



Quality Initial Teacher Education Review Submission to the Expert Panel

16 July 2021

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Overview of submission

This submission responds to several questions raised in the Quality Initial Teacher Education Review Terms of Reference and the Discussion Paper, released in June 2021.

Attracting and selecting high-quality candidates into the teaching profession

- What can be done to attract more high-achievers and career changers to the profession?
- What factors influence the high education course selection of high-performing school students?
- *The points on this topic included in this submission are sourced from our 2019 report, [Attracting High Achievers to Teaching](#) and our 2020 report [Top Teachers: sharing expertise to improve teaching](#)*

Preparing ITE students to be effective teachers

- What more can we do to ensure that ITE curriculum is evidence-based and all future teachers are equipped to implement evidence-based teaching practices?

Key messages

Part A: Attracting and selecting high-quality candidates into the teaching profession

❖ Australia faces real challenges in attracting and developing new teachers

- Drop in demand from young high achievers to become teachers

❖ Grattan's *Attracting High Achievers* recommendations would have a big impact

- Set a goal to double the proportion of high achievers within 10 years
- Key reforms include \$10,000 per annum scholarships, better career paths with new roles for top teachers with higher pay of \$40,000 - \$80,000, as well as a marketing campaign

Part B: Preparing ITE students to be effective teachers

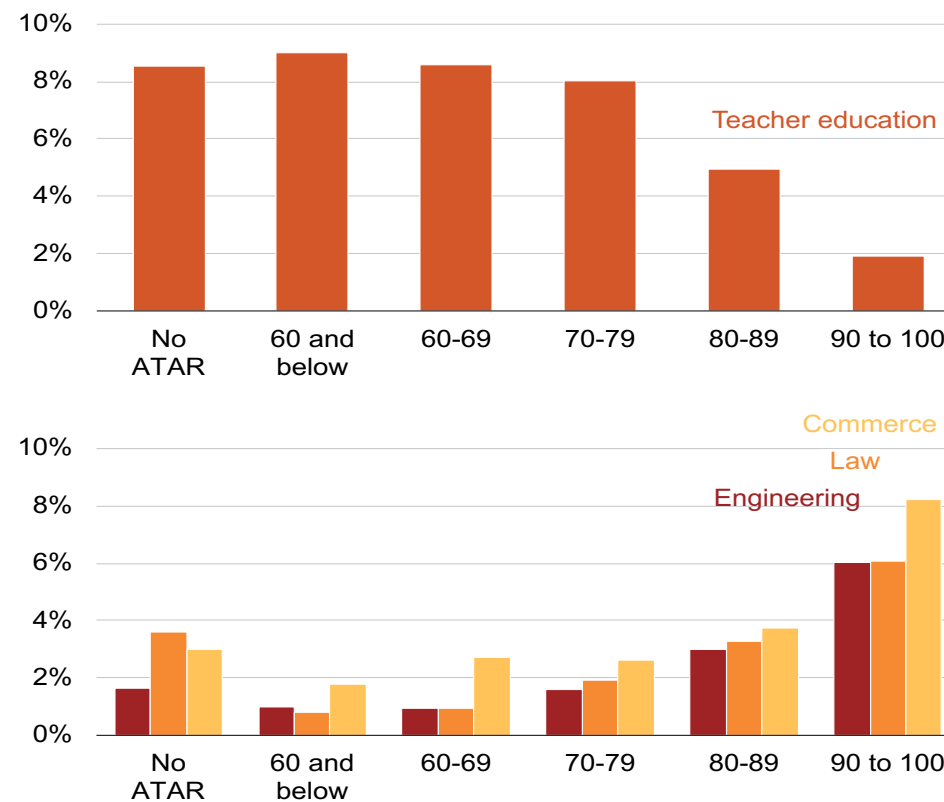
- ❖ ITE reforms will have the biggest impact if they are part of a broader strategy to improve workforce quality**
- ❖ Incentives could be used more effectively to raise the quality of ITE**

Summary

- Effective teachers are the most important in-school influence on student learning
- Prior academic achievement is the strongest predictor of future teaching performance, but the higher your ATAR, the less likely you will choose teaching (p8)
- Teaching is no longer a sought-after career by young high achievers; today only 3 per cent choose teaching, compared to 19 per cent in science and 14 per cent in health (p11)
- Over the past 40 years fewer high achievers became teachers (p13), at the same time, teacher salaries have fallen relative to other professions (p27)
- Our new survey of almost 950 young high achievers in 2019 – a first in Australia – shows that teaching falls short in two key areas: teacher pay and career challenge (p20)

Prior academic achievement is the strongest predictor of future teaching performance

- Prior academic achievement is the strongest predictor of future teaching performance (p8)
- Increasing teachers' prior academic achievement boosts student learning (several large US studies) (p8)
- Countries' PISA results are correlated with teachers' academic skills (analysis of PISA/PIAAC) (p8)
- Attracting high achievers works at scale (example of NYC which cut the disadvantage gap by a quarter) (p8)
- But the higher your ATAR, the less likely you will choose teaching (p12)



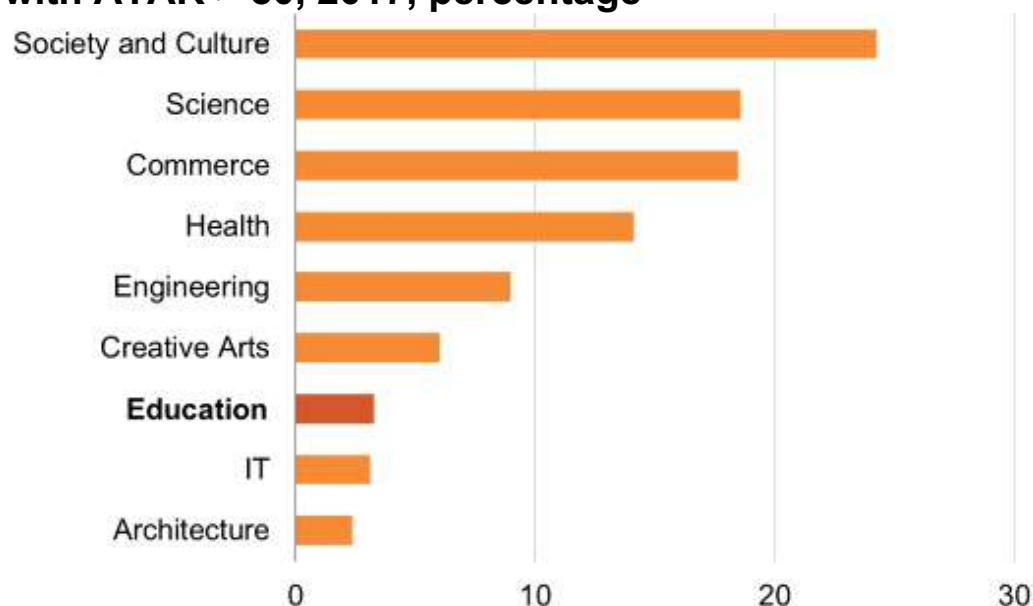
Source: Goss, Sonnemann and Nolan (2019), *Attracting high achievers to teaching*, Grattan Institute (Figure 2.2, p12)

Source: Goss, Sonnemann and Nolan (2019), *Attracting high achievers to teaching*, Grattan Institute (pages 8, 12)

