

CONFIDENTIAL

NSW Department of Education

Exec Priority Boost Supply of High Quality Teachers

June 2020



CONFIDENTIAL

I NSW Department of Education

Executive summary – Boosting supply of high quality teachers

This priority focuses on how we can actively manage teacher supply and demand levers to strengthen teacher supply, using robust workforce forecasting to focus our efforts and investment.

Purpose of today's presentation is to share some of the current insights around this priority, and to highlight the importance of this work to our strategic agenda.

- We cannot improve student outcomes without having a sufficient supply of high quality teachers available where and when they are needed.
- If we don't address supply gaps now, we will run out of teachers in the next 5 years. NSW public schools have a high proportion of out-of-field teachers, which impacts student outcomes

It isn't an easy problem to fix, and the current context is complex.

- This is a nationwide issue. It's an industrially sensitive context. We need to balance supply and quality initiatives. We are fiscally constrained, and economic uncertainty presents challenges in anticipating potential impact on demand (but may also highlight opportunities). Our systems and workforce arrangements are complex.
- External influences have made recommendations addressing teacher supply, and the NSWTF review of teacher workloads is likely to have recommendations that impact demand (staffing entitlement changes). Our internal policy settings, e.g. Raising the Bar, also impact our supply.

We have started identifying and developing strategies to address supply, but there is more to be done.

- A range of initiatives were identified as part of a rapid teacher supply strategy to address supply in the next 2-3 years and implementation planning is underway. Work on a long term teacher supply strategy is commencing, to address supply over the next decade. This will likely require investment, and will be presented to DaPCO later in the year.

We are seeking the support of the Executive in delivering this priority, including - at this point - investment in a mid career pilot, investment in an immediate teacher recruitment campaign, and commitment to a coordinated industrial approach.

- We will be reporting back to the Executive on our progress over the next three months, specifically addressing our rapid strategy implementation, cabinet submission to DaPCO, and long term strategy endorsement.

CONFIDENTIAL

■ NSW Department of Education

This executive priority is a key element of the employment lifecycle for teachers and school leaders

