

This is a tale of two students: Philippa and Amber. Philippa and Amber may not know each other but they aren't all that different. They both called South Auckland home for the first 12 years of their lives, they were both lauded as Dux of their respective intermediate schools and they both dreamt of giving back to their communities as a doctor. It's just that after intermediate, Philippa's family moved into the city to be closer to her mum's work, downsizing to an apartment they could afford.

Neither Philippa nor Amber's families were well off by any stretch of the imagination. They wanted the best for their children but couldn't afford a private school, so they both attended the local public school they were in zone for. Philippa's school was decile 10. Amber's school was decile 1.

Philippa and Amber both tried their hardest in Year 9. Philippa initially struggled to keep up with her classmates but eventually adjusted to the pace. That's because Philippa was selected for her school's accelerated class; they compacted the Year 9 and 10 curricula into one year so that Philippa could skip directly to NCEA Level 1 in Year 10. In contrast, Amber breezed through Year 9, easily topping her class and being praised by her teachers for generously spending so much time helping her peers learn. Amber's school didn't offer accelerated or enrichment classes.

Not only was Philippa now always a year ahead of Amber, but their schools also covered different ground in the same courses. In Philippa's school, she was taught all three external achievement standards in Level 2 Chemistry. Philippa learnt about bonding and structure, organic compounds and chemical reactivity. "If you want to take Level 3, you must get merit in all three externals or better", her teacher reminded. By the time Amber took Level 2 Chemistry in Year 12, she was only taught two externals. "You'll get three hours to sit two papers instead of three, so it'll be easier to pass", reasoned her teacher. Amber sat both. Most of her classmates only sat one, voiding the other. They had enough credits from internals to pass the subject, so they chose to concentrate their efforts.

While externals are typically considered harder than internals since they are assessed through an end-of-year exam as opposed to in school during the year, they usually cover the most important foundations of the subject. Both Philippa and Amber passed with flying colours and gained excellence endorsements in chemistry. Philippa gained a solid foundation in chemistry. Amber did not. Unlike Philippa, she wouldn't learn about organic compounds until university. No wonder then that only schools like Philippa's had any luck in sending students to the Chemistry Olympiad.

Philippa and Amber both sat the same number of internals in Level 2 Chemistry. Since Philippa's school taught one extra external, Philippa would gain more credits than Amber even if they both excelled in all their standards. NZQA audited both schools and recommended reducing the number of credits available. Philippa's school knew though that the number of excellence credits mattered for university scholarships and much more, including the international science camp scholarships that both students dreamed of winning. That's also why Philippa's school refused to adopt any unit standards, exclusively offering achievement standards. Carrying a maximum grade of 'achieved', not only are unit standards fruitless in the excellence credit arms race but they counterintuitively kill a high grade-point average. So Amber's school listened. Philippa's school did not. For Amber's school, opposing recommendations is blamed as a reason for their underachievement. For Philippa's school, the same disobedience is 'educational leadership': Her school doesn't follow pedagogical best practice – they define it and the community fully trusts the school's discretion. I mean, why wouldn't they have faith in one of the top performing schools in the country?

Even though the same number of internals were offered by their chemistry courses, different standards were taught. Philippa learnt how to perform titrations and calculate concentrations, an important skill for higher-level analytical chemistry. Amber gained the same number of credits through writing a report on the chemistry used in a current technology. Even when they studied the same standard, the format of assessment differed. At Philippa's school, oxidation-reduction reactions were assessed by a lab practical and in-class theory test which Philippa spent many hours preparing for. Meanwhile, Amber's task was to create a poster on the theory behind oxidation-reduction reactions. She had a week at home to work on this and could refer to her textbook at anytime so there wasn't much point learning the reactions, she reasoned. While Philippa was diving deep into the core of analytical chemistry, Amber was testing different fonts for her poster.

When Philippa got merit, game over; there were no second chances. Yet, when Amber got merit, she was offered a 'further assessment opportunity' and, failing that, a 'resubmission'. "Orders from the top, we need to push more kids over the line", the principal briefed the staff. With the previous National Government's 85% pass rate target at NCEA Level 2 signalling a results-driven shift, there was significant pressure on underperforming schools to 'improve' to avoid constant scrutiny.

Fast forward to Year 13, both Philippa and Amber stepped up to the challenge of the New Zealand scholarship examinations, designed for top students in their final year of schooling. By the end of Year 12, Philippa had already completed all her Level 3 subjects and given scholarship a go, albeit unsuccessfully. She was encouraged by her teachers to take five timetabled Scholarship classes, which would provide opportunities to review her mistakes. Amber, on the other hand, was self-studying scholarship subjects in addition to Level 3. There wasn't much of a culture of passing scholarships at her school; like many low-decile schools, hers gained a grand total of zero last year.

