RESEARCH REPORT

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VET delivery in regional, rural and remote Australia: barriers and facilitators

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INFORMING + INFLUENCING
THE AUSTRALIAN VET SECTOR

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This document should be attributed as Griffin, T & Andrahannadi, U 2023, *VET delivery in regional, rural and remote Australia: barriers and facilitators*, NCVER, Adelaide.

This work has been produced by NCVER on behalf of the Australian Government and state and territory governments, with funding provided through the Australian Government Department of Employment and Workplace Relations.

COVER IMAGE: GETTY IMAGES

ISBN 978-1-922801-10-4
TD/TNC 151.05

Published by NCVER, ABN 87 007 967 311

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About the research

VET delivery in regional, rural and remote Australia: barriers and facilitators

Tabatha Griffin and Upekha Andrahannadi, NCVER

This research investigates how the training sector could better meet the needs of regional, rural and remote (RRR) Australia. It explores how various stakeholders in the vocational education and training (VET) system understand local skills needs, along with the barriers faced by registered training organisations (RTOs) when delivering training in such locations.

Key messages

- An understanding of local skills needs, especially in regional, rural and remote Australia, cannot be gained through quantitative data alone. Local intelligence is required, gathered through informal relationships, formal partnership arrangements and other targeted activities.
- RTOs face many different barriers in delivering training in regional, rural and remote locations. These include challenges that are: RTO- and/or market-based; location-based; and student-based. Increased costs are associated with delivering in regional, rural and remote Australia, and these challenge the viability of training in such locations, especially in areas of thin markets.
- RTOs who deliver in regional, rural and remote Australia display a determination to assist individuals in these locations to succeed, as well as to provide good service to local industry. RTOs also demonstrate the importance of the right mindset and a flexible approach; characteristics that allow them to adapt to overcome the challenges in regional, rural and remote VET delivery.
- More effective provision of training in regional, rural and remote Australia may be facilitated by consideration of:
  - the diversity across regional, rural and remote Australia, and how reconceptualised policy and training package development might better enable the flexibility required in the local context. Devolved decision-making may help to minimise mismatches between national, jurisdictional and local training needs
  - the true costs of delivery in such locations to ensure that funding arrangements better cover them; additionally, ensuring that information on local training needs is effectively fed into funding decisions to ensure these needs are better met
  - coordination of training demand to help alleviate issues of thin markets. This could be facilitated by a third-party, but adequate resourcing of this role is likely to be required for it to be effective
  - mechanisms to assist in the development of informal relationships or formalised partnerships to help ensure that communities and local industries get what they need from training. There may be a role for government in assisting RTOs and other stakeholders in facilitating such linkages.

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Acknowledgments

The authors would like to express their gratitude to all the participants from training providers, industry, government, regional development organisations, employment service providers, and other organisations, who generously gave their time to be interviewed for this research.

We would also like to thank the members of the Project Advisory Committee for their guidance and feedback throughout the research process.

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Executive summary

Delivering training in regional, rural and remote (RRR) Australia is not easy. Australia is a large, diverse country, and ensuring that training is suited to individual locations, which are unique in their landscapes, economies, industries and cultures, is challenging. There is an ongoing policy interest in making sure that the vocational education and training (VET) sector is serving the needs of regional, rural and remote Australia. VET has a key role to play in regional development through its dual function of developing individuals and providing skills to industry.

This research set out to investigate how the training system could better meet the needs of regional, rural and remote Australia, with the project focusing on:

- understanding how various stakeholders in the VET system perceive local skills needs in regional, rural and remote locations
- understanding the current barriers to delivering VET in regional, rural and remote locations, and if/how these are overcome.

These issues were examined through interviews with 58 stakeholders in eight case study locations across the country. Interviewees represented registered training organisations (RTOs), industry peak bodies, state training authorities (STAs), regional development bodies and employment service providers.

Understanding local skills needs in regional, rural and remote locations

Traditionally, skills planning by state training authorities takes place at the state or jurisdiction level, but efforts are being made to better understand skills needs in regional, rural and remote locations. While a variety of data sources are used to determine skills supply and demand at the national and state levels, these become patchy and unreliable at the local level. The lack of data means that state training authorities, as well as regional development organisations and RTOs, rely on consultation to understand local skills needs.

An array of consultation approaches is adopted by state training authorities, regional development organisations and RTOs to determine local skills needs. Some of these are organised as part of a point-in-time effort, such as the regional skills summits held across WA in 2021. Others are ongoing activities, often drawing on intelligence from organised networks involving industry, local councils, education providers, and community development bodies. These activities highlight the importance of both informal relationships and formalised partnerships in attempts to understand and address local skills needs.

The barriers to training delivery in regional, rural and remote locations

RTOs face many barriers and challenges when delivering VET in regional, rural and remote locations, with these varying according to the unique characteristics of each location, including its degree of remoteness. These challenges fall into three broad categories:

- Market- and/or RTO-based barriers: these tend to be faced before training begins and include:
  - missed opportunities to deliver training in a location
  - trainer shortages
  - thin markets.

- Location-based barriers: these are a consequence of the location in which training is occurring and include:
  - distance to travel and difficult access, as well as extreme weather
  - lack of infrastructure/resources, technology and/or connectivity
  - limited pathways and/or job opportunities
  - training not matched to local training needs
  - trainer safety, especially due to social problems in some locations
  - lack of other services in the location.
- Student-based barriers: these relate to the student cohorts being trained and include:
  - language, literacy and numeracy (LLN) issues
  - digital literacy limitations
  - cultural differences and a need for cultural awareness in Indigenous communities.

Costs, funding and the viability of training

The challenges described above, and the efforts required to overcome them, add significant cost to training delivery in regional, rural and remote locations. These increased costs have ramifications for the viability of training, especially in thin markets, those where it is difficult to enrol a critical volume of students. Interviewees highlighted several constraints of current funding models that impact on their ability to deliver in such locations. These included:

- a mismatch between local needs and the funding available; for example, funding available to deliver certificate III level qualifications but not for lower-level qualifications, the latter being more suited to some learners or communities
- inconsistency of funding; for example, no longer being able to offer training to a community due to changes in funding priorities
- the loading applied to funding not always sufficient to cover the true cost of training resulting from travel or extra support or time required by students.

Overcoming the challenges

RTOs discussed the various strategies they use to address the challenges they face when delivering VET in regional, rural and remote locations. In addition to the specific approaches described by RTOs, the interviews revealed some overarching characteristics of RTOs that enable them to overcome the challenges faced. These are:

- a strong desire and determination to assist individuals to succeed and to provide good service to business and industry; RTO interviewees demonstrated that they go ‘above and beyond’ to ensure the successful delivery of training
- having the right mindset and a flexible approach; being able to adapt to changing situations and having back-up plans are essential when dealing with the complexity of delivering in regional, rural and remote locations.

The impact on industry

Despite all efforts by RTOs to deliver in regional, rural and remote locations, on occasions there is no choice but to send people to larger centres to undertake their training. This could be due to the absence of local trainers (or not being able to get a trainer to come in from elsewhere); lack of the equipment needed for the training; or the extra support required by students not being available locally. Industry interviewees revealed that, in particular, accessing training at higher levels is difficult in regional, rural and remote locations, meaning that workers need to undertake that training elsewhere.

In addition to the challenges in accessing higher-level skills training in regional, rural and remote locations, industry interviewees identified other training-related issues that impact on their workforce development. These included:

- a lack of local training providers
- a lack of trainers and/or training facilities
- a reduction in major large-scale training (such as a decline in the numbers of apprentices).

These issues are concerning, given that industry respondents described a host of workforce issues they currently face, including the widespread skills and labour shortages being experienced across the country.

What could better enable training in regional, rural and remote locations?

The following approaches have the potential to help facilitate training delivery in regional, rural and remote Australia:

- *More flexible approaches to training delivery*
  Policy development that sets up a uniform approach to training delivery may be a constraint to delivery in diverse locations across Australia. The participating RTOs in this study described the flexible approaches they need to adopt to deliver in regional, rural and remote locations and that the training system, as it is currently structured, impeded their ability to do this. Training package requirements and a mismatch between state and local training priorities were all cited as issues hampering their capacity to provide more flexible training in some locations. A greater understanding of how training needs to be delivered in a local context, aided by reconceptualised policy and training package development, would potentially allow for more flexibility. Devolving decision-making to ensure that local needs are better addressed may be an important consideration in this.
- *Funding arrangements*
  Interviewees questioned the suitability of funding for regional, rural and remote locations. While loadings (additional funding) are often provided for delivery in such locations, some interviewees argued that it does not always cover the true costs of delivery. A more comprehensive understanding of the true costs of delivery (for high-quality training) is necessary to ensure funding is adequate. Additionally, the funding available did not always match local needs, especially in terms of qualification level. Ensuring that the local needs of regional, rural and remote locations effectively inform funding decisions may be difficult and resource-intensive, but is necessary for minimising these mismatches and providing opportunities for people in regional, rural and remote Australia. As above, devolving some of the decision-making on these issues may help to alleviate them.

- *Coordination of demand*
  Thin markets hamper the viability of training for RTOs. Establishing mechanisms to enable the pooling of training needs (for example, across separate employers) in regional, rural and remote locations could help alleviate this issue by creating sufficient volume of students. It was suggested that government, industry peak bodies, or local councils could potentially facilitate this if resourced to do so.
- *Enabling relationships and/or partnerships*
  Interviewees confirmed the importance of building relationships and forming partnerships to allow successful delivery of VET in regional, rural and remote locations. These relationships are critical in informing RTOs about what communities and local industries/employers need from training. They are also important in gathering community support for training, especially in Indigenous communities, and in gaining access to infrastructure and/or resources. Establishing and maintaining these relationships is time-consuming and complex, especially for small training providers without dedicated staff for this purpose. There may be a role for government in assisting RTOs and other stakeholders in enabling such linkages.

It's bigger than the training sector

Some of the barriers to workforce development and training in regional, rural and remote Australia do not fall under the responsibility of the training sector. Issues such as lack of housing/accommodation; community problems (safety); technology/connectivity limitations; and limited job opportunities need to be tackled more broadly. A coordinated and holistic approach to regional development will better enable training delivery in such locations.

Training across a diverse nation

Context

The number and frequency of reviews and research by government and other parties indicate a longstanding and ongoing interest in regional Australia. In March 2022, the Select Committee on Regional Australia released its report, *Pride of place: inquiry into the future of regional Australia*, which 'explores regional Australia from a number of interlinked perspectives, the consideration of which is essential to securing our regions' economic and social prosperity' (Australian Parliament 2022, p.2). It explored the role of education, including VET, in these areas.

Key points

- VET in regional, rural and remote Australia continues to be of interest to policy-makers
- This research explores the barriers faced by training providers who deliver training in regional, rural and remote locations and the responses to them

The relatively recent appointment, in December 2021, of the Regional Education Commissioner, which was a recommendation from the above inquiry, and the regional elements to the work conducted by Jobs and Skills Australia (previously the National Skills Commission), also demonstrate the current policy focus in this area.

The Regional Education Expert Advisory Group's (2019) *National regional, rural and remote tertiary education strategy* also shone a light on both higher education and VET in regional Australia. The strategy, which described the challenges faced by regional Australians in accessing and succeeding in tertiary education, is focused on improving the participation and outcomes of regional, rural and remote students in post-secondary education.

Prior to this, in 2017, the Australian Government commissioned an independent review into regional, rural and remote education, which considered the challenges faced by students from all education sectors across the diverse Australian landscape (Halsey 2017). The recommendations of the review, which included expanding VET and university opportunities and pathways, were taken up in the national regional, rural and remote tertiary education strategy — the 'Napthine review' (Regional Education Expert Advisory Group 2019).

Opportunities, economic growth, employment, and population shifts are not distributed evenly across the country (Daley, Wood & Chivers 2017). Thus, the variability in the population densities of regional, rural and remote areas, coupled with the distance from capital centres and the unique cultural elements in these complex landscapes, bring inherent challenges in providing people and businesses with the necessary skills for work.

In 2008, the barriers to VET meeting regional development skills needs were explored by Kearns, Bowman and Garlick. The barriers identified included: unresolved tensions between national, state and community/regional priorities and between competition and cooperation in meeting skill needs; cultural barriers within RTOs, which inhibit enterprise and entrepreneurial initiatives; and a tendency in some cases to focus on short-term skill needs rather than promotion of a more strategic orientation of VET to support sustainable regional development.

Given the enduring policy focus on VET in regional, rural and remote Australia, it is timely to revisit the barriers faced by RTOs when delivering training in such locations.

VET in regional, rural and remote Australia – what does it look like?

Jobs and Skills Australia has recently produced a report detailing the provision of, and access to, VET in regional, rural and remote areas of Australia (Jobs and Skills Australia 2023). Based on NCVER's National VET Provider Collection and registration data held in the National Register on Vocational Education and Training (at training.gov.au), some key findings from this report are:

- The nature of regional and remote training delivery differs by state, with remote training delivery occurring most commonly in Queensland and Western Australia (reflecting these states' regional compositions and population sizes).
- The number of RTOs with head offices located in remote areas is lower compared with that in the major cities, but head office location does not necessarily reflect where delivery is occurring. In practice, RTOs may span several regions and deliver training to both metropolitan and regional/remote students.
- The range of training products on offer is narrower in regional/remote locations compared with that in major cities and decreases with remoteness. However, this can depend on the local industries. For example, increased study options for agriculture-related courses are observed in regional (and even remote) Australia compared with major cities.
- VET students in regional and remote areas are more likely to undertake studies at lower Australian Qualifications Framework (AQF) levels, typically at the certificate III level, than those in major cities.
- Regional VET activity is largely driven by local industries. This is reflected in the prominence of some fields of education in regional and remote areas, such as the higher-than-average concentration of enrolments in agriculture-related and engineering-related programs. Enrolments related to the delivery of essential services such as health and education are represented equally across remoteness areas.
- There may be latent demand for training that is not being met because people lack access to transport or because of the absence of a local provider.

For more detail on the delivery of VET in regional, rural and remote Australia, as well as a profile of Australia's regions, readers should see Jobs and Skills Australia (2023).

VET and regional development

VET has an important part to play in regional development through its function of developing individuals and providing skills to industry. The emphasis placed on it by organisations involved in regional planning, however, varies.

A scan of the regional strategies published by individual Regional Development Australia[1] organisations (RDAs) shows much variability in the presence of, and importance given to, VET and skills development. Some strategies do not mention VET at all (but may mention education in general or higher education).

1 Regional Development Australia (RDA) is a national network of committees across Australia, including the Indian Ocean Territories and Norfolk Island. The network is made up of local leaders who work across government, business and community groups to support economic and workforce development, local procurement, strategic regional planning and inform government programs and infrastructure investments. Individual RDA websites can be accessed from the overarching website: <https://www.rda.gov.au/>.

Even the report of the Select Committee on Regional Australia (Australian Parliament 2022) does not contain any recommendations on VET in the section relating to access to skilled labour.

Other regional strategies specifically highlight VET and its role in skilling the community. Some single out the issue of 'better matching' training to local skills needs. In a submission to the Select Committee on Regional Australia:

> The East Gippsland Shire Council stressed that in developing regional higher education, providers should ensure that education and training meets the needs of key local industries. This particularly acknowledges the role of education as 'a key enabler and driver of regional development' as it facilitates investment, encourages young people to stay in the regions and delivers wide-reaching economic benefits for communities. (Australian Parliament 2022, p.44)

Given how important planning is in realising regional development goals (Australian Parliament 2022), the omission of VET from some planning documents may constrain the ability of VET to contribute. Kearns, Bowman and Garlick (2008) argued that the role of the VET sector in contributing to sustainable regional development should be strengthened in ways that foster a more dynamic two-way interaction between VET and regional development. They argued that community and regional frameworks that connect and extend VET partnerships in strategic ways should be encouraged and supported.

The multi-faceted role of VET means that not only can the sector address change in a community, but VET (and education more broadly) can also *effect* change in a community. For example, in addition to providing the skills required in regional, rural and remote areas, access to education and training can help to retain young people in these locations, increasing the potential for business/industry growth and/or diversification. Indeed, in this current research project, some industry peak bodies stated that developing/skilling local people is critical to the growth of local business.

People (young people, especially) having to travel to main cities or larger centres to undertake training can have the opposite effect. As stated in the Australian Local Government Association's submission to the Select Committee for Regional Australia:

> The outflow of young adults from regional Australia is a major issue in regional Australia; many young non-metropolitan adults move to the capitals to pursue higher education or to seek work. Many would stay if there were more higher education opportunities available there. Australia's regions have differing educational requirements. (Australian Parliament 2022, p.45)

These young people may be taking advantage of opportunities they have found in larger centres, and it should not be assumed this is a poor outcome for them as individuals. Nonetheless, there are local and national concerns about losing people from regions and the effects this may have on the growth or longevity of those locations.

This project

This research aims to understand how the training system could better meet the needs of regional, rural and remote Australia. To do this it examines:

- how various stakeholders in the VET sector understand local skills needs
- the current barriers and enablers to delivering VET in regional, rural and remote locations across the country.

For the purpose of this research, 'regional, rural and remote' areas are those outside Australia's major cities.

Four regions, each containing two case study locations, were selected as the focus for this project (table 1). Selected in consultation with the Project Advisory Committee, these case study locations cover a range of different characteristics (such as industry structure and/or change, known skills shortages, labour market structure and demographics).

Table 1 Case study locations

State/territory	Region (RDA)	Towns
Queensland	Townsville and North West Queensland	Townsville and Mount Isa
Western Australia	Mid West Gascoyne	Geraldton and Carnarvon
Northern Territory	Entire territory	Alice Springs and Katherine
Tasmania	Entire state	Launceston and Burnie

A total of 58 interviews were undertaken with RTOs, industry peak bodies, regional development organisations and government departments across the eight case study locations.

More detail on the research methodology and a case study profile for each location is provided in appendix A and appendix B, respectively.

Understanding local needs for VET

Regional skills needs are not static. Changing industry structures — which may be a result of deliberate diversification to protect a region's economy — may require workers with different skills. As cited in the Select Committee on Regional Australia's report:

> Most industry sectors have undergone a process of gradual structural change. There are, however, regions that have experienced more abrupt changes or shocks. Because regions are not identical, this means that there has been great variation in the way in which they have experienced this change. For example, over the past few decades, the employment share of non-mining regions has shifted significantly towards service provision, while for mining regions, this shift has been less pronounced. The differential exposure of regions to changes in industry structure also influences their ability to adapt to changes in economic conditions. Factors include the skills and qualifications of the labour force, industry diversity, human capital and physical capital. (Australian Parliament, 2022, p.99)

Part of VET's contribution to regional development is enacted through meeting the local demand for skills and this requires an understanding of what skills are needed. But local needs are not always well understood (Kearns, Bowman & Garlick 2008). At the national and state/jurisdictional levels, considerable effort is made to understand skills needs (or occupations in demand). One example of this is the Skills Priority List developed by the Australian Government's National Skills Commission (2022) (now Jobs and Skills Australia), which provides information on occupations that are considered in shortage across Australia. While regional consultation and analysis are conducted in the development of the list, and the list indicates the jurisdictions in which regional priorities have been identified, it does not provide information for specific regional locations.

In this current project, interviewees (from state training authorities, regional development organisations and RTOs) were invited to describe how they work to understand current and future local needs for VET.

