



***Broad Context regarding the
history and future of public
FET Colleges.***

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Introduction

- Critical period for FET Colleges – moving towards a coherent framework for post-school education and training
- Shift from a FET system to a Post-school system allows for a more comprehensive approach to meeting the needs of post-school youth
 - Embedded within national targets for HRD and skills development
 - More effective base for planning and budget allocation
 - More equitable and stable funding base
 - Additional resources available through skills levy
 - Enhanced articulation possibilities – both into workplace and into HE
 - More effective platform for accountability and improved performance





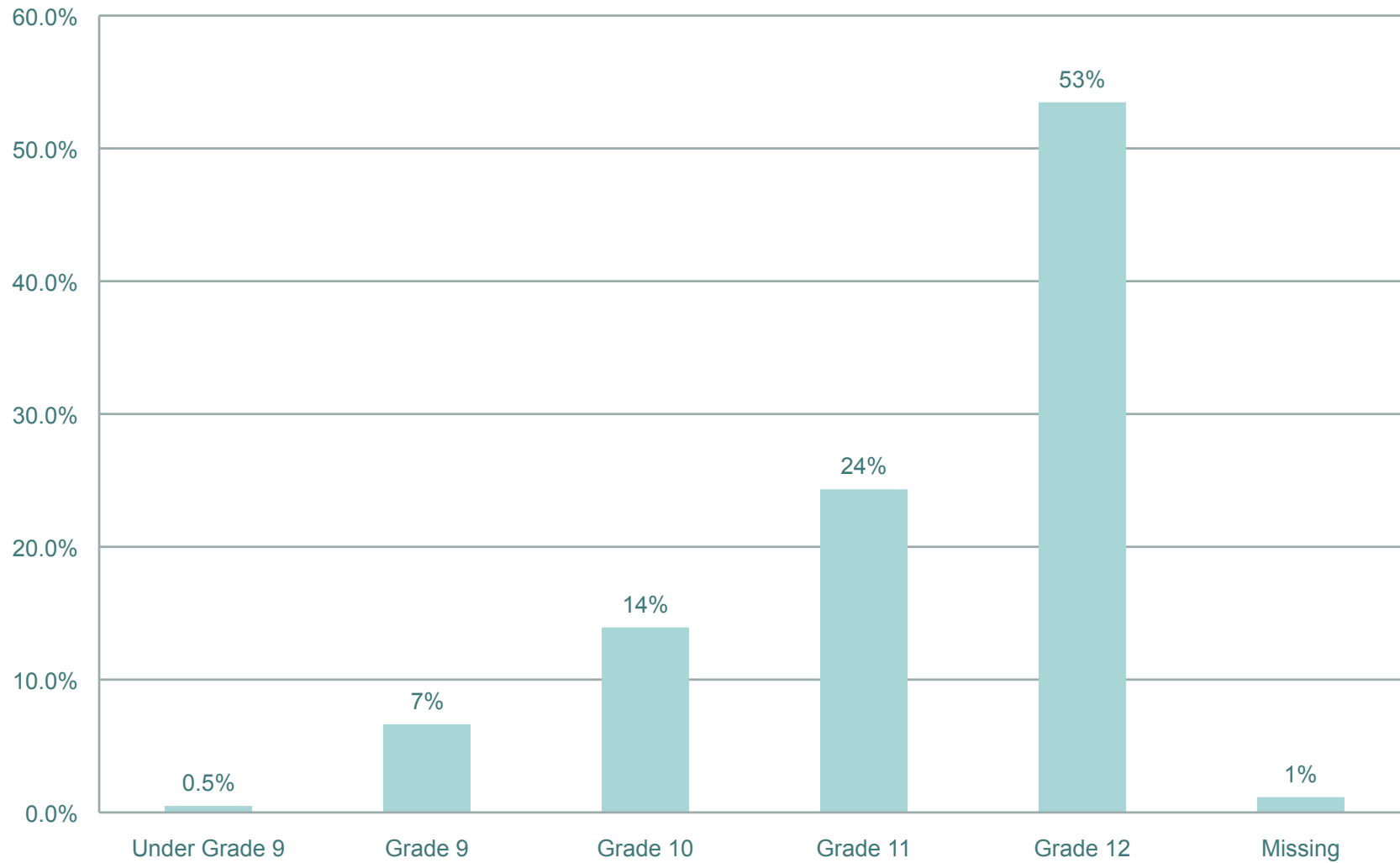
Historical context

- College history strongly associated with apprenticeship system
- Decline of the apprenticeship system created distance between colleges and workplace
