

# EDUCATION

## Resilient students see failure as stepping stone: NIE study

Other traits include making plans to reach goals, managing emotions

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Students who are initially weak in their studies but manage to improve have a few common traits: they are clear-headed enough to make plans, manage their emotions and see failure as a challenge.

They are also reported as having better relationships with teachers, who provide consistent academic and socio-emotional support.

These findings are from a study completed last year by Dr Imelda Caleon, a research scientist at the National Institute of Education.

Her research team gave out standardised English language and mathematics tests at the end of each year to about 1,300 students from 22 secondary schools over a

three-year period. All of them came from the Normal (Academic) or the Normal (Technical) classes.

The students answered questions on their families, how resilient they thought they were, their socio-emotional strengths and their relationships with teachers.

They were asked as well about the forms of support they received from their peers and parents.

Dr Caleon paid closer attention to 418 Normal (Technical) students who had failed in either or both subject tests and tracked their scores from Secondary 1 to Secondary 3.

Those who eventually passed in Sec 3 were deemed "resilient" in the study, while the rest who still failed were "less resilient".

Dr Caleon, whose research interest is in how to better support low-progress learners, said: "When students start with low achievement in school, they tend to continue in that trajectory. So I wanted to study those who are able to move out from that path.



Nurulmusfirah Abdul Razak, 16, scored four As in her N levels last year, from consistently failing her subjects before.

"For those less resilient, maybe they don't have enough resources to overcome their challenges."

Dr Caleon, who is writing up a report on her key findings for an international psychology journal, also conducted face-to-face interviews with 16 resilient students and 14 less resilient students. After controlling for factors like family background, a few attributes stood out.

Both groups perceive failure differently. She said: "(Those in) the resilient group usually see failure as a turning point, a wake-up call. They tend to be aware of why they fail.

"They cry, but they try to analyse their mistakes and then craft some strategies to do better."

The less resilient students are usually more "ambivalent", she added. "They don't seem to feel sad or happy... Most don't even attempt to find out why they fail."

While both groups had goals, like finishing school, those who were resilient had more concrete plans to reach their goals. They were also better able to manage their emotions and deal with stress. "If it takes a while before you calm down, much time will be wasted before you are able to focus on studying," she said.

Resilient students also indicated that they had better relations with teachers. "Instead of general motivational words like 'study harder', many said teachers encouraged them not to give up in the face of setbacks and taught them ways of dealing with stress," said Dr Caleon.

"Our students need to know that failure is not the end – it is an opportunity to learn to do better."

Educators agreed, saying that teachers play a big role in students regaining confidence, especially

when family support is lacking.

Kranji Secondary principal Goh Soon Hoe said the school's form teachers spend three mornings a week having conversations with students individually.

"The aim is to find out what is happening in their lives and, along the way, identify any case that may need more help."

Mr Gabriel Sim, Dunman Secondary's head of department for character and citizenship education, said: "Some students come with baggage. It is not that they are academically slower, but imagine running with a 10kg gunny sack."

In his school's Normal stream classes, at least one form teacher will stay with the students for all four to five years. "The teachers know the students inside out," said Mr Sim.

It took sheer hard work for 16-year-old Nurulmusfirah Abdul Razak to do well.

The former Normal (Technical) student from Dunman Secondary set aside weekly study time and asked for help from teachers and peers. From consistently failing subjects before, she scored four As in her N levels last year.

"I learnt to manage my time and not let tiredness affect me," she said. She is now studying applied food studies at ITE College East.

She added: "Failure made me sad, but it was not a bad thing. It was a stepping stone."

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### Dr Imelda Caleon's tips on engaging academically weaker students

**Give more targeted feedback**  
Do not give general comments like "work harder" or "good effort". Provide students with more specific feedback. Point out how they have made progress or what they can do to improve.

**Teach students to set goals**  
Show how goals can be set and plans drawn up to achieve those goals, with contingencies worked in as well.

**Teach students how to 'fail upwards'**  
Help students feel that failure is an opportunity for growth and positive change. It is not enough that students accept their failure, they need to identify why they fail and what they can do to improve. For example, if a student scores 46 in a test, make sure he or she does better the next round – even if by scoring 49, the student fails again.

**Create positive social connections with students**  
Whether in or out of the classroom, students will cherish some form of acknowledgement from teachers. For example, ask them how they are doing, especially when they are stressed.