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Stratification, Segregation and Streaming within Schools

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Abstract

Herein the culturally related human action of grouping people is examined as a phenomenon that has existed for many years in our global society. Today, grouping people can be understood and labelled as stratification, segregation and streaming and can readily be observed within schools and educational institutions. These grouping efforts and actions are addressed in related literature as sorting, tracking and categorization that may be tacit in classrooms and educational programs; nonetheless, there are often life-long implications for streaming each student. Many education theorists believe educators can sort students via assessment and evaluation of their academic ability; however, such attempts can be quite problematic, sometimes causing feelings of exclusion, marginalization and rejection. Academic ability is currently much more than a score on a summative assessment as the academic ability has many social (home, community, engagement) and education elements (pre-school, instruction quality, class size, test bias). This iterative review illuminates issues, problems and concerns that may lead to possible resolutions for educators when faced with the task of grouping students.

Keywords: Stratification, Segregation, Streaming

INTRODUCTION

Stratification appears to be forever linked to a sociological concept explaining how hegemonic civilizations create status (Kerckhoff, 2001). Within Canada, social hierarchies are nested within variables such as income level, which can then be linked to ethnicity and race (Kinnon, 2016). This stratification is deeply embedded in Canadian (democratic) federal, provincial and municipal government structures, institutions, and policy (Smaller, 2014). The structures stand upon deep histories of multiculturalism, inclusion efforts and immigration policies that seem to merely titivate education action while providing the pith of many intense debates and casual conversations concerning inequity in schools and classrooms.

Current Canadian federal and provincial government equality and inclusion policy are in place to address diversity in Canadian society that is often linked to physical, social, emotional, cultural and linguistic differences (Tuval, 2014). The Canadian educational (school) system must continue to evolve and adapt to meet the diverse needs of all students (Dixon, 2005; Florian, 2008) to prepare all students for a diverse life beyond school. In fact, “education is a powerful explanatory factor influencing success in the labour market and is related to further social, health and economic

outcomes” (Connelly, 2013, p. 56). Arguably any social stratification may not be natural. It is purposefully developed, promoted and sustained by the governing class, and given Canadian history, and it is very much a euro-centric adaptation that exists today (Bowles & Gintis, 1976).

Our Canadian school system seems to mirror and replicate social stratification, thereby subtly dividing students based on variables often related to family income, race, and ethnicity (Block & Galabuzi, 2011; Curtis, Livingstone & Smaller, 1992; Parek, Killoran & Crawford, 2011). The act of division is associated with literacy, numeracy and general assessments and evaluations that favour the dominant culture, which points towards inherent bias. For example, reflecting upon existing data, five main factors surface which contributes to the achievement differences between White and non-White students, which include “neighbourhood segregation, socioeconomic status [SES], parent influence, school discipline and standardized testing” (Noggle, 2014, p. 3). These variables can be unique to a geographic area and may be associated with a particular ethnicity or minority. Yet, the linkages can be explained via research that looks at variables such as immigration and language. For instance, a recent investigation by Coleman (2016) revealed, reading and math outcomes could be linked to traits such as race, age, SES, and Women, Infant and Children (WIC) benefits, with little chance that the findings unfolded coincidentally. Additionally, Coleman (2016) claimed,

being male does not appear to impact test scores in kindergarten in this sample significantly.

While being a black student decreases the test score by -.144, having a higher SES increases the test scores by .212. While this does align with previous research that suggests that SES is one of the largest contributing factors to the racial achievement gap in kindergarten. (p. 80).

It could be that children of this age do not yet demonstrate gender differences. Nonetheless, from the onset of schooling, there are many needs displayed by each student. Often these needs, if unmet, surface beyond something academic and instead present as maladaptive behaviours. When inclusion policy is challenged most, as the educator's response must be both equitable and prudent, yet this may be improbable since “educators cannot truly understand the challenges faced by students of colour [unless teachers are of colour] —challenges that result in lowered achievement— until [teachers who are White] develop a deeper understanding of what it means to be White” (Singleton & Linton, 2006, p. 183).

