Pathways to Success in regional northern Queensland: A "high expectation, high support" tertiary pathways approach that demonstrates successful transfer and attainment of bachelor degrees

SYNOPSIS

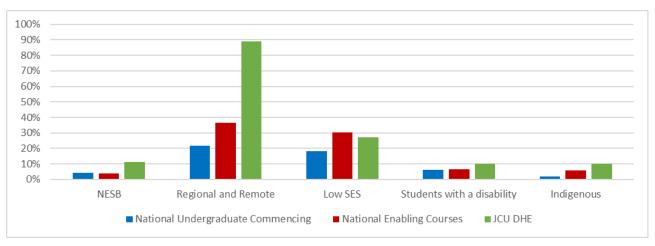
Since 2015, James Cook University's (JCU) Diploma of Higher Education (DHE) has provided a highly-supported, heavily-scaffolded curriculum committed to enabling pathways to, and widening participation rates in tertiary education in North and Far North Queensland. Led by a small team of highly committed academics, and supported by a wide range of support, academic, and technical staff, the DHE was intentionally designed to initiate a cultural shift in order to encourage institution-wide co-ownership of pathways to tertiary education. The DHE aimed to make explicit the implicit expectations of tertiary study in order to reduce pathways attrition and to improve the student experience for a highly diverse cohort by integrating core support services in the program. Ultimately, this intention resulted in significantly improved student rates of conversion to and attainment of Bachelor degrees.

CRITERION 1: DISTINCTIVENESS, COHERENCE AND CLARITY OF PURPOSE

BACKGROUND

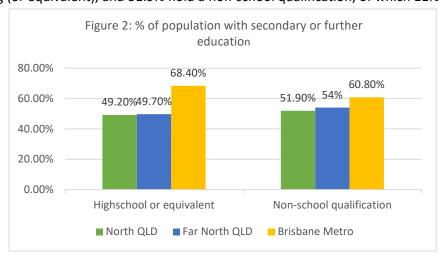
The remote location of JCU's Northern Queensland campuses furnishes a range of unique demographic challenges to providing tertiary education in the region. Furthermore, the DHE's status as an open-access course with no entry requirements ensures the student cohort is highly diverse, particularly amongst key equity groups formally recognised by Australian higher education policy (Figure 1).





Under the James Cook University Act of 1997, JCU has a legislative responsibility to "provide degrees of study or instruction to meet the needs of the community" (p.8). Historically, Northern Queensland has lower participation rates in higher education than, for example, the Brisbane metropolitan area. Across the region completion rates for secondary schooling (Year 11 or 12) and tertiary study remain significantly lower than the State average. For example, 49.2% of the population in the North Queensland catchment area have completed year 11 or 12 schooling (or equivalent), and 51.9% hold a non-school qualification, of which 11%

are Bachelor degrees. In the Far North Queensland catchment area 49.7% of people's highest level of schooling of is year 11 or 12 (or equivalent) and 54% have a non-school qualification, of which 11.8% are Bachelor degrees. In comparison, 68.4% of people in the Brisbane Metro area have completed year 11 or 12 (or equivalent) and 60.8% have a non-school qualification, of which 27.6% are Bachelor degrees (Figure 2).

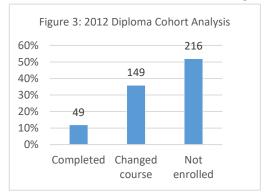


In 2018, only 29.5% of North Queensland school completers and 25.4% of Far North Queensland school completers commenced Bachelor studies compared with 51% of school completers from the metropolitan region (Queensland Government, 2019). Increased educational opportunities are critical to the region's participation in the knowledge economy. If the Northern Queensland region attained rates of Bachelor degree participation comparable to Brisbane Metro area, there would be 70,398 people with a Bachelor degree or higher, rather than the 53,009 there are currently. In addition to lower overall participation rates, students in Northern Queensland come from significantly more diverse backgrounds than those in other, metropolitan areas. Consequently, JCU's commitment to the widening-participation agenda manifests as a range of pathway options that enable access to higher education through the provision of low-cost, high-support pathway programs orientated towards assisting students in navigating challenges such as geographical isolation, financial restrictions, and first-in-family status.