- Knowledge curriculum became detached from workplace and had limited application
- Technological changes have driven up knowledge demands from industry and the economy more broadly
- NCV introduction sought to shift college provision to embrace new knowledge demands and increase the contextual relevance of the curriculum
- NCV works off the assumption that the schooling has provided the necessary foundational skills
- Colleges are therefore expected to compensate for the shortcomings created by the schooling system by providing general-vocational preparation in the absence of effective foundational skills. This requires a well-developed understanding of the strengths and weaknesses of the learners and the necessary pedagogic and classroom management skills to address learner needs.

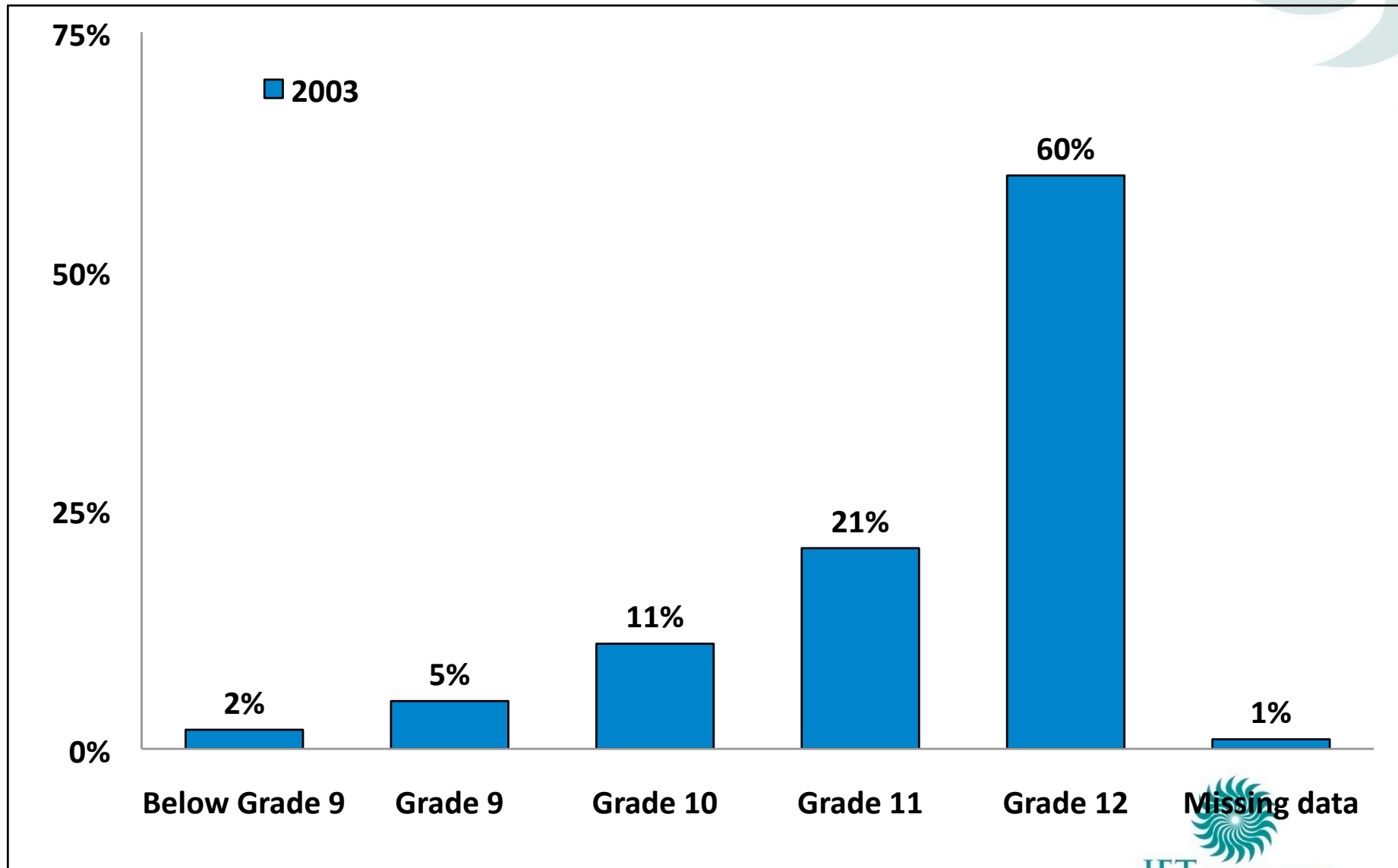
Profile of College Learners



**Highest School Qualification of NCV Students
2010 Respondents (N=18,131)**



Profile of College Learners (2003)