Variables infuse two well-documented modes of sorting in education: vertical stratification (by grade/age). The other is horizontal stratification, based on ability grouping informed by evaluation efforts within and outside the school. This sorting of students quite tacitly results in primary grouping early in institutions and continues via streamed pathways that lead to certain academic endpoints. It is not solely a Canadian problem since “socio-economic inequalities in academic achievement emerge early in life and are observed across the globe” (Pearce, 2016, p. 108).

The purpose herein is to examine global and local literature and illuminate the issues related to the grouping of students by ability, sorting by streaming and tracking, which today largely relies on assessment and evaluation performances in both formal and informal education settings. This grouping seems to impact student development, throwing up barriers at times while certain noteworthy and globally evident trends emerge associated with ability grouping, streaming and student tracking.

METHOD

This review developed over two years and followed an integrative review (Cooper, 1982; 1989) mode that required a literature search via online abstracts and databases such as ERIC, British Library Direct, Academic Search Elite, Libris, Questia, and High Beam. Journal resources were sourced from Emerald, Sage, and Science Direct and Google Scholar was included. Dissertations were included and led to specific citation searches. Data were organized into themes, such as stratification, segregation and streaming. Descriptors such as "educational grouping," "inclusion", tracking and engagement acted as secondary themes and exclusion in Education broadened the review.

The evidence-focused literature review was completed via a systematic review following an integrative approach focused upon literature published from 2010 until the present day. The iterative process (Cooper, 1982; 1989) was evaluative utilizing impact factors and journal quality metrics. The role of iteration was “not as a repetitive mechanical task but as a deeply reflexive process, . . . visiting and revisiting the data and connecting them with emerging insights, progressively leading to refined focus and understandings” (Srivastava & Hopwood, 2009, p.77). As a qualitative review, we were able to illuminate stratification, segregation and streaming within education via multiple steps: First, we identified peer-reviewed journal articles using PubMed, ERIC, PsycINFO and Google Scholar: Second, we screened for qualities, and third, we browsed reference lists of screened articles for related resources.

DISCUSSIONS

Organizing students via variables such as ability continues today as educators assign students to various programs, streams, classes or groups based on performance levels (Forgasz, 2010; Hoover & Abrams, 2013). Ability can be wrongly conceptualized as a singular accessible variable (Merritt, 2018) that can be sampled via assessment and evaluation efforts (Oakes et al., 1997; Oakes, 2005). However, Park and Datnow (2017) suggest, “student needs are defined not only by results on assessment tests or academic ability levels but also by readiness, interests, and learning profiles” (p. 12). Still, in many countries, the same ability grouping error has been made consistently over many years. It shows little movement towards a more logical, informed conceptualization of ability and grouping of students (Merritt, 2018).

Indeed, this is not a new mode, 30 years ago, Slavin (1987b) claimed “grouping of students for instruction is done for many reasons, but most grouping plans exist to deal with one central fact of mass education: that students differ in knowledge, skills, developmental stage, and learning rate” (p. 110). Once students are identified they are monitored or tracked. Tracking is a practice that involves assigning “. . . students to a rigid academic track . . . whereas ability grouping is a practice in which students similar in achievement levels are grouped together” (Gentry, 2016, p.125). Very few researchers have focused on the streaming (tracking) versus de-streaming issue (Tieso, 2003), and this needs to change both locally and internationally.

Sorting

Sorting can be thought of as implicit grouping, often without student knowledge, intent or desire (Lucas, 1999), and sorting may unfold in academic screening, retention and promotion meetings, and via parental conferencing, within a student’s academic journey (Tuval, 2014). Any assessment and evaluation that may be used to sort is only an intermediate outcome since eventual educational attainment and future earnings (salary) may be more significant variables in a student's life (Vardardottir, 2015). Infrequently these assessment and evaluation outcomes can lead to talk of retention. However, retention is quite negative, “costly and ineffective in raising educational outcomes” (OECD, 2012, p. 10). “Decreasing grade retention rates also requires raising awareness across schools and society about the costs and negative impact on students and setting objectives and aligning incentives for schools” (OECD, 2012, p. 10). Conversely, moving students up (skipping a grade) seems to produce notable results as “accelerated students significantly outperformed their non-accelerated same-age peers” (Steenbergen-Hu, Makel, & Olszewski-Kubilius, 2016, p. 1). Therefore, a case may be made to sort students to accelerate in specific cases.