Today, not enough high achievers become teachers

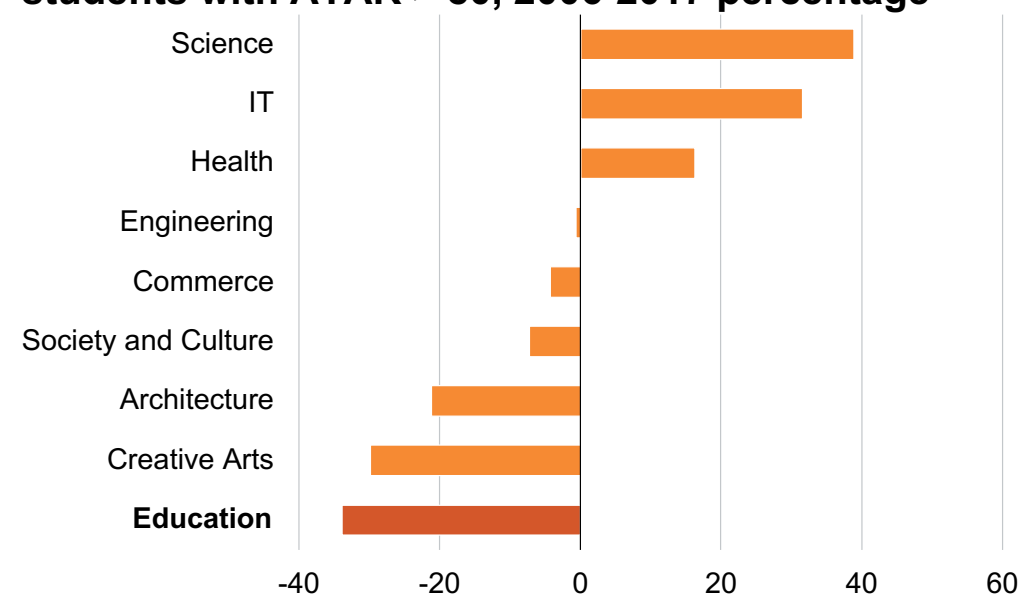
- Teaching is no longer a sought-after career by young high achievers; today only 3 per cent choose teaching, compared to 19 per cent in science and 14 per cent in health (p11)
- Over the past 10 years, demand from Australian high achievers for education courses at university has fallen dramatically, while demand from high achievers for science, IT, and health courses has risen strongly.
- A 20-year-old with an ATAR of 80 or above enrolled in an undergraduate university course in 2017 was one third less likely to choose teaching than a similar student in 2006 (p11)

Share of undergraduate admissions among students with ATAR > 80, 2017, percentage



Source: Goss, Sonnemann and Nolan (2019) Figure 2.1

Change in share of undergraduate admissions, students with ATAR > 80, 2006-2017 percentage



Goss, Sonnemann and Nolan (2019), Figure 2.5

Why this matters...

High achievers tend to make better teachers

- Teaching is complex and cognitively challenging
- Strong evidence shows that people who are good learners tend to become better teachers
- Non-cognitive abilities (e.g., communication and resilience) also matter.

More high achievers would mean more student learning

- We estimate that boosting teacher academic background by 1 S.D. would lift student results by 6-12 months by Year 9 in Australia (p9)
- A teacher's academic background is not everything, and other traits such as leadership and conscientiousness can help predict teacher effectiveness too. But current best evidence shows that academic achievement is a stronger predictor than non-academic traits of teaching quality (p9).

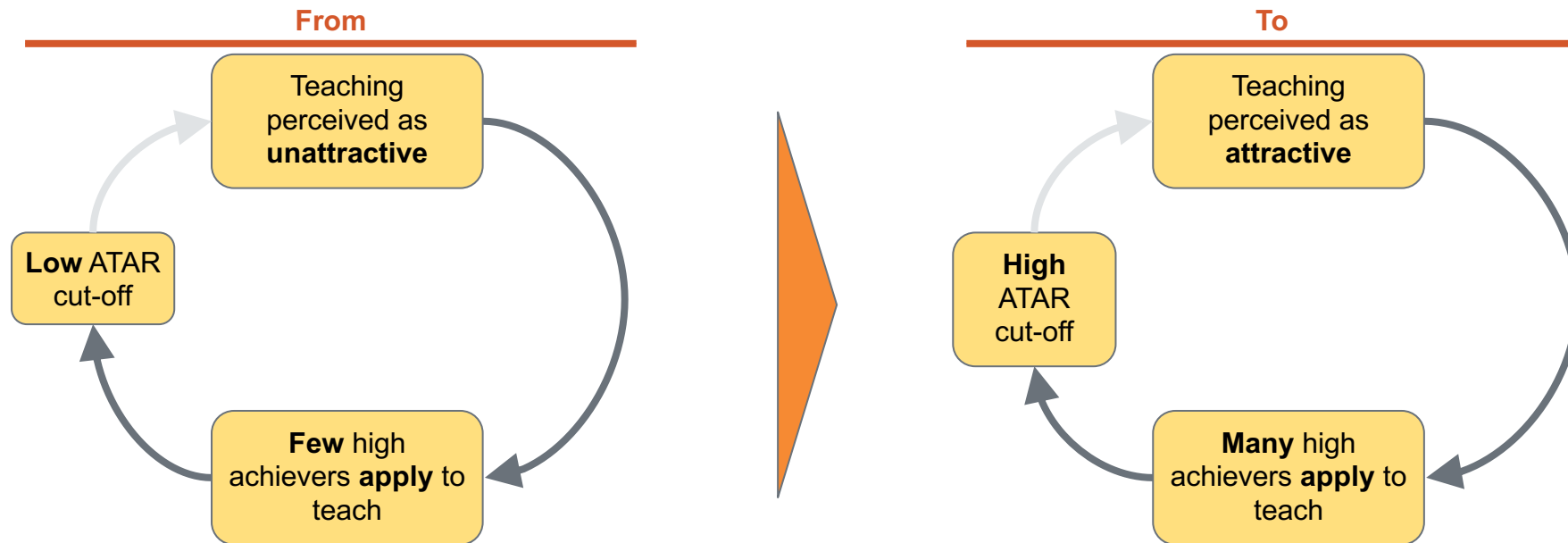
If more young people apply to become teachers, we can select the best

- High-performing systems attract many high achievers, then select both on academic and non-cognitive skills.
- For example, competition is so strong in Singapore and Finland that only about one in 10 students who apply to become teachers are accepted. High demand enables these countries to filter students based on a range of criteria, including their academic records and also a mock teaching class (p9)
- Even the best holistic admissions process is still limited by the quality of students who apply.

Australia needs to make teaching more attractive

- Policy settings over several decades have failed to make teaching attractive to high achievers. This has created a negative, self-reinforcing cycle where few high achievers apply to teaching degrees, leading to low ATAR cut-offs, which in turn sends a signal that teaching is not an attractive degree, as seen in the figure below.
- If there is high demand for ITE courses, ITE providers can select people with strong academics **and** non-cognitive skills **and** motivation.

Governments can create a positive reinforcing cycle if they make teaching careers more attractive



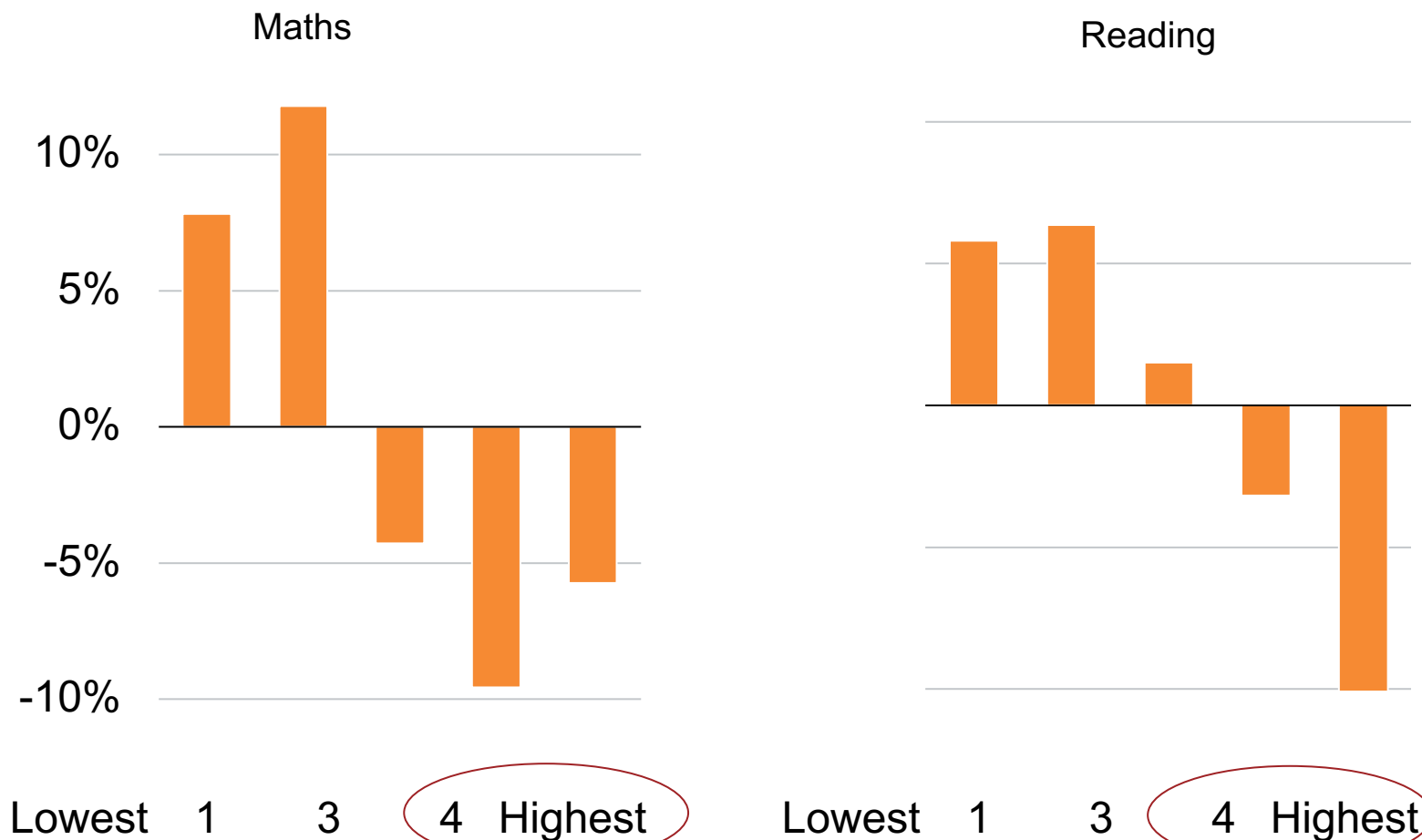
Source: Goss, Sonnemann and Nolan (2019), *Attracting high achievers to teaching*, Grattan Institute (Figure 1.1, p10)