DEVELOPMENT

Program development commenced in 2013 with a significant transformation in the ways in which pathways courses are provided to JCU students. Prior to 2013, diplomas were offered in a number of different colleges

(then faculties) at JCU, with little intra-institutional or cross-disciplinary consultation. These diplomas were characterised by slow progression and high attrition; in 2012 only 49/414 students completed their course of study (Figure 3). Initially, Balfour Consulting, who specialise in regional and remote areas, were commissioned by JCU to "establish preferences for pathways programs ... [and identify] suitable courses, preferred format of delivery, methods of presentation, timing, and location of delivery". Balfour were also asked to "investigate latent demand for pathways programs and to research the characteristics and attitudes of potential adopters" (Balfour



Consulting, 2011, p. 5). The target demographics, identified by this market research were Indigenous and low-SES groups, and non-school leavers without the required qualifications to enter university.

In August 2013, under the direction of then DVC-A, Professor Sally Kift, a university-wide Diploma Working Group was established. The group, chaired by the former Dean, Learning, Teaching and Student Engagement, consisted of representatives from each faculty; Marketing, Student and Academic Services; Equity; International; Corporate Planning and Performance; and the Project Management Office and marked the beginnings of an integrated, whole-of-institution approach to pathways delivery. The group examined existing JCU diploma offerings and identified the following motives for reform: poor/variable success and transition rates; TEQSA standards (English language proficiency on entry/course coherence); AQF compliance; and improving preparedness for undergraduate studies. The group endorsed the implementation of a single diploma model, the Diploma of Higher Education (DHE), with streams of study including Business Studies, Health, Information Technology, Society and Culture, General Studies, Engineering and Applied Science, and Science. Curriculum development commenced in 2014 and at the time of writing the DHE has completed 28 distinct offerings across Townsville, Cairns, Singapore, Thursday Island, and Brisbane.

EVALUATION AND DESIGN

Data-driven practice and evidence-based innovation have been central to the DHE's success. Learning analytics, student attendance, results, and subject satisfaction data is routinely collected across the semester. This data is then analysed, alongside input from critical friends and insights from course/subject review and calibration processes, to improve practise and foster student success. The data is also used to inform curriculum design, delivery, and case management. In addition, student surveys and focus groups are utilised throughout the year to gather constructive feedback and insight into the student experience. Furthermore, representatives from the University of Newcastle and Western Sydney University have engaged in site visits, benchmarking, and cross-institutional assessment moderation. Course priorities guiding curriculum, which include a commitment to high quality teaching and learning, the promotion of an outstanding student experience, and a whole-of-institution approach to pathways education, were developed in consultation with the Diploma Advisory Group (DAG) after a process of benchmarking with sector leaders: Monash University, University of Newcastle, and Western Sydney University.

Another essential ingredient of the DHE's course design and delivery is the involvement of experts within the tertiary education sector, and pathways space in particular, to act as critical friends and providers of professional development as well as to review and calibrate activities. The DHE's critical friends and providers of professional development are outlined in Table 1.

Year	Activity	Expert	Role
2016	Critical friend and professional development	Associate Professor Seamus Fagan	Director, Centre for English Language and Foundation Studies, Academic Division, The University of Newcastle
2017	Critical Friend	Leanne Yard	Acting Deputy Dean, University of Western Sydney College
2017	IRU Calibration	Various	IRU review and calibration of all diploma core subjects
2018	External Course Review	Professor Stephen Naylor and panel	Chair, Academic Board, JCU

Table 1: The Diploma of Higher Education's Critical Friends

The DHE has also been systematically designed around a number of foundational educational principles, such as transition pedagogy (Kift, Nelson, & Clarke, 2010), to support engagement, purpose, and teaching quality. These principles are pivotal as "the engagement of students in higher education is influenced by a number of factors—for example, how they finance their studies; how they balance studies and part-time employment; and what they see as their aims in undertaking . . . study" (Yorke & Longden, 2008, p. 1). Exploration of these factors is facilitated by students' completion of a pre-enrolment online readiness assessment. This task assesses student preparedness in a range of domains including lifestyle factors, literacy, numeracy, mathematics, and digital confidence and competence. Students are provided immediate and detailed feedback through the custom designed online readiness tool and in a pre-enrolment interview with staff. Before orientation week, DHE students also participate in a compulsory induction that introduces the program and wider university, while also including community building activities, and orientations to support services, coursework, and expectations of study. This induction, grounded in transition pedagogy and the DHE's whole-of-institution ethos, is jointly delivered by pathways and support staff to ensure students are confident, competent, and supported throughout their transition to study.