School sorting activities may be covert to many and can, on occasion, be overt as secondary level education lays out pathways labelled via destinations such as work/basic, college/university, academic/advanced and promoted in school materials, policy and guidance actions. At the secondary level, limiting ability grouping, increasing “opportunities to change tracks or classrooms and providing high curricular standards for students in the different tracks can lessen the negative effects

of early tracking, streaming and grouping by ability” (OECD, 2012, p. 10). However, the policy and sorting appear to be perpetuated as new educators take the place of retired educators after a pre-service training (acculturation) led by experienced educators. The system seems to be enduringly wanting despite efforts to reform, modify and change the system to make it truly unbiased, inclusive and equitable. This sorting endlessness has caused some to suggest: “It is the cards stacked against working-class kids that are to blame, not their genetic make-up” (Jones, 2011, p. 172).

Schools: Opportunity or Barrier

School quality is a “multi-faceted concept which goes beyond the transmission of knowledge or development of learning skills to include structure, teaching, curricula, affect and social environments” (Winheller, Hattie, & Brown, 2013). Schools have a theoretical and social order (organization) as an institution observes processes (Connelly, 2012; Rist, 1970) and assumes a functional role in society (Reid & Knight, 2006). School systems are closed systems since only a few people within the administration lead, and the majority follow. Yet, administration will quickly add they are following government directives which is again a closed system made up of only a few people representing the interests of an entire population. No matter the level, when policy (acts, regulations) changes (new/reformed) to reduce education stratification and “equalize school performance, the elite will likely find a way to maintain their advantage. This may occur outside of the school, possibly in the form of private tutors and enrichment exercises” (Doren, 2013).

Often the area in which a student lives may bring with it certain implications since “those who are able to occupy certain neighbourhoods are the most likely to enter better schools” (Coleman, 2016, p. 23). Decades of research illuminate the detrimental impact of living in impoverished neighbourhoods and its impact on life outcomes (Cashin 2014; Coley & Baker 2013; Ravitch, 2013). The Pew Research Center (2013) found that living in certain neighbourhoods almost guarantees downward mobility, impedes verbal cognitive ability, correlates with a loss in a year of school, and lowers high school graduation rates by 20% (Coley & Baker 2013). Still, many other factors can impair educational development for example, “race plays a definitive role in whether or not a student will be suspended in the first place, more so than family income and structure, neighbourhood, and even the initial behavioural infraction” (Graham, 2015, p. 1).

However, looking at Canada from another country such as Australia, Canada is praised for the level of equity provided to students and the larger community via quality comprehensive schools in which most local residents attend (Perry, 2015). In one Canadian province (Ontario), communities offer additional study opportunities such as Kumon for math, Oxford Learning and private personal tutoring both online and face-to-face, for those who can afford such additional educational, financial commitments since they are out of reach for many and “disadvantaged parents tend to be less involved in their children’s schooling, for multiple economic and social reasons” (OECD, 2012, p. 10). This economic barrier seems to bolster stratification herein defined as “the degree to which systems have differentiated kinds of schools whose curricula are defined as ‘higher’ and ‘lower’” (Kerckhoff, 2001, p. 4).

Ontario schools do have levels (partitions/segregation). No matter the name or label (tracking, sorting, streaming, or ability grouping), over time, investigators, authors and reporters have suggested that the effects of placing students into specific paths, levels or classrooms via (sorting) ability indicators (achievement) are not positive. Indeed, research shows that tracking, sorting, streaming, and ability grouping has been damaging, inequitable, and something to move away from (Burris, Welner, & Bezosa, 2009; Oakes, 2005). However, “children from less advantaged families were up to twice as likely to be in the lowest quintile of maths and literacy scores” (Pearce, 2016, p. 108), and this outcome can be linked to ability grouping, ethnicity and often SES.