Context for South African School Leavers



- 1-million young people exit the schooling system annually, 65% of which have not achieved a Grade 12 certificate.
 - The largest fall out (50% or 500,000) from the schooling system is post Grade 11 – either because they do not enrol in Grade 12 or they fail Grade 12.
 - With only 10% of matriculants quality for higher education, there is a total of 900,000 pre-matrics and post-matrics that must be catered for by the non-HE sector
 - 115,000 new enrolments in general-vocational programmes in FET Colleges in 2011, more than half of which have a Grade 12 certificate
 - Target of 21,000 enrolments in artisan training (these would be included in the new enrolment figures above)
 - Limited growth in college enrolments and poor throughput
 - Access to post-school education and training has also been limited for many (around 75%) of these school leavers
 - Insufficient jobs being created for new labour market entrants
- This context is reflected in 2.8million 18-24 year old youth that are Not in Employment, Education or Training (NEETs).



Dual Mission

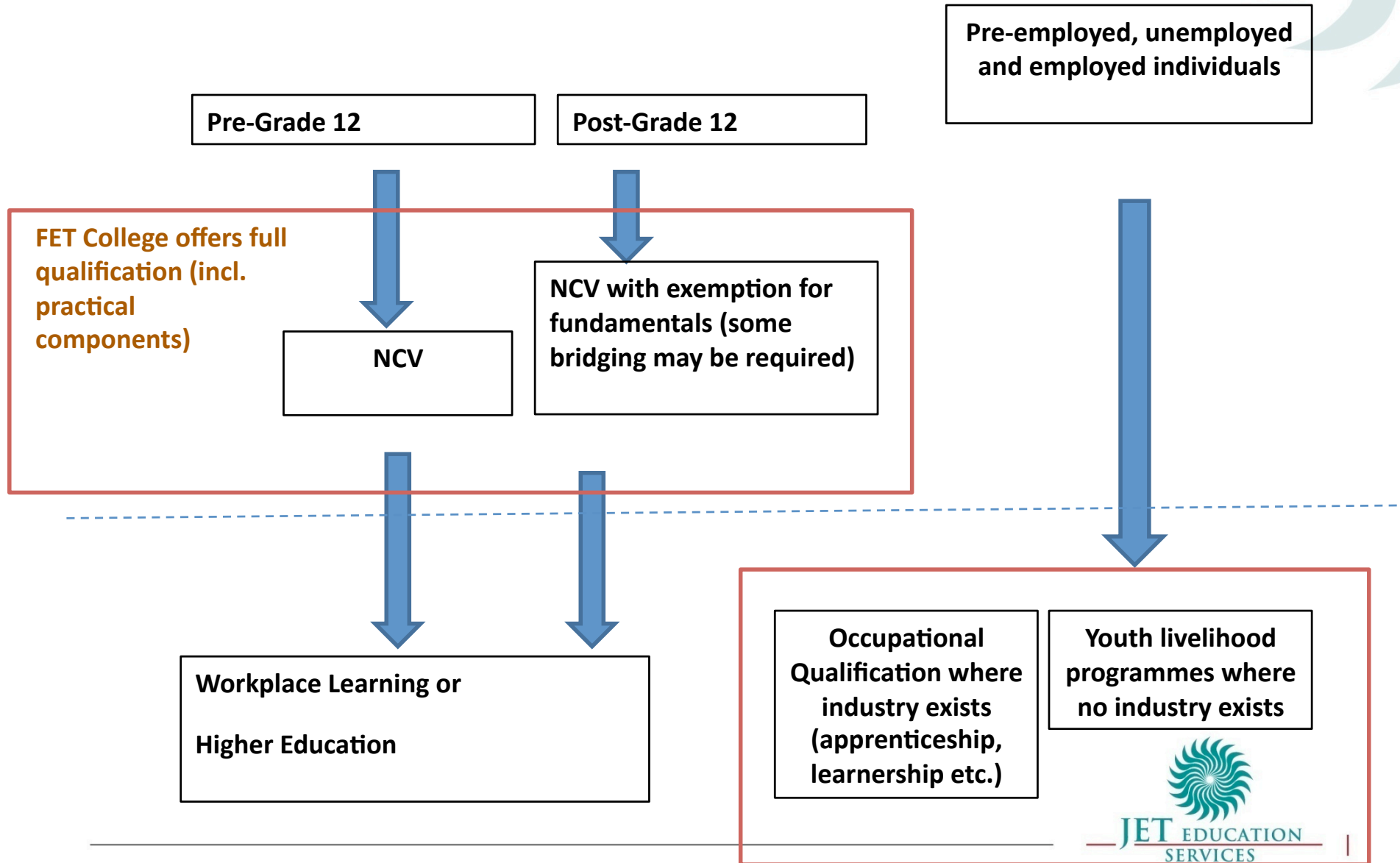


- Primarily, colleges offer post-school youth with a strong theoretical foundation in disciplinary knowledge which equips them to enter into higher education, to access academic qualification, or the workplace to be further trained towards specialised occupations, including through apprenticeships.
- In addition, however, colleges can offer school leavers, as well as employed and unemployed people the theoretical components of an occupational qualification that leads to a formally recognised trade or occupation.

These dual purposes form the basis an understanding of the role of FET Colleges and its relationship to other subsystems in the post-school environment.

The trade-off – meeting the broad knowledge demands of the economy for economic growth while also training narrow skills. What is the balance and what is the scale of the demand?

Coherent Model



Status

- Slight shift to lower age range in NCV but post-Grade 12's still dominate
- Throughput rates for NCV are showing improvement, evidence of a widening gap between strong and weak colleges but N programmes still particularly weak
- Lecturing staff qualifications and industry experience variable
 - Large number of young, relatively inexperienced lecturers without pedagogic competence or industry experience
 - Limited monitoring of classroom practices or support to under-performing lecturers
