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Engaging Young People in Occupations Served by Vocational Education: Case Study From Healthcare

Stephen Billett*, Anh Hai Le

School of Education and Professional Studies, Mt Gravatt Campus, Griffith University, 176 Messines Ridge Road, Mount Gravatt, Queensland, 4122 Australia

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Abstract

Purpose: Globally, countries with both developed and developing economies are struggling to secure sufficient participation in vocational education to generate the range and quantum of skills required for their communities and realising national social and economic goals. In an era of high aspiration, vocational education and the occupations it serves are increasingly seen as being a less than desirable outcome by young people and their parents. Hence, there is a need to identify means by which to inform and engage young people in considering vocational education and the occupations it serves. The case study discussed in this paper is contextualised within the Australian state of Queensland, which, like many other countries is struggling to have a workforce sufficient to meet communities' healthcare needs as its population both grows and ages.

Methods: The study data were collected from 1) interviews with healthcare-related stakeholders including health industry representatives, teachers or practitioners, and healthcare providers, 2) focus groups with senior secondary students, and 3) surveys with these participant groups. It provides a descriptive analysis of efforts to secure greater participation by young people in allied health roles, and, in particular, young Australian Indigenous people.

Findings: The study participants included those from regional and metropolitan centres and from state and independent schools, and in all of which the focus on engagement was

*Corresponding author: s.billett@griffith.edu.au

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central. Findings indicated that engagement was necessary to advise young people about these occupations, the effective preparation for them, and likely retention in the workforce.

Conclusion: This study highlights the need for intentional strategies to engage young people, their parents/guardians and with those efforts likely needing to be organised and enacted at the local level. This requires collaboration and engagement from education, industry, and local communities. Essentially, a systemic approach is required, specifying roles for government, employers, educational systems, and teachers and parents who engage directly with young people. In all, engagement, advice and opportunities locally are all emphasised in the study reported here.

Keywords: Post-School Pathways, Engagement, Informing About Occupations, Initial Occupational Preparation, Worker Retention, VET, Vocational Education and Training

1 Participation in Vocational Education and the Occupations it Serves

Changes in the demand for occupations and what constitutes workplace performance requirements have long required the need for effective and adaptive provisions of vocational education and training (VET). A current challenge and emerging imperative for VET is engaging sufficient numbers and kinds of young people who are suited to and can be prepared for the occupations it serves. Globally, in both countries with developed and developing economies, there are growing challenges to secure participation by young people in VET, and consequently, the occupations it serves (UNESCO-UNEVOC, 2018). This participation is becoming of great interest and concern within these nation states because of the importance of those occupations to the communities they serve, their contributions to both private and public sector enterprises and, collectively, the achievement of national economic and social goals. It seems that in the contemporary era, globally, the aspirations of young people and their parents are increasingly directed away from VET as a post-school pathway and many of the occupations it serves (Clement, 2014). In an era of high aspiration, VET is often only seen as an option for those unable to secure university entry (Michaelis & Busse, 2021).

Whilst wanting young people to have and achieve their aspirations, not considering VET as a viable option for that leads to: 1) Mismatches between skills young people are securing and employment opportunities, 2) Conflicts with what employers claim they are seeking in employees, 3) Potentially circuitous post-school educational journeys, and 4) Threats to national self-sufficiency. All of this suggests an urgent and fresh focus on the goals for and processes of VET are required to address this issue. Central here is engaging young people in VET and the occupations it serves. This includes identifying how meeting personal goals can

be aligned with workplace, community and societal needs. To that end, the study whose findings are reported and discussed in this paper suggests that directly informing and engaging with young people at the local level, may well be the best way forward. The project sought to identify how best young people can be attracted to, prepared for, and remain in healthcare work to both meet their personal needs and those of the healthcare provisions and the communities that they serve.

The case here arises from a study conducted in the Australian state of Queensland, which, like many others is struggling to have a workforce sufficient to meet communities' healthcare needs as its population both grows and ages. The state is geographically very large and divided into intensely populated metropolitan areas, a few regional cities and rural and remote communities. In some of the latter, there are many young Indigenous people who struggle to complete their schooling and find worthwhile work. Hence, beyond fulfilling workforce needs, there are also other social goals, such as assisting these young people identify which kind of work they want to undertake and then preparing them for productive and worthwhile working lives. Yet, for healthcare requirements to be met, there is a growing need for the state's healthcare and educational sectors to collaborate to attract, recruit, prepare, upskill, and retain an increasing number of para-professional healthcare workers, across the state and in all its communities. For these important goals to be achieved, it was found that strategies are required to engage young people, including Indigenous young people in this work and associated educational provisions.