Compared to the 1980s, fewer high-achievers become teachers

- There have been big changes to the nature of the teaching workforce over time.
- The proportion of teachers who performed in the top two quintiles at schools themselves has dropped since the 1980s (p13).
- In the late 1980s, about 1 in every 3-4 teachers came from the top quintile of school students; today it is 1 in every 5 teachers (p13).

Source: Goss, Sonnemann and Nolan (2019), *Attracting high achievers to teaching*, Grattan Institute, p13

Percentage point change in share of 23-year-old teachers from each quintile on a standardised test, 1988 to 2017

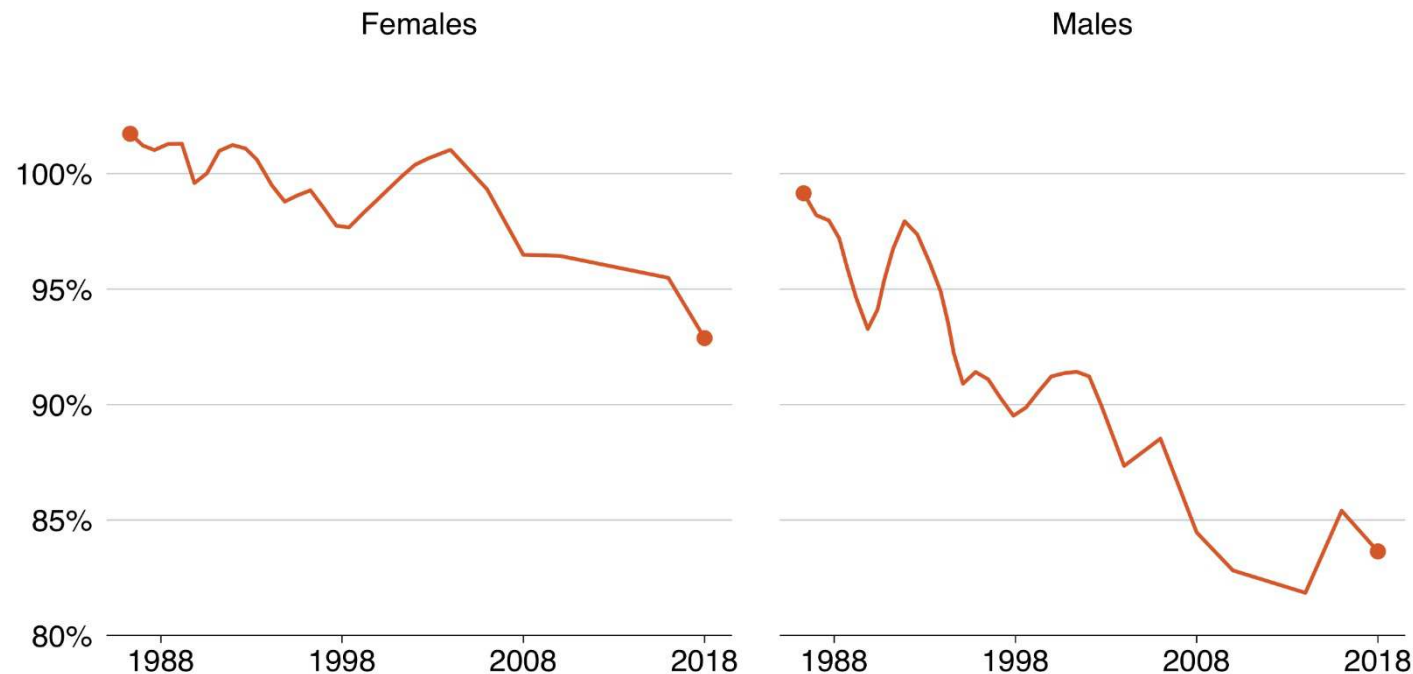


Notes: Analysis from the Longitudinal Survey of Australian Youth, which follows young people from school through to the workforce. Quintile of achievement is among students who have not dropped out of the survey by the year in which they turn 23-years-old, who tend to be higher-achieving students. 2017 results taken from teachers who took the PISA test in 2009, most of whom were 23 in 2017. 1988 results comes from an earlier standardised test. Includes primary and high school teachers but not early childhood educators.
Source: Goss, Sonnemann and Nolan (2019), *Attracting high achievers to teaching*, Grattan Institute (Figure 2.3, p13)

Over the past 40 years, relative teacher salaries fell sharply

- Over the past 40 years, fewer high achievers became teachers. At the same time, teacher salaries have fallen relative to other professions.

Average teacher salaries as a percentage of all professionals, 1986 to 2018



Notes: Salaries measured as the average weekly cash earnings of full-time non-managerial adult employees. In 2006 the ABS started including salary sacrifice income and changed the definition of 'professional'. For years 2010-2018 aggregate incomes for all professionals were not available, and so they were calculated using the weighted average of all professional occupations. The weights were derived from the number of full-time workers in each occupation and gender category in the 2016 Census.

Source: Goss, Sonnemann and Nolan (2019), Attracting high achievers to teaching, Grattan Institute, Figure 4.3, p28

Submission outline

Part A: Attracting and selecting high-quality candidates into the teaching profession

❖ **Australia faces real challenges in attracting and developing new teachers**

- Drop in demand from young high achievers to become teachers

❖ **Grattan's *Attracting High Achievers* recommendations would have a big impact**

- Set a goal to double the proportion of high achievers within 10 years
- Key reforms include \$10,000 per annum scholarships, better career paths with new roles for top teachers with higher pay of \$40,000 - \$80,000, as well as a marketing campaign