- Linkages to industry insufficient for creating meaningful access – impacts on employability.
 - Graduates who have had access to work experience during their studies had 82% more chance of finding employment that was related to what they studied.
 - Of the four primary routes to finding employment (employment agencies, newspaper agencies, personal contacts and family relations) only employment agencies and college links to industry are able to achieve the necessary match to appropriate employment and this is limited at present
 - Some commitment from industry but lack of enabling framework – need to strengthen this

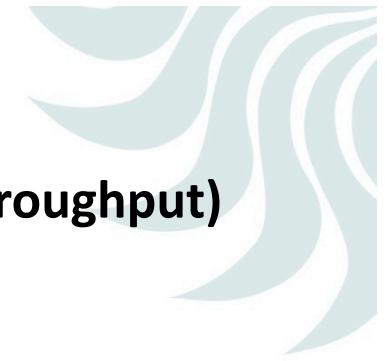


Estimated supply 2011-2015

(Assumes 10% growth p.a. and minor improvement in throughput)

| Public FET data | | | | | |
|---------------------------------|---|---------|--------|-----------|---------|
| | | 2011 | | 2011-2015 | |
| | | Total | NQF 4 | Total | NQF 4 |
| Enrolments | All | 137,927 | 27,274 | 842,119 | 164,426 |
| | NCV | 119,858 | 18,571 | 731,745 | 118,805 |
| | N1-3 Eng | 18,079 | 8,703 | 110,374 | 45,621 |
| Retention | Assumed that 80% of all NCV 4 and N3 Engineering learners enter the final examination and 40% pass all subjects rising to 50% by 2015 | | | | |
| Pass rates Certification | All @ L4 | | 8,728 | | 69,031 |
| | NCV 4 | | 5,943 | | 52,638 |
| | N3 Eng | | 2,785 | | 16,392 |

If extrapolated to 2016-2020 and 2021-2025, colleges could produce 179,000 and 325,000 respectively. This is dependent on the capacity of colleges to absorb large numbers of learners and continue to improve performance



Example: Primary agriculture

(Assumes 10% growth p.a. and minor improvement in throughput)

- NC(V) Primary Agriculture to addressing skills demand in Primary Agriculture occupations:
 - Overall Public FET Contribution estimated at around 10% of total demand over the 2011-2025 period (conservative and sustainable)
- Contribution by employers, SETA, Agricultural Colleges, private colleges, Dept of Agriculture, Forestry and Fisheries not available

| Period | Anticipated demand | Enrolments | | Graduations | |
|------------------------------|--------------------|------------|--------|-------------|-------|
| | | Year 1 | Total | Year 1 | Total |
| 2011-15 | 11,635 | 2,831 | 17,284 | 170 | 1,484 |
| 2016-20 (1.55 job growth) | 14,157 | 4,559 | 27,835 | 432 | 3,520 |
| 2021-25 (1.55 job growth) | 16,385 | 7,343 | 44,829 | 980 | 6,733 |