2 Informing and Engaging Young People

There are direct consequences from shortages of the skilled workers required for the effective provision of the goods and services that communities need. These include the ability to generate sufficient numbers and kinds of products and services that communities need. This shortage is more than limiting private enterprise profitability. It extends to limiting social and welfare provisions, such as in age and healthcare. Indeed, this is perhaps never more the case than in the health and social care fields in communities with ageing populations and that are dispersed across metropolitan conurbations, regional centres, rural and remote communities. For instance, the Australian state of Queensland is currently identifying how best to secure and effectively prepare and retain the state's workforce. Central to achieving that goal is enacting VET school to work pathways that are attractive, engaging, and effective for young Queenslanders (Farmer & Grace, 2021). Yet, redressing this problem requires collective action and engagement to inform and guide that decision-making of young people and those who influence them (Billett et al., 2020). Whilst within healthcare much of the focus is on securing sufficient medical doctors and nurses to service the needs of regional, rural, and remote communities, there is also an underlying shortage of the range of para-professional and

service-related roles within healthcare systems and facilities. Healthcare para-professionals (HPs) are healthcare workers that often provide support to other medical professionals by whom they are directly or indirectly supervised (Munn et al., 2014). HPs have varied roles and may work within or across healthcare professions. The nomenclature for HPs is diverse (Chief Health Professions Office, 2008) and includes aides, support workers, support personnel, attendants, or unlicensed staff (Australian Physiotherapy Council, 2007). The roles undertaken by HPs include direct patient care such as the implementation of treatment plans under the supervision of a qualified health professional, and indirect support, such as performing clerical and administrative duties based on service area requirements (Lizarondo et al., 2010). HPs work in various medical settings, including group practices, hospitals, rehabilitation facilities, and retirement homes. There are different educational requirements for HPs internationally. Within Australia, formal qualifications for HPs are available through the VET sector, which provides certification based on the achievement of competencies, delivered via registered training organisations (RTOs) such as Technical and Further Education institutions (Chief Health Professions Office, 2008).

Yet, unlike the work undertaken by nurses, doctors, and other areas of clinical work, many of these roles are relatively unknown and hidden from the public gaze. As such, they are less likely to be seen as potential occupations because a lack of awareness about them. The concept has also been used to refer to engaging marginalised communities in forms of employment in which their participation is limited – if you can't see it, you can't be it – is doubly applicable here. That is, these occupations are relatively unknown and, therefore, unlikely to provide obvious examples of occupations to pursue in marginalised communities. Engaging with young people, their parents and teachers, therefore, will be essential to redress the current attitudes towards VET and the occupations it serves and engaging them in ways that support informed and impartial decision-making. Earlier examples of collective action and engagement associated with students navigating potential gaps in the transition from school to employment emphasised the importance of partnerships amongst local businesses, schools and tertiary education institutions, and facilitated at the local level (Billett et al., 2007; Seddon et al., 2005). It was found that initiating, enacting and, perhaps most importantly, sustaining these partnerships was premised upon shared concerns and working in the collective, rather than the individual institutional interests.

2.1 Factors and Practices Shaping Decision-Making on Post-School Pathways

A complex of institutional factors and personal practices influences young people's decision-making about post-school pathways, and these shape the proposed strategies to redress these influences (see Billett et al., 2022). There are range of institutional factors – those from and projected socially and by social institutions – make suggestions about the kinds of work that

are available, what occupations and pathways are seen as being worthy of young people and their parents' aspirations. Some educational policies and practices privilege higher education and the occupational outcomes it serves, as being more desirable than VET. This is a phenomenon that exists globally, and in both countries with advanced industrial economies and those that are described as having developing economies (Cedefop, 2014; Clement, 2014; UNESCO-UNEVOC, 2018). These institutional factors are suggested by the social world explicitly and implicitly. However, to provide more impartial and informed basis for that decision-making, it is helpful to understand how these suggestions are engaged with and practised by young people, their parents and familiars in decision-making about post-school options.

This literature on decision making advises that entrenched societal sentiments shape opportunities in ways that exercise the suggestion arising from social status, location, familiars (Cedefop, 2014; Clement, 2014; UNESCO-UNEVOC, 2018), but that the practices of schools, teachers, career guidance officers as well as those within families both mediate these factors and make their own contributions to that decision-making (Billett et al., 2020). These practices may reflect incrementally changing aspirations and expectations that are a product of growing affluence, and a more educated community, with higher aspirations for young people and their populations becoming more metropolitan and schooling becoming longer. Thus, engaging young people, their parents and teachers directly will be essential in redressing the current attitudes towards VET and the occupations it serves and in ways that support informed and impartial decision-making. This requires collective action and engagement to inform and guide that decision-making of young people and those who influence them, which emphasises the importance of partnerships to realise positive outcomes for all.

3 Methods and Procedures

To identify how best young people can be attracted to, engage with, be prepared for, and remain in healthcare work this investigation was undertaken using a combination of qualitative and quantitative procedures to gather and analyse data. The qualitative data gathering, and analysis comprised: 1) Interviews with healthcare-related stakeholders; 2) focus groups with senior secondary students; and surveys with these two participant cohorts.

Interviews were conducted with 21 healthcare-related stakeholders including health industry representatives (e.g., peak or skills body (i.e., industry advisory committee), government agency, VET industry), teachers or practitioners (e.g., nurse unit manager, allied care worker, home carer) and healthcare providers (i.e., employers). The interview comprised open questions seeking stakeholders' views on 1) attracting young and older people to work within the healthcare sector, 2) preparing them for that work, 3) retaining them in the sectors, and 4) funding models to optimise such preparation. The audio-recorded interviews

took approximately 30 to 45 minutes each and were conducted online via MS Teams or Zoom based on participants' preferences. Participation was voluntary and confidential.

Focus groups were conducted with 45 senior secondary students (i.e., Years 11 and 12) at four school sites in regional and metropolitan Queensland. These students were recruited as they are either currently working or studying in the health industry or planning to enter it. The students were asked similar open questions to those in the stakeholder interviews. The focus groups were approximately 45 minutes long which is the standard duration of classroom sessions, and varied in size depending on the group and school commitments. Parental permissions were secured before involving these school students in the focus group interviews and surveys. In the parental consent for student participation, the students and their parents were given the opportunity to participate in a prize draw for one of the six prizes.