State training authorities

Interviewees from state training authorities reported that their skills planning traditionally starts at the state or jurisdiction level, but efforts are now being made to better understand skills needs at regional levels. At the state level, some of the data sources used to gain an understanding of skills demand were described, these include the ABS Census of Population and Housing, internet job vacancies (such as via Burning Glass), and employment forecasting models over various time periods (such as the Victoria University model). Skills supply via VET and migration is also considered. It was acknowledged that, while an array of data sources is used to understand skills needs, these become patchy at the local (that is, regional) level and local consultation is therefore required.

Various examples of consultation activities to gain insight into regional workforce development needs were provided by interviewees. In Western Australia, for example, 10 regional skills summits were held in regional areas across the state between August and December 2021, with regional action plans — to be implemented by regional coordinating committees — having since been developed. In Queensland, a network of industry skills advisors, representing different key industry sectors, provide 'ear to the ground' information, supplying contextualised information to the available data. Local/regional skills needs can then be identified and added to the skills priority lists via industry-submitted business cases. These very localised business cases can include needs such as specific units of competency for an employer in a specific location.

It was acknowledged that skills needs identified at the local level cannot always be addressed through training. A WA interviewee explained that, with a focus on 'occupations difficult to fill', local intelligence might uncover situations such as a workplace with a poor reputation, where nobody wants to work, meaning any available positions at that workplace will always be hard to fill, regardless of the training opportunities available. Local information may also reveal other issues, apart from those that are training-related, in some locations, such as a lack of housing.

State training authority interviewees acknowledged the difficulties in predicting future needs, describing it as 'crystal ball stuff'. There are concerns about getting it wrong — and steering students towards qualifications/training that turn out to be unnecessary. Demand-driven systems are considered a way to counter this issue, meaning that industry can take as much as it needs rather than 'saying we'll need 5 more here and there'. The disadvantage with this strategy is the potential lag between demand and supply, especially for qualifications that take longer to complete.

Regional development organisations

Only a small number (four) of regional development organisations participated in this research and so the findings are limited. The interviews did, however, confirm the earlier finding (page 12), that these organisations vary in their approach to local skills and training needs, depending on how they fit with government and other bodies (not wanting to duplicate efforts) and the other priorities/roles identified by these regional development organisations. For example, some regional development organisations do not play an active role in economic or workforce development in their region, deferring to the state training authority instead. For those regional development organisations that do undertake work to understand local skills and training needs, most of this information is gained by connecting with other local bodies, such as local councils and education providers, and through participation in steering groups, organised summits and other meetings. The broad remit of these organisations means that they are often aware of the other issues that constrain workforce development, such as lack of housing and community attitudes to work and training.

Registered training organisations

Participating RTOs (one of the main groups of interest in this project; hence, the more detailed information) used various forms of information to understand local skills needs (table 2).

Table 2 Methods used by RTOs to gather information about local skills/training needs

Method	Further details
Direct approach	• By organisations/employers that want training • By community members
Dedicated staff conducting industry engagement and consultation	• Mostly in larger RTOs • Maintaining relationships through the development of large projects, so the RTO can contribute when workforce planning occurs and skills needs become apparent
Information from various organisations/bodies	• Industry advisory committees • Industry peak bodies • Chambers of commerce • Local council authorities • Community Development Programs
Links with industry	• Trainers work/worked in the industry, or knows people who do (knowing everyone in a small town)
Local knowledge	• Staff (teaching and/or administrative) are locals, with local contacts/knowledge • Visiting areas, getting 'feet on the ground' and talking to local people

Communication with state training authorities	• About current or future skills needs
RTO representation	• On peak bodies • At local forums
Networking	• With businesses – providing information about training, enquiring about skills needs • At local meetings • Indigenous corporations
Building partnerships/relationships with local organisations	• Other RTOs (knowing what and where they are delivering) • Local government authority • Aboriginal community organisations • Industry/employers • Health agencies
Published information	• Industry workforce plans • Regional development plans (including regional skills summits, action plans)
Engagement with schools	
Feedback/intel from students	

Interviews revealed that these activities might be undertaken by RTO management, by trainers 'on the ground', or a mix of the two. Where trainers are gathering local knowledge through their engagement with employers and learners, the challenge is to have mechanisms in place to ensure this 'is fed into … the broader process of deciding what we're going to offer next year or what new courses we'll introduce or what changes we'll make in terms of, industry saying … we'd rather have graduates with this skill set' (RTO WA).

This information may be used to kick-start some long-term planning from the RTO to put a new subject or course on scope where a need is anticipated (RTO, Qld) or may prompt the RTO to add additional elements to its training, such as more employability skills, which may have been identified as a community need (RTO, NT). These responses or business decisions require investment of time and money, however, and implementing these plans may require the RTO to overcome some of the barriers that are discussed in the next chapter.

What does industry need?

In general terms, what industry or employers in regional, rural and remote locations want is largely not dissimilar to those in metropolitan areas — skills (not necessarily full qualifications) that are up-to-date and provided in ways convenient to the business. As stated in the North Coast NSW Employment Strategy (2020):

> Training must be accessible (in terms of location and time) and relevant to the needs of an industry. Disruptions across many areas of business and society, particularly business model, technological, political and now pandemic mean that businesses now prefer their employees to take on short courses, micro-courses and on the job training in preference to longer certified courses or even qualifications. Business owners report that with the pace and size of changes, training courses and institutions are falling out of date, finding it difficult to keep up with industry standards and technologies. Much can be done to ensure training opportunities are shaped more closely to the needs of employers (e.g., skill sets as opposed to qualifications). (Regional Development Australia Mid North Coast NSW & Regional Development Australia Northern Rivers NSW 2020, p.25)

This notion was reiterated by the industry interviewees in this current project. As two interviewees explained:

> My experience in horticulture and agriculture is, that while business owners might have a reasonably good understanding of what they need their workers in that particular role to have, communicating that or translating or mapping that to what's available in the training sector is extremely challenging and, again to me, that's because there's this mismatch. (Industry, WA)

> I mean, a good RTO should be focusing first and foremost on what the actual clients want, not what somebody else wants, whether it's unions, training councils, the national Training Councils or, researchers or whatever. So, I think that conversation needs to be empowered more. There needs to be a much better co-understanding between those two groups and that of course to me is an organic thing. So once you allow more of that conversation to happen, that co-understanding will improve with time. (Industry, WA)

Industry interviewees added that they are looking for agile, adaptable and modular qualifications; they want training that is fit for purpose and which includes expanded digital skills, along with skills to enable the transition to clean energy:

> It's actually about future scoping and saying, so 'what do we want in the next five years?' rather than actually saying 'we're building for now', and we also need to consider that every qualification, regardless of whether it's mining, actually, in the next five years is going to have such an exponential level of either growth or change in what that is. So, automation, digitisation, all that sort of stuff … it's going to be across everywhere. (Industry, National)

Workforce challenges

Industry peak bodies were invited to describe the current challenges they face with their workforce, particularly in regional, rural and remote locations, and whether they have encountered any training difficulties that impact on the development of their workforce.

Almost all interviewees emphasised the current and widespread skills and labour shortages as the main issue they currently face. In addition to the general shortage of workers being experienced across the country, various elements that contributed to this issue in regional, rural and remote locations included:

- ageing workforce

> The knowledgeable and skilled sector in our industry is definitely ageing. (Industry, WA)

- negative perceptions of their industry (low-skilled, low-paid jobs)

> And I think the problem is that because those areas are low paid, I think sometimes people have a view that they're not very difficult or they're not very skilled, but actually it is … (Industry, Qld)

> Getting people to work in it. I think there's social challenges in mining at the moment. Someone needs to break the story … to be a story at the moment about it's going to help the world with their aspirations of net zero and all this sort of stuff but there's still an undercurrent of 'mining is dead, mining is dirty, mining is not good for the environment'. So that's what's there now right, so getting people to work there. (Industry, National)

- seasonal work

> I guess from a workforce point of view, a seasonal workforce is really hard because of our locality. We're not really on a backpackers' route or it's a destination. So, we do struggle for that short term workforce which we principally bring in from overseas. (Industry, NT)

- unattractive work conditions or location (for example, distance, lack of housing/accommodation, lack of services, social issues)
- difficulties in competing with the mining industry (high salaries)
- preferences by many people for living in cities

> So, there's significant challenges everywhere and no one wants to work in the regions, right? No one wants to go and work in the middle of nowhere. I mean, there is already older people in there already. So, the challenge is getting the young ones that, you know, don't want to work in the middle of nowhere and don't want to work in mining potentially. (Industry, National)

As described above, some industries have been highly reliant on skilled migration or temporary workers in the past and have been hampered by COVID-19 pandemic border closures. However, some industries questioned the necessity for skills immigration and stressed that 'if employers want to bring new people from other states and or countries, they've got to prove that they have equal numbers of local apprentices undergoing the same training' (Industry, Qld). Thus, some industries deemed that developing local people is a new or ongoing priority. As well as 'doing their bit' for the local community, developing local people reduced the risk of not being able to access temporary workers or being able to attract workers from elsewhere to live in challenging locations (and keep them there). This approach also negates the need to find/provide housing for incoming workers, which has proved difficult in the tight housing and rental market:

> I think it's very important with the housing crisis that we have at the moment, the cost of housing that's ... A significant number of our Queensland operators are having this issue where, and you know I work closely with them, the Noosa Council, and they're having very significant problems with accommodation so they can't attract people because they can't accommodate them, or the lengths that the businesses are having to go to accommodate staff that they have been able to attract. So I think it is in their best interest to see if they can secure and attract people locally before, you know, bringing people in from interstate or intrastate. (Industry, Qld)

> So, our main focus is building a Tasmanian workforce. So for example, there's a large project going at the moment, the new Bridgewater Bridge down South and we were having sort of initial discussions with the head contractor around, you know, Tasmania's workforce and sort of what can we do to ensure that it is a Tasmanian workforce and not a sort of fly-in fly-out, because it is a great opportunity for people to pick up skills and learn a trade or learn skills that they can then go and use somewhere else within the Tasmanian building construction industry. (Industry, Tas.)

Industry respondents discussed several strategies to address their workforce issues: fit-for purpose training; connecting migrant workers to training programs in regional areas; *in situ* or on-the-job training; promoting accessible employment; providing training to non-traditional workforces such as mature-age workers; attracting minority cohorts; providing job opportunities for other family members; regional incentives such as tax deductions and grants; and promoting local career pathways to youth and school children. Identifying funding programs to subsidise apprenticeships and other state government initiatives that provide different VET opportunities in RRR areas were also presented as key strategies to address skills and labour shortages.

Training challenges

In terms of training, industry peak bodies reported several issues as impacting on their workforce development, especially:

- lack of local training providers

  > The availability of training in regional remote areas. That obviously affects businesses' ability to skill their workers locally. And that applies across each sector that can be differentiated according to what your particular needs are. Maritime has one set of needs, and their issues are really different to road transport for instance. (Industry, Qld)

- lack of access to trainers and/or facilities

  > We've just got this kind of layered problem there that stems off not having, well, we do have an RTO ... we don't have trainers. I was speaking with a school, and I am trying to come up with a concept here to deal with this. (Industry, Qld)

- lack of major large-scale training in the region (such as a decline in the numbers of apprentices)

  > One of the biggest issues we've had as far as a lack of skills goes is the lack of major large-scale training that used to occur in the past. So, for example up here in Queensland, in as far as engineering goes, Queensland railways used to employ 100 to 150 new apprentices every year. So that meant we had 150 qualified tradespeople every four years coming out in the workplace. (Industry, Qld)

- lack of access to training in higher-level skills/qualifications[2]

  > If we talk about the regional aspects, one of the key things is that the higher-end skills levels. So, for example, last year I was up in Gladstone. Now Gladstone is a manufacturing hub, a huge hub here in Queensland, in fact it's even going to be getting bigger … now, four of the machinists, apprentice machinists, they have to drive 2 hours to Rocky [Rockhampton] to attend college which is absolutely ludicrous. (Industry, Qld)

As reported by industry interviewees, the issue whereby entry-level training might be available locally but higher-level training not, means that workers who require higher-level training need to be sent to larger centres or cities. While these findings are limited to the case study locations in this research, this has been shown to be a broader issue. For example, the Regional Education Expert Advisory Group's (2019) *National regional, rural and remote tertiary education strategy* reported that VET provision in RRR locations tends to focus on lower-level qualifications (certificates I, II and III). Likewise, data analysis conducted by Jobs and Skills Australia (2023) suggested that decreased training options were available for students in regional and remote Australia, especially in relation to higher-level qualifications.

The lack of training providers in regional areas is considered one of the principal sources of regional skills shortages (Australian Parliament 2022). Many regional, rural and remote locations therefore need to rely on non-local VET provision to meet skills needs. Having to send workers to larger centres for training is inconvenient and costly for employers, meaning that they may make the decision not to train workers (unless necessary, such as for licensing purposes). One industry interviewee described the type of scenario faced by businesses that are unable to access local training:

2 The qualification levels that constitute entry-level training versus higher-level training was not always specified in interviews and can vary by industry and occupation.

> Then it also falls to the employers who, if they need the workers, they're going to have to pay for the training … the employer has to have enough resources within their business to release that worker to travel away for training to get that required licence. A lot of that training is only done in Brisbane … so they've got to first drive to either Mount Isa or Cloncurry or Townsville and then fly down to Brisbane, they're going to be in Brisbane for a week, for example, to do whatever training they've got to do, fly back and then drive as well. So that's the best part of a good 10 days if they've got a week's worth of training. So that person is, a) away from their business, b) the business has got to pay for that person to be away, for their accommodation, travel expenses. You know, that gets quite expensive. (Industry, Qld)

There appear to be some disparities between smaller and larger businesses in how they are able to access training locally. It was suggested that smaller producers/businesses have less capacity to send employees away for training (especially if it's for a significant amount of time, such as a week or two) due to the difficulties in ensuring the work is covered by others. Larger companies, with more employees (and hence more training requirements), are more likely to be able to organise training providers to conduct training in-house and thereby avoid the need to send employees elsewhere for training. But even if they do need to send employees away, they are potentially more able to cover those employees while they are off the job.

Looking to the future, some industries reported that they are facing significant growth and change, especially in relation to the increasing use of technology and the transition to green energy. These shifts will require some skills development in order to build and upskill the relevant workforces, but some interviewees were uncertain about how well the VET sector can provide this. For example:

> So, with autonomous trucks, that's thrown up some issues because electricians are really dealing with the automation, but they really need to have electrical mechanical overlay. So, the training system's been very slow to adapt to the technology. It's not really fit for purpose at the moment. We either need a new qualification created or we need dual apprentices, or we need kind of stackable skill sets created. We need something created to deal with automation on site really. (Industry, WA)

Some interviewees were also concerned that difficulties in accessing training may deter people from entering their industry. As one described:

> Now if it's in the too hard basket, people won't do it. If it's too hard for them to train up in our industry, they're going to find another option, where they don't have to go away to do particular training to be able to get a job or whatever. So yeah. If it's too hard, they won't do it. (Industry, Qld)

Challenges to delivery, and overcoming them

Diverse barriers requiring flexibility and determination

RTOs and industry bodies were asked to describe the barriers to delivering training in regional, rural and remote Australia. Across the four case study regions, a complex array of challenges was identified. Figure 1 summarises these, categorised loosely into those that are: market and/or RTO-based, location-based and student-based.

Given that the case study locations ranged from relatively large regional centres in Tasmania and Queensland to very remote locations in Western Australia and the Northern Territory, the diversity of location type means that not all challenges were experienced in all locations, or at least not in the same way. The barriers most often raised are discussed in more detail below, noting that many are interrelated. For a list of all barriers mentioned and some additional quotes/examples from participants, refer to appendix C.

Key points

- RTOs delivering in regional, rural and remote Australia experience many challenges, which often contribute to increased costs
- RTOs are passionate about delivering in regional, rural and remote locations, and displayed great tenacity and problem-solving to overcome barriers

How training providers work to overcome these challenges is also presented in the sections below. In addition to the specific strategies and enablers described, additional qualities of the RTOs that were not explicitly expressed in interviews were identified. For example, an overarching theme that emerged was the passion and tenacity of the participating training providers for delivering in regional, rural and remote locations. There was a strong desire and a determination to assist individuals in regional, rural and remote locations to succeed, especially in smaller communities, and an aspiration to provide good service to regional, rural and remote businesses and industry.

> But my personal view has always been, support those little guys. If the regional people need a course then we'll go and schedule the course there. Even if that comes at the cost of one of our Brisbane courses because we can run Brisbane courses every week, that's never been a problem. But when someone in the middle of Central Qld says, 'no one's running course, so really need one, haven't seen one for the last two years', then we say, 'OK, well, we'll make it happen'. (RTO, National)

> It's actually really exciting. There have been and continue to be some fantastic projects run in some of those small locations, and I think when they work, they're more fulfilling than some of the things that are easier to achieve in the bigger places. (RTO, WA)

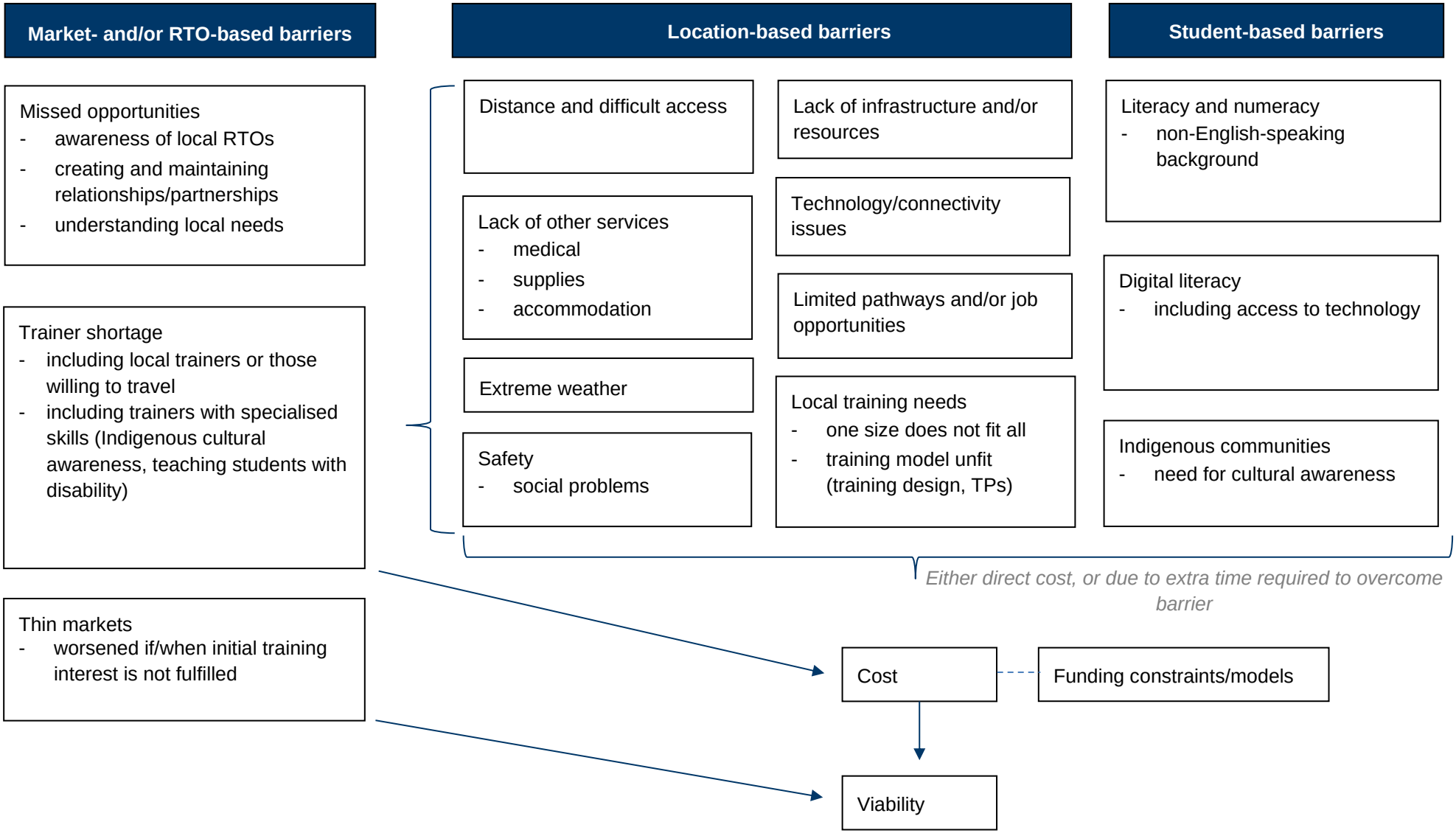
The other characteristics of RTOs and trainers that enabled them to overcome many of the challenges they faced included having the right mindset and a flexible approach across all aspects of the training (design, planning, delivery, assessment etc.), as well as ensuring that back-up plans were in place for unanticipated disruptions.