Employment Lifecycle for Teachers and School Leaders



CONFIDENTIAL

| NSW Department of Education

Objectives for this priority – Boosting teacher supply

What this
priority will
help
achieve

Improved learning in schools and classrooms to enhance impact on students

Covering all targets
Academic, equity, independence, and wellbeing



Reduced teacher supply gap

Increase aggregate supply of teachers and specific KLAs

Reduce out of field teaching, particularly in
rural and remote schools

Improve deployment of existing teacher
supply



Actively manage teacher supply and demand levers

Workforce supply
forecast model

Rapid and long
term teacher
supply strategies

Staffing
Methodology
Review

Rural and Remote
Strategy

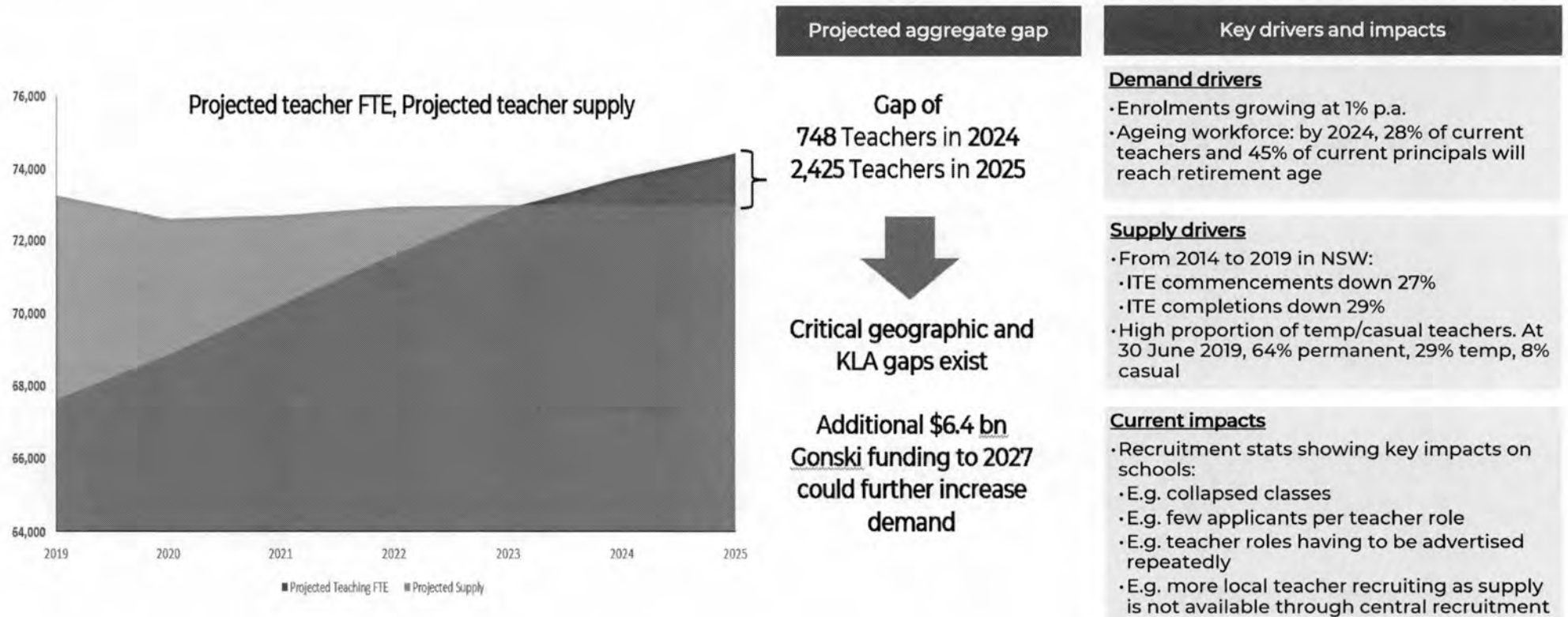
What this
priority will
do

Sensitive: NSW Cabinet

CONFIDENTIAL

■ NSW Department of Education

NSW public schools will run out of teachers in the next 5 years



Sensitive: NSW Cabinet

CONFIDENTIAL

■ NSW Department of Education

NSW public schools have a high proportion of out-of-field teachers, which impacts student outcomes

Out-of-field teachers

Out-of-field teachers account for 15% of total teachers, and:

- 14% of secondary school teachers
- 18% of maths teachers
- 12% of science teachers
- 35% of special education teachers

Maths and Science are impacted more significantly

- The **demand** for maths 7-10 and 11/12 and Science 7-10 exceeds the number of available teachers.
- We are reliant on **out-of-field teachers** to meet the current demand
 - **22% of mathematics 7-10** is taught by an out-of-field teacher (with a further 10% unidentified)
 - **12% of mathematics 11-12** is taught by an out-of-field teacher
 - **16% of science 7-10** is taught by an out-of-field teacher (13% of physics, 5% chemistry, 7% biology is taught by an out-of-field teacher)

High out-of-field teaching is significantly higher in rural and remote locations.

- **Rural SW and North** proportion of out-of-field 7-10 maths is **42% higher than metropolitan schools** (at 27%).
- **Rural SW 7-10 English** out-of-field is **57% higher than metro schools** (at 25%)

Student outcomes

Out of field analysis considers the effect of out of field teaching at a HSC level on the HSC scaled mark attained. The HSC scaled mark converts the raw mark for the subject to a mark out of 50 for each unit of study, adjusting marks to moderate for different marking standards across schools and to account for relative difficulty of subjects.

On average, HSC scores (all courses) are increased by 0.131 - 0.812 when all teachers who taught subjects in the KLA for those courses were accredited in a competency in that KLA.