Surveys were completed by 50 participants. The survey questions comprised five sections formulated with a similar structure of the interview schedules: 11) Demographic information, and items on: 2) Attracting young and mature aged people to work within the healthcare sector, 3) preparing young and mature aged people for that work, and 4) retaining workers in the sector. Both hard copy or online versions of the survey were available to participants either before or after the interviews and focus groups for the informants' convenience. In most cases, the surveys were completed in face-to-face encounters with students and individuals in health and education department informants.

Deductive coding was performed on the interview and focus group qualitative data, using pre-determined categories (i.e., attracting and recruiting, training, and retaining healthcare workers). Subsequently, thematic analysis was conducted within these categories to identify factors impacting on 1) attracting and recruiting young people for healthcare work, 2) preparing new employees, and 3) retaining healthcare workers. An example of this analytical process is included in the appendix. Descriptive analysis was undertaken with the survey quantitative data. Both forms of analysis were helpful for securing insights into informants/respondents' perceptions of issues associated with research project. The research was approved by the Human Research Ethics Committee of Griffith University (GU No: 2022/195) and was carried out in accordance with the National Statement on Ethical Conduct in Human Research. The data gathering was subject to informed consent and interview informants were given a pseudonym to maintain their confidentiality.

4 Findings

Overall, the key finding is that 'engagement' is the most salient consideration and principle for informing policy and practice. That is, finding ways to engage young people is central to attracting them, including young Indigenous Australians to take up this kind of work. Also, the effectiveness of their preparation is aligned with engaging them in relevant experiences and

providing them with appropriate support. Also, retaining them in the workforce was found to be s aligned with engagement through rewarding work, supportive workplace culture and opportunities for either vertical advancement or horizontal broadening of their capacities to contribute to healthcare. The following sections build and elaborate these conclusions.

4.1 Attracting and Recruiting

From the focus group and interview data, it was possible to identify sets of factors that either attracted or detracted young people from participating in healthcare work. In overview, these factors comprised:

- Engaging conditions (EC) – conditions of the sector that informants found attractive
- Engaging work (EW) – qualities of the work that informants found attractive
- Personal disengagement (PD) – qualities of the work that informants reported would detract them from participating
- Disengaging conditions (DC) – conditions of the sector that informants reported as being unattractive

From these young people's perspectives, having conditions of work that are seen to be secure and supportive, and kinds of work that were found to be interesting and worthwhile were key sources of what would attract these informants to engage in this kind of work. Qualities of work included working with others, having variety in activities, ability to learn new skills and being part of diverse work teams and engaging in work activities that were familiar because of family connections with this work. Conversely, those factors associated with causing informants to hesitate in considering a career in health work largely comprised personal concerns and those associated with conditions of work that would cause them to disengage. Issues of working remotely from family, reaction of patients and the potential impact on mental health from the work are reported as being key personal impediments to engaging in health work. Disengaging work or occupational factors with those associated with the demands of healthcare work, shift work and its impact upon life outside of work (i.e., family – work balance). Whilst some of these detracting factors can potentially be addressed through workplace arrangements, others such as shift work and emotional demands of that work are less easy to be addressed.

From healthcare stakeholders' perspectives, the status of healthcare work as enhanced in recent years, and it is viewed now as important, worthwhile and stable work for which there is a future. The promise of employment and advancement is also aligned with attracting new appointments: 'Knowing that there are jobs at the other end, knowing that they can be sustained during their studies financially' (Erica, Gov Health Dept, stakeholder interview). The qualities of healthcare work

are also associated with personal and professional satisfaction, making a contribution to others through caring: 'Either being a light bulb moment or a trigger' (Mary, Health workforce, stakeholder interview). Engaging support was proposed as comprising the provision of educational pathways, support and guidance to progress along them and the options of paid traineeships and cadetship which again were associated with employment and employability. These pathways are seen as being helpful and supportive: 'That's the key and giving students pathways out of school, making the appeal of working in aged care or disability or allied health' (Rick, Training Organisation, stakeholder interview). Specific strategies mentioned here are exposing young people to career expose and also abiding close guidance when they are engaging in this work.

Conversely, factors associated with disengaging conditions and personal basis to disengage with this kind of work were proposed by informants. The former is associated with shift work, fixed wages, commitment and time and effort by mature age workers and risks associated with being socially isolated in work and to travel for education: 'There's no TAFEs [Technical and Further Education] in there at all. They'd have to travel to the regional center' (Ann, Gov Health Dept stakeholder interview). For some, disengaging conditions involved having difficulty to find and complete practicums for allied health:

> *They can't finish their qualification or get experience because they're not prioritized, or they're not seen as valuable as someone who's gone to university or something like that. […] But continual roadblocks make it difficult. And that, honestly, it's bad for the students, because they just want to finish and they're just like, come over this. (Rick, Training Organisation, stakeholder interview)*

Personal factors associated with reticence to engage included the requirement to move away from home to be educated in work and many of the targeted occupations not being visible to those who have no other knowledge of healthcare work than their own direct experience with healthcare sectors:

> *For a lot of Aboriginal and Torres Strait Islander people [Indigenous Australians], if you've never engaged with that profession, you don't see it as a realistic career opportunity for you. (Erica, Gov Health Dept, stakeholder interview)*

The survey data provided insights into who influences these young people's decisions about post-school pathways and preferred occupations. In Table 1, parents then teachers and peers/friends are the three most important reported influences, which is consistent with other Australian studies (Billett et al., 2020) and those from overseas (Clement, 2014). This finding points to the importance of engaging not only young people (i.e., the young person and their friends) but also their parents/carers and those who work as their schoolteachers.