COLLABORATION

The DHE's systematic whole-of-institution approach also manifests as a core innovation in curriculum design. During course development, DHE staff used the framework of Appreciative Inquiry (Cooperrider & Whitney, 2001) to initiate a cultural shift towards co-ownership of pathways education across the institution whereby faculty and service units could be integrated into course design and delivery. Curriculum working groups, which include academics, learning advisors, librarians, and disability support staff, are now actively engaged in curriculum development. Structured communication models, such as divisional briefings, ensure institutional transparency, while strong collaborations between academic and professional staff foster high quality teaching and learning, and broad institutional support.

Such a collaborative stance towards supporting student learning represented a significant alteration to JCU's previously siloed approach to pathways and is codified in the DHE's strategic plan and mission statement, which states, "[p]athways at JCU provides innovative, highly engaging, and supportive transition programs that enable students to learn, work, and contribute to the global community" (Pathways Strategic Plan, 2015). It is also manifest in the ongoing work of the Diploma Advisory Group (DAG) and External Advisory Group (EAG)—collectives of community and disciplinary stakeholders—as well as the DHE curriculum working groups. This collaboration enables the widening-participation agenda to permeate the consciousness of the university, and integrates the domains of organisational culture, teaching capacity, and student support. As a result, processes of student recruitment, learning, retention, and program governance now involve wide-ranging stakeholders, with the end result of improving student experiences and outcomes in the pathways space. The success of this collaborative model in preparing diverse learners for tertiary study is evidenced in feedback from community stakeholders: *Prospective students with a disability are encouraged to engage with the AccessAbility team as early as possible to discover options for supports throughout their studies. We have seen success stories from young people with disability entering and completing this course*

who found it helped to adjust to university studies and life. (David Swayn, National Disability Coordination Officer, NQ STEPS Group Australia, member of the EAG)

Furthermore, and unlike many pathway programs in the sector, the DHE is co-located alongside and benefits from a close relationship with fundamental services within the central Learning, Teaching and Student Engagement (LTSE) Directorate, such as counselling, learning advisors, and AccessAbility (disability support) services. In addition, academic and professional staff work in close collaboration with DHE staff in curriculum design and case management. For example, learning advisors, disability support staff, librarians, and careers staff are part of each of the subject working groups that drive curriculum design. Rather than simply being a service for students to be referred to, this collaboration ensures a more inclusive curriculum from the ground up that harnesses staff expertise (discipline and pedagogical) and benefits all students. Over the past four years, this approach has exhibited proven benefits in terms of retention, engagement, and achievement for a highly diverse student cohort. This is echoed in reflections from managers of the student support units at JCU: "JCU Student Transitions and Careers [STC] team provides a range of different programs to support students to transition into university as well as out into graduate employment, such as orientation, peer mentoring, and careers and employability services. [STC] has worked closely with DHE staff since the program's inception, and their directorate collocation has strengthened working relationships and enhanced student outcomes. The DHE has consistently adopted an evidence-based, best practice approach to all aspects of their work, and their strategic vision has enhanced partnership work across the university . . . The success of this tailored transition program and communication plan has been demonstrated through the level of student engagement . . . [The] collaboration and collocation with Diploma staff has resulted in regular student referrals, and the high level of student engagement with the service reflects the awareness raising and normalisation of support within the course . . . The DHE works closely with this centralised program to recommend peer leaders and provides support for those mentors. The DHE now has one of the largest mentor groups on campus with 27 peer leaders who support an average of 435 commencing students each year with their transition into university." (Manager, Student Transitions and Careers, 2019)

"In line with their whole of institution approach, the DHE has since its inception closely collaborated with Student Equity and Wellbeing to ensure their curriculum and student support model enhance the experience of our diverse student cohort. Student Equity and Wellbeing (SEW), which includes AccessAbility (disability) Services, Counselling, Wellbeing and Chaplaincy, has been part of the Diploma Advisory Group. AccessAbility Services and Counselling staff have been provided with the opportunity to participate in curriculum working groups to enable staff to take into consideration the experience of students who may experience wellbeing, mental health and disability impacts as part of their studies. The DHE has been proactive in their approach to student support through curriculum including using universal and inclusive learning design is part of their curriculum. The DHE's co-location has also allowed for a unique and best practice model of case management and curriculum design between support services, DHE Student Support Advisor and academics resulting in a seamless support for students while ensuring the inherent requirements and learning requirements of the program are maintained and staff in all units are able to share expertise and collaborate for the benefits of students." (Manager, Student Equity and Wellbeing, 2019)