> So, I think it takes a good, experienced trainer to be able to adapt to various things that happen in remote areas. And even simple things like, you know, some of the right areas don't have reliable power, they don't have tables, chairs, air conditioning. You might be working out of the local pub and sharing it with the locals. But it's like everything else, we just be flexible in those areas and have a backup plan. (RTO, Qld)

> We have to have amazing schedulers and planners … How do we do this? When do we do it? Where are we going? And of course, you know, we have to have lots of backup plans and recovery plans and stuff. (RTO, Qld)

The following section presents the key challenges described by the participating RTOs, industry perceptions of those challenges and the various responses to them.

Figure 1 Barriers to delivering VET in regional, rural and remote Australia



Market- and/or RTO-based barriers and responses

Many interviewees described barriers that can be considered market- and/or RTO-based. These types of issues typically prevented or affected the ability to offer or commence training in a regional, rural or remote location. Three such challenges were identified: trainer shortages, missed business/training opportunities, and thin markets.

Trainer shortages

Many RTO and industry respondents reported that a lack of trainers was a barrier to delivering training in RRR locations. Finding trainers with specific characteristics or skills was especially difficult for some RTOs. The issues included finding:

- experienced trainers

> And that's the barrier, finding the right trainers. If the trainers can't be flexible, then … there's no grey area there. They're either completely relaxed and calm and flexible with it. Whatever happens, happens. Or they can't do it. There's no middle ground there. (RTO, Qld)

- trainers for particular courses

> Fremantle is the only provider for the marine mechanics apprenticeship for WA. So, it's not even like they have a different option, they have to send them to Perth for their blocks. And they're struggling to get lecturers. (RTO, WA)

> You know, some of your outback regions, there just isn't anyone to deliver the programs. (Industry, Qld)

- Indigenous trainers, and/or those experienced in delivering to Indigenous people (see page 39 for further consideration of delivering in Indigenous communities)

> So primarily some of the barriers are [the lack of] Aboriginal trainers. The reaction that you have when you have an Aboriginal person up the front of the room is totally different, so you know we need more Aboriginal trainers, and that's certainly been a big barrier … (RTO, NT)

> Service providers have reported to me that we can't get an RTO that has culturally competent trainers for our staff and then RTOs will admit that and say we're looking for them, but we can't find them. (Industry, Qld)

- local trainers

> Local trainers don't exist. It is hard enough trying to find anywhere at the moment but if you try and find one in a particular area where you need them, you're not going to. (RTO, Qld)

The ageing trainer workforce and not being able to envisage where the next generation of trainers will come from was also a concern for some.

> We struggle with getting younger trainers and this scares me, to be honest … In both the Darwin side and the Cairns side, and even down at Alice (Springs), all of our trainers are over the age of 55, 60. Where are the youth? (RTO, NT)

In addition to the difficulty of finding trainers who are willing to travel and deliver training in challenging locations (described in further detail below), some RTOs and industries reported losing trainers to industry, where skills demand and salaries are high.

> We deliver into the mines in Mount Isa. Our teachers are sometimes encouraged across the road into the mine, so we end up being a bit of a feeder for the mines at times. Their remuneration, obviously, competing with the mine for what we can do under our bargaining agreement is very different.
>
> (RTO, Qld)

> A decent marine mechanic will be getting 120 grand a year. You can't expect somebody to give that up in order to teach them how to do that job. It's, you know, it's counterintuitive. (RTO, WA)

> And to employ that person in a training provider, you know, they're already getting $130,000 as an operator, right, and working six months of the year. And then you want them to work in a TAFE, let's just call it TAFE, for $60,000 a year and full time. Yes, you get a few more weeks of holidays, but …
>
> (Industry, national)

The lack of training staff means that some RTOs are continually recruiting:

> We are continually recruiting … we do lots and lots of different methods: radio, TV, Facebook, LinkedIn, anything like. So, we are in recruitment mode all of the time, it's nonstop.
>
> (RTO, Qld)

Also, RTOs' focus on retaining staff in some regional, rural and remote areas was evident in the interviews. The strategies adopted included upskilling local trainers, solving accommodation issues by providing shared housing, buying houses and buying new vehicles to provide transport to and from work.

Recruiting and retaining trainers is not easy, though, and a lack of other services, such as medical facilities and childcare, and challenging environments (described in detail in the 'location-based barriers' section) can act as disincentives for trainers to reside in or visit an area.

Both RTOs and industry interviewees shared similar responses to overcoming staff shortages in regional, rural and remote areas. The strategies adopted included flying trainers in from cities; block delivery; blended delivery; maximising the available time when travelling by covering multiple jobs in one trip; online-only delivery in remote areas; and upskilling local trainers. Further, equipping teaching spaces with new technology (for example, using VR and AV in classrooms to facilitate online delivery) and making use of a remote service model, where trainers travel from one remote location to another, were presented as solutions for overcoming this significant challenge.

Some interviewees suggested providing different employment contracts (for example, part-time or casual) to trainers 'so that they can join the system' (Industry, WA) and regional incentives 'whether it's a tax deduction or a grant or, I'm not too sure how it all works in the background' (Industry, NT) as enabling strategies not only to attract, but also to retain trainers in regional, rural and remote areas.

The Department of Employment and Workplace Relations acknowledges that 'RTOs are under increasing pressure to attract and retain a skilled workforce' (Department of Employment and Workplace Relations 2023) and it is evident that this widespread VET workforce issue is being acutely felt in regional, rural and remote Australia. The development of a VET Workforce Blueprint will 'aim to identify effective strategies for VET workforce issues such as attraction, retention, career development and succession planning' (Department of Employment and Workplace Relations 2023). It is unclear at this stage how the shortage of trainers in regional, rural and remote locations will be considered in the blueprint, but hopefully it will provide some strategies that will help address this critical barrier.

Missed business opportunities

Some interviewees expressed frustration about the missed opportunities to deliver training in their local region. Reasons for these missed opportunities included lack of awareness (by industry/businesses) of local RTOs due to lack of marketing; difficulties in creating and maintaining relationships and partnerships with other RTOs, community stakeholders, industry, government and other relevant stakeholders; and lack of understanding of local skills needs.

Awareness of local RTOs

Some RTOs in RRR areas described situations where they were overlooked by local businesses who contacted RTOs in the capital city, rather than reaching out to local RTOs:

> It's disheartening sometimes that people don't ask local first, you know, I'd prefer everyone to come and say 'do you guys deliver bigger loading crane courses' and then we can say yes, no. But sometimes, you know, you hear someone in town delivering courses and you think 'why are they not using us, we do that'. (RTO, Qld)

Lack of local awareness of private RTOs specifically was also raised by one interviewee:

> The other barrier, I believe, is that people still think VET is TAFE. Everybody. So, they don't even think about private RTOs. Often, they don't even go there. They'll go to TAFE first, and because we've got the relationship here with TAFE, they don't teach the creative industries or their own leadership [qualification], so then they refer people to us. So, a barrier for private RTOs I believe is the marketing. (RTO, WA)

Marketing their services was reported to be challenging in these locations but advertising in different media platforms and using social media to connect with local employers and trainees were presented as feasible strategies to improve awareness. Some RTOs, however, held the view that even with advertising, local people would still reach out to the RTOs in the city first:

> People don't always realise there is a local training provider either — often the first port of call is Perth. That's the same in every regional area. Even if you advertise, they'll still go to the city first. (RTO, WA)

Relationships/partnerships challenges

Creating and maintaining relationships with local businesses is another strategy to boost awareness and create opportunities to train locally, but this requires a significant investment of time.

> Or if you just wanted to go and do the meet and greet and, you know, spend a couple of days marketing and getting your name into those areas … (RTO, Qld)

Maintaining and retaining relationships with multiple stakeholders can be challenging due to the vast number of stakeholders involved in decision-making in these complex landscapes. As one RTO explained:

> A big part of my role is engaging with the local state member, local federal member, the local council, the local mayor. Now, if I live in Brisbane West, that's a list of four people. I've got about 64 people because everywhere I travel, to a different campus, to different federal member, different state member, different Council, different mayor, different community. So, managing that can be pretty challenging as well. And it is a barrier because a lot of our delivery around Mount Isa just will not occur if the relationship isn't there and you know we don't get paid to foster and promote relationships, but it's a massive part of our job. (RTO, Qld)

Some RTOs have experienced missed opportunities due to the champions with whom they have built relationships subsequently leaving the organisation:

> You can have a plan with one person, and they move on, and you've lost the plan again. So very resource-intensive in that sense. (RTO, WA)

Dealing with different communities with unique cultural backgrounds exacerbate the complexities:

> So, you already have to have some sort of a relationship within the community to be able to commence any type of program or to initiate any type of program. There's a lot of conversations that you have to have with them. It's a long process. You can't just go and deliver. It doesn't work like that. (Industry, Qld)

Some, but not all, RTO and industry interviewees acknowledged a lack of collaboration between RTOs due to intense competition in some thin markets:

> We don't really have a business networking like you guys all have down there. Yeah, we used to, years ago, but it sort of fell over and it's so competitive. Like everyone sees everyone else as a threat. Ah well, I wouldn't be able to sit down with the other RTOs in town and discuss my ideas of how to make things better in town. Because it's too competitive. We don't have enough population to support everyone, where we want to be in it. (RTO, Qld)

> If you've got three training providers all fighting over the same low volume, they'll all lose and they'll all leave, and none of them will ever come back, because they'll remember that. Whereas, if one of them comes in and wins and builds a relationship... (Industry, Tas.)

Other RTO interviewees reported no competition between RTOs in the areas in which they conducted training, with clear boundaries present and respected. Some described situations where cooperation between RTOs was occurring, with potential students being sent to the RTO best placed to provide the required training. The levels of competition and cooperation between RTOs clearly varied by location and the qualifications delivered.

Being well connected to the industry helps RTOs to build and maintain relationships with the stakeholders:

> I think in those regional and remote places, we do in Geraldton as well, it's not confined to those smaller places, we are definitely looking for as many relationships with external stakeholders as we can because that gives us insight into what industry are doing, for starters, and what they need. But it also gives us access potentially to resources and expertise and those sorts of things. (RTO, WA)

Industry respondents also stressed the importance of building and maintaining meaningful relationships with all stakeholders:

> Those types of collaborations are so valuable. And it just makes a really good case study in terms of the depths that particularly the education providers from [university provider] and [VET provider] went to make sure that what they were delivering was what industry wanted. So, they had all of these working groups with all the, you know, the company trainers and vocational experts involved; they were called expert groups and were involved in these groups right from the beginning. (Industry, Qld)

As one RTO explained, building relationships was not just a strategy to create a business opportunity, it also ensures industry and business needs are met:

> It's not about doing whatever to make the money. It's about doing whatever is needed to get the continuous improvement outcome, for what the business wants because that's what we'd like to see. So yeah, connection is everything in Tassie [Tasmania], possibly more so in the North West. (RTO, Tas.)

Thin markets

Thin markets, whereby it can be hard to recruit a critical volume of students, can challenge the financial viability of providing training in some regional, rural and remote locations.

> Even in Geraldton, we do have low student numbers in some areas, so the viability of some of the delivery is impacted and we're constantly doing that juggling act where we try to offset some of the less viable areas with some of those areas that are a little more viable … or, you know, stronger numbers. At the moment, the numbers are pretty good overall. But you know that it's reflective of what happens in the economy broadly. And Carnarvon, I think is a completely different kettle of fish … very low, sort of comparatively very low population base. So, student numbers are very low in all areas. (RTO, WA)

> That the biggest barrier is the standard one, which I'm sure you've heard, is the financial viability of running it now, sufficient number of students and a sufficient dollar value to cover the cost and make it feasible, especially when you compare the revenue from running a course in [location suppressed] to running one at our [location suppressed] office. We can't run a course at a loss, you know, we don't have the ability to do that. As much as I want to deliver in regional areas, it's got to be viable. (RTO, National)

Some RTOs emphasised that face-to-face delivery exacerbates the costs involved in delivering in thin markets:

> When I talk numbers, I'm talking for face-to-face training. You know, anyone can sign up and do it online. But for face to face, you're paying a trainer, you're renting space. So, you know, you need your numbers to make it viable, otherwise you're just going to lose money, which is not a good business decision either. (RTO, Qld)

While assessing thin markets and the viability of running a course is especially relevant to for-profit training organisations, it may not be as critical in those organisations with other functions/roles or funding arrangements, where profit is not as crucial. TAFE, in particular, has a role to play in thin markets across the country, although one TAFE interviewee described the pressure that comes with this:

> We still operate a lot in very thin markets, but it is with … more and more demands upon us to be everything to everybody. We just can't be anymore. (TAFE, location withheld)

While TAFE, as the country's public provider, has the ability to operate in thin markets, the interviews revealed that there are some differences in how TAFE and private RTOs service remote communities: TAFE often (but not always) relies on students coming into training facilities located in regional centres, while many interviewed private RTOs described scenarios whereby trainers are travelling out to local communities or businesses to deliver training. Although this study is limited to a small number of case study locations, it appears that some aspects of the training delivered by private RTOs in regional, rural and remote locations are different. One strategy suggested for addressing the issue of thin markets and training viability was the possibility of leveraging off these differences by creating innovative partnerships between public and private RTOs (which may be more flexible and have lower overheads) to ensure training is both fit for purpose and fit for scale in thin markets (Industry, WA).

Decisions to not deliver training in some locations due to thin markets can impact on local industry. As one industry peak body reported:

> And then some regions where they do have facilities, I've heard that it's just not being delivered because it doesn't seem to be ... what the training organisation would consider to be enough people to be able to deliver the program. So, it's not financially viable for them. So, they don't offer the programs, although there's a need in the region for it. (Industry, Qld)

According to the industry respondents, in addressing thin markets it is critical to understand where the actual demand is:

> Yes, there's thin markets, but let's understand where those demands are around the country. So that becomes your aggregate of students per period of time. So that, consolidates your demand, then the next question is, well, where's the best location? Of course, there will be political people, let's do it here, let's do it there. But I think the ultimate determinant of where the training should be is very much about where the location for industry is. (Industry, WA)

Industry interviewees suggested several solutions, some of which are already being used, to address thin markets:

- agreeing on a minimum number of trainees to conduct the training (Industry, Tas.)
- establishing partnerships between employers and RTOs (Industry, Qld)
- grouping trainees from different locations who are doing similar modules so that they can attend one location to undertake block training (Industry, Tas.)
- developing a framework where one RTO can deliver training to a critical mass from different organisations (Industry, Qld).

Employers and training providers arriving at a compromise that matches the training requirements with the training provider's offerings is another way to address thin markets, cost and training viability. As one interviewee suggested:

> It's about really understanding what the training provider can offer, at what cost … to allow them to make a dollar. And that could mean that they strip out elements … and just try to get to a point where they're comfortable in the relationship with you … And then you might find that in the middle of all of that, there's a product that can address the barrier, make a dollar.
>
> (Industry, Tas.)

Location-based barriers and responses

Travel and associated challenges

Many of the barriers identified by participants were related to the dispersed and often difficult locations in which they were delivering training. The tyranny of distance means that travelling to some locations to provide training may involve long road trips and/or flights (either commercial or privately chartered). Additionally, access to some locations can be limited, especially in northern Australia, where the wet season can restrict road access:

> One of the most significant issues is the funding and support for remote delivery, because especially with the cost of fuel and with us driving out to remote communities, it's expensive to do it. Not that long ago I broke the shock absorbers on my car, driving out to work. You know it's extremely challenging to get out there. I've worked in situations … we're doing work with the Central Land Council ranges and there's a period there where we would fly in and out. But the cost of flights is somewhat prohibitive. And it's also much harder to take all the training gear on a plane than what it is in the vehicle. (RTO, NT)

> Distance and cost of travel is probably a very big barrier with it, even from things like the conventional airlines down to Alice [Springs] is something like 2—3 times the price of going capital city to capital city, so you know it's still a Qantas link flight, but it's still $800, you know, each way … (RTO, NT)

> We deliver Aboriginal school-based training … which is fine if you just deliver it in your town of Broome, but Kununurra, that's 1000 kilometres away. I've been there to deliver the school-based training. The problem is it's very expensive to fly to Kununurra and back, even from Broome. It's preferable to drive and that gets expensive. (RTO, WA)

The logistical considerations can be significant:

> A good example of that at the moment, we've got a contract up in the Torres Strait, delivering [qualification withheld], but for us to do that, it's on the different islands and … the teacher's got to fly from Cairns to Horn Island, get ferry across from Horn [Island] to Thursday [Island] to pick up the stuff to go back to Horn [Island] to get a helicopter or a little light aircraft across … then they've got to be picked up by some … you know, all of these challenges to service the communities to a level of what they require is quite challenging. (RTO, Qld)

Travel costs can multiply when RTOs have to respond to employers' needs, such as an employer not being able to release workers for training:

> The RTOs are going up there, or going out to these people, and it's costing our company thousands and thousands of dollars every visit ... it costs me to fly, car hire, accommodation, meals … and in those areas those flights can be $1000 each. So we're paying for all of that just to be told 'no, I'm not releasing him today, we're too busy'. (RTO, Qld)

Another RTO reported that employers sometimes request that training be conducted on weekends, to reduce the impact on business operations, but explained that this can 'pose a whole new set of challenges around the extended timeframe to run the course and the multiple trips back and forth'. (RTO, National)

Mode of transport also needs to be considered in the light of any equipment or resources that need to be transported into the location. Some RTOs spoke of upgrading vehicles to ensure they were suitable for the road conditions and could carry all equipment required:

> Actually, safely getting staff to areas. Sticking around the Mount Isa region and servicing communities like Doomadgee, now there are flights into Doomadgee, but if we're going out to deliver a Cert I in Construction, where we need a set of tools, a set of equipment, we'd have to hire the plane, the whole plane, which obviously we can't do. So, we have to truck people out. So, we carry behind our vehicles a sort of trailer that's full of equipment that allows us to deliver. But from Mount Isa to Doomadgee on a good day is a six and a half hour run that is not on sealed roads. (RTO, Qld)

One RTO mentioned obtaining a pilot licence to reduce travel costs:

> I actually got my own pilot's licence, so that became more economic than chartering planes because that's just amazing numbers that go on to the price there. And I actually now fly either the staff or myself out to the communities, which has dramatically reduced some of those costs. In fact, it's now actually very comparable to driving out, but a lot quicker. So, I save on the time. (RTO, NT)

Travelling long distances to a training location adds to the trainer's time commitment and may require overnight stays. Interviewees reported that suitable accommodation is not always readily available and can also be expensive:

> At Groote Eylandt … we're working with the local community to start training there. So we've been in that infancy stage to deliver training and we're trying to work how we can deliver training on the island by sending someone over there. It's the costs involved and trying to find the accommodation appropriate to allow the trainers to feel safe and being in a safe environment. (RTO, NT)

> You've got accommodation that you've got to get sorted out there and I remember on that particular job I was sleeping out on the veranda for a period of time that was closed in, you know, like being in a chicken coop. (RTO, NT)

One RTO reported working with government to secure housing, so that shared housing can be provided to trainers (RTO, Qld).