Table 1: Three Most Important Influences on Post-School Pathways and Preferred Occupations

3 most important influences on decisions about post-school pathways	*n*	*3 most important influences on decisions about preferred occupations*	*n*
Parents	44	Parents	*38*
Teachers	30	Teachers	*30*
Peers/ Friends	19	Peers/ Friends	*17*

These ratings suggest the key sources of advice, guidance, and support for young people's decision-making are from those with whom young people directly engage and have frequent interactions (i.e., proximal sources), and whilst replicating earlier findings indicates the need to raise awareness about and engage parent and teachers in experiences that enhance their understandings of vocational education and the occupations it serves and how that occurs. Mindful here is that in that earlier work (Billett et al., 2020), teachers underestimated their impact on students' decision-making about post-school pathways.

Table 2 presents the data on the factors that attract and inform potential new appointees to this kind of work and how they learn about and make decisions about to which occupations they are most suited. Being attracted to occupations and work that helps others, is well paid, and offers career paths is emphasised in the survey responses to the attractive features of these occupations.

Table 2: Three Most Attractive Features of Work on How to Learn About it

3 most attractive workplace features	*n*	*3 best ways to learn about being suited to healthcare work*	*n*
Work that helps others	37	Visit to healthcare facilities	37
Well paid work	35	Information sessions by experts	36
Career paths	20	Work placements/ internships	34

Associated with learning about the qualities of these occupations, the data presented here emphasises the importance of engagement in healthcare settings and with informed practitioners (e.g., experts) to inform and advise. These findings advance the importance of engaging with young people, their parents and teachers and exposing them to the kinds of experiences that might best assist them all come to understand about and potentially engage in healthcare work. That is, efforts to engage young people need also to include parents and teachers.

The survey data also identified issues associated with preferred areas of work and the addressing the challenges for informants who might be working and learning far from home (Table 3). The issue about working away from home is particularly germane to the state of Queensland because of its scale and location of many of the communities in which young Indigenous people live.

Table 3: Three Most Preferred Areas of Work and Key Requirements for Working and Learning Away From Home

3 most preferred areas of healthcare work	*n*	*Key requirements for being away from home area*	*n*
Nursing	29	Available accommodation	29
Hospital	19	Interesting work	28
Ambulance Services	14	Good pay	26
		Get home on weekends	18
		Nice location	18
		Improved career prospects	17

Here, the most preferred health-related occupations are nursing, hospital work and ambulance service, which might be derived from them being observable: Known about. Key concerns needing to be addressed for these young people working and learning away from home are issues of accommodation, the quality of work, pay and prospects for advancement and the attractiveness of the location. Again, these are practical considerations about accommodation that are realistic and born out of experience and the advice of familiars, and of concern, in particular, to young Indigenous people from remote communities. In fact, in many instances, their parents or care givers would not have sufficient funds to pay for accommodation, particularly in regional and metropolitan centres.

4.2 Preparing New Employees

The requirements for preparing new employees are more than undertaking a VET course. They include learning through immersion in the occupational practice, guided by more experienced workers, through activities in which novices can come to work and learn together and through activities selected and guided by more experienced healthcare workers. In overview, from the interviews and focus groups, what was seen as being helpful in the preparation were threefold:

- Engaging learning experiences – e.g., internship model, traineeship, cadetship, hands-on and practical, real experiences;
- Engaging support – e.g., identifying pathways, mentoring, peer support, financial support, cultural sensitivity, shadowing;
- Engaging education provisions – e.g., pathways to higher education, part-time work while studying.

In particular, young people proposed the following qualities to be central to effective preparatory experiences:

- Professional and practical hands-on
- Watching specialists
- Work placements to experience the reality of work
- Work experience
- Year 10 program (health taster) to emergency ward at hospital
- Mentors working in the hospital who can give live experiences
- Shadowing at university
- More opportunities at the hospital (e.g., cadetships)
- Part-time work in the field during education

The healthcare stakeholders viewed some current approaches to be effective means of that preparation. For example, traineeship models were perceived as an entry as well as opportunity as they are:

> *[…] Guided by our rules and regulations, our policies and procedures. […] We couldn't actually find anyone with the qualifications to go into these positions. So, we've put trainees on so that we can train them up ourselves. (Simon, Indigenous health worker, stakeholder interview)*

Or cadetship models – 'opportunity to build those core skills like communication, teamwork, prioritization, and also getting money at the same time' (Erica, Govt Health Department) - were compared with scholarship model that:

> *[…] Lacks any substantial merit, because it's just giving lump sum funding with no expectation of building the skills of that individual to make them more employable on the other side. (Erica, Govt Health Dept, stakeholder interview)*

That is, 'the cadetship model has been better, a more rounded approach to the process' (Wayne, Govt Health Dept stakeholder interview). These stakeholder informants also highlighted the importance of work experience for young people to come to understand the occupation:

> *[…] There's a role for us all and potentially, for schools to actually set up something as a formal structured program to provide pathways and doorways, open doors of opportunities. (Kate, Govt Health Dept, stakeholder interview)*

From the survey data, accounts of the preferred qualities of educational programs, occupational preparation and teaching-learning were identified (see Table 4).