Tracking

To be clear, tracking is an instructional management practice in which students are assessed on achievement (intelligence) and then assigned to differentiated curricula to match outcomes (demonstrated abilities) (Yang, 2009). Coleman (2016) found “early school tracking, as well as

differential disciplinary treatment, contribute to the black/white test score gap that has been persistent for decades” (p. ii). Gentry (2016) clarifies, suggesting “tracking was a specific practice that involved assigning secondary students to a rigid academic track . . . whereas ability grouping is a practice in which students similar in achievement levels are grouped together” (p.125). Of note was the finding that family income (occupation) data related to tracking seemed to parallel divisions along with partitions of race, ethnicity and socio-economics with Canada (Block & Galabuzi, 2011; Picot, Lu, & Hou, 2009).

Of interest is the fact that teachers' pre-service and graduate education is likely to influence the achievement of their students (OECD, 2013). Therefore, having well trained, certified and accredited teachers is important to a point. However, Norman (2016) found teachers had higher expectations for academic streamed students and less so for basic work streamed students, which helps to maintain levels in schools. Still, at any school, and any level, the quality of teacher instruction impacts all students' education outcomes (Winheller, Hattie, & Brown, 2013), as well as classroom and school climate (Frempong, Ma, & Mensah, 2012), which is built upon positive relations (Freeman, Frydenberg, Begg, & Care, 2010; OECD, 2013). Perry and McConney, (2013) found that “whether a student attends a low SES public school or a high SES private school, student perceptions of the quality of teacher instruction are very similar” (p. 2).

For many years, a key theory within sociology has illuminated how stratification is the foundation of the North American capitalistic value system, which places human social diversity in an organized and status-related hierarchy (Bourdieu, 1993). In the United States, African American children begin to fall behind White students on standardized tests as early as kindergarten (Epps, 1995). Researchers agree that streaming poor and minority students disproportionately locate students in lower streams, essentially excluding students from other placements (Oakes, 2005; Vardardottir, 2015). The Ontario Alliance of Black School Educators explains

how the education system works with society to stereotype and problematize Blacks in general and Black youth. It makes some children and youth feel ashamed to be Black. They spoke of how the education system can shame Black children through a Eurocentric curriculum that redacts Blacks and their contributions to Canadian society, by the low expectations teachers have of them, and by streaming Black children into non-academic programs of study. (Turner Consulting Group, 2015, p. 47)

Privilege (White or otherwise) is “a special right, benefit, or advantage given to a person, not from work or merit, but because of race, social position, religion or gender” (Liu, Pickett, & Ivey, 2007, p. 195). Moreover, it may be suggested by some that all ruling elite use their position at the top of society to create an ideology. However, this statement, in and of itself, is quite tenuous. It is prudently helpful to suggest that this very ideology can create inequity via testing, tracking, sorting, streaming, or ability grouping, which is a feature of intersectionality that involves layers of advantage. Maintaining stratification and inequity is not straightforward since education can be a means of mobility for some (middle class) and a means to preserve status for both the rich and poor. It is possible to measure inequality via the Gini index since it “measures the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution” (The World Bank, 2013). As is the case with most instruments, they have limitations and are subject to error and insensitivities. Still, in 2018 it is possible to suggest that family income plays a role in student performance as Apple (2001) claims:

More affluent parents often have more flexible hours and can visit multiple schools. They have cars—often more than one—and can afford to drive their children across town to attend a ‘better school. They can provide the hidden cultural resources such as camps. After school programmes (dance, music, computer classes, etc.) give their children an ‘ease’, a ‘style’, that seems ‘natural’ and acts as a set of cultural resources. Their previous stock of social and

cultural capital—who they know, their ‘comfort’ in social encounters with educational officials—is an unseen but powerful storehouse of resources. (p. 415)

Hattie (2009), from New Zealand and now working out of the University of Melbourne, completed a meta-analysis covering several years to examine more than 800 factors within educational achievement. The most prominent result, “an ‘inviting’ climate for learning, where learning is engaging, appropriately challenging, and enjoyable” (Winheller, Hattie, & Brown, 2013, p. 64), is of the utmost importance. In-school relationships are fundamentally important since they can potentially impact achievement and educational outcomes students realize. Another prominent correlation was realized between academic streaming and student dropout rate (Werblow, Urick, & Duesbery, 2013) due to narrow and short basic level pathways in secondary schools (Kinnon, 2016). As puzzling as it may be, it appears that children of low-status minorities preserve their place by making certain decisions that impact income and mobility, ensuring the continuation of stratification as a capitalistic value.