Other strategies to address travel-associated challenges included making the most of the available time when travelling (for example, delivering multiple courses when in location), employer contributions to travel costs, and support from local venues to deliver training.

The use of online delivery was also presented as a solution to overcoming issues related to travel time and cost (for both trainers and students), but this raises other challenges (as discussed on page 35).

Environmental factors – physically and mentally challenging locations

Some locations, especially very remote locations, can be challenging environments in which to live, visit or deliver training. Harsh weather conditions, such as extreme temperatures, rainfall or cyclonic conditions (especially in northern Australia), are deterrents for some people:

> Uh, just the sheer temperature … if you've doing civil construction or something, you're working in 55 degrees. Most of them are not used to that. You're working out in the gravel pit … and you're providing instruction using a 2-way from the airconditioned car … because it's too hot to be out in it. So yeah, a lot of trainers are not used to those sorts of conditions. (RTO, WA)

> So I think that we have barriers with our time in what we can deliver, and what I mean by that is we have a wet and dry season. So wet season you go to Gunbalanya, you've got Cahills crossing … that's where all the crocodiles are and where all the tourists are. Well, to get out to Gunbalanya and those places where we've delivered before, [means] that if we can't get the training within the dry season then you're not going to send anyone out in the wet season because we have safety requirements to river crossings and those type of things. (RTO, NT)

Interviewees also spoke of social issues which can impact the safety of trainers. Concerns about substance abuse, domestic violence and friction between feuding families in some communities were raised as safety issues that create unappealing or unsafe environments for trainers.

> I suppose the unfortunate thing is within NT, and I don't want to pick on a community itself, but it's a struggle to deliver in some of the communities through the violence that's happening there … they've sent a lot of police because there's families feuding now. We had a chance to deliver training out there but doing our research and going through the process that we do, it's unsafe to send anyone out there. (RTO, NT)

Industry respondents also raised concerns about safety and 'liveability' in some locations:

> So, there's chronic issues of crime. If you go live in these towns, you will have your car stolen, you will have your house broken into. You know when we talk about liveability, it's not just that you don't have access to health care, childcare, those fundamental things … (Industry, WA)

Sending trainers into difficult locations can be a 'culture shock', even if the RTO has attempted to prepare them:

> We must have gone through six coordinators in quick succession, because sometimes they come from the East Coast, they've never been to a place like Broome or the Kimberley, it's a culture shock. We even send videos showing what you can expect … they say 'yeah, yeah, yeah', but after a week they don't show up. Now that is the culture shock. (RTO, WA)

Responses to overcome these challenges are intertwined with those already mentioned in the previous sections (that is, providing safe accommodation, transport to and from work, etc). In addition, educating the trainers about the living conditions in these areas, and addressing security and safety issues with the help of local governments and the Commonwealth were also suggested. While it is not always easy or possible, finding local trainers (who are used to the conditions) was also offered as a solution for these location-based challenges.

Infrastructure and resources

It is not feasible to have expensive training facilities in every part of the country. The size of the country and the dispersed population means that it can be difficult for students to access available training facilities, hence limiting the capacity of training providers to deliver training:

> Obviously vocational education has got a practical component to it. So regardless of whether you can deliver the theory content electronically, there is still that compulsory practical learning. So, it works very well for things like traineeships or work-based learning, where they are going to be exposed to the practical aspects of the training anyway, but it doesn't work for people that just say they want to do a cert in aquaculture … they don't have access to those facilities. (RTO, WA)

Even when training facilities are available, the costs of ensuring equipment is maintained and up to date can be prohibitive:

> Particularly in the trades areas … we get some feedback that the equipment that we have on some of our sites is not contemporary, because we just can't maintain everything, everywhere. We have half a million people in Tasmania, I think that's forgotten at times, and we maintain multiple sites delivering the same training, just because it's in a different region. It is really difficult and you just don't get that level of funding to have the greatest and latest and best in every site. (RTO, Tas.)

It is not financially viable for some RTOs to be equipped with expensive, state-of-the-art machinery and technology, particularly given the nature of the thin markets in some of these locations. As industry interviewees explained:

> Technical equipment like side loaders and, you know, things that people need to be trained in are expensive just to have sitting idle. If you're an RTO and only using it once a month or things like that, that comes into play as well. (Industry, NT)

> They don't have the facilities and you can't put them in each campus because it's just not feasible. (Industry, National)

However, industry respondents raised concerns around the safety of both trainers and students and the credibility of RTOs operating without appropriate machinery:

> But we've had problems in the past with RTOs who've had, you know, cheap ancient trucks or whatever to have people upskilled with. And then the employers get jack of that and, you know, complain about the RTO and then, you know, again you have that credibility loss simply because the RTO … that's not their bread and butter. (Industry, NT)

Interviewees suggested solutions such as using government-owned premises like local libraries and training centres; support from local venues to conduct training; requests to industry to provide access to their equipment; and additional funding for infrastructure development to overcome infrastructure and resource challenges.

On occasions there is no choice but to encourage students to travel into larger centres to undertake their desired training:

> If you want to do that in the mining sector, then how do you actually manage to do that? Unless you go to the mine site itself, to the work site, you've got to probably take them to the place where you've got the infrastructure. And that's at a bigger campus. (Industry, National)

> So, it might be mum and dad in your fish and chip shop or a little cafe. And they want to do a Cert III in Commercial Cookery … can't do that, you know, because they don't have the proper commercial kitchen set-up to offer the student … So, therefore we can't, hand on heart, say we can deliver that. However, we always come up with alternatives for them … offer them to come to our campus in Townsville to learn if they want to and do it that way. (RTO, Qld)

The comments above suggest that sometimes there is no option but for students to travel away from their community to undertake training in their chosen field. While some students may embrace this as a positive opportunity, for some people (especially young people and First Nations people), being away from family can be stressful and may require cultural awareness and extra support from the RTO. It also adds cost for the student, unless they are eligible for funding that covers travel, accommodation and other expenses (such as 'away from base' funding). Some interviewees also reported that some young people who travel to larger centres to study do not return to their hometown and saw this as a loss to their community.

Industry respondents are also of the view that investing in technology and providing infrastructure support in the RRR areas will 'unlock more opportunities for remote vocational learning' (Industry, Qld). Some providers are certainly exploring the use of technology, to varying degrees, to enable greater accessibility in the absence of dedicated training facilities. Some are looking to move more of their training into an online environment, while others are developing high-tech solutions.

> So, the biggest issue from that is accessibility to training, especially because we still deliver things probably more traditionally than what we need to in, you know, quite a few instances. And though we're trying to move to far more digital online type products to allow greater accessibility regardless of where you are, we're still on that journey and we're probably newer into that space than what we'd prefer to be. (RTO, Tas.)

Some of these solutions require significant investment, as one RTO described:

> We're actually now designing classrooms, what we are calling classrooms of the future. So, we're focusing a lot on developing AV and VR capability and we're having a control room philosophy. So, what our facilities look like is we have an AV/VR room, which is basically an empty room with a rail around the top with really you-beaut cameras that enable us to put in HoloLens technology … Because of the industry in the Whitsundays, booming now with aquaculture, we're building an aquaculture plant, so that will plug in the back of the classroom. (RTO, Qld)

This significant investment means that delivery is still reliant on demand to warrant the spend. The viability issue is still relevant, even if training is delivered in a different way. The benefit is that the demand can be spread across geographically dispersed locations. As the above RTO further explains:

> The idea behind this, when these things come online, is because we only ever get three who want to do aquaculture in the Whitsundays, three who want to do aquaculture in Bowen and three who want to do aquaculture in Home Hill, we'll be able to have a teacher in one of those facilities zooming across … and the technology that we're putting in is just quite remarkable with the cameras that follow the teachers and things. And so we will deliver … aquaculture … to all of our outer campuses capable of receiving this. And we'll use the real life stuff in Whitsundays. But people will be able to see what's happening and looking, feeling, touching. (RTO, Qld)

It should be noted that such solutions are not ideal in every situation. Online delivery does not suit all learners nor all courses (see Hume & Griffin 2022 for more discussion on this). RTO interviewees described situations where students were put off by online delivery modes. 'Anything that's digital is, by definition, harder' (RTO, WA), and 'complex digital platforms' (RTO, WA) were two examples of why students 'refuse to learn another way' (RTO, Qld). The limited digital literacy in some people, especially in some locations, as discussed on page 37, can also hinder the use of online delivery in regional, rural and remote Australia. Online delivery is also reliant on good internet connectivity in these locations, as discussed in the next section.

Connectivity and technology

Despite the significant investment in improving internet access in Australia over the past few years, poor and unreliable internet is still an issue in many regional, rural and remote parts of the country. Access and the stability of internet access (and other technologies, such as mobile phone coverage) can vary considerably depending on the location and its remoteness. Indeed, the Australian Parliament (2022) reported that the tele-education experience through the COVID-19 pandemic has highlighted disparities across Australia, with disadvantage more likely to impact on those living in regional areas. As one RTO interviewee described:

> You know you can be in some towns there, they just get their internet cut. So that's a barrier for online training because the speed of internet connection and the reliability. Quite often when I'm in a location, there's no internet. (RTO, Qld)

Additionally, access to computers (and technology in general) in some communities is limited:

> The other thing that you find is that you can't do a lot of training online in certain communities, because there's no technology out there. They can't get to a computer … you got to take hard books out there. (RTO, NT)

> The regional parts of Queensland are the worst, you know, it's everywhere, but a lot of our metro areas have support mechanisms in place, you know, and they might have a little bit more access to technology, so therefore they're more inclined and they're more used to using it, whereas out on the farm stations or the mines, or in the rural, regional remote areas, that's not the norm.
>
> (RTO, Qld)

Back-up plans, such as having printed material ready, were described by some RTOs, noting that this generates additional operating costs to the RTOs (RTO, Qld).

While online delivery might be considered one way to overcome some of the challenges in training in regional, rural and remote locations, the limited technology and internet access in some locations can render it ineffective.

Limited pathways and/or job opportunities

The lack of job opportunities, especially in small communities, can pose a barrier to the training opportunities that could be offered. RTO interviewees indicated that they were hesitant to offer or deliver training for jobs that are not available, aware that this can create a cycle of people churning through qualifications with no employment outcomes:

> Lack of job opportunities for people — creates churn through qualifications. It also means some kids just don't want to do the training that's been made available — because there are no jobs at the end of it. (RTO, WA)

It was also acknowledged that training is only part of the solution for some people, such as those experiencing long-term unemployment. The benefits of employment and training, in combination with each other, were considered important. To ensure that individuals (especially those considered vulnerable) were not in training for training's sake, some RTOs require that potential students be employed before enrolling them:

> We train specifically where there are jobs available and if there're no jobs available, we'll be up front and say there's no point doing the course because you won't get a job because there aren't any, but if we talk to the employers and they have vacancies, which they will do at the moment, and you know we try and line those up and match the people to the job before they do the course so that it becomes relevant right from the start. (RTO, National)

While this works in some situations, it is not necessarily appropriate for all types of training, and it should also be noted that not all VET students undertake training in order to gain employment. Further, some students may need training that develops their employability skills before they are ready to enter the labour market.

Industry respondents stressed the need for educating high school students about future pathways, emphasising the importance of providing them with information about opportunities in the industries in their regions. Gateway to industry schools (Queensland), Queensland Mining Academy, 'Youthbuild' in Tasmania, the Queensland Future Skills Partnership and various activities undertaken by industry training hubs were examples of such programs provided by interviewees.

Mismatch between community/student needs and training (including course design)

Ensuring that training is suitable for a location is not merely concerned with addressing local skills needs or ensuring employment outcomes; it is also about matching the training to the needs of the community and the people. Phrases like 'one size does not fit all' were used by interviewees:

> Yeah, and the other thing is just being mindful, I would say that, and I've noticed this with communities, every place is different … it's not going to be one size fits all. (RTO, NT)

> We have endeavoured to try and engage and do a whole bunch of work to understand what rural and remote areas … need, and it's really diverse, depending on the community in the area, because they're all quite different. And you know, that's a challenge for us, to then try and understand how we can help because one of the things that I think that we need to do better is manage expectations around what it is, where we can actually help, instead of giving perhaps the impression that we can do everything and help with everything. (RTO, Tas.)

Some RTOs talked about how full qualifications and/or nationally recognised training do not always meet the needs of some communities:

> For the last 10, or probably for the last five years, we haven't been delivering nationally recognised training. We tend to do long project work. So, one of the issues with remote delivery with the VET sector is it's very ... you arrive, do the training for a short amount of time, disappear and never see them again. So we take a very long term approach to skill development for the remote workforces because relationship building is really important to the people that you're working with in order to deliver effectively. First and foremost, our focus is on LLN and because we take a very long-term approach to training and delivery, that doesn't necessarily fit with how the VET sector works with short term qualifications. (RTO, NT)

Ensuring that training programs meet the needs of a community is not always easy, particularly if the training is not aligned with industry/employer needs. Working with communities to ensure they are getting what they need was described by one interviewee:

> The other thing that we try and do within the training program is to try and look at the package, the packaging rules. We talk to the community, we see what they want. You'll get people … who get onto training.gov and they'll read a unit of competency to see and say 'ohh [we'll] do that'. But [we] unpack it to them and say well this is what this means, and usually you find out it's not meeting what their needs are. So, it's about talking to them. (RTO, NT)

Once again, it is noted how important building those relationships are in delivering VET in regional, rural and remote locations: they're important not just to ensure that training aligns with community needs but also that the community supports the training that will take place. Community and employer buy-in is critical in some communities:

> The biggest thing in both areas is not so much the individuals, it's the people around them. It's the employers, the job agencies, the community, community workers. If those people support them and say yes, you should do this course and you know, then we can do all these things afterwards. Then it generally works. But if we're relying on the individuals by themselves, with no support from anybody else, then they come and go … (RTO, National)

Student-centred challenges and responses

Many of the student-related challenges faced by RTOs are not unique to regional, rural and remote Australia, although some interviewees suggested that the issues can be more acute in some of these locations.

Language, literacy and numeracy, including digital literacy

Many of the RTO interviewees reported that language, literacy and numeracy issues were a large barrier to delivering VET in regional, rural and remote locations, with some suggesting that it intensifies as training locations become more remote. Several elements that contribute to LLN challenges were reported:

- English as a second (or additional) language, especially in Indigenous communities

  > A lot of the time, especially in Northern Territory, English is a second language for some of our Indigenous people, so it's not the norm to read English and understand it. So yeah, I do think it's a huge factor and I think the literacy skills that we have within communities are really quite a lot lower than what they should be. (RTO, NT)

- Low education levels (only up to Year 10, for example)

  > And I'll talk [about] Yarrabah, which is Queensland, but they only go to year 10, in Yarrabah in the high school. And so straight away we know that there's a lower level of literacy out there. So you've got to take that into consideration. (RTO, NT)

- Lack of formal post-school education

  > Participation in formal education historically too … there's the story that some people have walls of certificates — not in remote communities. So, in many cases this … is early in terms of any form of education for some people. (RTO, NT)

Some industry interviewees also spoke about the LLN issues they see in their industries, acknowledging that RTOs would face challenges in delivering training that caters to the wide spectrum of LLN skills.

While an issue not unique to people in regional, rural and remote locations, RTO interviewees also spoke of the lack of confidence that some people in these locations have in undertaking post-school training. They may be nervous about 'going back to school' or might think they are not worthy. For some people, undertaking training is the first formal learning they have done since school:

> And you know, for many people coming on to our campuses, [it's] the first time they've ever been in this sort of environment. And being in adult education environment versus school environment, we expect them to behave and act like adults. But it's really daunting for them. You know, where do I go? Who do I talk to? How do I find this out? So [the] sort of stuff that we might take for granted and find quite easy and straightforward ... lots of people don't. (RTO, Tas.)

A variety of mechanisms were described by RTOs to overcome the LLN challenges faced:

- incorporating modifications to training delivery and/or training materials to cater to low literacy levels (such as visuals, lots of practical demonstration)
- offering one-on-one support, either online or in person (may also involve inviting students into town/onto campus)
- allowing a longer timeframe (for example, one RTO works on a 10-year timeframe and uses unaccredited training rather than shorter, accredited VET qualifications).

While some of these strategies are not unique to regional, rural and remote locations, providing them in these locations may be more challenging due to issues such as (but not limited to): a lack of additional and/or specialised support staff; limitations in how long a trainer might be in a specific location and the length of time between visits; and limitations in the volume and/or types of materials available or that can be brought in.

Poor digital literacy was also highlighted as a barrier to training in regional, rural and remote Australia:

> Digital literacy is a really big issue for us in Tasmania generally, it is not highly taken up and it's hard to move people in that direction as well. We have a role to play, and we are probably fairly early in our journey in that as well, because we've got some work to do in that space. (RTO, Tas.)

> Digital skills in the regional areas is a lot harder. We have moved 99% of our assessments and resources to digital. Still done in the classroom, still trying to support, but there's sometimes, you know, you'll take out a laptop and pass it around to the students and they look at it and say, what's that? But that's fine … you just put that away and give them stack of paper. (RTO, National)

This barrier, together with the unreliable internet connectivity in some regional, rural and remote locations, is especially problematic if online delivery is used as a mechanism to increase access to VET in RRR Australia.

RTOs reported using several strategies to address low digital literacy in RRR students:

- having a back-up plan for students with low digital literacy (printed materials, for example)
- developing and using new apps to facilitate digital literacy (including 'in language', for Indigenous students)
- testing students' digital literacy prior to enrolling students in online courses.

It is not all bad news, however, with some RTOs reporting that the provision of training is helping students become more proficient with their digital literacy:

> We have found that the uptake of digital literacy is really what has been fantastic. (RTO, NT)

Training in Indigenous communities

Some of the participating RTOs specialised in, and were very experienced in, delivering training in Indigenous communities.[3] While many of the barriers they discussed are also experienced in non-Indigenous communities (and are discussed/included in the sections above), some were either unique to training in Indigenous communities, or were heightened in some way.