CRITERION 2: INFLUENCE ON STUDENT LEARNING AND THE STUDENT EXPERIENCE

Research indicates that "students are more likely to meet expectations than not, regardless of whether these expectations are good, bad, correct, or misguided" (Haesler, 2012, p. 2). This knowledge guides the DHE's "high expectations, high support" approach to teaching and learning and its focus on the "educational conditions in which we place our students" (Tinto, 1999, p. 2). In accordance with transition pedagogy (Kift, Nelson, & Clark, 2010), the DHE's holistic curriculum engages the entire student experience by including the academic, social, and support dimensions of study in learning design. Curriculum innovations include the provision of diverse co-curricular learning opportunities such as a mandated student induction, the normalisation of support services through the integration of learning-support staff, disability advisors, and dedicated pathways support advisors into subject design and delivery using the principles of Universal Design for Learning. The effectiveness of this approach is evidenced in student feedback: "[s]upport in the diploma is awesome. [I] loved the diploma induction, Unistart and pre-semester workshops. Support is fostered by all and encouraged" (Student Reference Group, 2016); "Any self-doubts I had were quickly expelled as the level of support which is available to Diploma of Higher Education students extends beyond my needs. Never before having been inspired by educators to excel, my levels of engagement rapidly evolved with the learning

process, and this in turn was reflected in my grades" (DHE student, 2015). These integrated supports are complemented by a whole-of-course approach to subject design.

Students undertake two core subjects, *Developing Academic Skills* and *Learning in a Digital Environment*, and can also undertake *Essential Maths* and *Essential Science*. Together, these subjects seek to make the implicit expectations of tertiary study explicit in order to make the university experience easier to navigate. This process begins during the pre-semester student induction where testimonials from past students are complemented by an academic panel who describe modes of learning and expectations in academic environments. In addition to allaying concerns regarding the practical dimensions of study, such as timetabling, lab protocols, and textbook requirements, the academic panel sets the tone of "high expectations" by outlining professional expectations. A concurrent focus on resilience, normalisation of the diverse challenges people may face during their studies, and acknowledgement of the strengths that students bring to the program lays the foundations of "high support" that carry through both the course design and subject curricula.

Iterative subject design built on cyclical processes of institutional consultation, internal and external review, and vertical alignment with students' target degrees consolidates the DHE's whole of institution approach at the subject level. A culture of high-support is further fostered through explicit integration of embedded resilience strategies into the Academic Skills curriculum. Strategies such as conversational frameworks (Laurillard, 2002) and reflective practice (Huggins, Kift, & Field, 2011) are recognised as key methods for building cultural capital and facilitating transformative learning among vulnerable cohorts, particularly among under-prepared Indigenous students (Hall et. al., 2015). The success of these strategies resonates across the course with students forming a noticeable sense of cohort identity early in the semester, which facilitates engagement in class discussions and peer-learning across their other subjects. Furthermore, conscious discursive alignment across classroom practice and weekly learning episodes in the two core subjects provides a cohesive learning experience and fosters a sense of belonging. This positively influences students' motivation, engagement, resilience, and persistence (Tinto, 1999), while mitigating the impacts of discontinuities between prior learning and new academic contexts (Paxton & Frith, 2014).