Streaming: A Global Issue

To review a student grade (score) is used to divide students into schools, programs, streams or tracks (Kinnon, 2016; Smith, 2011). The streams act as a partition directing students into grade-based ability groups leading to certain academic ranks, positions and endpoints (Zareey, 2013; Martell, 2009; Slavin, 1987a). In one recent study in the United States (Virginia) concerning the use of student summative data, it was determined that “. . . elementary (97%) teachers were more likely to report using data to make changes to student groups than were middle (81%) or high school (66%) teachers, albeit large percentages of teachers at all three levels did indicate using assessment data for this purpose” (Hoover & Abrams, 2013, p. 226). Teachers do use student data to inform instructional decisions.

Many years ago, formal streaming (tracking) began in grades nine and ten in Ontario and divided students into core classes, labelling these tracks/streams as academic (university bound), applied (college or work bound), and locally developed (workbound) groups (Oakes, 2005; People for Education, 2013). Loveless (2009) proposes that the current exercise of grouping students into levels that differs from streaming (tracking) of the 1990s was linked to intelligence and career aspirations. The streaming practice has an extensive history in Ontario and Canada, and other developed countries (Krahn & Taylor, 2007). For instance, a Spanish researcher, Hidalgo-Hidalgo (2014), contends, “education is one of the most important means by which governments attempt to equalize opportunities for economic success among citizens” (p. 964).

Recently a number of researchers surveyed fourth-grade students across 40 countries and realized that grouping students homogeneously within schools (streaming) or classrooms (tracking) based on literacy via the information provided by parents, informed by family socioeconomic status (SES) and guided by reading attitudes seems to possibly impact reading achievement (Ming, Wing-Yin, & Sung Wook, 2017). Nevertheless, given the research design (survey), several limitations surface; for instance, surveys usually permit data collection at one point in time. Hence it is rather problematic to gauge change within the sample population unless multiple surveys are completed over time. The multiple survey effort is more-costly, and time-consuming. Yet the authors also surveyed parents’, teachers’, and principals across the same 40 countries. They revealed that streaming was linked to higher reading achievement, and the track was linked to lower reading achievement (Ming, Wing-Yin, & Sung Wook, 2017).

Digging deeper into this recent study of 40 countries, it was found that peers who had higher literacy levels influenced sample students’ reading achievement via sharing. Conversely, less literate peers seemed to decrease the literacy development of sample students. It was concluded that when peers have higher family incomes (socioeconomic status), students realized better reading achievement, yet having a positive attitude towards literacy can compensate for other ‘wanting

variables'. In sum, results indicate that streaming across schools and mixing of students within classrooms impact overall reading achievement positively (Ming, Wing-Yin, & Sung Wook, 2017).

In Singapore, “specialised Independent Schools offer specialised education catering to students with talents and strong interests in specific fields, such as the arts, sports, mathematics and science, and applied to learn” (Government of Singapore, 2018). However, to gain entry to these school, children must complete the primary school leaving exam (PSLE), which sorts, groups and funnels students based on results. Having the necessary scores on the PSLE allows certain students to attend the “School of the Arts, Singapore Sports School, NUS High School of Mathematics and Science, and the School of Science and Technology. Eligible students of the Singapore Sports School can progress directly to Republic Polytechnic” (Government of Singapore, 2018). While there are many educational paths, as shown in figure one, students must become eligible.