Some of the challenges experienced by RTOs when delivering training in RRR Indigenous communities included:

- language, literacy, numeracy and digital literacy (discussed in previous section)
- training not suited to the local context, or suited to First Nations learners
- funding not fit for purpose (whole qualifications not always appropriate/wanted, or qualification level too high)
- cultural beliefs and activities
- difficulty in recruiting trainers with appropriate cultural awareness
- lack of support for training from the community and/or families

3 It should be noted that this project did not aim to provide a thorough examination of providing VET in Indigenous communities, but given the nature of the case study locations, many of the project interviewees raised some of the challenges faced. A project currently being conducted by the Australian Government aims to explore the learning experience of First Nations learners in the VET system and it is likely this will provide a deeper understanding of issues, and strategies to overcome them.

- socioeconomic issues
- safety/social issues (violence, domestic violence, substance abuse, family issues, legal issues).

The participating RTOs displayed a strong commitment to providing training in these communities and described the work they do to overcome or navigate these barriers. In addition to many of the approaches taken to overcome LLND issues (described above), some of the techniques that RTOs take to overcoming challenges in training First Nations people include:

- ensuring the training is what the community wants/needs (not 'selling us this dream that never happens' (Industry, Qld)
- having First Nations people and/or local people as trainers
- ensuring trainers are culturally aware
- having trainers familiarise themselves with Indigenous languages
- involving local (especially Indigenous) people for support and mentoring.

Recruiting Indigenous trainers, or encouraging Indigenous people to become VET trainers, is not an easy task, however, with one RTO explaining:

> So ideally it would be to have First Nations trainers. Every job I've done in Broome, I always aspire to train someone, an Aboriginal person to take my place because I always work in Aboriginal community organisations or areas. But why? Why would they go through getting all those qualifications? Because they're in such demand as leaders and role models, so there's other avenues that can be taken where you will get higher wages and be able to do the task without having to go through all of those skills and jump those hurdles. (RTO, WA)

Increased costs

The increased, and often considerable, costs associated with delivering training in regional, rural and remote locations was almost unanimously nominated by RTOs as a barrier and was often the first mentioned:

> Well, number one is the cost factor. Now this is incredibly expensive. We're talking about remote WA. (RTO, WA)

> The RTO doesn't always make money on programs it offers, because of the extra costs. (RTO, Qld)

> One of the most significant issues is the funding and support for remote delivery, because, especially with the cost of fuel and with us driving out to remote communities, it's expensive to do it. (RTO, NT)

These increased costs, combined with the issue of thin markets in regional, rural and remote Australia, can challenge the financial viability of training in such locations (as described on page 29). The strategies that RTOs reported using to offset these costs included seeking employer financial contributions and looking for co-funding opportunities.

While increased costs were the barrier mentioned most often, these are a result of many other factors, as described in the previous sections, rather than being an independent issue. Addressing some of these specific barriers may assist in alleviating the additional costs associated with delivering in these locations. A better understanding of how these various factors increase the cost of delivery may also help to inform the design of future funding models (including loading or other funding arrangements specific to regional, rural and remote delivery).

Funding issues

Some RTOs spoke about the constraints of the current funding models and how these impact delivery in regional, rural and remote locations, with the following issues raised.

Mismatch between need and funding available

RTOs gave examples where funding was available to deliver certificate III level qualifications but explained that not all people are capable of embarking on that level of training. There was a sense that more funding for lower-level qualifications, and for training that does not necessarily result in a full qualification, providing a pathway to higher level training, would better meet the needs of some communities and learners. For example:

> So governments are always trying to do stuff for Indigenous, which is great. But I think what they do is they throw a lump sum of money and say we want to do a cert three when they should be looking at lower levels and then they should be looking at training that is not a full qualification. They [a community] came to me and they said would you do specific units because they have a store like an IGA store out there. All they wanted to know was how to use a Word document and those type of things. Now for me to go out there, the community can't pay for it usually, so you have to get funding. But when you do go to get the funding, or apply for it, they won't support it because it's not a full qualification. (RTO, NT)

Funding awarded to non-local RTOs and training not delivered where it is needed

Some RTOs expressed concern about non-local RTOs being awarded funding to deliver certain qualifications and the inefficiencies this can create:

> The allocation of contracts is done by people in Canberra, who don't understand the travel times in WA. For one program, they gave Broome to Geraldton, and gave Geraldton to Perth. Broome is 22 hours from Geraldton, and Perth is 4½ hours away. So there was a cost in setting up in Broome. (RTO, WA)

There were also concerns raised that training is not always delivered in the regional, rural and remote locations where it is needed:

> If they award, say, $10 million worth of funding to [RTO] in Brisbane, who says that they're going to come to Boulia, Birdsville and Mount Isa … and these MC courses [Multi-combination class truck licence], an MC course is worth between $1500 and $3000 and the funding can bring it down to $50. Now if they put their hand up to come to these regions, there should be stats to say, well, you said you would go and do 25% of the work out West. But they won't come. See, they get the funding and nobody is checking, because to drive out to Mount Isa from Brisbane in a road train, will be 30 hours driving. If no one's forcing you to, why would you? (RTO, Qld)

Lack of continuity in funding

One RTO described the challenge they face with managing community expectations when funding priorities and opportunities change. They described situations where they have received funding to offer a program, which they get up and running, but when priorities change and the funding is no longer available they can no longer offer it to the community (even though there is still a demand for it).

Funding models not suited to RRR delivery

Some RTO interviewees spoke of the extra time often required to deliver in regional, rural and remote areas and expressed concerns that funding models based on the volume of training (nominal hours) may not be appropriate for training in such locations. For example:

> In terms of funding, the biggest barrier is the model does not work for remote learners. And it doesn't matter how many times I say that to the government or how many times I say to politicians, nobody wants to change the model. So, I think that's a huge barrier... the fact that you've got 10 hours to do something. (RTO, NT)

Funding for training delivery in regional, rural and remote locations usually attracts loadings to offset the additional costs, the level of which can vary according to characteristics such as location, skills/qualification priority and/or training for priority cohorts (for example, First Nations people). Some RTOs, however, suggested that this does not always cover the true costs of delivery, while others provided examples of funding programs that specifically covered some of the extra costs, such as travel and accommodation.

Looking forward: what would help?

What would better enable VET delivery in regional, rural and remote Australia?

The interviews revealed that there is no shortage of passion and determination to provide training across Australia. Interviewees acknowledged that it is difficult, but there was a strong commitment to providing for local industries and making a difference to individuals and communities. The previous section described various strategies that RTOs use to overcome the myriad of challenges they face in delivering in a diverse array of locations. But are there bigger-picture strategies that could *better* enable delivery?

Key points

- VET delivery in regional, rural and remote Australia could be better enabled with consideration of diversity of place, funding arrangements, co-ordination of training demand and the facilitation of partnership building.
- Not all challenges to delivering VET in regional, rural and remote Australia can be addressed by the VET sector. A holistic approach is required.

Consideration of diversity to enable flexible approaches

Australia's regions are incredibly diverse and this needs to be acknowledged in policy-making. As aptly described by the chair of the Select Committee on Regional Australia:

> Regional Australia isn't a monolithic entity — it comprises a vast and diverse landscape, with different economic and social characteristics. Policymaking needs to take into account the unique economic and social circumstances of a particular area, including local businesses and industries, to address the needs of the people living there. The Committee regards place-based decision making as critical for the successful development of rural, regional and remote Australia.
>
> (Australian Parliament 2022, p.v)

At a regional level, local organisations such as the Eyre Peninsula Local Government Association (2019), for example, also highlight the importance of tailoring policies to regional differences.

This point of view was echoed in many of the interviews for this project, with interviewees detailing the unique characteristics of the locations and communities in which they deliver training. They described how 'standard' practices are not always suitable, for example:

> The training package requirements don't always suit the remote context. (RTO, WA)
>
> Things are different in every location. Two different regional centres will need to be managed differently. You know, one small Indigenous community is going to be different to another small Indigenous community. And I think that is one of the barriers for people, is that unless you understand the regional towns and the way that they are all unique … (RTO, National)
>
> Every program will be different because participants will be so different and there'll be a different need at the time … you can't do one size fits all. It will never, ever work. (RTO, NT)

Policy development can act as a constraint to delivering training effectively in regional, rural and remote Australia. As the Regional Australia Institute suggested, as quoted in the Select Committee on Regional Australia report (Australian Parliament 2022, p.89):

> We tend to offer the same sorts of support, programs and assistance across the country … So, we've got a uniform approach to most of our industry and education development, but we need … things that allow some of these policies and programs to vary according to different places.

Given this diversity in regional, rural and remote locations, a flexible approach to providing VET is required. Kearns, Bowman and Garlick (2008, p.32) argued that there is a need to:

> Enhance flexibility in the VET response to the full range of learning and skill needs in community and regional development, particularly in relation to the small business sector, small, underserviced communities and in thin markets generally, including those associated with emerging industries within rural and regional contexts.

Indeed, in this current study, interviewees emphasised the flexible approaches they need to adopt when training in regional, rural and remote locations, and how this is not always easy within the constraints of the sometimes-inflexible system. Training package requirements and a mismatch between state and local training priorities were all cited as issues constraining the ability to provide training in the requisite flexible manner in some locations. Similar to the way in which state training authorities are making efforts to better understand skills needs at the regional level, a greater understanding of how training should be delivered in the local context — and how policy and training package development might better enable that — would potentially allow for the flexibility in approaches required in RRR Australia. Devolving some of the decision-making to ensure local needs are better met may also help to facilitate this.

Funding arrangements

There is no doubt that additional costs are associated with training delivery in RRR locations. However, interviewees were hesitant to suggest that the key to overcoming this barrier is simply to increase funding. Their responses implied that a more nuanced approach was required. What was raised by interviewees was the suitability of the funding model for some regional, rural and remote locations, especially in terms of two issues:

- funding not always covering the true costs of delivering, despite the additional loading
- a mismatch between state funding priorities and local needs, for example, funding not available for the lower-level qualifications better suited to local community members.

Some RTOs indicated that they seek out additional and/or multiple funding sources to help defray the costs of delivering training in regional, rural and remote locations and/or thin markets. Situations were described where combinations of Commonwealth and state funding were used, sometimes also in combination with employer contributions. This type of approach may be especially helpful for training aimed at remote communities and smaller businesses, which potentially find the full costs of training prohibitive.

Understanding the true costs of delivering in regional, rural and remote Australia, especially in terms of the travel expenses (and how these have further increased since the COVID-19 pandemic) and the extra time sometimes required, would help to ensure that funding is adequate. To assist with this, Jobs and Skills Australia (2023) reported that the National Skills Commission has provided analysis and advice to the government on the most appropriate frameworks for funding and delivering training in thin markets, as well as for student support services.

Examples of previous funding programs (typically associated with delivery in Indigenous communities) that fully covered travel and accommodation were discussed and highly regarded by some RTO interviewees. These previous programs should be evaluated to ensure that any learnings can be considered in future funding programs.

As above, devolving some of the decision-making on the most appropriate qualifications to fund in regional, rural and remote locations may help to alleviate some current aspects of the mismatch between funding availability and local need.

The consideration of suitable funding models is mostly relevant to publicly funded training. In their submission to the Select Committee on Regional Australia (Australian Parliament 2022), however, Business NSW recommended that increased subsidies be provided to both public and private training providers who deliver courses in regional areas. VET funding policy, with its emphasis on competition, was found to be acting as a barrier to collaboration between VET providers in all the regions and communities studied by Kearns, Bowman and Garlick (2008). The competitive nature of obtaining funding and ensuring that the funding available matches the local needs are challenges that RTOs need to overcome for the benefits to be realised.

Coordination of demand

Several interviewees suggested that finding a way to pool the training needs of different employers would help to increase the viability of training for RTOs in thin markets:

> One thing that would work, and this is actually something I'm thinking about doing, and I've been talking to my colleagues about it, is what's really needed is a sort of framework in rural areas where you can bring together service providers and see if you can get a critical mass of workers. And then you can go to an RTO and say, well actually it's five organisations, but we've all got three [workers] each, so that might make it viable for you to come up once a month and do training. So, I've been thinking about that for a while. It's a little bit fraught of course, because if somebody pulls out, then all of a sudden the others are left holding the bag. But I've got to work that issue out yet. But that's one thing that would work. (Industry, Qld)

While there may be some issues with competing businesses working together, the capacity to access training more readily and potentially more economically may outweigh the risks:

> One of the classic comments that people in the industry make is ‘why should I invest in training this person up? Because my experience is that once I do that, they get snaffled by somebody else’. So, one of the countermeasures to that is through an industry group and this is where working through an organisation like [withheld] or similar peak bodies that have members, getting them to realise that one way to counteract that is you do it as a group. And yes, there will be movement between businesses, but because you're all participating, it's, well, some may move to non-members, but you're minimising the losses so to speak. (Industry, WA)

This type of arrangement requires someone to drive it and it needs to be resourced. Consideration should be given to the individual or organisation best placed to help employers pool their training needs. A possible example of this type of resourced role was discussed by one of the industry interviewees, who highlighted one of the approaches emerging from the recently released Queensland Workforce Strategy:

> Establish a network of Industry-based Workforce Advisors to work directly with employers to help them to address workforce challenges and diversify their workforces.
>
> (Queensland Government 2022, p.12)

The interviewee believed that these advisors would work with businesses to assist with workforce issues, especially small-to-medium enterprises with less sophisticated human resource practices. The interviewee suggested that these advisors ‘can put a consortium together or you can pick five businesses in the area and say, look, you're doing the same thing, you’ve got the same needs’ (Industry, Qld).

Industry cluster arrangements have also been used successfully to perform such a function; for example:

> Nambucca Valley's Vehicle Manufacturing Industry cluster has worked together to share labour pools, training opportunities and even capital equipment to grow their supply chain. Geographic clustering of this nature has great capacity to attract skilled staff, create pathways for employment and even contribute to industry attraction. (Regional Development Australia Mid North Coast NSW & Regional Development Australia Northern Rivers NSW 2020, p.23)

Other interviewees suggested that industry peak bodies and/or local councils could play this type of role if resourced to do so.

While this suggestion related to coordinating demand for training, there may be a similar argument for coordinating the supply of training. Kearns, Bowman and Garlick (2008, p.29) noted that VET providers should also make cooperative arrangements:

> Enhanced cooperation between VET providers linked to regional development planning would bring benefits to our regions in extending the skill base. VET providers should cooperate at least to rationalise and maximise VET provision in thin markets.

This requires the development of sound relationships and/or partnerships between RTOs, which is addressed in the section below.

Partnerships

The importance of partnerships between training providers and other stakeholders, especially industry, to ensure that VET delivery is meeting employer and other needs is well understood in the sector and is broader than the regional, rural and remote context. In regional, rural and remote locations, however, partnerships between many different stakeholders are especially important in ensuring VET delivery is relevant to local economies and/or communities. In their 2008 study, Kearns, Bowman and Garlick found that successful VET in local communities was facilitated by relationships of many sorts, including VET in Schools partnerships, VET—industry partnerships and VET for social inclusion partnerships.

A number of regional development organisations have acknowledged the importance of partnerships in their strategic plans. As described in the North Coast employment strategy (2020):

> Reciprocal partnerships between education institutions and businesses are essential in bringing theory and practice together. Businesses should talk to education institutions about the skills they are after [to] inform program development. (Regional Development Australia Mid North Coast NSW & Regional Development Australia Northern Rivers NSW 2020, p.25)

Similarly, Regional Development Australia Hunter reports that their industry and education partnership initiatives have been cited by the Australian Government and national education institutions as exemplars of industry-led workforce skilling excellence, with their implementation models reportedly being emulated Australia-wide (Regional Development Australia Hunter nd).

Interviewees in this current study confirmed the importance of building strong relationships with various stakeholders to enable the successful delivery of training in their RRR locations. Interviewees described:

- VET—industry relationships

> For us, it is about the fact that we are well connected to the sector, so our RTO was born out of industry need … by two people that had worked in the industries that they now go back and train in. So, for us it's all about connections … So, what helps us to deliver is the fact that if we don't know them, we know the person that knows them. (RTO, Tas.)

- RTO—RTO relationships

> We work pretty closely with other RTOs where we can as well. I'm sort of where there's always going to be some overlap between what we do and what they do. But I think if we can build relationships, where it's something we don't deliver and we can help them out, hopefully some of that flows back to us as well. (RTO, Qld)

- RTO—government relationships

> We've managed to build a good relationship with Skills Tasmania and they see the ongoing demand that industry has. We have a secure demand for our training, so therefore Skills Tasmania go 'right, well that's working', so they're happy to make that investment. But if we didn't have that relationship or the circumstances were different then certainly the standard sort of dollars around nominal hours would never ... (RTO, Tas.)

- RTO—community relationships

> And then as a training organisation, you have to have really good relationships with the CDPs [Community Development Programs] or the community people. So, if that relationship is not great, the program can go down in 10 minutes. (RTO, NT)

While the aim of these relationships was often to ensure that training was meeting stakeholder needs, they also provided other opportunities, such as access to resources:

> I think in those regional and remote places, we do in Geraldton as well, it's not confined to those smaller places, we are definitely looking for as many relationships with external stakeholders as we can because that again gives us insight into what industry are doing for starters and what they need. But it also gives us access potentially to resources and expertise and those sorts of things.
>
> (RTO, WA)

There is a place for both informal relationships and more formalised partnerships in regional, rural and remote locations. One such example is the Gippsland Hi-Tech Precinct, described in Regional Development Australia Gippsland's regional plan:

> The Gippsland Hi-Tech Precinct in Morwell is recognised as a cornerstone of our region's innovation eco-system, and it will be via this precinct that important partnerships between education, government, business and industry will be formed to support the expansion of new or emerging and growth industries, including renewable and clean energy, food and fibre, health and advanced manufacturing. (Regional Development Australia Gippsland 2020, p.51)

What could more successfully enable relationship/partnership building? Many of the RTO interviewees in this project described the significant time and effort expended in building relationships with a diverse range of stakeholders in their local communities. Similar to the 'coordination of demand' scenario, there may be a role for government to help facilitate this relationship-building. Government may be able to assist RTOs and other stakeholders by facilitating linkages between them.

Meeting local skills needs – not just a training issue

It should be acknowledged that training is not the only mechanism for addressing labour shortages. As explained in the Select Committee on Regional Australia report (Australian Parliament 2022, p.93):

> The issue of labour shortages cannot be fixed quickly; it is dependent upon a number of interrelated factors including population policy, access to training, spousal employment, and access to health services and educational opportunities for children.

The factors that influence the ability to attract and/or retain skilled workers to a particular region is an important element in addressing regional skills needs. As Kearns, Bowman and Garlick (2008, p.18) concluded:

> Not all identified demand for VET skills requires new VET skills supply solutions. Other responses may include improving workforce planning, workforce conditions and/or local services and infrastructure, and so changing perceptions of place and lifestyle.

As explained in previous sections, some of the barriers to delivering VET in regional, rural and remote Australia, as described by interviewees in this project, are not the responsibility of the VET sector itself. Issues raised that are outside the VET sector included limited availability of housing/accommodation; community issues (for example, safety and attitudes towards working and training); technology/connectivity limitations; and limited job opportunities. This suggests there needs to be a coordinated and holistic approach to regional development to enable better delivery of VET in such locations.