Part B: Preparing ITE students to be effective teachers

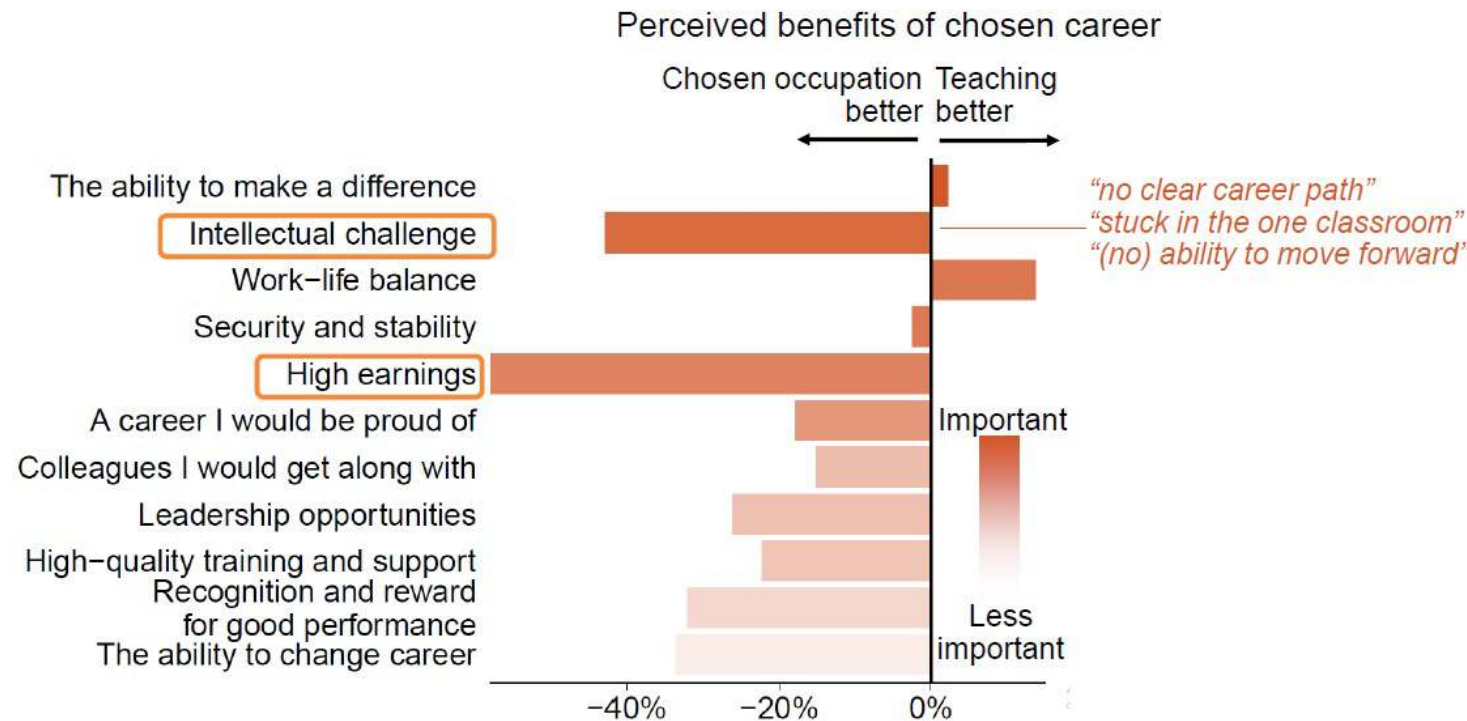
❖ **ITE reforms will have the biggest impact if they are part of a broader strategy to improve workforce quality**

❖ **Incentives could be used more effectively to raise the quality of ITE**

Our 2019 survey shows bright young people turned off teaching by pay and career path

- We surveyed almost 950 people aged 18 to 25 who obtained an ATAR of 80 or higher. Our survey tested the gaps between what high achievers think their chosen careers will provide compared to teaching, ranked in order of what they say is important to them (see chart below).
- The good news is that young high achievers are open to the idea of becoming a teacher: about 70 per cent said they would consider it. But for young high achievers, teaching falls short in two key areas: intellectual challenge and pay.
- While high achievers want to do something that will make a difference, they consider they can get this in their chosen careers.

High achievers say teaching falls short on intellectual challenge, and pay

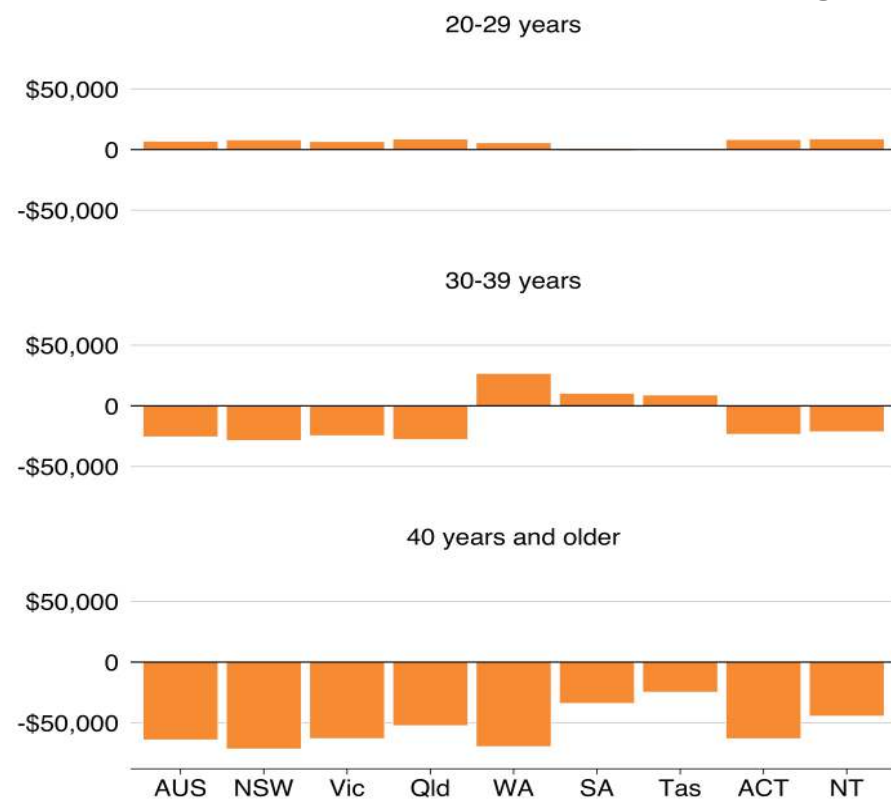


Notes: Results are from Grattan Institute survey of 950 young high achievers aged 18 – 25 with an ATAR 80 or above
Source: Goss, Sonnemann and Nolan (2019), *Attracting high achievers to teaching*, Grattan Institute, Figure 3.3, p20.

Teacher pay is not competitive for high achievers, especially at the top-end

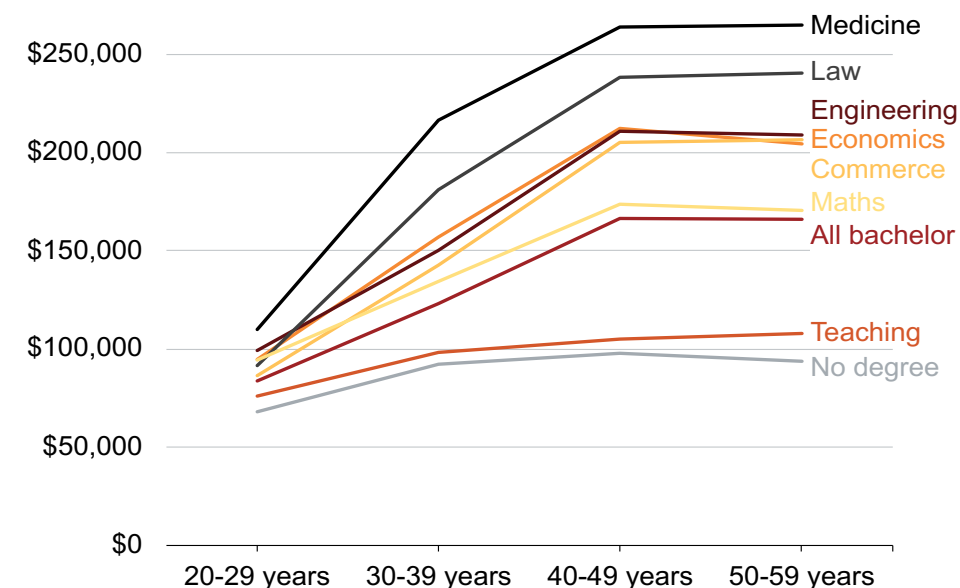
- The charts below show the salary differentials between full-time teachers and other similarly educated full-time workers at the 80th percentile for pay. High performing teachers in their 20s get paid close to other high performers in their 20s who have a bachelor degree. But by the time these teachers hit their 30s and 40s, their pay is a lot less than their university peers in other professions.

Salary differential between full-time teachers and other full-time workers with a bachelor degree, 80th



Source: Goss, Sonnemann and Nolan (2019), *Attracting high achievers to teaching*, Grattan Institute, Figure 4.1, p26.

