Exec Priority Boost Supply of High Quality Teachers

June 2020
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.
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

- Attraction
  - Boost supply of high quality teachers
  - Rapid short term strategy
- Recruitment
- Professional and career development
  - Improve performance management of school leaders and teachers
  - Connect into a cohesive system
- Performance appraisal
  - Long term strategy
  - Strengthen critical elements
  - Ensure consistency
Objectives for this priority – Boosting teacher supply

<table>
<thead>
<tr>
<th>Improved learning in schools and classrooms to enhance impact on students</th>
</tr>
</thead>
</table>
| Covering all targets  
*Academic, equity, independence, and wellbeing* |

What this priority will help achieve

- 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

What this priority will do

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

Projected aggregate gap

Gap of
748 Teachers in 2024
2,425 Teachers in 2025

Critical geographic and
KLA gaps exist

Additional $6.4 bn
Gonski funding to 2027
could further increase
demand

Demand drivers
- Enrolments growing at 1% p.a.
- Ageing workforce: by 2024, 28% of current teachers and 45% of current principals will reach retirement age

Supply drivers
- From 2014 to 2019 in NSW:
  - ITE commencements down 27%
  - ITE completions down 29%
  - High proportion of temp/casual teachers. At 30 June 2019, 64% permanent, 29% temp, 8% casual

Current impacts
- Recruitment stats showing key impacts on schools:
  - E.g. collapsed classes
  - E.g. few applicants per teacher role
  - E.g. teacher roles having to be advertised repeatedly
  - E.g. more local teacher recruiting as supply is not available through central recruitment
NSW public schools have a high proportion of out-of-field teachers, which impacts student outcomes

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.
**It will be difficult to boost supply of high quality teachers**

<table>
<thead>
<tr>
<th>It's a nationwide issue</th>
<th>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</th>
</tr>
</thead>
<tbody>
<tr>
<td>It's a balancing act</td>
<td>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.</td>
</tr>
<tr>
<td>It's an industrially sensitive context</td>
<td>The NSWTF inquiry into teacher work pressures will likely make recommendations with implications on teacher supply and demand</td>
</tr>
<tr>
<td>We are fiscally constrained</td>
<td>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</td>
</tr>
<tr>
<td>It's a complex system to manage</td>
<td>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.</td>
</tr>
</tbody>
</table>
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, an provides an opportunity to emphasis 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
NSW Department of Education

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

<table>
<thead>
<tr>
<th>2020</th>
<th>2021</th>
<th>2022 and beyond</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Targeted teacher recruitment campaign</strong> leveraging existing branding and promotion resources and materials</td>
<td><strong>Employee Value Proposition</strong> developed to target priority supply gaps</td>
<td><strong>Ongoing implementation of teacher supply initiatives</strong></td>
</tr>
<tr>
<td><strong>Mid career pilot</strong> designed, with implementation planning underway for 2021</td>
<td><strong>Mid career pilot implemented</strong></td>
<td><strong>Regular updates to the workforce planning forecast</strong> to measure impact of initiatives and inform investment in future initiatives</td>
</tr>
<tr>
<td><strong>Updated workforce planning model forecast</strong> to support better targeted investment in supply initiatives</td>
<td><strong>Updated workforce planning model forecast</strong> to support better targeted investment in supply initiatives</td>
<td><strong>In flight evaluation of initiatives</strong> to drive process improvement and benefits realisation tracking</td>
</tr>
<tr>
<td><strong>Long term teacher supply strategy</strong> developed and progressed through DaPCO. Any funding/investment requirements identified and impact of proposed initiatives quantified against the workforce model</td>
<td><strong>Long term teacher supply strategy</strong> business case submitted (if required) and implementation planning completed</td>
<td><strong>Rapid supply initiatives</strong> underway and early evaluation of impact established:</td>
</tr>
</tbody>
</table>
| **Priority rapid supply initiatives** underway:  
  - Practicum strategy and engagement with ITE providers  
  - Targeted HR support for pre-service teachers  
  - Network casual pools pilot (hub and spoke)  
  - Review retraining and scholarship programs |  
  - Earlier employment offers for targeted pre-service teachers  
  - Retirement transition (retention approaches)  
  - Priority vacancy and targeted deployment approach established  
  - Strengthened LWOP management  
  - Review of NSBT role  
  - Attraction and engagement strategy for interstate and international teachers  
  - Capability development for Principals around workforce management |