Table 4: Most Attractive Qualities of Education and Occupational Preparation Programs and Teaching-Learning

4 most attractive qualities of an educational program	*n*	*3 most important qualities of an occupational preparation program*	*n*	*3 most important qualities of the teaching and learning experiences*	*n*
Practical experiences	36	Located near home	45	Teachers who are experienced in the healthcare work	43
Interesting teachers who have relevant workplace experience	29	Includes a paid component or has financial support	44	Develops theoretical understandings	43
Pathway to higher education	26	Leads to national qualification	44	Develops practical abilities	43
Combination of education and practice	19				

Central to these young people's preferred qualities of effective educational programs were access to practical experiences, teachers with sector relevant expertise, pathways to higher education and a combination of experiences and educational and healthcare settings. Qualities for occupational programs also preferred were being located near to home, having a paid component and leading to national qualifications. It is noteworthy that some communities from which these data were gathered are quite socially disadvantaged and parents may not be able to afford to support their children's occupational preparation without financial support. The qualities of the valued teaching and learning experiences were those in which the teachers had industry experience and assisted students develop understandings and practical capacities.

These young informants also most highly rated models of preparation that combined education and work-based experiences and with a preference for an educational experience prior to engaging in work-based activities and the structured integration of the two experiences (Table 5).

Table 5: Three Best Models of Preparation Programs

3 best models of healthcare preparation programs	*n*
Combination of education and work-based	18
Educational experience then work-based	13
Structured experiences in education and practice settings	8

Proposed here is the importance of having and combining experiences in both educational and practice settings and structuring the integration of those experiences. This integration can arise through, for instance, having educational interventions before, during and after the workplace experience: Before (i.e., preparing young people for the work practice), during

(i.e., providing support and regular debriefs about experiences), and after work experiences (i.e., significant debriefs and personal processes of reconciling two sets of experiences) (Billett, 2022).

However, the learning occurring as individuals commence engagement with an occupation practice and workplace is merely the beginning of an ongoing process of learning across working life. Therefore, it is also important to be reminded that there is a need for preparation at different stages along the employees' journey as they encounter new tasks and broaden their skills and role functions. Much of this development, of necessity, occurs in and through engagement in working life. That kind of engagement positions novices as employees with a responsibility to work and learn and contribute to the work of the healthcare unit. It also provides structured entry level occupational education comprising guided learning experiences in both educational and practice settings. These kinds of considerations are also important for retaining workers because unless they can respond effectively to emerging challenges and new requirements for that work, they may elect to leave the workplace and occupations. Hence, that ongoing learning through engagement in work settings is important for the retention of these important workers.

4.3 Retaining Healthcare Workers

The findings from this study indicate that retaining these new employees is premised on productive work environments, opportunities for career progression. From the interviews and focus groups, it was possible to identify a set of factors that reportedly either being effective in either engaging or disengaging employees. These are:

- Engaging conditions - e.g., flexibility of work, adequate staffing, opportunities for promotion, job security, well paid work,
- Personal engagement - e.g., being respected, sense of belonging to the workplace,
- Engaging educational experiences - e.g., educational pathways that assist these worker's progress,
- Engaging work - e.g., supportive work environment, finding passion, a clear pathway,
- Engaging support - e.g., supporting through transitions, safe environment, development of processes, linkage to other First Nation employees,
- Disengaging conditions - e.g., overly demanding workload, lack of recognition,
- Personal disengagement - e.g., distance away from home, confronting work.

All of this suggests that retaining employees in these healthcare roles includes organising and enacting work environments that are engaging, and provide satisfying work and possibilities for promotion, advancement, and flexible work arrangements. Specifically in healthcare work, *'people need to be engaged in meaningful work in teams that are supported and non-hierarchical' (Erica, Govt Health Dept, stakeholder interview)*. That engagement and guidance, also, must be reciprocated by the learner-workers coming to see themselves in and act appropriately in those roles and engage effectively with others to develop and build the capacities for effective healthcare work, including the healthcare workplace being *'a safe place for problem solving, that everyone felt included in that team mentality was sort of encouraged' (Erica, Govt Health Dept, stakeholder interview)*.

The survey data also provided suggestions to support retention. In Table 6 are presented the three most important proposed requirements to remain in the healthcare sector, having a career and remaining in remote or regional communities.

Table 6: Three Most Important Qualities to Retain Workers in the Industry, a Longer Career and in Remote/Regional Communities

3 most important requirements to remain in the industry	*n*	*3 most important to make a healthcare career*	*n*	*3 most important for retaining in remote/ regional communities*	*n*
Positive working environment	31	Being part of the team	42	Opportunities	26
Opportunities for career advancement	20	Being treated respectfully	41	Diversity of work task	18
Good pay	18	Achieving worthwhile goals through work	40	Housing	18

It can be seen here that positive work environments, opportunities for advancement and good pay are ranked most highly. Retention within healthcare careers is reported as being buoyed by being part of a work team, treated respectfully, achieving personal goals through work (i.e., all about engagement). Importantly, retention in remote and regional communities is held by these informants to be premised on the opportunities created by those locations, access to housing and the diversity of work tasks in those settings. All of this suggests that there are range of workplace practices and affordances likely to lead to higher employee retention. Of course, these informant perspectives are what they want from workplaces. Yet, they also offer those on how they will come to engage in their work.