Within specific KLAs:

- In field teaching is only associated with higher HSC scores for Mathematics Standard 2 and is not statistically significant
- In field teaching in English is not a statistically significant factor in HSC attainment
- In field teaching is associated with higher average HSC scores in Science, with the exception of biology
- On average, HSC scores (Technology courses) are increased by 1.575 - 3.732 when all teachers who taught subjects in the Technology KLA were accredited in a competency in that KLA. This effect is significant.

Sensitive: NSW Cabinet

CONFIDENTIAL

I NSW Department of Education

It will be difficult to boost supply of high quality teachers

It's a nationwide issue	Increasing teacher supply gaps are being experienced in all other states and territories, as well as by the non-government sector. While this presents opportunities for inter-jurisdictional collaboration, this also create increased competition for available teachers
It's a balancing act	At a minimum, we will need to maintain current quality standards while addressing teacher supply gaps. There will be a constant need to balance the supply and quality initiatives to understand how they may impact each other.
It's an industrially sensitive context	The NSWTF inquiry into teacher work pressures will likely make recommendations with implications on teacher supply and demand
We are fiscally constrained	Boosting supply will require investment. Our current funding arrangements are not sufficiently flexible to address this, and there is ongoing uncertainty around the federal and NSW budget processes for 2020-21
It's a complex system to manage	We operate within complex employment arrangements and a highly mobile workforce, which create challenges in managing existing supply. Historically, undersupply of teachers has not been an issue and is not something we are in the practice of actively managing to the level that will be required to meet our future needs. It will be a challenge to take on more active stewardship of this system.

Sensitive: NSW Cabinet

CONFIDENTIAL

I NSW Department of Education

There are a number of commitments and opportunities in this space that will shape our response

External policy influences

- **NSW Government response to inquiry into outcomes-based funding in NSW schools** includes supply related recommendations including a draft commitment to develop a fast-track mid-career pilot by end 2020
- **Productivity Commission Green Paper** addresses supply through a draft recommendation to design and implement accelerated pathways into teaching
- **National Teacher Workforce Strategy** draft focuses on building the evidence base around supply, with states and territories to implement complementary action to address workforce gaps

DoE Policy settings

- **Raising the Bar** drives a need to strengthen the teacher pipeline to support higher entry requirements
- **Staffing Methodology Review** may impact the level of demand in the future if there are changes to staffing entitlements
- **Rural and Remote Strategy** will identify a range of supply related activities focused on rural and remote schools, as well as a review of incentives

Current context

- **Economic uncertainty** increases the perceived value of working in the public sector with greater stability of employment, and provides an opportunity to emphasize this in developing our Employee Value Proposition (EVP)
- **COVID-19** has given teaching a high profile as an essential service, and stable employment in a period of crisis which could be leveraged in establishing our EVP
- **National Cabinet** will focus on a national agenda of job creation, and an increasing number of available teaching roles in the future may provide an opportunity to align with this agenda

Sensitive: NSW Cabinet

CONFIDENTIAL

I NSW Department of Education

We are already identifying and developing initiatives to address short, medium and long term supply needs



These initiatives and activities will have multiple industrial touchpoints and intersection with other executive priorities eg teacher and principal performance. It will be critical to have a coordinated industrial approach.