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

### Priority Project Team
- **ED lead** - G Carrigan / C Reed (HR)
- **Director leads** - J Clissold / S Barrett-Reid

### Workforce model
- E Frankel (HR-Supply) - 100%
- J Chapman (HR-Supply) - 100%
- T0 BE FILLED (HR-Supply) - 100%

### Teacher supply
- T0 BE FILLED (HR-Supply) - 100%

### SMR & Rural and Remote
- Project teams as required

### Advisors
- **STEERING COMMITTEE**
  - HR: G Carrigan / C Reed
  - S&G: O Nielsen 5%
  - SQ&P: C Charles 5%
  - Ed Services: D French 5%
  - EFG: J Clissold 5%

### WORKSHOPS
- DELs
- Principals
- Teachers

These resources will need to be revised once we begin implementation

Sensitive: NSW Cabinet
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 (e.g., 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
Appendix

Workforce model data
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)
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.

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 attainement.
- 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.
Appendix

Teacher supply strategies
Rapid Teacher Supply strategy has identified a range of initiatives

<table>
<thead>
<tr>
<th>Immediate Impact</th>
<th>Engage and employ preservice teachers earlier</th>
<th>Improve retention of teachers at critical points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Strengthen proactive relationship with ITE providers; develop consistent approach to engagement with DoE</td>
<td>2.1 Undertake casual teaching myth busting initiative to improve awareness of the process for casual staff seeking employment</td>
</tr>
<tr>
<td>1.2</td>
<td>Develop a targeted practicum strategy to provide visibility, ensure consistent experience for preservice teachers, and increase coverage of KLAs</td>
<td>2.2 Create a network of casual pools; providing schools with resource stability and better opportunities for teachers (longer term role, improved professional learning)</td>
</tr>
<tr>
<td>1.3</td>
<td>Bring offer of permanent employment earlier to selected preservice teachers e.g. at the beginning of their final year of study</td>
<td>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</td>
</tr>
<tr>
<td>1.4</td>
<td>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</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medium term</th>
<th>Attract more teachers through a compelling EVP</th>
<th>Improve workforce insights to deploy teachers to priority areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Define Employee Value Proposition for all NSW teachers: embed in all attraction, recruitment and on boarding processes, amending as required</td>
<td>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</td>
</tr>
<tr>
<td>3.2</td>
<td>Differentiate Employee Value Proposition for specific cohorts: preservice, casual, rural and remote, Special Education and STEM teachers, and amend practices</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Introduce alternative employment models and pathways</th>
<th>Implement policy and process changes to release more permanent positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 Develop and test a mid-career pilot to engage career changers and establish a new supply pipeline (working with SA and ACT)</td>
<td>6.1 Strengthen strategic management of LWOP, review guidelines and policy application</td>
</tr>
<tr>
<td>5.2 Establish employment based pathways to engage individuals in teaching / paraprofessional roles whilst they are still studying (include review of scholarships &amp; fast track approaches)</td>
<td>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</td>
</tr>
<tr>
<td>5.3 Develop targeted recruitment strategies for international teachers, interstate teachers and qualified teachers not currently employed as a teacher</td>
<td>6.3 Provide guidance, communication materials and capability development for Principals to support workforce decision making and application of policy</td>
</tr>
<tr>
<td>5.4 Strengthen current retraining programs and deliver accelerated 'bootcamps' for existing teachers in high demand subject areas (Maths, Special Education)</td>
<td></td>
</tr>
</tbody>
</table>

Sensitive: NSW Cabinet
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**
- 1 year postgrad qualification
- Permanent employment on entry of program
- Financial incentives at entry and completion
- School-based mentor on entry

**Target**
- 50 participants
- Early-mid career professionals, or returning to workforce
- Maths, science, Special Education
- Rural and Remote locations

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

**Evidence and rigour**
- Research will go deeper than the Rapid Teacher Supply Strategy

**Multilateral solutions**
- Initiatives DoE can deliver not just by itself, but also with other school sectors, other states, and/or propose to the Federal Government

**A case for disruption**
- A burning platform for reforms that may be controversial, but will shift the dial on teacher supply

**What are the critical success factors?**
- Quick decisions and feedback from DoE Executive and the Minister's Office
- Ensure the LTSS and DapCo sub are on track to meet expectations

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

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