5 Engaging, Preparing and Retaining Young People as Health care Workers

Through the interview and focus group data and that provided by the online survey, a range of factors associated with engaging, preparing and retaining young people as healthcare

workers has been raised. Moreover, some ways of progressing have been proposed in the forms of general approaches and specific strategies. Although far from comprehensive or inclusive of all kinds of stakeholders and potential employees, the respondents provided helpful data that informs how they might be most effectively engaged and offer practical strategies for progressing forward.

In this way, key premises for attracting, preparing and retaining these workers in these healthcare roles is advanced, comprising 1) Engaging conditions, 2) Engaging work, 3) Engaging support, and redressing 4) Personal disengagement and 5) Disengaging conditions.

5.1 Engaging Young People in Healthcare Sector

Engaging potential workers includes providing access to some of the range of allied health occupations that otherwise will be unknown to them and providing guidance during that access. For Indigenous Australian peoples, this includes culturally appropriate mentoring and guidance. This kind of guided engagement can inform and support these young people's decision-making about to which healthcare occupations they are most suited, and their effective initial and further development of the capacities required to perform that work effectively.

Therefore, 'planting seeds' early on through mandatory schooling processes stands as an option, which is analogous to the 'grow your own' metaphor that is used within these communities. For instance, the work experience programs organised by schools might be focused and engaged in real or simulated work-based experiences. In addition, opportunities for work experiences in healthcare settings during schooling or on school breaks could assist here. These can provide opportunities for young people to explore occupations, and then consider and evaluate alignments with their personal interests and capacities. Then, there is mentoring or guided support to assist and inform career decision-making. For instance, the importance of experiences provided to 'boarders' who come to large cities (e.g., Cairns) from remote Indigenous communities and the role that teachers, both in those communities and in those cities can play in decision-making about career choices was emphasised. However, these experiences need to be reinforced and augmented by events such as career expos and 'local engagements' where the young people can access and experience occupations in practice. Also, for young Indigenous peoples modelling by experienced workers goes beyond occupational tasks, it includes that provided by Indigenous workers themselves thereby indicating that Indigenous people can undertake those tasks.

There is also a need to engage young people so that they can witness the different kinds of work and activities healthcare comprises and judge its appropriateness for their capacities and interests. Work experiences are also important for creating realistic understandings about the work to be undertaken (Stasz, 1999). That is, being upfront with young people about what is involved – through hospital 'walking throughs', exposing them to daily work

plans, visits to work sites, and activities such as these. All of this suggests that there needs for guided engagement to attract young people, particularly those from Indigenous Australian peoples to participate in this kind of work.

5.2 Preparing Young People for Healthcare Occupations

Thus, effective preparation for these young people will be through engagement in educational and workplace experiences that are commensurate with their readiness. That is, their abilities to effectively engage in these experiences and learn from them in ways that are productive in achieving the goals of learning occupational practices. It was proposed that providing a combination of experiences, particularly being aware of Indigenous people's issues, cultural sensitivity and cultural understanding are important. Helpful here are having experienced a range of different models and approaches, and views internship and cadetships that are paid as being the most effective.

What appears to be essential in this occupational preparation is providing a combination of classroom-like instruction, for the kinds of knowledge that will not be learnt easily in practice settings, and practice-based experiences supporting understandings about the work, developing the capacities to conducted and generating appropriate occupational dispositions about its conduct. An integrated model is seen to be important – having workplace experiences (but with a suitably qualified and appropriate trainer on staff), having training blocks that are efficient and effective supported by peer mentoring. Immersion in the occupational practice and work setting is also helpful for developing the values associated with work that the trainees would be otherwise unfamiliar with, and that immersion needs to be carefully guided and supported by experienced and culturally oriented practitioners.

The content with which they are presented and the experiences through which young people are engaging need to be appropriate and culturally aligned with their needs, and not just for Aboriginal and Torres Strait Islander people. It needs to comprise effective models through which they can learn, develop, and hone their capacities and participate in ways that incrementally provide them with roles and responsibilities associated with the occupations to be learnt, rather than positioning them always as novices or learners (i.e., students). Indeed, distinction between the apprenticeship model and occupational preparation undertaken in educational institutions is that in the former, the apprentices see themselves as being nascent practitioners, rather than students reliant upon teachers for their learning. Thus, having a pathway of experiences – the practice-based curriculum – that incrementally engages learners in a series of activities that build their capacities and yet assist inform their sense of self as nascent occupational practitioners can structure effective learning experiences. That preparation needs to include guided engagement in work activities, particularly as some experiences in health care settings can be quite confronting. In an associated study, a Year 11

student was confronted with residents who died in an aged care facility. Also, to enhance their readiness, engaging them in professional discussions about cases and tasks can extend the construction and organisation of their knowledge.

Consequently, immersion in healthcare work seems to be an appropriate model for initial occupational preparation, if it is not overwhelming, beyond orientation to the occupation through educational interludes (i.e., classroom-type preparation). That is, the candidates are made ready to engage with these kinds of experiences and then guided in their engagement in patient activities. There may also be significant benefit in making students ready as effective learners by developing their capacities to engage with others to support and promote their learning, prior to their engagement, through orientation processes. Those others are likely to include more experienced practitioners, but also the peers with whom they are learning. These peers may be able to guide and support participation, and for Indigenous young people it is helpful for these to be from their own communities and aware of sensitivities that will assist inclusivity.