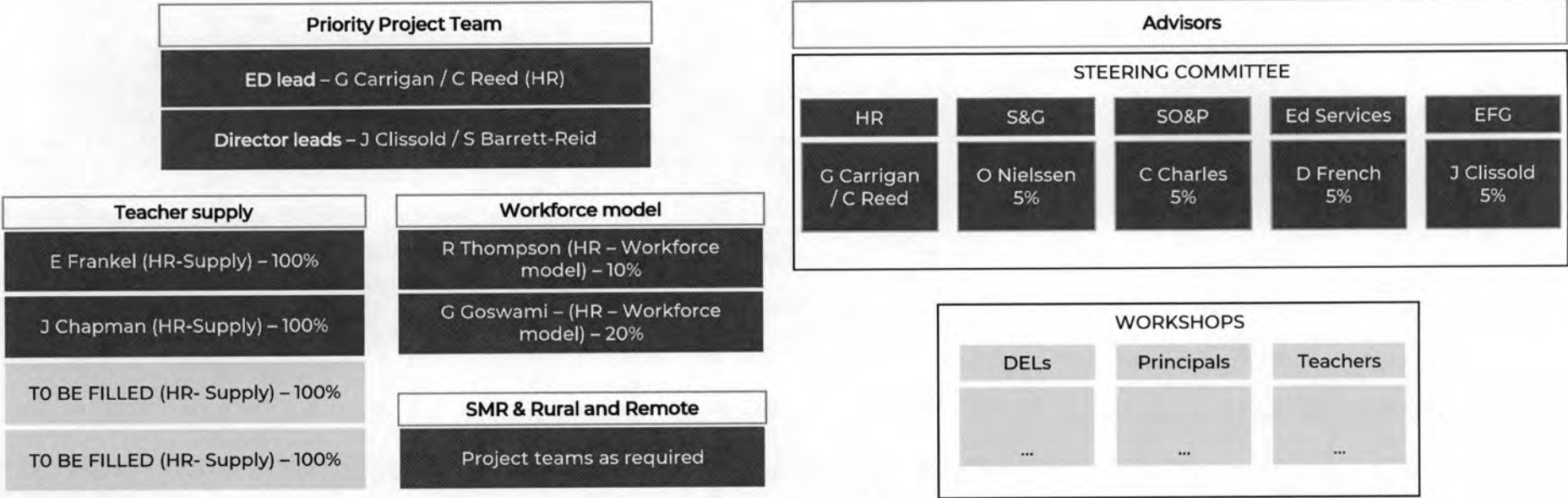
Sensitive: NSW Cabinet

CONFIDENTIAL

Filled Being Filled Needs Approval

NSW Department of Education

Our team is drawn from across the Department to integrate with related initiatives



These resources will need to be revised once we begin implementation

CONFIDENTIAL

| NSW Department of Education

Asks for Exec and next steps

FOR DISCUSSION

ASKS

1. \$4m for a fast-track mid-career entry pilot - a 1 year postgrad teaching qualification for 50 early-mid career professionals, with a focus on areas of need (eg Rural and Remote locations), to address the government commitment to explore fast track options for mid career entry into teaching..

2. Endorse a rapid teacher recruitment campaign Leverage existing channels, resources and materials to support immediate deployment, targeting rural and remote teaching

3. Initiate a coordinated Industrial Relations approach

That ensures we balance points of agreement and disagreement with the NSWTF across this priority and other pieces of work (e.g., Teacher and Principal performance, LSLD).

NEXT STEPS

July

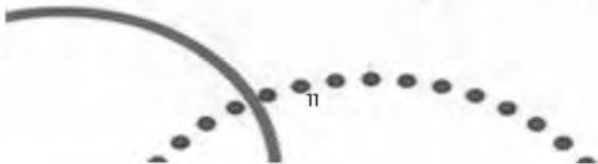
Rapid supply strategy – endorse implementation plans and any additional resource requirements

August

DaPCO – agree positioning of DaPCO submission on long term teacher supply in the context of DoE priorities

September

Long term teacher supply strategy – endorse final report, targets and business case for long term teacher supply initiatives