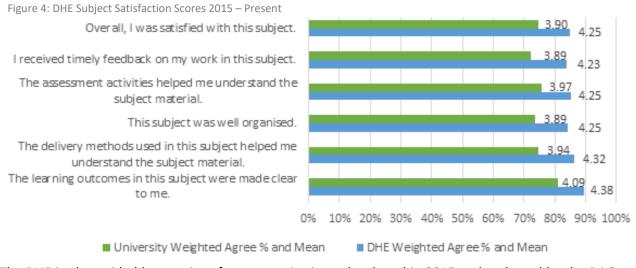
Instruction in academic and digital literacies (Jisc, 2017), combined with authentic assessment (Herrington, 2010), prepares students for the rigours of tertiary study. Authentic design integrates context and learning by allowing for practice in knowledge application. The DHE's core subjects achieve this in both academic and digital learning domains through horizontal cross-subject alignment of assessment processes which build knowledge while reducing cognitive load. Students are required to undertake a self-directed research project orientated around a single topic of their choosing, culminating in a video for Learning in a Digital Environment and written discussion paper for Developing Academic Skills. At a subject level, orientation to study in academic skills is followed by a search-planning assessment in digital learning), centred on information literacy and advanced search techniques. Academic skills then follows up by stepping students through the processes of reading, understanding, and synthesising information from academic literature in an annotated bibliography, while digital learning focuses on practical dimensions of study such as formatting, understanding data, and media literacy. By engaging in formative research, evaluation, and data processing activities, students are able to develop and refine transferrable information technology and study skills prior to engaging in higher stakes assessment processes. Throughout the entire process subject-embedded learning advisors provide additional supports around core assessment items, while integrated processes of peer-review consolidate student's experiences of the DHE as a community of learners. Moreover, the orientation of the curriculum around authentic activities enables transformative learning by helping learners critically reflect on their own assumptions, recognise their existing frames of reference, and participate effectively in academic discourse (Mezirow, 1997). The success of these approaches is evidenced in student feedback: "[Learning in a Digital Environment] is great and complements [Developing Academic Skills] . . . Peer reviewing and working in groups creates a much better student culture" (CS1022, Student Feedback Survey, SP2, 2017); "All that was taught and shared amongst our cohort has made the transition to a new university much more smooth, and due to the nature of your teaching methods, I am confident in myself to undertake what is being asked of me through my Bachelor" (Student Reference Group, 2017).

The DHE's research-informed curriculum, and subsequent positive effect on student learning, is further acknowledged in feedback from external reviewers: "The Diploma of Higher Education (DHE) team is commended on the extensive evidence base provided for the review. It is clear the DHE has been thoughtfully

designed and is based on sound pedagogical theory and foundations" (External Reviewer A, JCU Course Review, 2017); "Clear and consistent alignment between course learning outcomes, subject learning outcomes and assessment items was evidenced. Participation in IRU Academic Calibration is a positive quality engagement activity that supports the rigour of the academic program. This is encouraged to continue" (External Reviewer B, JCU Course Review, 2017).

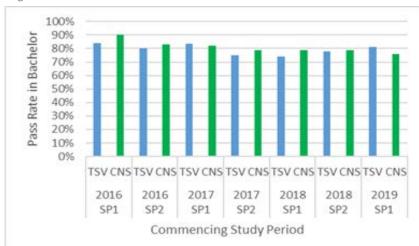
Broadly, JCU students have cited issues of stress, financial difficulty, and workload as the three most common reasons why students leave university. The DHE cohort is particularly diverse, and many students face complex barriers in the transition to study. In an effort to reduce attrition rates, and to improve learning outcomes and the holistic student experience, DHE students are introduced to a comprehensive approach to student support. In addition to the collaborative, universal curriculum design to support all students' learning, the program has embedded support staff and structures to provide students individualised support across the student lifecycle. In addition to this individualised support, designated student support officers on both the Townsville and Cairns campuses undertake cohort monitoring to underpin these support measures. Each week, teaching and support staff (student advisors, learning advisors, and disability support staff) meet to review student attendance, engagement (online and in class), learning analytics, and assessment results. From this, at-risk students are identified early and case-managed by the student support team, who meet with these students regularly to discuss their progress and to implement measures that support their study: I can't speak highly enough of the support I received from everyone at JCU. From my initial enquiry with the Pathways Programs Student Support Advisor, through to my individual Tutors and Subject Co-ordinators, as well as the various Student Support Services offered, I had help available every step of the way as I familiarised myself with a very 'alien environment'. It felt like the whole University were cheering me on to succeed! (DHE student, 2016)

Since its first year, the DHE has consistently received outstanding results in student surveys, achieving no less than 4.17 on the 5 point scale (Figure 4), which demonstrates the strength of the curriculum. Qualitative feedback, from 2015 to 2018, elaborating on these levels of satisfaction has been collated in this video. These results led to the showcasing of the Diploma as a model program at the JCU Academic Board, 2017.