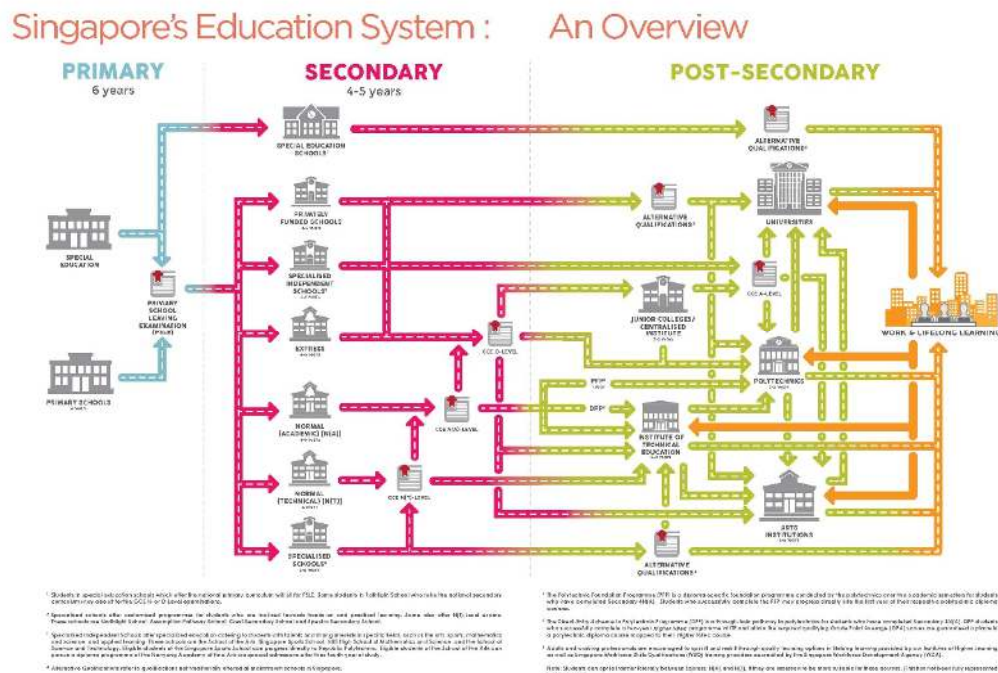


Fig.1 Singapore Educational Landscape (Singapore Government, 2018)

In primary schools in Malaysia, streaming begins early, from the time students enter Year One, “students are assessed and grouped into classes. most schools practice this move as their strategy [is] to create the best learning experience for the students according to their ability” (Mansor et al., 2017, p. 2549). Streaming in Malaysia is pervasive, commonplace and has created some opposition which has instigated debates on the benefits and disadvantages of streaming. Mansor et al. (2017) concluded:

higher ability students exhibit a high level of self-esteem and confidence compared to the opposite in lower ability groups. Both groups relate this perception to membership of the stream they belong to. Streaming has therefore contributed to an inter-group comparison that works in favour of the higher ability group. (p. 2557)

Australian researchers Robinson and Smyth (2016) have argued that streaming students can cause some students to leave school early, which can cause youth to become apathetic, unmotivated non-performers within a globally competitive educational market. The same Australian research has

unearthed a preoccupation in schools with performance and school improvement, which marginalizes and induces social, economic limitations, which seem to have long-lasting impacts within schools and society.

Finnish researcher, Finnvoild (2018), revealed that the more the child is segregated from ordinary classroom education, the lower parental expectations are for their children's educational attainments. The Finnish study also found that other factors also significantly influencing parents' educational expectations include how parents view their child's school performance and various measures of the severity of the child's physical disability. However, these secondary factors could not account for the empirically strong association between segregation practices and parental expectations. Parental expectations were also significantly related to parental income and education. The findings suggest the expectations of parents with higher income and education are less affected by school segregation practices which can be located in the education system of Finland as detailed in Figure two.