Sensitive: NSW Cabinet

CONFIDENTIAL

NSW Department of Education

Appendix

Workforce model data

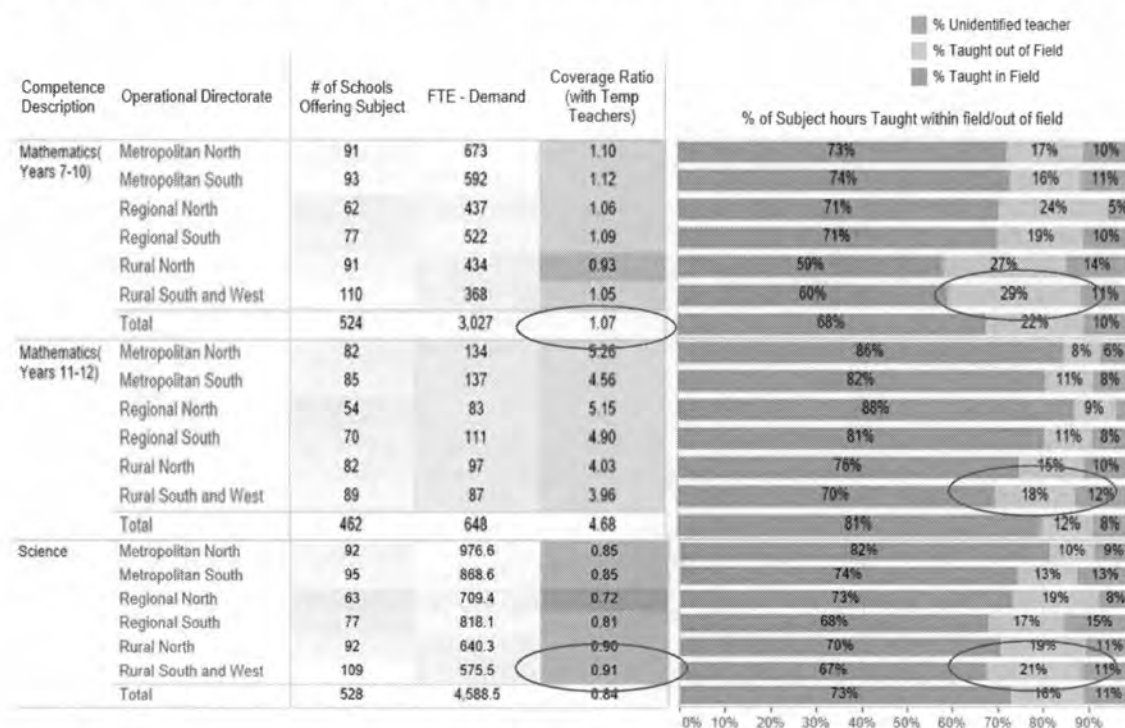


CONFIDENTIAL

| NSW Department of Education

NSW public schools have a high proportion of out-of-field teachers

At the KLA level, both maths and science have limited coverage (with ratios of 0.9 in maths and 0.8 in science). This leads to high out-of-field teaching (22% in maths and 16% in science, with a further 10% - 11% unknown)



Students being taught Out-of-field*

- 109,000 secondary students
- 15,000 maths students
- 11,500 science students
- 8,000 HSIE students

*N.B numbers are estimates

Out-of-field teachers

- 15% of total teachers
- 14% of secondary school teachers
- 18% of maths teachers
- 12% of science teachers
- 35% of special education teachers

Maths and Science impact

- The **demand** for math 7-10 and 11/12 and Science 7-10 exceeds the number of available teachers.
- We are reliant on **out of field teachers** to meet the current demand (albeit out of field is lower than might have been expected)
 - 22% of mathematics 7-10 is taught by an out-of-field teacher (with a further 10% unidentified)
 - 12% of mathematics 11-12 is taught by an out-of-field teacher
 - 16% of science 7-10 is taught by an out-of-field teacher (13% of physics, 5% chemistry, 7% biology is taught by an out-of-field teacher)