Example: Engineering

(Assumes 10% growth p.a. and minor improvement in throughput)

- All NC(V) and Report 191 (N1-N3) engineering related programmes to meet engineering artisan occupational demand.
 - Overall Public FET Contribution estimated at around 67% of total demand over the 2011-2015 period (conservative), will exceed demand after 2015
 - Requires high level of enrolments
- The concern is that these graduates will still have to source structured workplace learning in order to gain entry to the trade test and qualify as artisans

| Period | Anticipated demand | Enrolments | | Graduations | |
|------------------------------|--------------------|------------|---------|-------------|--------|
| | | Year 1 | Total | Year 1 | Total |
| 2011-15 | 35450 | 35077 | 214 149 | 3615 | 23755 |
| 2016-20 (1.55 job growth) | 43535 | 56492 | 344 888 | 8250 | 58035 |
| 2021-25 (1.55 job growth) | 39312 | 90981 | 446923 | 16388 | 107286 |



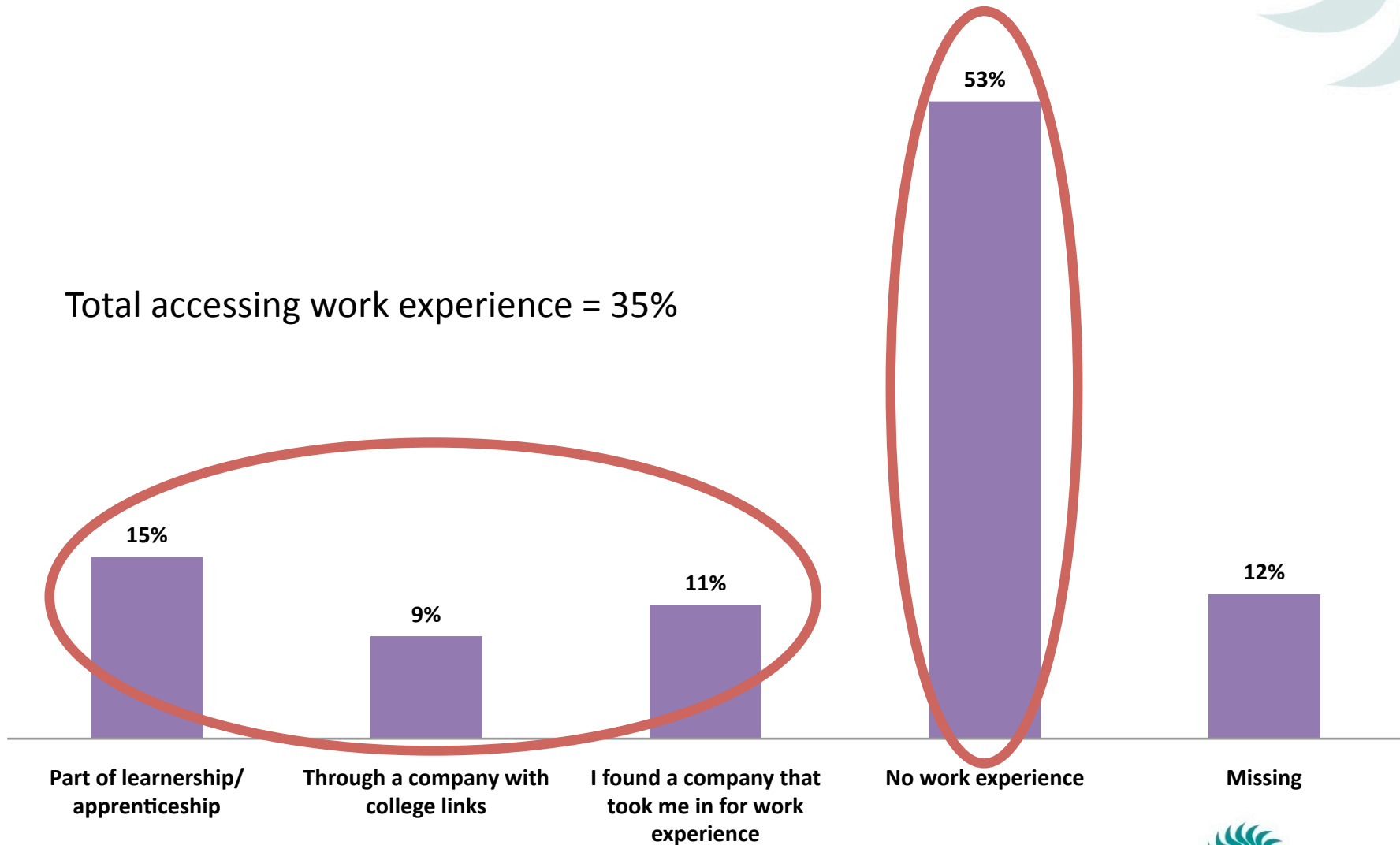
“Ramp-up scenarios”: All engineering at public FET (Assumes 10% growth p.a. and improved throughput)