80th percentile of total yearly personal income of full-time workers holding a bachelor degree by field of study,



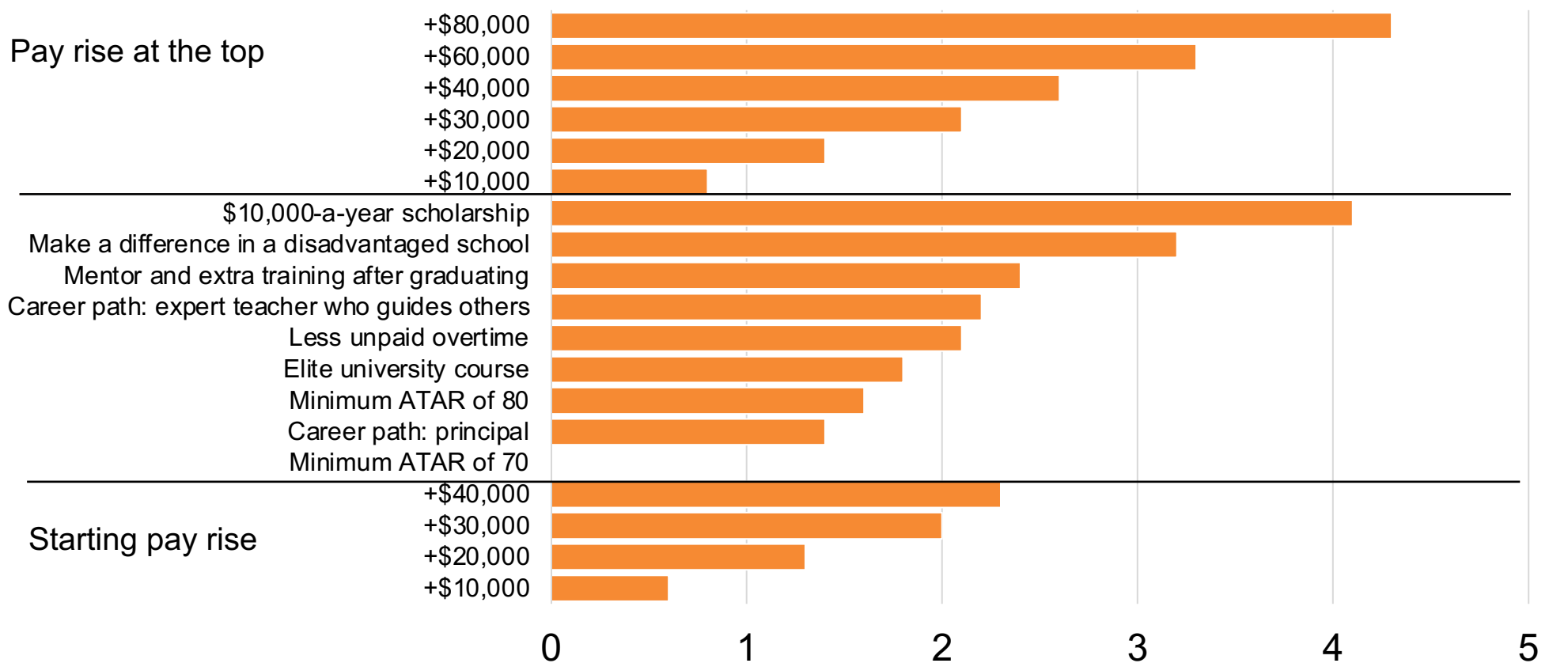
Notes: Includes people who studied a teaching degree but now work as principals. Four-digit fields of education chosen because they have the highest median ATAR. 'No degree' includes all levels of education below bachelor. See Figure 3.4 for notes on income estimates.

Source: Goss, Sonnemann and Nolan (2019), *Attracting high achievers to teaching*, Grattan Institute, Figure 4.2, p27.

New survey tested what initiatives would attract to teaching

- As part of Grattan Institute’s survey of young high achievers, we conducted a conjoint analysis (a survey technique commonly used in market research to understand how people trade-off different benefits against each other). The results of their choices were analysed to find which qualities were most likely to entice high achievers

Relative importance of various options to attract high achievers



Notes: Results from Grattan Institute survey of high-achieving young Australians.

Source: Goss, Sonnemann and Nolan (2019), Attracting high achievers to teaching, Grattan Institute, Figure B.2, p47

Relative importance

We propose a package of three reforms

- Policies to make teaching more attractive should attract high achievers, make good use of them, and be cost-effective. Reforms with additional benefits for all teachers should be given extra weight. Using this framework, we recommend a three-part package of reforms, seen in the table below.

Components of the package	Attract high achievers	Make good use of high achievers	Lift the productivity of all teachers	Annual cost for government schools
1. Scholarship of \$10,000 a year for high achievers	✓✓✓✓	X	X	\$350 m
2. New roles for:				
- Instructional Specialists (paid \$40,000 more than the highest standard pay for teachers); and	✓✓✓	✓✓✓	✓✓✓	\$1.22 b
- Master Teachers (paid \$80,000 more than the highest standard pay for teachers)				
3. Marketing campaign	✓	X	X	\$20 m
Overall package	✓✓✓✓✓	✓✓✓	✓✓✓	\$1.57 b

Note: Costs refer to implementing reforms in all Australian government schools and shown in \$2019 dollars. Flow-on implications for Principal and Associate Principal salaries might increase the cost of the package by ~\$250 m per year

Source: Goss, Sonnemann and Nolan (2019), Attracting high achievers to teaching, Grattan Institute, Table 4.1, p24

Policy recommendations

Our report makes the following policy recommendations to attract more high achievers to teaching

1. Education Council should set a national goal to double the proportion of high achievers who choose teaching within 10 years
2. Governments should implement an integrated reform package – with three components – for government schools:
 - **Component 1:** \$10,000 per year cash-in-hand scholarships to high-potential students (ATAR above 80 or comparable undergraduate academic achievement, plus strong non-academic capabilities) who agree to teach in a government school upon completing their degree.
 - **Component 2:** Create two new roles that together form an expert teacher career pathway with higher pay and greater responsibility (as per *Top Teachers* report)
 - **Component 3:** Run a marketing campaign to explain the reforms and re-position teaching as a challenging and rewarding career.

Policy recommendation: new teaching scholarships

Component 1: Offer \$10,000 teaching scholarships to high achievers

- Scholarships would attract many more high achievers to teaching. In our survey, high achievers value \$10,000 cash-in-hand scholarships almost as much as the suggested \$80,000 pay rise to top end teacher salaries.
- Every student who receives an ATAR of 80 or above – or a similar achievement level at university for post-graduate students – should be eligible to apply for a \$10,000 per year cash-in-hand scholarship if they choose to study teaching.
- We estimate that our scholarship proposal would attract about 16,000 high-achieving students each year, increasing the number of high achievers who select teaching by 70 per cent.
- Scholarships would be available for study in both undergraduate and post-graduate teacher education courses. They should not be awarded on academic results alone. People who receive government-funded scholarships would have to agree to work as a teacher in a government school for a set number of years
- Other countries have successfully tried this reform. Scholarships for high achievers have increased in value in the UK. For every £1,000 increase in the total value of a scholarship, there has been a 2.9 per cent increase in applications (p25). Singapore offers financial support and incentives (including a paid stipend while studying) to trainee teachers to encourage people into teaching.
- Across the country, governments should fund about 10,000 scholarships each year, in line with government schools' share of the teacher workforce. This would cost about \$350 million per year.