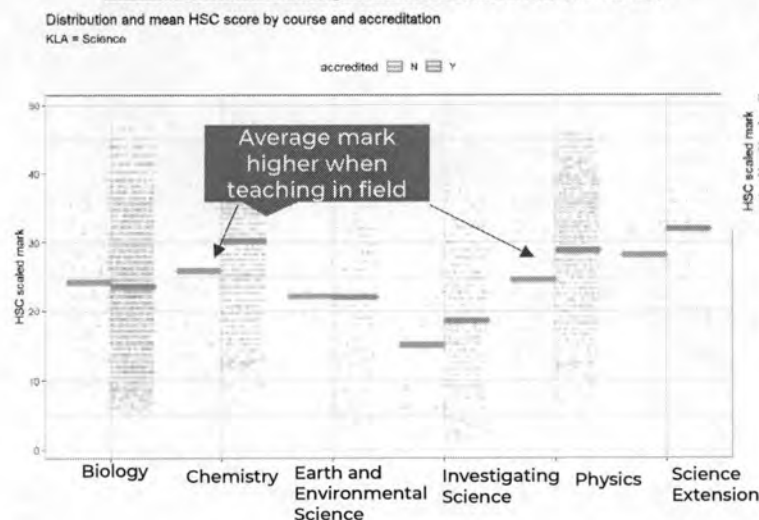
CONFIDENTIAL

■ NSW Department of Education

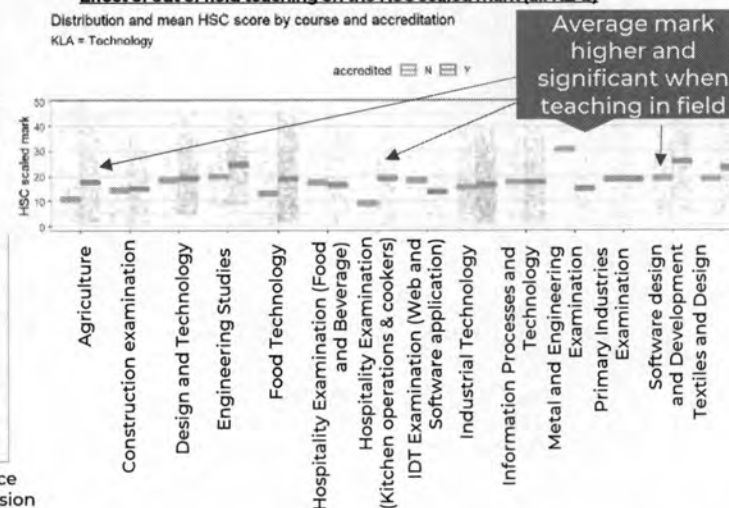
Teaching out-of-field impacts student outcomes

On average, HSC scores (all courses) are increased when all teachers who taught subjects were accredited in a competency in that KLA

Effect of out of field teaching on the HSC scaled mark (Science only)



Effect of out of field teaching on the HSC scaled mark (all KLAs)



On average, HSC scores (all courses) are increased by 0.131 - 0.812 when all teachers who taught subjects in the KLA for those courses were accredited in a competency in that KLA.

Within specific KLAs:

- In field teaching is only associated with higher HSC scores for Mathematics Standard 2 but this relationship is not statistically significant
- In field teaching in English is not a statistically significant factor in HSC attainment
- In field teaching is associated with **higher average HSC scores in Science**, with the exception of biology
- On average, HSC scores (Technology courses) are increased by 1.575 - 3.732 when all teachers who taught subjects in the Technology KLA were accredited in a competency in that KLA. This effect is significant.