Consequently, central here is the role of more experienced workers whose role is to guide and support these novices, albeit in work intensive environments such as clinical settings. These will have the capacity to provide and sequence experiences for novice workers in ways that allow them to participate in incrementally more demanding tasks, but also respect patient safety and care as a fundamental principle. In particular, the principle of engaging in activities with low error risk and progressing through activities that have a greater consequence of errors is a standard means by which learning arrangements are provided in the workplace. For instance, in many healthcare settings, this guidance and support is undertaken routinely by preceptor nurses and more experienced medical practitioners. The task here then is to provide that kind of experience more broadly across these healthcare occupations. Other roles for experienced workers include modelling and coaching activities and providing them with means by which they can achieve their work goals. Rather than direct instruction, this can be through a process of guided participation in which the novices are made aware of the tasks, their requirements and have models associated with the performance of those tasks and then incremental engagement in undertaking such tasks. The other key role for more expert workers is to be a support well-being when they are encountering new circumstances and situations that might be distressing and confronting in ways. Without such mediation, these experiences might not lead to effective learning and professional development outcomes. Being aware of these concerns and being supportive of the novices' well-being and development may assist their effective engagement and retention in allied health occupations. For young Indigenous people having a mentor who is culturally aligned is again reported as being an essential quality.

Some data refers to the importance of peer support during the work activities so that students can learn and critically appraise their experiences. Hence, as noted, peer engage-

ment offers another form of accessible support and guidance. Healthcare settings can be quite lonely and confusing workplaces for novices (Newton, 2011). Hence, having peers with whom to discuss, share and engage stands to be effective strategies for achieving positive learning outcomes. Practical strategies that might be considered here are those associated with novices working in pairs rather than being on their own, so that they have inbuilt support and overcome issues of separation and loneliness (Williams et al., 2019). Other strategies include having group meetings of novices that provide an opportunity for them to share, compare their experiences with others (Noble et al., 2019).

Underpinning the effectiveness of the novices' engagement in work activities, interacting with more experienced workers and with peers, is their abilities to participate in such processes to optimise their contributions and learning. Moving from models of education, such as schooling, that can be quite didactic and, in which, the responsibility for the learning is often vested within the teacher, to one where it needs to be far more vested in the learners' actions, can be a significant challenge. Hence, preparing young people to be effective in the learning and have responsibility for it would be an important element of promoting their readiness to be productive learners and practitioners in their health care work. The second point here is important because beyond initial preparation, healthcare workers are expected to be able to continue to learn and respond to new challenges and much of this is vested in their capacities to be active in managing and promoting their own learning and development.

It was mentioned repeatedly that paid models of initial occupational preparation (i.e., cadetships, traineeships) are preferred as they provide the structure, experiences, and time for developing occupational capacities and position these novices as workers, rather than as students. That is, they are positioned to be given responsibilities and needing to fulfil expectations associated with novice worker. Added here is that for many of these participants, a salary is an essential for their participation in this initial preparation. Whilst this might be seen a cost impost on healthcare system, if those programs are aligned to the need for additional workers in the sector, then two goals may be served. One stakeholder recounted just this approach. That is, having failed to secure the kinds of workers their healthcare facility required, they recruited trainees, instead.

Certainly, this kind of educational provisions includes and embeds work experiences are central to effective occupational preparation. VET qualifications and certifications are helpful, but on their own are insufficient and also require a pathway to employment that provides the capacities permitting the young people to engage effectively (Billett, 2023). Being paid to learn and having a living salary (i.e., through cadetships) is particularly important for young Indigenous people because their parents are unlikely to be able to support them. Moreover, preparation and initial education for occupations should not be seen as being restricted to novices and trainees. The requirements constantly change for all forms of work,

and healthcare is no exception. So, there is a need for support for continue to learn across working life and this is a key consideration for retaining workers in the healthcare workforce.

5.3 Retaining Healthcare Workers

Retaining workers in the healthcare sector is reported as being premised upon it providing secure work, rewarding experiences, supportive work environment and opportunities for either horizontal or vertical advancement. Consequently, finding fits between individuals' capacities and interests and the work they undertake, for them to find value within it and doing so in a positive work environment may be helpful. Moreover, a focus on well-being and processes that reinforce the value and standing of these workers are likely to be helpful to avoid the sense of being taken for granted when undertaking demanding and, at times, personally challenging work. That is, attempting to avoid disengaging conditions and the personal disengagement to which the respondents referred.

So, to engage, prepare and retain workers, what is being requested can be summarised as: 1) Having a safe and positive work environment, 2) Undertaking work in which they can be effective and derive satisfaction, and 3) Experiencing support and development opportunities. One specific issue for Aboriginal and Torres Strait Islander people is that they may become overly burdened with expectations about their roles associated with their cultural heritage and background. It is reported that they are often called upon to address issues associated with Indigenous patients or issues for which they are not always fully ready to undertake, and this can occur to such an extent that it becomes overwhelming and can cause them to will increase their work roles. Therefore, to avoid burnout need to have pathways, cultural safety, forms of progression and leadership which is supportive.