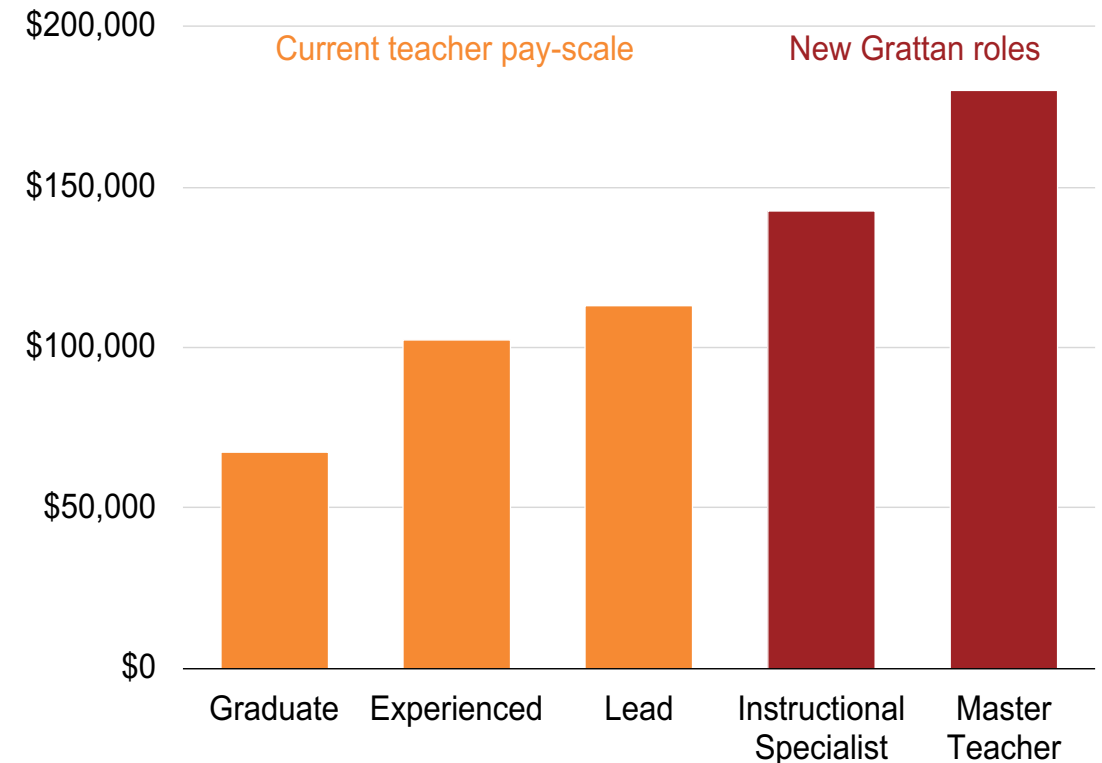
Policy recommendation: changes to teacher salaries

Component 2: Establish an expert teacher career path with new roles at higher rates of pay

- High achievers want better pay as well as more challenging career paths. Creating an expert teacher career path for the best teachers would achieve both objectives: it would enable top teachers to take on significant new responsibilities, at higher rates of pay.
- We suggest two new roles, open to all teachers who can demonstrate the required standard of expertise.
 - **Instructional Specialists** would work to improve teaching within their school. They should be paid \$40,000 more than the highest standard pay rate for classroom teachers.
 - **Master teachers** would work across schools. They should be paid \$80,000 more than the highest standard pay rate for teachers (p25).
- This reform should be phased in over a decade to ensure the right selection, training, and support processes are in place. For more information on the two new roles, see our *Top Teachers (2020)* report.

Our package would steepen the pay scale for the best teachers

Average yearly salary

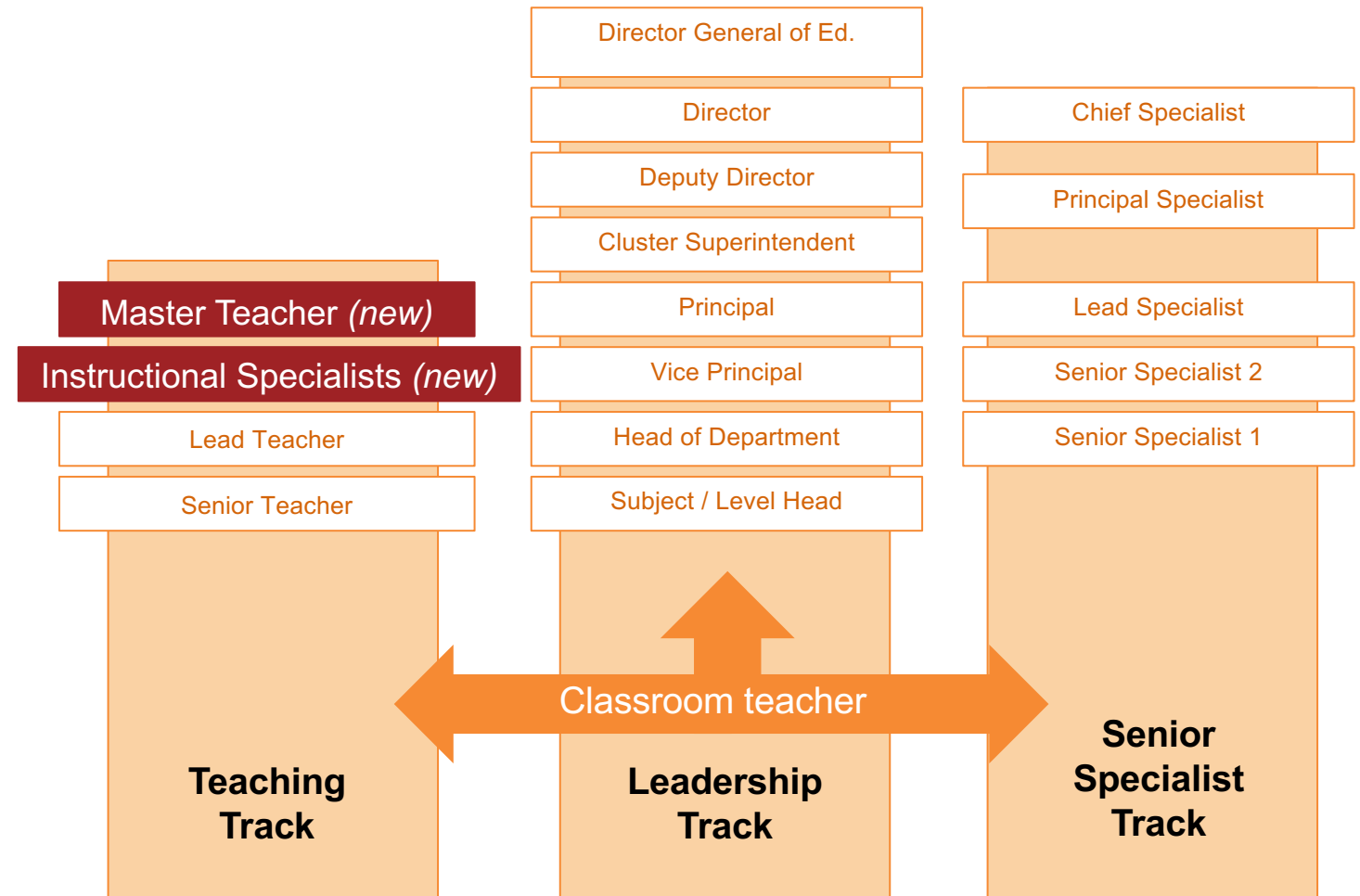


Source: Goss, Sonnemann and Nolan (2019), *Attracting high achievers to teaching*, Grattan Institute, Figure 4.6, p30

Better career opportunities and development support

- High achievers want intellectually challenging career paths, but that doesn't necessarily mean moving into traditional school management. Respondents to our survey were nearly twice as attracted to the potential to become an 'expert teacher' than the idea of being a school principal (p31).
- We suggest two new roles for those with deep expertise in teaching, Master Teachers and Instructional Specialists, where they become responsible for helping other teachers improve.
- A big focus of the new roles would focus on supporting beginning teachers, a reform that high achievers are especially interested in (p32).

Based on Singapore's model



Source: Goss, Sonnemann and Nolan (2019), *Attracting high achievers to teaching*, Grattan Institute, p31,32

