovative educational models to keep students engaged and motivated (e.g., growth mindset, inquiry based learning),
8. Provide ongoing professional learning opportunities for teachers and administrators on the topics of destreaming, ability grouping, equity, and inclusion,
9. Align the PDSB Destreaming Project with the Ministry of Education's direction in this area.

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