...replacing streaming is an opportunity to address the larger issue of school inequities, and to avoid creating new categories of students and programmes that inevitably spotlight differences. The categories we create or dismantle will be formative, because the secondary school years are when the us-versus-them mindset is learnt and aspirations are developed.

It is not streaming per se that leads to inequality, but the differentiation of students into categories and spending less on low-socioeconomic status students that have been shown to result in inequality and immobility, say the writers.
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Phasing out streaming: First step to decreasing educational inequality

Irene Y.H. Ng and Nursila Senin

For The Straits Times

After four decades, the "sacred cow" of streaming will be slaughtered in 2024. In its place is subject-based banding, although students will continue to be allocated to secondary schools based on three broad categories. At Secondary 4, all students will take a common examination and receive a common certificate.

This change is important, as years of research on streaming (or ability-based tracking as it is known in the international scholarship) have shown that it leads to greater inequality in student performance, and is related to lower inter-generational mobility.

Indicative of this is Singapore's performance in the Programme for International Student Assessment (Pisa) by the Organisation for Economic Cooperation and Development. Singapore's students have been top performers, but Singapore also ranks highly in terms of the gap between the top 10 per cent and bottom 10 per cent of students, and the dependence of students' Pisa scores on parents' socioeconomic status (SES). The students also rank low in terms of the percentage of nationally resilient students, along with countries such as Belgium and Germany, which also stream their students. This measures how these students fare against the top performers in their own countries.

It is indeed time to address such inequities, and ending the practice of streaming is a key first step. However, it is not streaming per se that leads to inequality, but the differentiation of students into categories and spending less on low-SES students that have been shown to result in inequality and immobility.

In her past work, the first author has summarised these effects as differential labels, differential resources and differential networks.

First, the differentiation of schools and programmes creates differential labels of prestige and stigma, leading to the self-fulfilling prophecy of students behaving and performing according to the expected labels on them.

Second, differential resources to the different schools and programmes lead to virtuous circles of more resources for the preferred schools or programmes, and vicious circles of fewer resources for the stigmatised schools and programmes.

Third, as the desirable schools or programmes attract students from more well-to-do families and the stigmatised schools or programmes are shunned, differentiated networks lead to differential access to current and future connections and resources.

Our other research has also demonstrated these differential effects. For instance, while Associate Professor Irene Ng and Ms Annie Cheong found that Normal stream and Institute of Technical Education students had lower self-esteem than students from other streams in the National Youth Survey in 2013, Prof Ng and Ms Nursila Senin found that this effect had disappeared in a similar survey by 2016.

In contrast, the Integrated Programme and International Baccalaureate (IP/IB) students in the 2016 survey had higher resilience and were less stressed over their finances, studies and future uncertainty than non IP/IB students, including their Express stream counterparts. These results were controlled for parents' SES and demographic characteristics.

Thus, beyond streaming, if schools continue to be differentiated, with certain programmes such as IP/IB situated in more desirable schools and other programmes in less prestigious schools, then the negative effects that were attributed to streaming could still rear their ugly heads.

Indeed, how schools are resourced and pitted against one another matter. Using Pisa individual-level data, Ms Rachel Ker, now a master's student with the University of Chicago Harris School of Public Policy, found that students in schools with greater autonomy and a wider variety of co-curricular activities (an indication of resources) have higher-SES parents and better Pisa scores. Part of the effects of parents' SES on Pisa scores is also through students being in these schools with greater autonomy and resources.

One interpretation of the above findings is that when schools are highly differentiated, one way that high-SES parents attain future educational and economic success for their children is through securing spots in desirable schools with more resources, and also investing in them.

Abolishing streaming does not fully address existing differences between schools. For example, independent schools that offer only IP/IB programmes and specialised schools, such as the School of the Arts and NUS High School of Mathematics and Science, accept only Express stream students.

Although Education Minister Ong Ye Kung has said that these schools should admit more diverse students through the Direct School Admission (DSA) exercise, DSA admits only a small number of students on a discretionary basis. The extent to which broadening the DSA will lead to these schools admitting students across bands might therefore be limited.

Thus, replacing streaming is an opportunity to address the larger issue of school inequities, and to avoid creating new categories of students and programmes that inevitably spotlight differences. The categories we create or dismantle will be formative, because the secondary school years are when the us-versus-them mindset is learnt and aspirations are developed.

We need to counter human tendencies to differentiate and label. In 2014, the Education Ministry revised its funding formula to make funding more equitable by enrolment size. We could go a step further by institutionalising progressive spending for schools that have higher proportions of low-SES students.

We could also decrease competition and increase collaborations between schools, encouraging principals, teachers and students to share knowledge and work together across schools. The strategies by Uplift (Uplifting Pupils in Life and Inspiring Families Taskforce) will also be essential to address educational inequalities.

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