Halfway through the year, it was time to apply for university scholarships, typically judged by the number of Excellence credits attained in Year 12. Competition between schools like Philippa's meant that the bar was raised high; students needed excess of 100 Excellence credits for their application to even be read. Philippa was identified as a top applicants for multiple scholarships, impressing by not only her many Excellence credits but also having achieved them a year early. Amber's school didn't even offer her 100 credits; she needn't have wasted her time.

When it came time to sit the scholarship exams, Philippa felt as prepared as she could be, having spent a year in class revising. Amber was stressed: she was sitting five scholarship exams too but also had to juggle five NCEA Level 3 exams over the same period. She had studied as much as she could but still felt that there were gaps in her knowledge. The scholarship chemistry exam, for example, consisted of 30% organic compound questions, a topic Amber had never touched in her life. Unsurprisingly then, Amber got no scholarships. Philippa? She passed all five and even got one at outstanding, placing her among New Zealand's top 50 scholars and adding \$15,000 to her name.

Straight out of high school, Philippa and Amber both enrolled in a BSc in Biomedical Science at the University of Auckland. With her Top Achiever scholarship including accommodation at a hall of residence, Philippa didn't need to work. Conversely, Amber was flatting – cheaper than a hall but closer to university than home – picking up a part-time job to pay for rent. For the time she spent working and cooking, Philippa was busy studying. At Philippa's hall, there were regular tutorials led by older students and Philippa met many like-minded students who she studied with. Philippa was a straight A+ student. Amber struggled with the workload alone; her CHEM110 paper was primarily organic chemistry and given the superficiality of her prior understanding, it proved a steep learning curve. Amber scraped an A- average. The cut-off for medicine was A.

Ten years down the line, Philippa and Amber would finally cross paths: Philippa as a doctor, Amber as her nurse. Make no mistake, Philippa and Amber both lead happy, fulfilling lives. They both tried their hardest and they both thought they reached their full potential. Yet when confronted with the full picture, one can only wonder what Amber's life could have been.

Education can be a hard thing to talk about. When it's implied that a person is 'successful' because of the school they attended, it can feel like their achievements are being diminished. But even though it never came easy for Philippa, she can't deny that the school she attended created certain advantages over Amber. While the differences in the way that their schools implemented NCEA were minute, over time those small differences added up resulting in vastly differential outcomes. Here we heard the tale of two driven, high-achieving students from similar socio-economic backgrounds, yet we saw how different NCEA implementation alone created such divergent pathways. What happens then when we compare students from different backgrounds and add other variables to the mix? It goes without saying that the outcomes become even more disparate.

Now, it's easy to hide behind a veil of political correctness and praise NCEA's ability to cater to all students. It's easy to pat ourselves on the back and solely focus on the National Government's 85% pass rate target at NCEA Level 2 being surpassed. But just as GDP doesn't perfectly measure economic growth, perhaps NCEA pass rates don't perfectly measure our kids' achievement; the 'long tail of underachievement' hasn't gone away, it has only gone into hiding under the guise of statistics.

Through this tale, the solutions I champion should speak for themselves. Principally, it is fundamentally unfair for students to be awarded the same qualification regardless of whether they learn one external topic or three, whether they are assessed by a take-home poster or a difficult test. Practically, our current system ironically harms the exact students they try to help by allowing students with an inferior understanding to pass and slip under the cracks. To address this, NCEA must facilitate more consistent standards of teaching and assessment. At the very least, all students taking a particular subject should sit the same end-of-year exam – without the ability to cherry-pick standards – and be subjected to internal assessment with less variability. Outsourcing the design, delivery and marking of internal assessment to external providers, such as LearnCoach who already facilitates such assessment digitally, would achieve this by eliminating incentives acting upon schools, improving educational outcomes and equity while maintaining flexibility in the method of assessment. This solution may not carry the political appeal of being novel – like overhauling Level 1 – but it will make a real positive difference to the students that pass through our education system.

It will improve the wellbeing of teachers through outsourcing the design, delivery and marking of internal assessments, allowing them to refocus on learning; and both teachers and students by alleviating pressure to take as many standards as possible and 'credit farm', making 150 credits the norm. It will improve coherence by ensuring students are taught and assessed all the key topics within a subject, gaining a full understanding that allows them to draw connections between topics, lifting literacy and numeracy. It will improve the credibility of the NCEA qualification internationally, so universities and employers will no longer weight externals over internals and preferentially select IB and CIE students. It will keep pathways open for students and support good connections beyond schooling, especially more competitive ones, for all students taking NCEA regardless of their school. Ultimately, it will improve equity so that students from across the socioeconomic spectrum are taught and assessed the same way and receive equal access to a world-class Kiwi education. And after all, isn't the true measure of any society found in how it treats its most vulnerable members?

This piece is informed by my personal experience with NCEA Levels 1-3 and Scholarship as a student, as well as students I have come across as a tutor and part-time educational consultant.