In sum, all of what has been proposed requires collaborations by and governance of these arrangements that are likely to be most effective when enacted through partnerships at the local level that engage collaborators from education, industry and community (Seddon & Billett, 2004; Seddon et al., 2004). On their own, hospital and healthcare systems, vocational education and training institutes and schools are unlikely to be able to achieve these outcomes. Instead, working collaboratively and locally offers the greatest promise. Indeed, global sentiments about the standing of VET and the occupations (e.g., those in healthcare beyond nursing and medicine) need to be addressed nationally and locally. This requires a systemic approach with specific roles for government, employers, educational systems, and teachers and parents who engage directly with young people. Those roles are directly engaging dialogically with young people. Societal and other suggestions projected distally (i.e., government, industry, education). Others engage immediately and dialogically (i.e., parents, teachers, friends and community). Yet, local interactions are salient when supported by relevant experiences. Local engagement strategies need to include visits, observations, guided

participation in work settings and be supported by those who are open and seeking to be guides and models. Engagement, advice and opportunities locally are all emphasised in the study reported here.

Ethics Statement

The ethical considerations and practices of the study have been approved by the Human Research Ethics Committee of Griffith University, Australia. This research has the following research ethics research number: GU ref no: 2022/195. Griffith University conducts research in accordance with the National Statement on Ethical Conduct in Human Research.

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Biographical Notes

Dr Stephen Billett is Professor of Adult and Vocational Education at Griffith University, Brisbane, Australia and Australian Research Council Future Fellow. Following an earlier work life in garment manufacturing, he has subsequently worked as a vocational educator, educational administrator, teacher educator, professional development practitioner and policy developer in the Australian vocational education system and teacher and researcher at Griffith University. He is a Fulbright scholar, national teaching fellow, recipient of honorary doctorates from Jyvaskala University (Finland) and University of Geneva (Switzerland), and is elected Fellow of the Academy of Social Sciences of Australia.

Dr Anh Hai (Leah) Le is a research fellow at Griffith University. Her research interest focuses on workplace learning and curriculum development in tertiary education, with a specific emphasis on the process of building knowledge through scholarly engagement with industry and tertiary institutions. Much of her recent research has focused on lifelong and adult education.

Appendix

Factors Attracting and Detracting Participation in Healthcare Work: Young People's Perspectives

Attracting
– Good pay - engaging conditions (EC)
– Job security – human based jobs can't be replaced by technologies (EC)
– Pathways to higher studies/qualifications (EC)
– Making friends: "Most healthcare work is done in teams of people, often across different disciplines" – engaging work (EW)
– helps the community (saving people) so feel good but also hesitant when can't save someone
– Lots of variety (EW)
– able to easily communicate with a lot more people work in like a team (EW)
– new skills – using different equipment (EW)
– See more diversity in the workforce – the feel of being around the community (EW)
– Having family/familiars working in the healthcare gives insights into the sector (EW)
– Compassion side of the job (EW)
Detracting
– Remote location - too far away from family away from home (personally disengaging - PD)
– Patient reaction (PD)
– Impact on mental wellbeing (PD)
– Demand of work (DC)
– Long shift work (DC)
– Family-work balance (e.g., working in emergency) (DC)

Notes. EC - Engaging conditions; EW – Engaging work; PD – Personal disengagement; DC – Disengaging conditions.

Factors Attracting and Detracting Participation in Healthcare Work: Stakeholders' Perspectives

Attract
– Different opportunities and perspectives about attraction – changed over the course of the last few years – the healthcare sector being a very stable industry, offering stability of employment because of COVID; a combination of environment and opportunity (EC)
– Cultural understanding and support "if they've got a known family member or community member who has successfully gone through a health education in either the vet or the tertiary sector" (EC)
– Employability/employment outcomes: "Knowing that there are jobs at the other end, knowing that they can be sustained during their studies financially." (EC)
– Lived inspiring experience associated with health professionals, which becomes an impetus "either being a light bulb moment or a trigger" (EW)
– Experience-based: Having family working in healthcare thus family traditions; or having positive experience in the healthcare system themselves (EW)
– Capacity to complete the study – sense of self: "An enjoyable way then that to them is evidence that they could do that too" (ES)
– Paid traineeship/cadetship with guaranteed employment (ES)
– Creating pathway out of school "So I think that's the key and giving students pathways out of school as well, making the appeal of working in aged care or disability or, you know, allied health" (ES)
– Career expos – taster (ES)
– Close guidance (mentoring) (ES)
Hesitate
– Shift work (DC)
– Set wages (DC)
– For mature age people: diverse challenges including time and financial commitments, travel for study, uncertainty of guaranteed employability (DC)
– Having difficulty to find and complete practicums for allied health "they can't finish their qualification or get experience because they're not prioritized, or they're not seen as, you know, as valuable as someone who's gone to university or something like that. […] But continual roadblocks make it difficult. And that, honestly, it's bad for the students, because they just want to finish and they're just like, come over this." (DC)
– Being socially isolated, lack of resources at the rural/regional healthcare facilities, and issue with being accepted by integrated into the community (DC)
– Not being informed of different occupations within healthcare apart from medical roles (doctors, nurses); short contracted work relying on funding (lack of job security); lack of local TAFE provisions "there's no TAFEs in there at all, they'd have to travel to the regional center" (DC)
– Negative and isolating experiences; reluctance of moving away from their communities (PD)
– Lack of understanding of the diversity of allied health roles: "for a lot of Aboriginal and Torres Strait Islander people, if you've never engaged with that profession, you don't see it as a realistic career opportunity for you" (PD)

Notes. EC - Engaging conditions; EW – Engaging work; ES – Engaging support; PD – Personal disengagement; DC – Disengaging conditions.