Source: Jensen et al (2012), *Catching Up*, Grattan Institute Report

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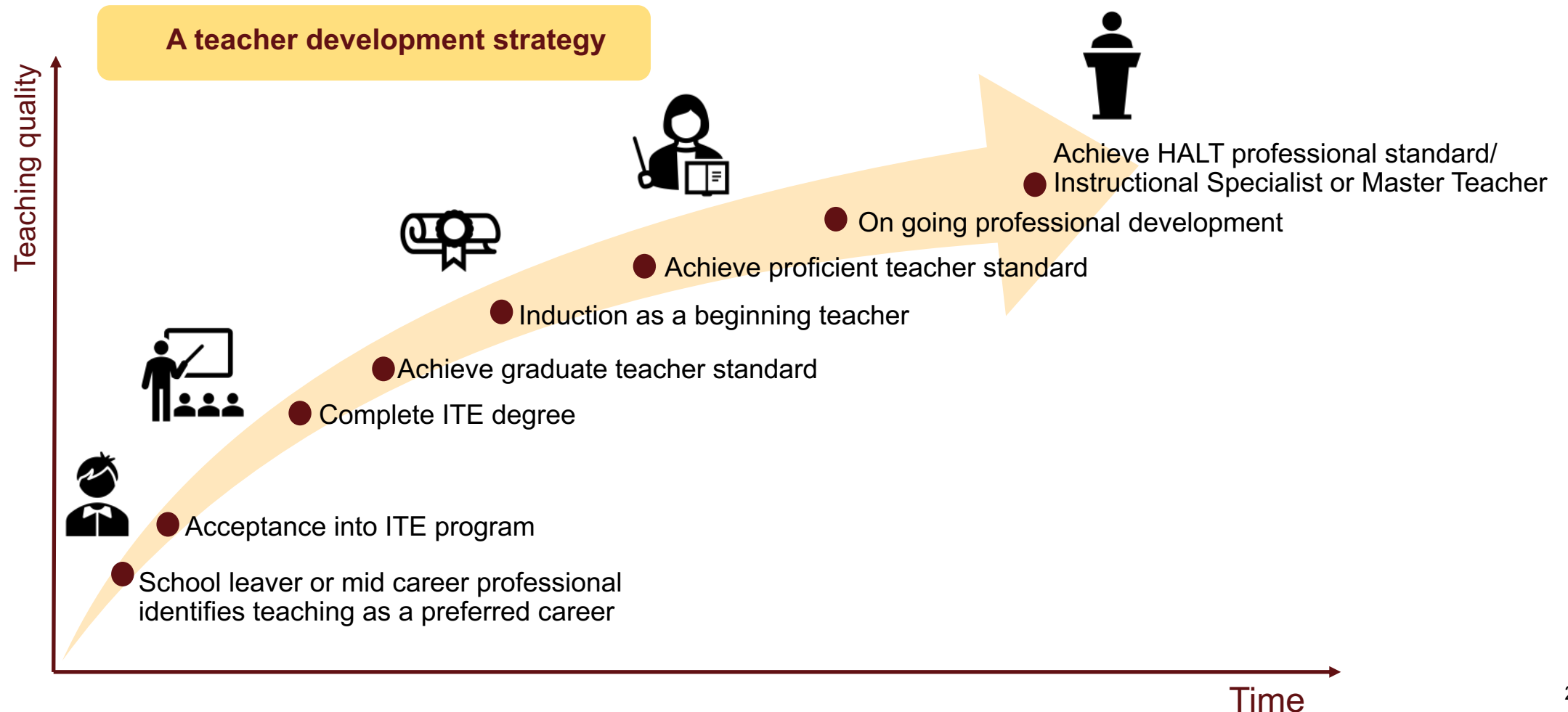
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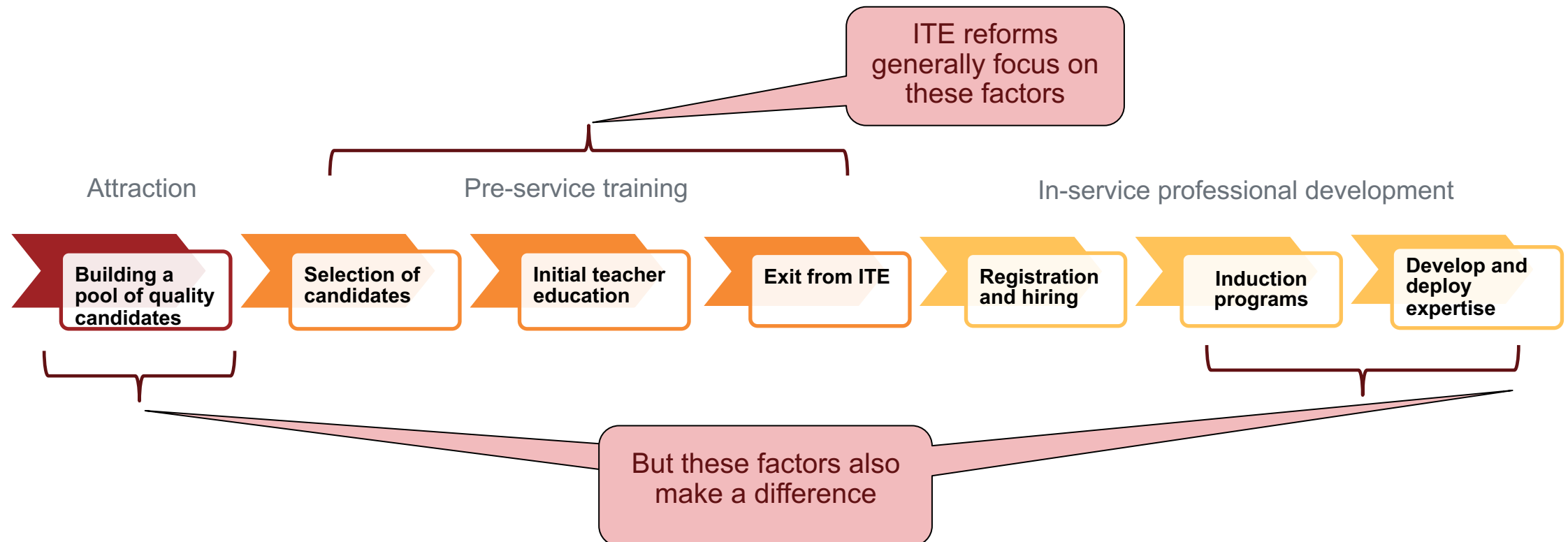
ITE reforms should link to a broader quality workforce development strategy

- ITE reforms are likely to be most effective in raising teaching quality if they are part of a broader workforce development strategy that develops expertise and deploys it more strategically across the education sector.



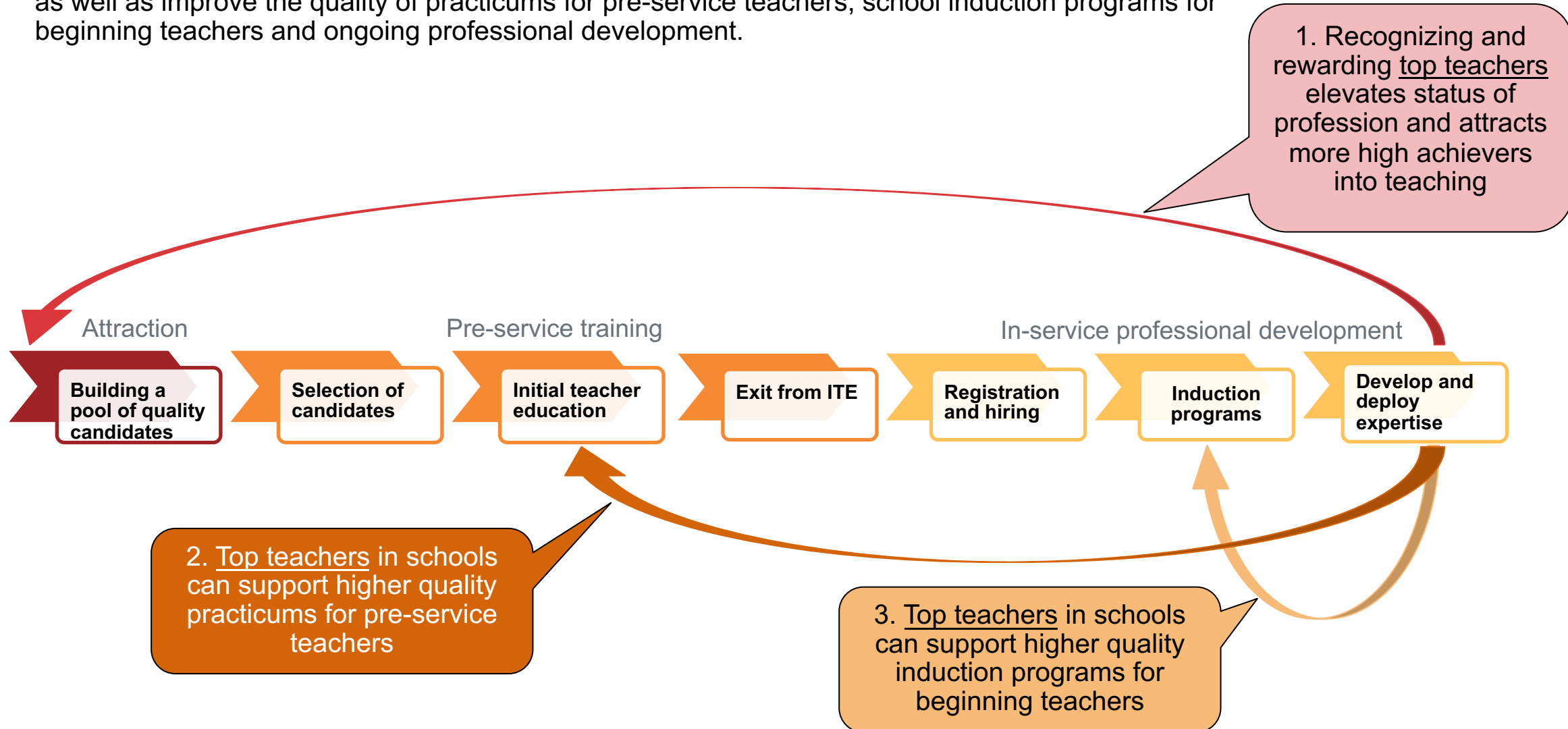
ITE reforms should link to a broader quality workforce development strategy

- Raising the quality of new entrants to the teaching profession requires not only improvements to the quality of initial teacher education programs but also the pool of initial teacher education candidates, as well as school induction programs and ongoing professional development opportunities.