CONFIDENTIAL

NSW Department of Education

Appendix







Teacher supply strategies



CONFIDENTIAL

| NSW Department of Education

Rapid Teacher Supply strategy has identified a range of initiatives

Immediate impact	 Engage and employ preservice teachers earlier <ul style="list-style-type: none"> 1.1 Strengthen proactive relationship with ITE providers; develop consistent approach to engagement with DoE 1.2 Develop a targeted practicum strategy to provide visibility, ensure consistent experience for preservice teachers, and increase coverage of KLAs 1.3 Bring offer of permanent employment earlier to selected preservice teachers e.g. at the beginning of their final year of study 1.4 Establish a dedicated HR consultant to deliver personalised employment support to preservice teachers; pilot with 1.2 and over time could increase to other cohorts 	 Improve retention of teachers at critical points <ul style="list-style-type: none"> 2.1 Undertake casual teaching myth busting initiative to improve awareness of the process for casual staff seeking employment 2.2 Create a network of casual pools; providing schools with resource stability and better opportunities for teachers (longer term role, improved professional learning) 2.3 Develop advice to hiring managers and retiring teachers to streamline transition to retirement. To include: releasing permanency earlier, opportunities for casual work, and understand impact of accreditation requirements in 2022
	 Attract more teachers through a compelling EVP <ul style="list-style-type: none"> 3.1 Define Employee Value Proposition for all NSW teachers; embed in all attraction, recruitment and on boarding processes, amending as required 3.2 Differentiate Employee Value Proposition for specific cohorts: preservice, casual, rural and remote, Special Education and STEM teachers, and amend practices 	 Improve workforce insights to deploy teachers to priority areas <ul style="list-style-type: none"> 4.1 Develop options for priority vacancy recruitment and targeted deployment for hard to fill locations and roles; align with SMR work on appointment process
Medium term	 Introduce alternative employment models and pathways <ul style="list-style-type: none"> 5.1 Develop and test a mid-career pilot to engage career changers and establish a new supply pipeline (working with SA and ACT) 5.2 Establish employment based pathways to engage individuals in teaching / paraprofessional roles whilst they are still studying (include review of scholarships & fast track approaches) 	 Implement policy and process changes to release more permanent positions <ul style="list-style-type: none"> 6.1 Strengthen strategic management of LWOP; review guidelines and policy application 6.2 Work with Ed Services on review of NSBT role descriptions to ensure fit for purpose in context of limited teacher supply for specific KLAs
	<ul style="list-style-type: none"> 5.3 Develop targeted recruitment strategies for international teachers, interstate teachers and qualified teachers not currently employed as a teacher 5.4 Strengthen current retraining programs and deliver accelerated 'bootcamps' for existing teachers in high demand subject areas (Maths, Special Education) 	<ul style="list-style-type: none"> 6.3 Provide guidance, communication materials and capability development for Principals to support workforce decision making and application of policy
Longer term		

Sensitive: NSW Cabinet

CONFIDENTIAL

I NSW Department of Education

The MO has committed to a fast-track, mid-career pilot by end 2020

This is an ambitious timeframe, with feasible timing options currently under review

Potential parameters

Features	<ul style="list-style-type: none">• 1 year postgrad qualification• Permanent employment on entry of program• Financial incentives at entry and completion• School-based mentor on entry
Target	<ul style="list-style-type: none">• 50 participants• Early-mid career professionals, or returning to workforce• Maths, science, Special Education• Rural and Remote locations
Impact	<ul style="list-style-type: none">• 50 teachers, which could be scaled in future years• Permanent positions• High demand subjects and/or rural and remote• 3 year bond to a school, 5 years to DoE• Existing relationship with school and mentor