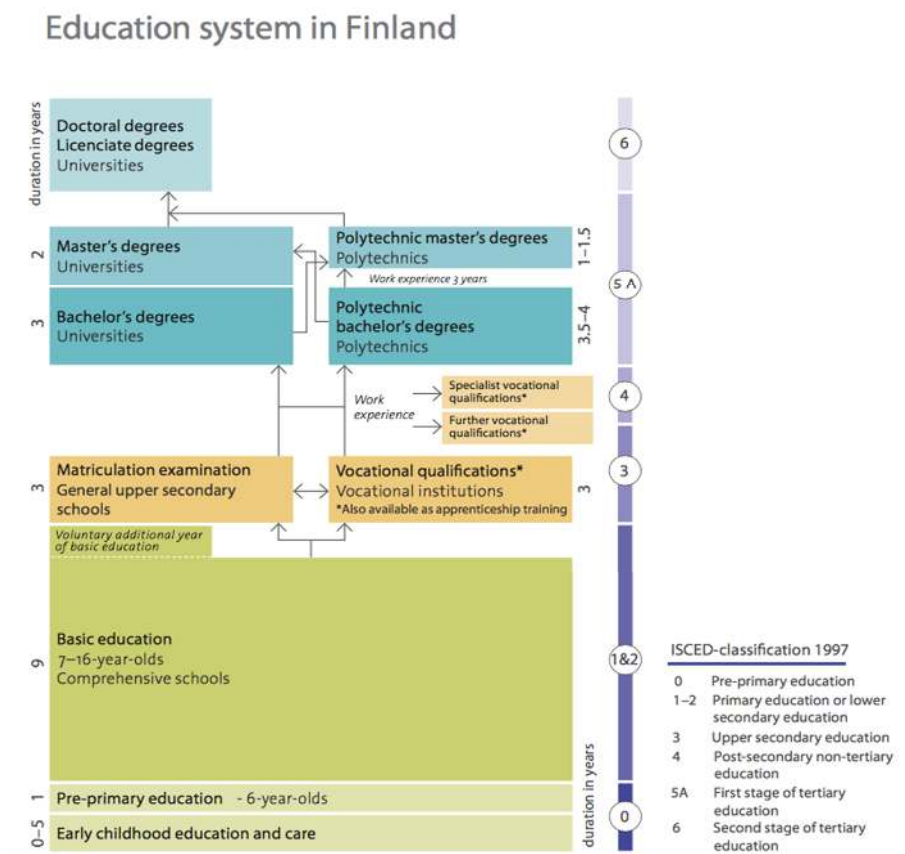


Fig. 2 Education System of Finland (Council for Creative Education, 2018)

de Almeida Lopes Fernandes (2017) research in South America suggested Brazil has always been considered to be a land free of racial and ethnic tensions. Yet, despite Brazil being famous for miscegenation, racial discrimination in Brazil remains, especially in light of the huge disparity between Brazil's racial groups with respect to economic outcomes and education levels. The effect of segregation on the income of workers was estimated via data from elementary schools in São Paulo, Brazil. Results indicate that segregation infuses the eventual wage gap among racial groups. This effect may be attributed to private schools versus public education. There is a little separation along racial lines, which suggests that lack of access to social networks and higher quality

public schools may be the most critical element in explaining wage differences. In Brazil, racial discrimination seems to work indirectly through socioeconomic factors, which can be further exacerbated via grouping in schools.

Messing (2017) investigated how segregation unfolds in Central and Eastern Europe and its impact on 14–15-year-old Roma students and their teachers. The author found that studying in segregated Roma schools limits young Romas' chances for further education and deprives them of interethnic social networks. In fact, studying in segregated classes of ethnically mixed schools has a devastating effect on the development of young people's identity, self-esteem, and interethnic relationships.

Implications

As education unfolds over time, those within the system quickly learn that it is not unbiased or even a neutral enterprise (Parkay, Hardcastle Stanford, Vaillancourt, Stephens, & Harris, 2012, p. 64). Instead, people discover that there are groups, tracks, and streams based on testing, assessment, evaluation, and ability that induce segregation. It is these arrangements that seem to favour one group over another. For instance, research has concluded that streaming benefits high achieving students placed in academic streams (tracks) (Slavin, 1987ab). Yet, students in academic classes seem to invest more time and effort than basic/applied level students (Carbonaro, 2005), so there may be a motivational aspect in play.

Research has demonstrated that higher streamed (tracked) students are expected to be academic behaviourally and are often perceived as more teachable than lower tracking students (Stevens & Vermeersch, 2010). Teachers in the academic stream appear to listen to students more intently and regularly respond via integrated student feedback, suggestions and reactions to inform instruction (Anyon, 1981). Teachers in basic/applied levels frequently request professional development and extra time to differentiate instruction in detracked classrooms (Modica, 2015). These classes are viewed as more challenging to teach, lead and plan.