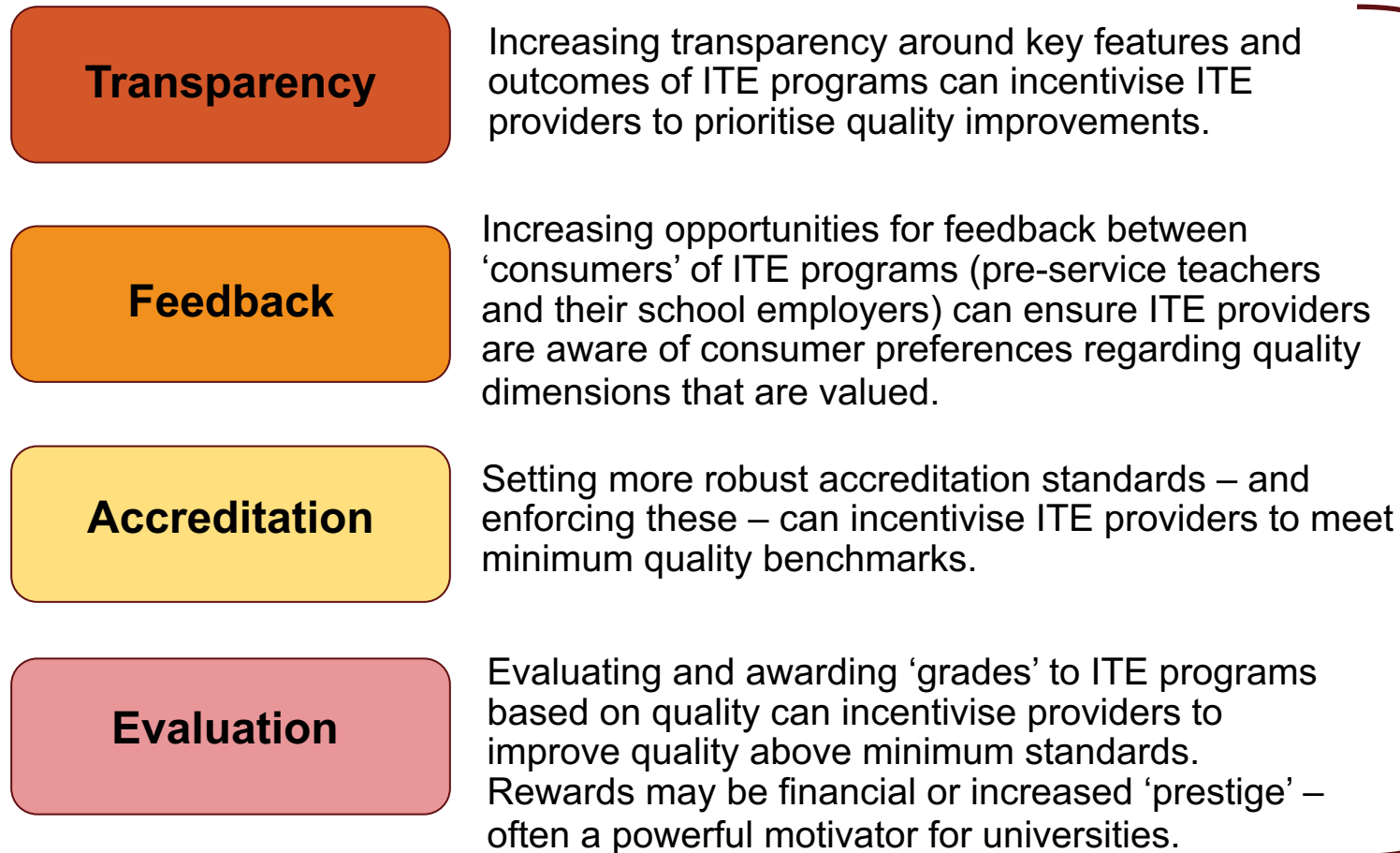
ITE reforms should link to a broader quality workforce development strategy

- For example, recognizing and rewarding expertise and deploying top teachers strategically to work with others in the profession can motivate high achievers to consider teaching as an attractive career option as well as improve the quality of practicums for pre-service teachers, school induction programs for beginning teachers and ongoing professional development.



Use incentives effectively to raise the quality of ITE

- Governments can harness incentives to encourage ITE providers to raise the quality of their offerings.
- This can be done by enhancing the transparency around ITE course features and outcomes and creating more opportunities for teachers and their employers to provide feedback to ITE providers.
- Well designed and enforced ITE accreditation and evaluation processes can also strengthen incentives for providers to raise quality over time.



Use incentives effectively to raise the quality of ITE

Transparency

Increasing transparency around key features and outcomes of ITE programs can incentivise ITE providers to prioritise these outcomes.

- e.g., reporting graduate employment outcomes, pass rates on registration assessments

Feedback

Increasing opportunities for feedback between 'consumers' of ITE programs (prospective ITE students, teachers and their school employers) can ensure ITE providers are aware of consumer preferences regarding valued quality dimensions.

- e.g., formalising feedback channels between education departments and ITE providers

International example: Transparency around graduate outcomes via rigorous teacher registration assessments

- The rigorous and independent assessment of ITE program graduates prior to their registration as beginning teachers can sharpen incentives for ITE providers to raise the quality of their programs, provided their graduates' performance is reported transparently.
- Differential hiring practices that favour graduate teachers who perform more strongly on registration assessments can also sharpen demand for higher quality ITE programs.
- For example:
 - in Japan, ITE graduate teachers sit an employment exam before they are hired (Roberts-Hull et al, 2015).
 - in South Korea, ITE graduate teachers must also pass a rigorous examination process prior to becoming a teacher in a public school.
 - these requirements incentivise ITE providers to cover the content and skills emphasized in these examinations.

International example: Feedback between employers of teachers and ITE providers

- Strong feedback channels between the Singapore Ministry of Education (who employs teachers) and the National Institute of Education (the ITE program provider) support close alignment on outcomes of ITE programs.

Use incentives effectively to raise the quality of ITE

Accreditation

Setting more robust accreditation standards and enforcing these can incentivise ITE providers to meet minimum quality benchmarks.

- e.g., strengthening content requirements in ITE courses; demonstrating preparedness to refuse accreditation for poor quality courses

Evaluation

Evaluating and 'grading' ITE program quality can incentivise providers to improve quality above minimum standards. Rewards may be financial or based on prestige.

- e.g., awarding top grades to exemplary ITE programs, to boost prestige and/or financial rewards

International example: Korea's enhanced evaluation process

- Reforms in Korea in 2010 strengthened the evaluation of ITE programs and added consequences to evaluation outcomes to sharpen incentives to improve quality.
- All Korean ITE providers are now evaluated based on criteria that focuses on:
 - program management (including teaching staff, facilities and practicums)
 - the teaching program (including curriculum, specialisations and school connections)
 - program outcomes (including graduate readiness for teaching, student satisfaction, drop out rates, rigor of graduation criteria, employment outcomes).
- The evaluation process results in each ITE provider receiving a grade, from 'A' – 'D'. These grades are public and publicised in the media.
- In 2010, only eight ITE providers received an 'A' grade.
 - A significant financial reward also accompanies this grade.
 - Providers with an 'A' grade were also invited to contribute to a model ITE curriculum.
- ITE providers graded 'B' received no financial reward.
- ITE providers graded 'C' or 'D' were given an opportunity to improve the quality of their courses or face a reduced enrollment cap.