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Appendix A

Methodology

Case study selection

Four regions, each containing two case study locations, were selected as the focus for this project (table A1). Selected in consultation with the Project Advisory Committee, these case study locations cover a range of different characteristics (such as, but not limited to, remoteness and size, industry structure and/or change, known skills shortages, labour market structure and demographics).

Table A1 Case study locations

State/territory	Region (RDA)	Towns
Queensland	Townsville and North West Queensland	Townsville and Mount Isa
Western Australia	Mid West Gascoyne	Geraldton and Carnarvon
Northern Territory	Entire territory	Alice Springs and Katherine
Tasmania	Entire state	Launceston and Burnie

To select the case study regions/locations, the Regional Development Australia network of 52 committees across Australia was used. The website for each of the regions of the 52 committees was skimmed for information relating to the characteristics mentioned above and any other relevant information for each region represented. Where available, a selection of documents, such as strategic plans or skills analyses, were also reviewed. A shortlist of potential regions was shared with the Project Advisory Committee.

A total of four regional areas were ultimately selected for investigation. In each of these, two specific areas/towns were selected, that is, a total of eight case study areas. The case study location profiles in appendix B list the characteristics of each of the locations.

Recruitment and interviews

RTOs that reported delivering training within or near each of the case study locations were identified using the My Skills website. These RTOs were invited to participate in the project by email. Where a sufficient number of RTOs could not be recruited for a particular location (such as Burnie, Tasmania, and Carnarvon, WA), the search area was broadened and additional RTOs were invited to participate.

Internet searches were conducted to identify the appropriate industry peak bodies, other regional development organisations and employment services that operate in each of the locations (or jurisdictions). These organisations were also invited by email to participate in the project. The state training authorities for each of the four jurisdictions were also invited to participate in the research. Interviewees were provided with an information sheet describing the project and a copy of the semi-structured interview questions prior to the interview.

A total of 58 semi-structured interviews were undertaken with RTOs, industry peak bodies, regional development organisations and government departments across the eight case study locations (table A2).

Most interviews were conducted by video (Microsoft Teams) and a small number by phone. They were 30—60 minutes in duration.

Table A2 Number of interviews for each jurisdiction/organisation type

	RTOs	Industry	Government/ regional development	Employment services
Queensland	7	7	3	1
Western Australia	7	5	2	2
Northern Territory	5	7	1	
Tasmania	3	4	2	1
National	(3[1])	1		

Notes

1. Three RTOs were national but were contacted and interviewed due to their delivery in Qld, WA and Tas. (and are therefore included in those jurisdictional counts).

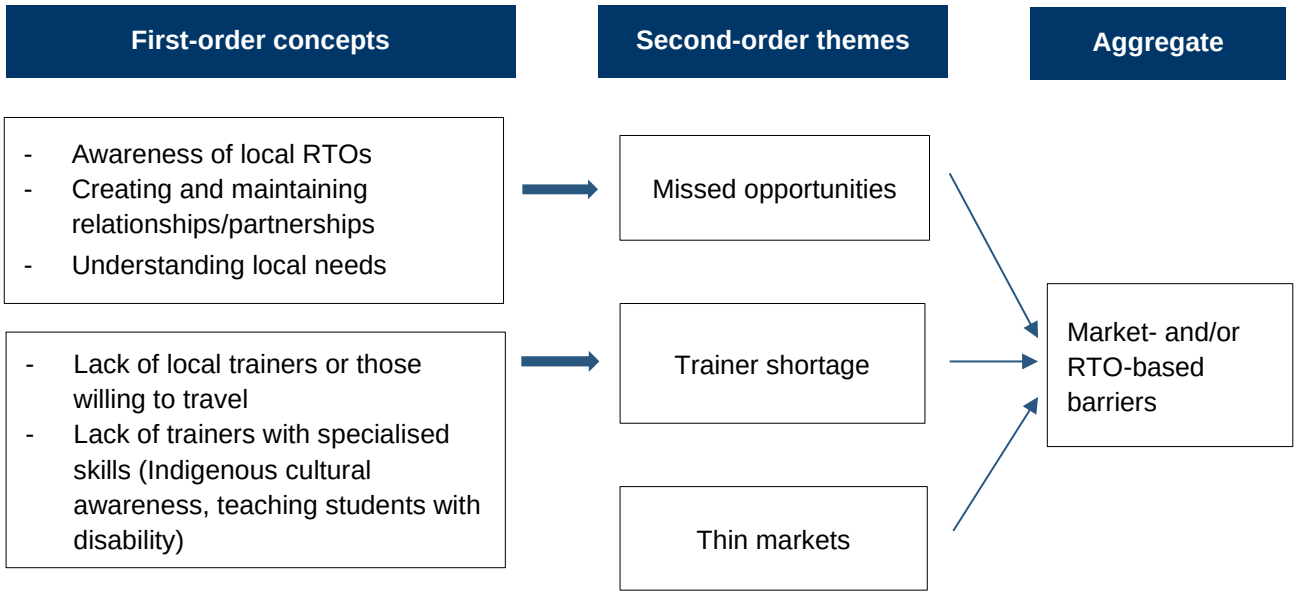
Analysis

Interview transcripts were imported in NVivo (a qualitative data analysis software package).

NVivo was used as a data-management tool to analyse the interview transcripts. The data analysis began with coding and identifying first-order concepts in each transcript. This process generated a list of codes related to the barriers and facilitators of VET delivery in regional, rural and remote areas; local skills needs; workforce and training challenges; and responses to those challenges. The next stage of analysis involved an iterative process to obtain a more refined and focused list of codes and themes.

Developing flow diagrams of the first-order concepts and second-order themes enabled the authors to summarise the emerging patterns in the data; see figure A1 for an example of the data-analysis process/structure.

Figure A1 Data structure of aggregate dimension 'market- and/ or RTO-based barriers'



Appendix B

Regional case study profiles

The following regions are based on those defined by Regional Development Australia (RDA) committees. Two locations within each region are presented as case study profiles.

Townsville and North West Queensland – regional overview

The region, stretching from the east coast of Queensland to the Northern Territory border, covers just over one-quarter of Queensland's area and is represented by 15 local government areas (LGAs). Townsville is the largest centre in the northern region, while Mount Isa is the largest centre in the northwest region.

Traditional industry sectors, such as agriculture, defence and resources, are thriving, with innovative industries like advanced manufacturing and renewable energy beginning to emerge (Queensland Government 2020). In the North Queensland regional plan, the Queensland Government (2020) states that the region is well placed to become a national leader in renewable energy, allied technology and manufacturing.

Despite the established industry base, the region has endured a challenging period. Gross regional product (GRP) has been volatile over the past 10 years and growth has been consistently negative since 2016. A raft of issues, such as a declining resource sector since the Global Financial Crisis (GFC), drought and floods, have been compounded by the COVID-19 pandemic and have led to declining population growth and increasing unemployment (Regional Development Australia Townsville & North West Queensland 2020).

The Charters Towers LGA has been described as an 'education centre', with eight schools, including three private boarding schools, a TAFE campus and the Charters Towers School of Distance Education (Queensland Government 2020).

Townsville

ABS ASGS code RA 3: outer regional Australia
Modified Monash model category MM2: regional centre (outer)
See table B1 for selected demographics and characteristics.

Townsville, on the east coast of Queensland, is a major regional hub, with a range of established industries such as defence, mineral processing, engineering and tourism, along with established health and knowledge facilities. There are ongoing opportunities to expand these established industries, as well as to develop emerging sectors such as renewable energy, allied technology and manufacturing (Queensland Government 2020). The region is committed to the goal of becoming a leader in advanced manufacturing, with the government investing in the Townsville Manufacturing Hub, part of a $30 million commitment to propel advanced manufacturing in regional Queensland (Queensland Government 2020).

Townsville boasts world-class health, education and research facilities, such as James Cook University, Central Queensland University, Australian Institute of Marine Science and Australian Institute of Tropical Health and Medicine (Queensland Government 2020). The MySkills website[4] reports there are 62 RTOs delivering VET within 25 km of Townsville, including three campuses of TAFE QLD.

One of the Australian Government's 10 industry training hubs is situated in Townsville (Australian Department of Employment and Workplace Relations 2022). As part of the training hub services, career facilitators work with and encourage young people to build skills and choose occupations in demand in their region, creating better linkages between schools and local industry, repositioning vocational education and training as a first-choice option. This work aims to eliminate persistent high youth unemployment in regional areas.

Table B1 Selected demographics of the Townsville local government area

Characteristic		Characteristic	
Population	186 757	Main occupations (top 5)	
Median age	34 years	Professionals	18.8%
Aboriginal and/or Torres Strait Islander	7.0%	Technicians and trades workers	15.1%
Highest level of education attainment		Community and personal service workers	14.7%
Year 12	17.7%	Clerical and administrative workers	13.5%
Certificate III or IV	20.5%	Managers	9.7%
Advanced diploma or diploma	7.8%	Industry of employment (top 5)	
Bachelor degree or higher	15.7%	Health care and social assistance	15.3%
		Public administration and safety	14.1%
		Education and training	10.3%
		Retail trade	10.2%
		Accommodation and food services	7.9%

Source: ABS 2016 Census All persons QuickStats (https://www.abs.gov.au/census/find-census-data/quickstats/2016/LGA37010, viewed 24 May 2022).

Mount Isa

ABS ASGS code RA 4: remote Australia
Modified Monash model category MM6: remote community
See table B2 for selected demographics and characteristics.

Mount Isa, an inland regional town in the far northwest of Queensland, is approximately 1800 km from Brisbane and 883 km from the nearest major sea port of Townsville. With a land area of more than 43 000 square km, Mount Isa City is Australia's second largest city by land area. Mount Isa is home to a multicultural population, representing some 50 different nationalities from all over the world.

4 Commonwealth of Australia 2022, Training provider search, viewed 3 June 2022, <https://www.myskills.gov.au/registeredtrainers/search/?keywords=&locationID=10836&Distance=25&courseCode=&fa=&js=0&pt=&op=>. The My Skills data includes campus locations voluntarily entered by RTOs into the website from 2014 onwards and excludes certain RTOs that have chosen to opt out, such as enterprise RTOs. Since mid-2022 the national register (training.gov.au) started publishing known delivery locations as reported by RTOs to all three VET regulators, and is now a more comprehensive and up-to-date source of RTO delivery locations. These updated data are currently being migrated into the My Skills website as part of the ongoing My Skills Transformation Project.

Known for its mining, Mount Isa's mines are among the world's top 10 producers of lead, copper, silver and zinc. Future operational expansions are expected to take Mount Isa into uranium, phosphate and rare earth element mining. The town is also involved in both agriculture and processing the minerals it extracts (Mount Isa to Townsville Economic Development Zone 2021).

Demonstrating the challenges faced in accessing education in remote Australia, Mount Isa is home to 'School of the air', a government co-education service to meet the needs of isolated students in northwest Queensland (many living with their families on stations hundreds of kilometres from a school). The students are drawn from a large geographical area, which extends from the Gulf of Carpentaria to Birdsville, and from Hughenden in the east to the Northern Territory in the west.

The MySkills website[5] reports there are eight RTOs delivering VET within 50 km of Mount Isa, including a campus of TAFE QLD.

Table B2 Selected demographics of the Mount Isa local government area

Characteristic		Characteristic	
Population	18 671	Main occupations (top 5)	
Median age	31 years	Technicians and trades workers	22.3%
Aboriginal and/or Torres Strait Islander	16.9%	Professionals	15.8%
Highest level of education attainment		Machinery operators and drivers	15.8%
Year 12	16.0%	Clerical and administrative workers	10.5%
Certificate III or IV	23.2%	Community and personal service workers	9.7%
Advanced diploma or diploma	5.4%	Industry of employment (top 5)	
Bachelor degree or higher	12.5%	Mining	30.7%
		Health care and social assistance	11.4%
		Education and training	8.2%
		Retail trade	8.1%
		Public administration and safety	6.0%

Source: ABS 2016 Census All persons QuickStats (https://www.abs.gov.au/census/find-census-data/quickstats/2016/LGA35300, viewed 24 May 2022).

Mid West Gascoyne (WA) – regional overview

The Mid West and Gascoyne region covers about one-third of Western Australia (600 000 sq km) and is managed by 21 LGAs, providing services to communities that range in size from 90 to around 39 000 people.

The main industries in the region are resources and agriculture, but several sectors are emerging and growing, such as tourism, value-added food production, aquaculture, education and training, and construction (Regional Development Australia Midwest Gascoyne 2021).

5 Commonwealth of Australia 2022, Training provider search, viewed 3 June 2022, <https://www.myskills.gov.au/registeredtrainers/search/?keywords=&locationID=11009&Distance=50&courseCode=&fa=&js=0&pt=&op=>. The My Skills data includes campus locations voluntarily entered by RTOs into the website from 2014 onwards and excludes certain RTOs that have chosen to opt-out, such as Enterprise RTOs. Since mid-2022 the national register (training.gov.au) started publishing known delivery locations as reported by RTOs to all three VET regulators, and is now a more comprehensive and up-to-date source of RTO delivery locations. These updated data are currently being migrated into the My Skills website as part of the ongoing My Skills Transformation Project.

While this expansive area is considered a single region by Regional Development Australia, the Mid West and Gascoyne regions are often considered separately, such as by the WA Department of Primary Industries and Regional Development (Government of Western Australia 2017a).

The economy of the Mid West is built around mining, agriculture, tourism and fishing. Mining is its most valuable sector, with a range of minerals and energy deposits available, including gold, iron ore, copper, nickel, silver and natural gas (Government of Western Australia 2017b).

The Gascoyne economy is supported by the tourism, mining, agriculture and fishery industries, with tourism being the largest revenue earner. Salt is the main mining commodity, while agricultural lands along the Gascoyne River in Carnarvon are also a strong driver of the regional economy (Government of Western Australia 2017c).

Employment in the Gascoyne region has diversified in recent years, with a fall in agriculture being offset by growth in mining, energy professional services, transport and retail sectors. Post-school qualifications are biased towards the certificate level, reflecting the industry structure of the region (Gascoyne Development Commission 2015).

Geraldton

ABS ASGS code RA 3: outer regional Australia
Modified Monash model category MM3: large rural town
See table B3 for selected demographics and characteristics.

Just over 400 km north of Perth, the regional coastal city of Geraldton is the service centre for the Mid West region. In terms of Geraldton's economy and industry structure, it has:

- the largest fishing industry in WA and an emerging aquaculture sector
- a strong marine precinct and allied marine trade and support services
- intensive and broad-acre agriculture, including significant livestock, cropping and horticulture
- a wealth of coastal and inland regional tourism attractions
- a well-developed transport and logistics industry
- strong construction and manufacturing industries
- a strong business services industry and a small but strong Aboriginal business community
- emerging renewable energy sectors with high potential (Progress Midwest 2020).

'Economic participation' is one of the strategic goals in the Geraldton 'jobs and growth plan' (Progress Midwest 2020). The plan aims to develop skills for growth and ensure that the opportunities to contribute to and benefit from growth in the economy are widely available across the community, with a particular focus on workforce development. Strategies to achieve this include some VET-related activities:

- skills development for traded sector clusters (groupings of related firms)
- employer engagement to expand job opportunities for Aboriginal people
- improvement to youth transitions from school to training, further education or work.

Research and educational institutions in Geraldton include the Geraldton Universities Centre (GUC), CSIRO's (Square Kilometre Array) Murchison Support facility, Western Australian Centre for Rural Health (WACRH), Batavia Coast Maritime Institute and TAFE (Progress Midwest 2020).

The MySkills website[6] shows there are six RTOs within 50 km of Geraldton, including the Geraldton campus of Central Regional TAFE.

Table B3 Selected demographics of the Geraldton local government area

Characteristic		Characteristic	
Population	38 634	Main occupations (top 5)	
Median age	38 years	Technicians and trades workers	17.0%
Aboriginal and/or Torres Strait Islander	9.7%	Professionals	16.1%
Highest level of education attainment		Clerical and administrative workers	12.4%
Year 12	13.5%	Labourers	11.6%
Certificate III or IV	20.5%	Community and personal service workers	11.5%
Advanced diploma or diploma	7.2%	Industry of employment (top 5)	
Bachelor degree or higher	10.5%	Health care and social assistance	14.0%
		Retail trade	11.7%
		Education and training	10.9%
		Construction	8.3%
		Public administration and safety	7.2%

Source: ABS 2016 Census All persons QuickStats (https://www.abs.gov.au/census/find-census-data/quickstats/2016/LGA53800, viewed 25 May 2022).

Carnarvon

ABS ASGS code RA 5: very remote Australia
Modified Monash Model category MM7: very remote community
See table B4 for selected demographics and characteristics.

A sub-tropical coastal town, Carnarvon sits on the banks of the Gascoyne River. This freshwater river system enables the successful growth of a diverse agriculture industry, recognised as the 'food bowl' of Western Australia; it is also a regional hub for many outlying pastoralists (Regional Development Australia Midwest Gascoyne 2021).

The tropical climate, fertile soil and large underground water sources make Carnarvon an ideal location for horticulture development, while the pristine coastal waters provide the perfect marine environment for successful commercial fishing and aquaculture (Government of Western Australia 2017b).

The Gascoyne Development Commission (2015) has deemed 'advancing human capacity and knowledge' as one of six transformational pillars to support growth of the region. Measures of success include the following VET-related measures:

- enhanced secondary and tertiary education, providing a quality and scope of service more comparable to metropolitan Perth
- a suitably trained workforce to supply the new and expanding workforce demands in the region

6 Commonwealth of Australia 2022, Training provider search, viewed 3 June 2022, <https://www.myskills.gov.au/registeredtrainers/search/?keywords=&locationID=14537&Distance=50&courseCode=&fa=&js=0&pt=&op=>. The My Skills data includes campus locations voluntarily entered by RTOs into the website from 2014 onwards and excludes certain RTOs that have chosen to opt-out, such as Enterprise RTOs. Since mid-2022 the national register (training.gov.au) started publishing known delivery locations as reported by RTOs to all three VET regulators, and is now a more comprehensive and up-to-date source of RTO delivery locations. This updated data is currently being migrated into the My Skills website as part of the ongoing My Skills Transformation Project.

- the development and delivery of targeted training programs to address skill gaps, in partnership with training institutions and industry, including the resource sector.

'Encouraging innovation' is another identified pillar, with opportunities including the design and development of new training programs and approaches in partnership with training organisations, community and industry.

Education (particularly secondary and tertiary education) services have been described by the Gascoyne Development Commission (2015) as lacking across the region and are a driver of the loss of young adults from the Gascoyne.

The MySkills website[7] shows that Central Regional TAFE is the only RTO within 100 km of Carnarvon, with the closest being on the outskirts of Geraldton.