For many years research outcomes have suggested that teachers of academic streams were more experienced (status) and were more enthusiastic than inexperienced teachers who taught in work-bound (basic/applied) streams (Modica, 2015). The inexperienced teacher may find they have basic or applied classes and mistakenly believe they have succeeded if students are well behaved even if little learning occurs (Oakes, 2005). Forgasz (2010) reports that teachers uniquely define and employ the practices of streaming/ability grouping in secondary grades to select out only "high achievers or only "at-risk" students and further divide students into *top/high*, *medium/mixed*, and *low/at-risk* achieving groups, [and even build] subgroups within these three categories, akin to the A, B, C, D" (p. 38). By doing this, educators sway student efficacy beliefs, guiding the amount of student engagement (Pajares & Urdan, 2006) which seems to link to a recent U.K. study by Steve (2012) that concluded, teacher expectations can have a major influence on student achievement.

Research has determined that students inhomogeneously (achievement) grouped classes do better than students in heterogeneously grouped classes (Collins & Gan, 2013). Still, Chmielewski, Dumon, and Trautwein (2013) demonstrate how basic streamed students feel better about themselves in mixed-ability classrooms. Secondary streaming excludes and distresses the affective domain, eroding self-concept and positive beliefs (stigmatization) (Hallinan, 1994). In turn, this may also affect how students judge their capability to succeed in the classroom since streaming has obvious negative effects on achievement for basic and applied streams (Hallinan & Kubitschek, 1999). Family income and some minorities are grouped excessively in lower streams, excluding them from quality education (Oakes, 2005; Lynch & Lodge, 2002). Some see de facto segregation via academic tracking (Welton, 2013).

Organization for Economic Co-operation and Development (OECD) maintain the position that streaming mirrors socio-economics and "that dividing students, especially dividing them early, contributes to worse educational outcomes for those from low socio-economic backgrounds" (OSSTF/FEESO, 2015, p. 3). Focused upon socio-economics, Parekh, Killoran, and Crawford (2011) determined that "higher-income, non-minority, and students with parents who have a university education are over-represented within the advanced streams and quality educational programs" (p.

37). The variable of race, ethnicity and culture surface often in streaming. For example, research by Steve (2012) concluded that teacher expectations, based on race, have a major influence on school performance and life after school.

In response to these de-streaming arguments, the Toronto District School Board (TDSB) has been implementing de-streaming pilot projects in several schools (TDSB, 2015). As a result of the Integrated Equity Framework (IEF), TDSB moves to a system-wide implementation of a de-streaming model by delaying pathways where students will not be stream based on ability groupings into applied or academic courses. TDSB model will be leading in the province as this model is also aligned with the Organisation for Economic Co-operation and Development (OECD) findings.

CONCLUSIONS

Segregation, sorting, tracking and streaming may be tacit within education. However, there are overt implications, reactions and impacts concerning any efforts to group students in education (Lee & Smith, 1993). Some education theorists believe students can be sorted via assessment and evaluation of academic ability; however, such positions can be quite narrow, dated and illuminate degrees of student disengagement (Fredricks, Blumenfeld & Paris, 2004; Flinders & Thorton, 2013). Ability is a multifaceted variable that is much more than a score on a summative assessment; ability is the power one has to do something and involves competence, beliefs and the skills to do well on tests (Snyderman & Rothman, 1987; Vogl & Preckel, 2014).

Nonetheless, Steenbergen-Hu et al. (2016) determined in their one-hundred-year examination of ability grouping data that “. . . students benefited from within-class grouping, . . . cross-grade subject grouping . . . and special grouping for the gifted . . . but did not benefit from between-class grouping” (p.1). Yet, even though there are positive implications for some grouping, there are other variables at play such as motivation, readiness and teacher efficacy that can impact grouping efforts and outcomes, which need attention in the future if grouping is to be fully understood (Fredricks, Blumenfeld, & Paris, 2004).

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