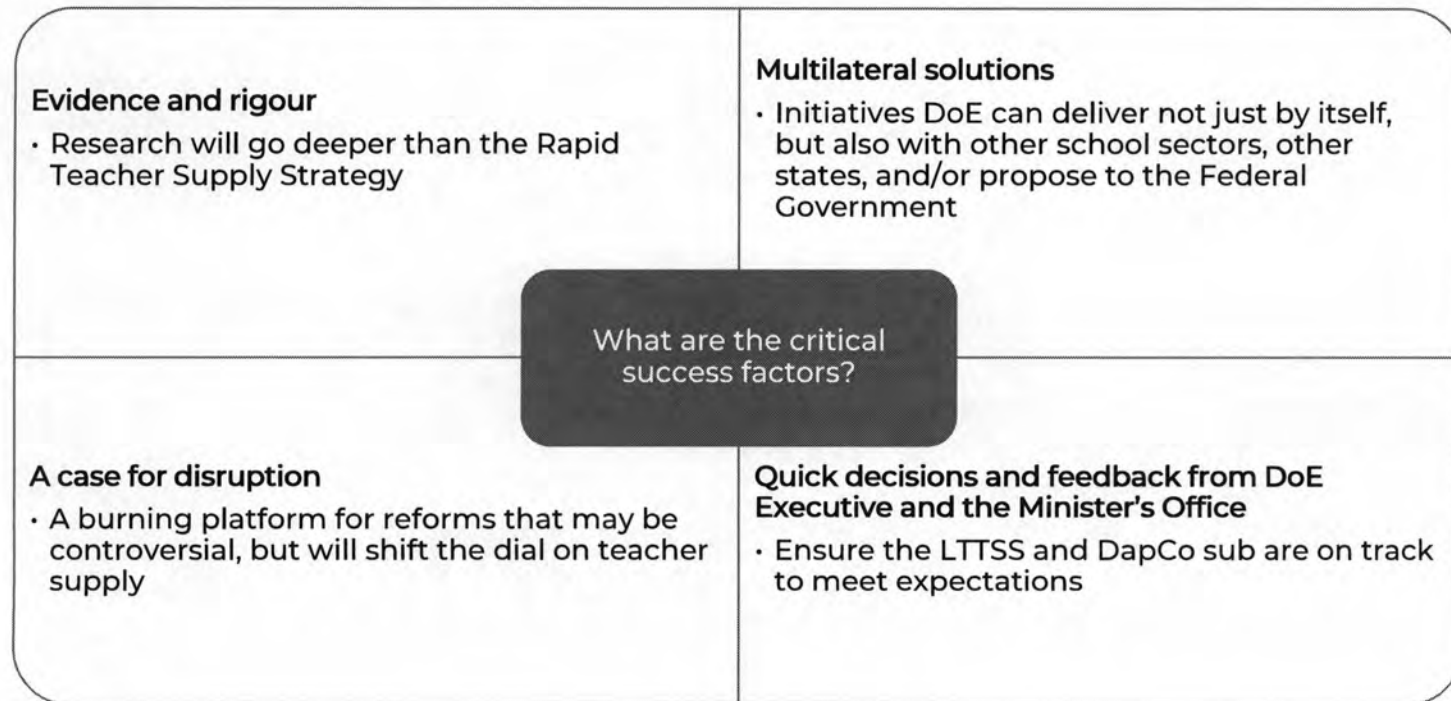
Proposed milestones

- **July 2020** - Secretary holds roundtable with ITE providers to discuss 1 year postgraduate qualification as part of midcareer pilot
 - Secure funding for pilot program
 - Tender process for ITE provider
 - Agree model and provider for mid-career pilot
 - Design detailed model and internal processes
 - Promotion/selection
 - Implement program for students
- 

CONFIDENTIAL

I NSW Department of Education

Longer Term Teacher Supply Strategy is under development and will address targeted and aggregate supply gaps over the next decade



Sensitive: NSW Cabinet

CONFIDENTIAL

I NSW Department of Education

Timing is tight to develop the Longer Term Teacher Supply Strategy and submission to the Cabinet Committee on Delivery and Performance (DapCo)

June	• <u>Kick-off meeting</u> with consultants
July	• <u>Problem statement</u> to LTSS Steer Co, George, MO, and School Improvement Exec • <u>Quantify challenge, barriers and potential initiatives</u> to LTSS Steer Co
August	• <u>Matrix of interventions prioritised over forward years</u> to LTSS Steer Co, George, MO, and School Improvement Exec
September	• <u>Draft LTSS report</u> to LTSS Steer Co • <u>Final LTSS report</u> to LTSS Steer Co, George, School Improvement Exec, and Minister
September/ October	• <u>DapCo sub</u> to LTSS Steer Co, George, MO, and School Improvement Exec
3 November	• <u>DapCo sub and LTSS report</u> due to Minister (hard deadline)
17 December	• Proposed <u>DapCo meeting</u> (previously requested 22 Oct)

Sensitive: NSW Cabinet