Table B4 Selected demographics of the Carnarvon local government area

Characteristic		Characteristic	
Population	5 528	Main occupations (top 5)	
Median age	39 years	Managers	19.7%
Aboriginal and/or Torres Strait Islander	18.0%	Labourers	15.3%
Highest level of education attainment		Technicians and trades workers	13.4%
Year 12	13.3%	Clerical and administrative workers	12.7%
Certificate III or IV	16.3%	Professionals	12.5%
Advanced diploma or diploma	5.5%	Industry of employment (top 5)	
Bachelor degree or higher	9.7%	Mining	15.5%
		Agriculture, forestry and fishing	15.4%
		Health care and social assistance	9.0%
		Retail trade	8.9%
		Accommodation and food services	8.8%

Source: ABS 2016 Census All persons QuickStats (https://www.abs.gov.au/census/find-census-data/quickstats/2016/LGA51540, viewed 25 May 2022)

Tasmania (no individual RDAs) – regional overview

There are no individual RDAs in Tasmania and so it is treated as a single region.

Tasmania's key industry sectors are advanced manufacturing, Antarctic and Southern Ocean, digital services and information technology, food and agriculture, forestry, international education, mining and mineral processing, science and research, and tourism.

Regional Development Australia Tasmania (2017) identified four priorities for 2017—19:

- expand and grow economic activity in Tasmania
- increase collaboration and efficiencies between federal, state and local government, and between government and the private sector

7 Commonwealth of Australia 2022, Training provider search, viewed 3 June 2022, <https://www.myskills.gov.au/registeredtrainers/search/?keywords=&locationID=14735&Distance=100&courseCode=&fa=&js=0&pt=&op=>. The My Skills data includes campus locations voluntarily entered by RTOs into the website from 2014 onwards and excludes certain RTOs that have chosen to opt-out, such as Enterprise RTOs. Since mid-2022 the national register (training.gov.au) started publishing known delivery locations as reported by RTOs to all three VET regulators, and is now a more comprehensive and up-to-date source of RTO delivery locations. This updated data is currently being migrated into the My Skills website as part of the ongoing My Skills Transformation Project.

- improve educational attainment and employability skills
- address the needs of Tasmania's changing demographic profile.

VET will have an important role in at least three of these priorities.

Regional Development Australia Tasmania (2017) reports that the region's economy has been impacted by a multitude of factors, including freight costs and access to markets; limitations and high cost of public transport; state government restructure and reduced public spending; changes in industry competitiveness; low participation rate and lack of employability skills of jobseekers; net out-migration; a rapidly ageing population; and population stagnation. Further, education and skill capabilities vary considerably and are not always matched to job opportunities.

Two education and training related activities were identified to help address some of the above-mentioned issues. These are:

- encouragement of school retention, understanding of career pathways, and formal education and training as enablers to securing quality high-skilled employment opportunities in growing industry sectors
- skills and training for key growth sectors, for example, business and construction, tourism and hospitality, agriculture (particularly dairying, aquaculture and farm management), aged care, disability support and advanced manufacturing (Regional Development Australia Tasmania 2017).

Launceston

ABS ASGS Code RA 2: inner regional Australia
Modified Monash Model category MM2: regional centre (inner)
See table B5 for selected demographics and characteristics.

Launceston is a regional city strategically located in northern Tasmania. Economic growth has been challenged by a sustained decline in manufacturing, the contraction of the timber industry, slow population growth, and lower exports and tourism due to higher international exchange rates. The tourism industry is a driver of the regional economy but other industry sectors are also important to Launceston's economy (and that of the wider region). These include health care and social assistance, retail trade and the education and training sector. Collectively, these three industries account for over two-thirds (38%) of employment in Launceston, reflecting the city's role as a regional service centre (City of Launceston 2017).

The City of Launceston's (2017) strategic economic plan provides a framework and directions to facilitate and promote Launceston's economic development over a five-year period (noting it is now slightly dated). The subheading of the strategic plan, 'Providing the pathway for Launceston's transition to a regional "knowledge city"', provides an insight into the direction in which the City of Launceston wishes to move and there is a strong emphasis on becoming 'increasingly oriented towards the professional services, health care and education if the City is to prosper in its role as a regional city' (p.8).

The MySkills website[8] indicates that there are 29 RTOs within 25 km of Launceston, including a TasTAFE campus.

Table B5 Selected demographics of the Launceston local government area

Characteristic		Characteristic	
Population	65 274	Main occupations (top 5)	
Median age	39 years	Professionals	20.3%
Aboriginal and/or Torres Strait Islander	3.5%	Technicians and trades workers	13.1%
Highest level of education attainment		Community and personal service workers	12.7%
Year 12	13.5%	Clerical and administrative workers	12.4%
Certificate III or IV	16.6%	Sales workers	11.4%
Advanced diploma or diploma	7.0%	Industry of employment (top 5)	
Bachelor degree or higher	16.1%	Health care and social assistance	18.1%
		Retail trade	13.5%
		Education and training	10.9%
		Accommodation and food services	8.2%
		Public administration and safety	6.1%

Source: ABS 2016 Census All persons QuickStats (https://www.abs.gov.au/census/find-census-data/quickstats/2016/LGA64010, viewed 25 May 2022).

Burnie

ABS ASGS Code RA 3: outer regional Australia
Modified Monash Model category MM 3: large rural town
See table B6 for selected demographics and characteristics.

Burnie is a coastal city with a variety of health, education, arts, culture, sport and recreation services and facilities. It has a busy and productive port, providing freight links between the state, mainland Australia and the rest of the world. Rural land is used largely for forestry and farming, grazing and crop growing, providing produce such as dairy, meats, vegetables and whisky (Burnie City Council 2020).

The proximity to the mines on the west coast has led to the creation of a specialised mining equipment manufacturing industry, which is a global leader (Burnie City Council 2020). The pending downsize of Caterpillar Underground Mining in Burnie has motivated many specialised manufacturing companies to redirect their focus and improve services, products and processes (Regional Development Australia Tasmania 2017).

The Burnie City Council highlights the level of social disadvantage, along with poor health and education outcomes, in the town (Burnie City Council 2020). Improving this is a focus in the council's vision for 2030.

8 Commonwealth of Australia 2022, Training provider search, viewed 6 June 2022, <https://www.myskills.gov.au/registeredtrainers/search/?keywords=&locationID=15246&Distance=25&courseCode=>. The My Skills data includes campus locations voluntarily entered by RTOs into the website from 2014 onwards and excludes certain RTOs that have chosen to opt-out, such as Enterprise RTOs. Since mid-2022 the national register (training.gov.au) started publishing known delivery locations as reported by RTOs to all three VET regulators, and is now a more comprehensive and up-to-date source of RTO delivery locations. This updated data is currently being migrated into the My Skills website as part of the ongoing My Skills Transformation Project.

The 2030 vision for Burnie includes that lifelong learning is valued and practised. The goal is for improvement in post-Year 10 retention, as well as making available a wide range of education opportunities using multi-purpose physical facilities and advanced communication technologies. It is deemed important that higher education, VET and schools work with business and industry to support the needs of the community (Burnie City Council 2020).

The MySkills website[9] shows that there are five RTOs within 25 km of Burnie, including a campus of TasTAFE and 12 RTOs within 50 km, which include some located in Devonport.

Like Townsville, Burnie is also a location containing an industry training hub (see the Townsville profile for more information).

Table B6 Selected demographics of the Burnie local government area

Characteristic		Characteristic	
Population	18 895	Main occupations (top 5)	
Median age	41 years	Professionals	14.6%
Aboriginal and/or Torres Strait Islander	6.9%	Technicians and trades workers	14.3%
Highest level of education attainment		Labourers	13.7%
Year 12	10.6%	Clerical and administrative workers	13.2%
Certificate III or IV	19.8%	Community and personal service workers	12.7%
Advanced diploma or diploma	6.7%	Industry of employment (top 5)	
Bachelor degree or higher	9.7%	Health care and social assistance	18.0%
		Retail trade	12.6%
		Education and training	9.4%
		Public administration and safety	8.1%
		Manufacturing	7.5%

Source: ABS 2016 Census All persons QuickStats(https://www.abs.gov.au/census/find-census-data/quickstats/2016/LGA60610, viewed 25 May 2022).

Northern Territory – regional overview

There are no individual RDAs in the Northern Territory and so it is treated as a single region.

Regional Development Australia NT has a cooperative relationship with the NT Government and with the Local Government Association of the Northern Territory, ensuring integrated and aligned arrangements for regional engagement and economic development across the Territory. The current key guiding document for strategic economic planning in the Northern Territory is the Territory Economic Reconstruction Commission (2020) report.

The Northern Territory's economic output is predominantly concentrated around a few industries. These include construction, government and community services, and the mining sectors. These industries account for over half of the NT’s total economic output (Northern Territory Government 2022).

9 Commonwealth of Australia 2022, Training provider search, viewed 6 June 2022, < https://www.myskills.gov.au/registeredtrainers/search/?keywords=&locationID=15246&Distance=25&courseCode=>. The My Skills data includes campus locations voluntarily entered by RTOs into the website from 2014 onwards and excludes certain RTOs that have chosen to opt-out, such as Enterprise RTOs. Since mid-2022 the national register (training.gov.au) started publishing known delivery locations as reported by RTOs to all three VET regulators, and is now a more comprehensive and up-to-date source of RTO delivery locations. This updated data is currently being migrated into the My Skills website as part of the ongoing My Skills Transformation Project.

With a focus on economic recovery from the COVID-19 pandemic, the Territory Economic Reconstruction Commission (2020) looked at the industries and enabling factors most likely to significantly shift the economic curve upwards. The identified sectors are: mining and energy, manufacturing, and agribusiness. Tourism and defence are also identified as important. The report acknowledges that a skilled population is a critical enabler of economic growth, but also recognises that until such time that there is a significantly larger base population, the Territory will continue to rely on interstate and overseas migration to fill ongoing and temporary jobs. Matching education to employment opportunities and enabling economic participation by Aboriginal people is a priority:

> A capable local workforce requires focus on how the Territory can better engage its population by linking education to real employment opportunities as close to home as possible. More opportunities for Aboriginal employment and participation need to be collaboratively identified through supporting Aboriginal economic leadership. At the same time, capability development should focus on existing strengths and opportunities in remote areas where there are clear linkages with real economic opportunities. (Territory Economic Reconstruction Commission 2020, p.114)

Alice Springs

ABS ASGS Code RA4: remote Australia
Modified Monash Model category MM6: remote community
See table B7 for selected demographics and characteristics.

Alice Springs is the second largest population centre in the Northern Territory and is the economic, business and service hub for the region. Residents from remote areas of South Australia, Western Australia and Queensland also access many services from Alice Springs, for example, health and retail. The Central Australia region economy is sustained by mining, tourism and primary industries and is underpinned by government funding for regional service delivery and defence (Central Australia Economic Reconstruction Committee 2020).

In its submission to the Territory Economic Reconstruction Commission, the Central Australia Economic Reconstruction Committee (2020) reiterated the importance of Aboriginal people to the region's economic recovery:

> the committee discerns that a robust and sustainable 'Aboriginal economy' is essential in delivering sustainable jobs and businesses for the Central Australia region. The committee calls for the increased economic participation of Aboriginal Australians and supports measures that facilitate agreed beneficial outcomes with Aboriginal communities.
>
> …
>
> Increased economic participation … will also contribute to strengthening the Central Australian economy and help to meet labour shortages in crucial industries such as health, agriculture and energy. (Central Australia Economic Reconstruction Committee 2020, p. 4)

While the submission does not explicitly describe the education and training requirements to help fulfil the economic priorities it identifies, it does acknowledge the important role that the international education sector plays in the development of a skilled workforce, among other things (Central Australia Economic Reconstruction Committee 2020).

The MySkills website[10] indicates that there are 11 RTOs within 50 km of Alice Springs, including a campus of Charles Darwin University, a dual-sector institution.

Table B7 Selected demographics of the Alice Springs local government area

Characteristic		Characteristic	
Population	24 753	Main occupations (top 5)	
Median age	35 years	Professionals	24.2%
Aboriginal and/or Torres Strait Islander	17.6%	Community and personal service workers	16.2%
Highest level of education attainment		Clerical and administrative workers	14.1%
Year 12	12.0%	Technicians and trades workers	12.3%
Certificate III or IV	16.4%	Managers	12.1%
Advanced diploma or diploma	8.4%	Industry of employment (top 5)	
Bachelor degree or higher	21.7%	Health care and social assistance	19.3%
		Public administration and safety	14.7%
		Education and training	11.1%
		Retail trade	8.5%
		Accommodation and food services	7.2%

Source: ABS 2016 Census All persons QuickStats (https://www.abs.gov.au/census/find-census-data/quickstats/2016/LGA70200, viewed 25 May 2022).

Katherine

ABS ASGS Code RA4: remote Australia
Modified Monash Model category MM6: remote community
See table B8 for selected demographics and characteristics.

The township of Katherine is an important regional centre. It is a natural transport crossway, connecting the Ord River and the Kimberley to the west, Alice Springs to the south and Queensland to the east. The north—south transcontinental rail route passes through Katherine, connecting Darwin to Adelaide. The economy of the Big Rivers region, in which Katherine is situated, is supported by agribusiness, pastoral and horticulture, tourism, defence and defence support industries and on-shore gas exploration (Big Rivers Regional Reconstruction Committee 2020).

In its submission to the Territory Economic Reconstruction Committee, the Big Rivers Regional Reconstruction Committee (2020) highlighted several enablers for economic growth in the region. Of these, one suggested that major industry proponents be required to source goods, services and workers from local business and communities, *including the development of training programs for Aboriginal and other local workers*, highlighting the importance of education and training. It also identified the development of social infrastructure, including education, as important for economic growth.

10 Commonwealth of Australia 2022, Training provider search, viewed 6 June 2022, <https://www.myskills.gov.au/registeredtrainers/search/?keywords=&locationID=119&Distance=50&courseCode=&fa=&js=0&pt=&op=>. The My Skills data includes campus locations voluntarily entered by RTOs into the website from 2014 onwards and excludes certain RTOs that have chosen to opt-out, such as Enterprise RTOs. Since mid-2022 the national register (training.gov.au) started publishing known delivery locations as reported by RTOs to all three VET regulators, and is now a more comprehensive and up-to-date source of RTO delivery locations. This updated data is currently being migrated into the My Skills website as part of the ongoing My Skills Transformation Project.

Being a small remote community, it is not surprising that the MySkills website[11] shows that there are only two RTOs within 100 km of Katherine, with one of those a campus of Charles Darwin University.

Table B8 Selected demographics of the Katherine local government area

Characteristic		Characteristic	
Population	9 717	Main occupations (top 5)	
Median age	33 years	Professionals	18.5%
Aboriginal and/or Torres Strait Islander	22.1%	Technicians and trades workers	17.0%
Highest level of education attainment		Community and personal service workers	16.3%
Year 12	9.1%	Clerical and administrative workers	13.2%
Certificate III or IV	16.8%	Managers	12.4%
Advanced diploma or diploma	7.9%	Industry of employment (top 5)	
Bachelor degree or higher	13.4%	Public administration and safety	24.5%
		Health care and social assistance	14.8%
		Education and training	9.3%
		Construction	9.0%
		Agriculture, forestry and fishing	6.2%

Source: ABS 2016 Census All persons QuickStats (https://www.abs.gov.au/census/find-census-data/quickstats/2016/LGA72200, viewed 25 May 2022).

11 Commonwealth of Australia 2022, Training provider search, viewed 6 June 2022, <https://www.myskills.gov.au/registeredtrainers/search/?keywords=&locationID=95&Distance=5&courseCode=&fa=&js=0&pt=&op=>. The My Skills data includes campus locations voluntarily entered by RTOs into the website from 2014 onwards and excludes certain RTOs that have chosen to opt-out, such as Enterprise RTOs. Since mid-2022 the national register (training.gov.au) started publishing known delivery locations as reported by RTOs to all three VET regulators, and is now a more comprehensive and up-to-date source of RTO delivery locations. This updated data is currently being migrated into the My Skills website as part of the ongoing My Skills Transformation Project.

Appendix C

Themes and selected quotes from interviews

Table C1 Data supporting the theme 'market and or RTO-based barriers'

Associated first-order concepts	Representative quotations
Awareness of local RTOs	'People don't always realise there is a local training provider either – often the first port of call is Perth. That's the same in every regional area. Even if you advertise, they'll still go to the city first' (RTO 10).
	'it's disheartening sometimes that people don't ask local first, you know, I'd prefer everyone to come and say "do you guys deliver bigger loading crane courses?" and then we can say yes, no. But sometimes, you know, you hear someone in town delivering courses and you think "why are they not using us, we do that"' (RTO 16).
	'Or if you just wanted to go and do the meet and greet and, you know, spend a couple of days marketing and getting your name into those areas, well, there's another thing, I suppose it, which comes down to marketing, but yeah. Would they be aware of?' (RTO 3).
	'the other barrier, I believe is, I just thought of this one, is that people still think VET is TAFE. Everybody. So they don't even think about private RTOs. Often they don't even go there. They'll go to TAFE and see because we've got the relationship here with TAFE, they don't teach the creative industries or their own leadership, so then they refer people to us. So a barrier for private RTOs I believe is the marketing and ...' (RTO 33).
Creating and maintaining relationships/partnerships	'so managing that can be pretty challenging as well. And it is a barrier because a lot of our delivery around Mount Isa just will not occur if the relationship isn't there and you know we don't get paid to foster and promote relationships, but it's a massive part of our job' (RTO 20).
	'a big part of my role is engaging with the local state member, local federal member, the local council, the local mayor. Now, if I live in Brisbane West, that's a list of four people. I've got about 64 people because everywhere I travel … to a different campus to different federal member, different state member, different Council, different mayor, different community' (RTO 20).
	'We don't really have a business networking like you guys all have down there. Yeah, we used to years ago, but it sort of fell over and it's so competitive. Like everyone sees everyone else as a threat. Ah well, I wouldn't be able to sit down with the other RTOs in town and discuss my ideas of how to make things better in town. Because it's too competitive. We don't have enough population to support everyone, where we want to be in it' (RTO 16).
	'Hard to say as there is limited opportunity for RTOs in Tasmania to talk to each other – no networking. Loss of business and scope growth opportunities because they don't know what other people are doing. This is also a loss for learners. In other sectors there is good collaboration, but not in training.' (RTO 2).
Understanding local needs	'But you know what, you never see that local knowledge tapped into really. When they're doing training packages, especially around the RII [Resources and Infrastructure Industry], all the consultation is with Queensland … almost guaranteed. And the reason I know this is over the 20 odd years or so, I've always said to all our mining clients, "are you guys part of the Industry Skills Council or been approached by it", and they'll say "no"' (RTO 10).
Lack of local trainers or those willing to travel	'So primarily some of the barriers are [the lack of] Aboriginal trainers. The reaction that you have when you have an Aboriginal person up the front of the room is totally different, so you know we need more Aboriginal trainers' (RTO 8).
	'Local trainers don't exist. It is hard enough trying to find anywhere at the moment but if you try and find one in a particular area where you need them, you're not going to' (RTO 12).
Lack of trainers with specialised skills	'I think retaining staff. I think getting your really diverse staff, like when you're in Sydney or Fremantle, knowing can you pick up experts from really acute care settings. Our trainers and assessors are, you know, at Broome Hospital, which is kind of like well, you know, how are we really able to teach that?' (RTO 29).