- 5-15% improvement in NCV and Report 191 throughput every 5 years.
 - Overall Public FET Contribution estimated would exceed total demand by 2015
- BUT would require **significant** work placements for trade test certification
 - Work experience and trade test passes at current levels – Demand only met by 2026
 - Work experience and trade test passes at 50% - Demand met by 2021

| Period | Demand to programme | Enrolments | | Graduations | | Work & Trade Tests | |
|------------------------------|---------------------|------------|---------|-------------|--------|--------------------|--------|
| | | Year 1 | Total | Year 1 | Total | 35% | 50% |
| 2011-15 | 35450 | 35077 | 214 149 | 3615 | 50 095 | 17533 | 25048 |
| | | | | | | 6137 | 8767 |
| 2016-20 (1.55 job growth) | 43535 | 56492 | 344 888 | 12294 | 94497 | 33074 | 47249 |
| | | | | | | 11576 | 23624 |
| 2021-25 (1.55 job growth) | 39312 | 90981 | 446923 | 31892 | 237951 | 83283 | 118976 |
| | | | | | | 29149 | 59488 |

Type of Work Experience Obtained During Studies (2010) (n=18,131)

Total accessing work experience = 35%



Implications for Engineering Supply



- If stay on current trajectory can meet demand in second 5-year period but require sufficient workplaces for workplace experiential learning
- Substantial investment in intermediate engineering training in FET Colleges (around R1.5billion in baseline year) with relatively low output (5,000) (This excludes artisan training funded by SETAs and employers)
- Combination of inherited factors: poor foundation skills from school (particularly Language, Mathematics and Physical Science) combined with weak delivery capacity in many colleges
- Need to support and strengthen delivery in order to lower enrolments needed for same output and thereby substantially lower cost, which can be spread into other priority areas where demand is not being met (e.g. Agriculture)
- If improved throughput by around 5-15% every five years for NCV and Report, would eventually only need to enrol around 32,000 per year into engineering programmes to meet demand

Driving performance improvement



Recruitment and selection

Industry needs to provide clear and consistent communication to colleges and students on what their requirements / expectations are in relation to skills

Sharing of expertise and supporting college staff around recruitment / selection practices

Management

Tools and skills to monitor teaching and learning

Systems to address key obstacles as they emerge and implement policy (attendance, learner performance, timetabling)

Teaching and Learning

Effective classroom management techniques

Effective assessment practices

Lecturer attitudes and mindset

Facilitating access to the workplace

Creating a framework for industry-college engagement

Providing a range of workplace learning opportunities

Alignment of programmes and qualifications across the subsystems



- Need to urgently review of the NCV
 - Better alignment with industry knowledge and skills demands and industry standards
 - Align appropriately to student target population
- QCTO must prioritize the development of occupational qualifications and put in place mechanism for colleges to offer the theoretical components of these

Ensuring an alignment between institutional and workplace learning



- A key challenge behind the delivery of TVET is creating sufficient access to workplaces for the purpose of on-the-job training.
- Important piece of the TVET puzzle is a framework for industry and colleges to engage around access to workplaces for experiential learning, which has been found to be a significant determinant of employability.
 - Lay down conditions for different forms of workplace learning
 - Incentivise placement of young learners but link it to learning, especially through internships

Managed Growth and Strengthening of FET Colleges



- Ensure growth in line with capacity of colleges
- Intensive national strategy to strengthen management and teaching capacity to enhance learner throughput
- Guide enrolment patterns to align with evolving workplace demand
- Create framework for college-seta-employer engagement to stimulate growth in occupational training and workplace access

Framework for college intervention