	‘There is a massive shortage of trade teachers at the moment and Mount Isa is heavily trade based’ (RTO 20).
	‘Fremantle is the only provider for the marine mechanics apprenticeship for WA. So it's not even like they have a different option, they have to send them to Perth for their blocks. And they’re struggling to get lecturers. So, there's apprentices that have been halfway through a traineeship and haven't been able to complete their, sorry apprenticeship not traineeship, because there's no one to assess them’ (RTO 49).
	‘Early childhood and care is my biggest one and individual support. Business, not so bad. Yeah, that they would be a major two, the harder ones to fill, I don't have... I have a someone in individual support, but that trainer I have is actually in, she lives in WA because we do some training over there too’ (RTO 13).
Thin markets	‘Haven’t got the volume in regional WA to sustain high levels of training’ (RTO 10).
	‘That the biggest barriers are the standard ones, which I'm sure you've heard, is the financial viability of running it now, sufficient number of students and a sufficient dollar value. Hard to cover the cost and make it make it feasible, especially when you compare the revenue from running a course in [location suppressed] to running one at our [location suppressed] office … it's obviously a definite factor. We need to look at. We can't run a course at a loss, you know we don't have the ability to do that as much as I want to deliver in regional areas. It's got to be viable’ (RTO 12).
	‘When I talk numbers, I'm talking for face-to-face training. You got, you know, anyone can sign up and do it online. But for face to face, you've, you know, you're paying a trainer you're renting space. So, you know, you need those, you need your numbers to make it viable, otherwise you're just going to lose money, which is not a good business decision either’ (RTO 3).
	‘The other big one that we often encounter, and this is the difficulty being the public provider is viability because we get lots of very active communities and people in their communities who say oh, you know they want to do it, doesn't matter what training it is. You know we need X&Y because that's what our community desires. And we'll have 12 people for you, for instance … very often we get to the point where we turn up and there's four people there, not 12 people there. So all of a sudden, you know, we've got someone that's driven couple of hours, log cars, wages, the whole kaboodle. And then we've got four people sitting there in front of us … We still operate a lot in very thin markets, but with more and more demands upon us to be everything to everybody. We just can't be anymore. And we know that's one of the difficult things that we've got to adjust to and had to adjust to is that we probably don't do as much as maybe what we'd like to because we just physically can't’ (RTO 5).
	‘Even in Geraldton we do have low student numbers in some areas, so the viability of some of the delivery is impacted and we're constantly doing that juggling act where we try to offset some of the less viable areas in some of those areas that are a little more viable. Or, you know, stronger numbers. At the moment, the numbers are pretty good overall. But you know that it's reflective of what happens in the economy broadly … And Carnarvon, I think, is a completely different kettle of fish very low, sort of comparatively very low population based. So, student numbers are very low in all areas’ (RTO 9).

Table C2 Data supporting the theme ‘location-based barriers’

Associated first-order concepts	Representative quotations
Distance and difficult access	‘Distance and cost – so in the West Gascoyne, you need to fly to Perth to go anywhere north of you, so that adds additional cost. Flights are expensive and unreliable … And some of those areas that there's times a year when you just can't, can't go there’ (RTO 10).
	‘Distance and cost of travel is probably a very big barrier with it, even from things like the conventional airlines from down to Alice is something like 2—3 times the price of going to capital city to capital city, so you know it's still a Qantas link flight, but it's still $800. You know each way or $600 to $800 each way and stuff so you have those costs. If you are organising other campuses, you have those expenses’ (RTO 4).
Extreme weather	‘And the other thing, so I think that we have barriers with is our time in what we can deliver and what I mean by that is we have a wet and dry season. So wet season you go to Gunbalanya, you've got Hales Crossing, which is called crossing, sorry which is famous, it's on YouTube. That's where all the crocodiles are and where all the tourists are. Well, to get out to Gumball only, and those courses which we've delivered before, we're not doing that quite now, is that if we can't get the training within the dry season

	then you're not going to send anyone out in the wet season, because we have safety requirements to river crossings and those type of things' (RTO 13).
	'just the sheer temperature … if you've doing civil construction or something, you're working in 55 degrees. Most of them are not used to that. You're working out in the gravel pit … and you're providing instruction using a 2-way from the airconditioned car … because it's too hot to be out in it. So yeah, a lot of trainers are not used to those sorts of conditions' (RTO 10).
Lack of infrastructure and/or resources	'We'll turn up to workshops, and, in the back of nowhere and they've just not got the range of equipment, or they've not got the things that these apprentices need to learn from. So, then we've got to source other places, or trainers have to bring tools with them so that they can teach them, and they should be learning these things on the job as they go. That, they don't have the range of resources within the workshops up there and I think that's due to, you know, them not being able to afford that … but that makes it very, very difficult. In the metro areas, you know, not a problem, you know perfectly for pretty much most of 99% of the time you'll have the range of equipment that is required. Whereas, you know, we've got to then source some, somewhere to take them in order to teach them' (RTO 1).
	'I mean, how are they going to fly in from a region when they don't have the equipment like we have had. So sometimes we have people fly into Mount Isa and they'll be like, oh, we're out here to do working class confined space course, can we hire your equipment?' (RTO 16).
	'so we get quite some feedback that the equipment that we have on some of our sites is not contemporary because we just can't maintain everything, everywhere. Like we have half a million people in Tasmania, I think that's forgotten at times and we maintain multiple sites delivering the same training, just because it's in a different region. You know it is, it is really difficult, and you know you just don't get that level of funding to have the greatest and latest and best in every site' (RTO 5).
	'So, the biggest issue from that is accessibility to training, especially because we still deliver things probably more traditionally than what we need to in, you know, quite a few instances. And though we're trying to move to far more digital online type products to allow greater accessibility, regardless of where you are, we're still on that journey and we're quite probably newer into that space than what we'd prefer to be. So accessibility, you know, getting to places to undertake the training' (RTO 5).
Lack of other services	'You know, there's a limited range of other services, so those wrap-around services that are in Geraldton, for example, are quite plentiful. You know, if we need to refer students to its specialised support services. Whether it's, you know, perhaps it's specialised disability support or it might be financial support or mental health support ... those services are available in Geraldton, they're not always, you know, sometimes they're, they're quite hard to get people into, but they're at least here. Very few of those wrap-around services in Carnarvon to support students who are largely already in marginalised cohorts. Either Aboriginal students or students who are long-term unemployed. So, the delivery in Carnarvon ends to be predominantly at the lower AQF levels, which then sort of has a bit of an impact on the students, their prospects when they're finished in terms of their readiness for employment' (RTO 9).
	'Housing for trainers is an issue too. And trainers who go back to industry as industry is paying more' (RTO 16).
	'The biggest problem that they're struggling with is accommodation. They can only get staff if their staff can find somewhere to live, and the people up in Broome, you know, when crap accommodation is 550 bucks a week. Who can afford that? You know, and then same deal actually in Augusta, which you probably at some stage spoke to [suppressed] and probably [suppressed] down in Bremer Bay as well, so tiny township. Finding anywhere to rent is, you know …' (RTO 49).
	'So basically if you know you got rural and remote regional areas and Aboriginal and Torres Strait Islander communities, you generally don't have a resident medical workforce for lack of a better word or a professional workforce also in place' (Industry 23).
	'So if we get into a point where we can't even get doctors out here and we can't get proper medical treatment out here' (RTO 32).
	'And there's going to be some places where you can't get a proper shop. So you've got to take your food out or there is no restaurants. You know, like that we always make sure the places that we send our people have got, they've got their own room and their own bathroom, own kitchen and everything. But buying your food out in community is not cheap' (RTO 17).

Technology/connectivity issues	‘the regional parts of Queensland are the worst, you know, it's everywhere, but a lot of our metro areas have support mechanisms in place, you know, and, you know, they might have a little bit more access to technology, so therefore they're more inclined and they’re more used to using it, whereas you know out on the farm stations or the mines or you know in the rural, regional remote areas, umm, that's not the norm’ (RTO 1).
	‘Internet connectivity is poor in some locations. Out in the regional areas the reliability and the speed of the IT system is almost worthless’ (RTO 10).
	‘The other thing that you find is that you can't do a lot of training online in certain communities, because there's no technology out there, they can't get to a computer, so you got to take hard books out there. And then that is hard itself, because they can be lost. So you're forever trying to fix and work things’ (RTO 17).
	‘I've been in [town] last week and you still cannot get accessible connectivity. You just cannot get it, it doesn't matter where I go there. You know, we've really matured, we've got nighthawks and we go out there with our 5G even though you know it says 5G, you still have bandwidth out. There is not enough in some of those areas, so connectivity to the internet for online stuff is not really, it doesn't work. So that’s also one of the barriers’ (RTO 8).
Limited pathways and or job opportunities	‘probably the other one that we notice as well in our region is around small communities’ ability to generate employment opportunities. It's just that it's that job creation, enterprise development. There's no easy solution and very often you know people will look to training’ (RTO 9).
	‘Lack of job opportunities for people – creates churn through qualifications. It also means some kids just don’t want to do the training that’s been made available – because there are no jobs at the end of it’ (RTO 10).
Safety	‘The other thing is the security and safety. That’s a real big concern for me. And how we can improve that … government has to improve that. And I don't mean government per se, but it's got to be improved. You know what I mean? The other thing that's happened here is, I don't know if you know, but all the communities, a lot of communities with dry communities, there was the government put a ban on. They've just removed the ban. So now communities are allowed to take alcohol in there. Now, that's a watch this space. What's going to happen? You know what I mean?’ (RTO 13).
	‘I suppose the unfortunate thing is within NT and I don't want to pick on like a community itself, but it's a struggle to deliver in some of the communities through the violence that's happening there. And it's unfortunate because what has been in the news, I don't know if it's been in the news down there, but there's, you know, the locally, the governments kept it quiet, but they've sent a lot of police because there's families feuding now. We had a chance to deliver training out there but doing our research and going through the process that we do it's unsafe to send anyone out there … So there's a barrier in itself, and until that gets fixed and like you know the police are out there now trying to quieten the community down, you're never going to go out there’ (RTO 13).
Local training needs	‘The training package requirements don’t always suit the remote context. So when we can’t meet the requirements, we need to take a young person from a regional place, put them in a city and hope to heck they don’t go AWOL because they’re now in the city, or that they’ve got in with the wrong people, and we got to spend a week doing that in a workshop somewhere’ (RTO 10).
	‘In terms of funding, the biggest barrier … the model does not work for remote learners. And it doesn't matter how many times I say that to the [jurisdictional] government or how many times I say it to politicians nobody wants to change the model. So you know that's I think that's a huge barrier ... the fact that you've got 10 hours to do something’ (RTO 8).
	‘First and foremost, our focus is on our LLN and because we take a very long-term approach to training and delivery that doesn't necessarily fit with how the VET sector works with short-term qualifications’ (RTO 7).
	‘You know you're telling them all these things, and some people I've been telling the same story for about three years; it took me three years to get them to get on board and actually take on those trainees and the things like the government incentives that people think that that's going to work; that's going to get them on board. Well, they haven’t been working, which is probably, you know, why they're asking for additional research. You know, why is that not fixing the problem? We're willing to give them all this money to do this training to get these people, and it's just a lack of understanding as to how traineeships work because in traineeships a training provider is just recognising the skills that they're getting in that workplace. We're not delivering the

	training. We're just ticking the boxes that say, yes, you have actually learned those skills in your workplace' (RTO 49).

Table C3 Data supporting the theme 'student-based challenges'

Associated first-order concepts	Representative quotations
Indigenous communities, need for cultural awareness	'So, I think a lot of the challenges we have are around Indigenous students, for example. And there's lots of things that we can do to help and, you know, funding provisions and things like that. But to get them to come in to, say, Broome, to attend skills workshop, they've got all these socioeconomic issues, like a lot of them are like, I don't know what to do with my child for two weeks, and, you know, OK, well, we don't have childcare on site. And so, you're sort of dealing with much more than just here's the material, go online' (RTO 29). 'Again, it's like really being on the ground as a provider and the team has said to me now, they've driven 6 hours to go somewhere and they've got out there and, being in an Indigenous community, you know, they'll say someone's died. So the whole community shuts down and they said we just have to acknowledge that we're going to be out there and we could turn around and walk and you know that's another part where it's succession planning [so that there are] key people that understand all of that completely' (RTO 29).
	'That's the nature of community life is such that something can happen, a funeral, for example, on the day before you're due to be there to deliver training and no one's going to be there. But if the whole place is shut down' (RTO 7).
	'And it's not that they don't want to come, but again … they're living in some pretty poor conditions, there are a lot of family issues. Time means nothing to them because every day is the same' (RTO 10).
	'And it's the very broad community issues, you know; just last week domestic violence came up with someone that, you know, that was a problem for them in making it to work' (RTO 7).
	'Some of the units I think … need to be looked at, how we can support the Indigenous better. Because everything we set up is for the, I am not hiding, for the white society. You know what I mean? And that's where the training I think has got to get to. Even to the point, I think there's something in it where the delivery, we know under all the rules and regulations, they've got to answer everything in English ... Well, I think with Indigenous side of things, there might be something to work on … There's a translator, someone can put it in their language, we can have it in their language and it reverts back' (RTO 13).
Language, literacy and numeracy (LLN)	'It does vary a lot though. Some areas where you expect there's going to be literacy [issues they are] actually really good and others where you think they should be OK, you end up extending the course because you need more time to help them out' (RTO 12).
	'Central Australia would be probably one of the worst areas in Australia for those issues because they're so early settlement compared to the rest of, you know, Australia. You start coming from some of the areas that are a bit closer to the coast on Queensland and NSW and, you know, they just don't have those same issues. So if that's an RTO who's used to teaching Indigenous in Brisbane or in Sydney or something like that, Redfern, or saying they're going to go central Australia …it's just yeah, they can't even communicate' (RTO 4).
	'LLN skills are the most obvious barrier. So we have some participants who cannot count to 10. For example, we have others who are coordinating some services, so you know between that sort of cohort there's a very broad range of skills sets, but there's LLN, even with those participants that we work with who are in basic leadership roles [LLN] has an impact on their capacity to meet the standards of the workplace. First and foremost, our focus is on our LLN and because we take a very long-term approach to training and delivery that doesn't necessarily fit with how the VET sector works with short-term qualifications' (RTO 7).
	'I could see that numeracy and literacy was going to be an issue in remote [areas]' (RTO 8).
Digital literacy	'digital skills in the regional areas is a lot harder. We have moved 99% of our assessments and resources to digital. Still done in the classroom, still trying to support, but there's sometimes, you know, you'll take out a laptop and pass it around to the students and they look at it and say, what's that? but that's fine. You just put that away and give them a stack of paper (and have a backup). And then, same principle in cities, we have the paper in the cities if people aren't computer-literate

	there. But the regional areas definitely have more of a lack of digital skills than anything else' (RTO 12).
	'I've mentioned before, digital literacy is a really big issue for us in Tasmania. Generally it is not highly taken up, it's hard to move people in that direction as well. And, you know, we have a role to play and we're probably fairly early in our journey in that as well because we've got some work to do in that space' (RTO 5).
Disability	'But his barrier is that one is getting adequate training and having that interpreter service available, it's very tricky. He has to coordinate a lot of it, which makes it very difficult and even just for him to meet with me the other week he had to pay up-front costs for the interpreter and gets reimbursed afterwards and, when you're unemployed and you're seeking work, you don't have the money. Yeah, and so, you know, there's some barriers for him just there and … ' (Industry 15).

Table C4 Data supporting the theme 'understanding local skills needs' (from RTO interviews)

Associated first-order concepts	Representative quotations
Networking, local place-based engagement, local knowledge	'I go out to these places. So for instance, I'll take any opportunity to travel and get my feet on the ground' (RTO 1).
	'We try to be involved with meetings that are going on and we try to communicate with, you know, the big businesses in town' (RTO 16).
	'But we have an engagement strategy … a lot of the North executives represent us on peak bodies, so we'll be on Chamber of Commerce, on jobs forums … our school engagement is enormous, you can imagine how many high schools we have. So it's having dedicated staff who can represent [RTO name suppressed] and you can imagine we all need to be saying the same thing, you know, so that across the area we've got lots of representation, lots of participation, we do lots and lots of industry engagement. We represent ourselves at every forum that we possibly can. We also have quite a lot of awards nights for the different industries' (RTO 20).
	'I think it's just through conversations and the dealings we have with the local businesses …' (RTO 6).
	'I think probably the other major strategy that we try to use, and again this is successful [to various degrees], depending on where we are, is to make sure that we partner with local. Yeah, we have relationships with local organisations, whether that's the local government authority; it might be with local Aboriginal organisations, so Aboriginal community-based organisations, other agencies like health, schools. The more of those relationships we have, the more we can work collectively with those groups. And then that's where the students come from. And if we don't have the resources, you know, the facilities, for example, for delivery we'd be saying what can be delivered in the workplace or, you know, is it a traineeship model we're looking at, you know, those kinds of things … So, obviously having those relationships with employers and industry and that sort of thing is critical' (RTO 9).
	'Industry consultation is there for a reason, actively engaging in industry consultation gives you a better understanding of what the industry actually needs and puts you in contact with them. Whereas if people don't follow through with that, that's when you lose contact' (RTO 49).
	'It is usually just the community connections, so whoever we do know within that community and CDP [Community Development Program] and it's not that you get lazy, but you know that they know what they need in that space. And normally you have to not just talk to one person in the space' (RTO 17).
	'But it's really looking at and trying to find out what the needs and wants are. Because there's so many I couldn't name; there are many communities up here … every month I'd find out there's a new community somewhere that's coming up and you just go, wow. And they're right in the deeper, the heart of, you know, Northern Territory. And then you're trying to find out what they want and they get word of mouth from somewhere else' (RTO 13).
Direct approach by organisations, businesses and community members	'We generally don't find them, they find us. So we work on people contacting us – whether it's that they've heard, whether they've just, you know, surf the net and come across our web page or whatever and make those general inquiries. And I guess from there, then it's just a discussion on a phone call going, hey, what have you got? Who are your people? What are you after? And sometimes they're not even really aware, you know, an example would be that' (RTO 4).

	‘A couple of ways. More often than not, it's a direct approach from community or members of the community, or a business within the community …’ (RTO 5).
Industry knowledge and engagement	‘And because of my mining background I’m connected well in the mining industry, I know what the new mines are and what the opportunities are’ (RTO 10).
	‘Now our relationship with the mine, it's just absolutely superb. It has to be because, you know we, we are a service provider to them. They meet with us regularly. We maintain that relationship’ (RTO 20).
	‘We do have some people [in] roles that are specifically about stakeholder engagement, so manager of industry engagement, those sorts of roles. So, formally setting up those structures to be able to consult with industry and particularly in Geraldton and Kalgoorlie; the managers of industry engagement are tasked with identifying new and emerging industry and sort of building those relationships there. We do have, it varies really, some industry areas have formal structures, such as the Industry Advisory Committee, so they have a formal committee that meets and those sorts of things. Other areas don't, depending on how some of those industries operate’ (RTO 9).
Regional development plans	‘For example, there was a series of regional skill summits that the state government ran around all around the states, or the three in our region. And from that there were action plans. So, they were summits where industry talked about what they thought they need in order to attract skilled workers to regional locations. So, that's been a vehicle for engaging with industry, but also an action plan that's come out of that. But it's identified a whole lot of things that we're doing. That's been supported by the Department of Training, who also have a workforce planning section that provides data [on] regional profiles. We do tap into the regional development commissions. That kind of big picture level information as well, which we also then use in our strategic planning process and that sort of thing’ (RTO 9).

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