The DHE is also guided by a series of course aspirations, developed in 2015 and endorsed by the DAG and EAG, these principles articulate the basis of high-quality pathways education at JCU. Typically, open-access pathways programs have success rates of between 35-50% (Hodges et al., 2013). However, the DHE set aspirations of a minimum 65% course success rate and 50% conversion rate to degree study at JCU, combined with evidence of improved preparedness for degree study. All aspirations have been met every year since the DHE's inception. Indeed, over 90% of students who submit subject assessment pass the core subjects and over two-thirds have transitioned into a Bachelor degree. These success rates are a direct result of the quality of the curriculum, and is echoed in the following student comment: "The DHE offered an excellent introduction to University life and academic expectations. Looking back, the course structure was phenomenal. After the diploma, I applied for Veterinary Science. I was told by many administrative staff members to avoid applying because there was little hope for someone like me. Through what I learnt from the diploma and the pre-requisites that I was able to achieve, I was accepted into Vet Science the immediate

Figure 5: Pass Rates of DHE Students at Bachelor's Level



year after I graduated the diploma. The diploma literally bridged the gap for me between grade 10 and Veterinary Science. I am now a second year student" (DHE Graduate, 2016).

DHE students routinely perform exceptionally well when they transition to the Bachelor degrees, with pass rates as high as 90% (Figure 5). These results speak to the quality of the DHE curriculum and the solid foundation it provides to pathway students who enter the Bachelor space and are

even more remarkable when compared to the results achieved by non-diploma students in Bachelor studies. A comparison of average GPA scores, using all subject level data for JCU students in SPSS for 2015 to 2018,

Table 2: GPA comparison of post- diploma and non-diploma students	Post diploma mean GPA	Never diploma mean GPA
Architecture, Building & Planning	4.87	3.77
Education	4.60	4.29
Engineering	4.14	4.30
Information Technology	4.48	4.39
Law	4.07	4.25
Medical Science	4.81	4.67
Medicine	4.33	5.17
Nursing	4.79	4.51
Occupational Therapy	4.73	4.51
Pharmacy	4.82	4.81
Physiotherapy	4.64	4.85
Social work	4.55	4.06
Sports Science	4.54	3.98
Veterinary Science	5.28	5.15

shows students who were 'post-diploma' are competitive with and frequently outperform those who had never been in the diploma. A selection of results for different 'study areas' is provided in Table 1. Academic staff have also commented: "Students from the Diploma are supremely well prepared for Bachelor studies" (Director of Academic Quality 2017, JCU) and "Students coming in from the Diploma were very well prepared and seemed much more capable" (JCU College of Arts, Society, and Education academic, 2018).

CRITERION 3: BREADTH OF IMPACT

The societal impacts of educational participation are well-documented and the innovative, whole-of-institution approach to DHE program has targeted identified students' needs, directly enhancing not only individual students' well-being, but also their families and communities, the JCU community, and other higher education institutions.

INDIVIDUALS, FAMILY AND COMMUNITY

Research shows that university graduates are more likely to find employment, enjoy higher wages and better job satisfaction, and find it easier to move from one job to the next (Browne Review, 2010). With the unemployment rate in Northern Queensland currently sitting at 9% in Cairns and 16.5% in Townsville (Queensland Government, 2019), widening participation in tertiary education in the region will have positive flow-on effects for DHE students entering the labour market: "The thing I am most looking forward to is earning real money, having real options and not relying on casual contracts" (DHE student, 2017). Study can also positively impact students' physical and mental health and while the effects on physical health are measureable, the positive effects on mental and psychological health are reported to be greater (Feinstein, Sabates, Sorhaindo, & Hammond, 2006), as reflected in the student experience: "I was placed in the special ed class in high school. I thought I was stupid and that uni was not for me. I started the Diploma of Higher Ed in health, because my partner encouraged me. My teachers and the AccessAbility staff worked together, and I loved the learning. I loved being in with all of other the students and I did really well. My GPA meant I had my pick of degrees and I'm in biomedicine now. I've never felt so confident" (DHE Graduate 2015). Furthermore, the 'ripple' impact of educational participation is well-documented and cannot be underestimated. For example, a person whose parents have a tertiary education is four times more likely to participate in tertiary education themselves compared

to someone whose parents have only below upper secondary education (OECD, 2014). Not only does the

further education of parents increase the probability of children undertaking further study, it also increases their children's cognitive development, and probability of higher future earnings in the job market. DHE students are already seeing these effects in their own families: "I started the Diploma in 2015 and loved it. I never finished school, I came to uni thinking I was going to do nursing, but then I discovered anthropology! I've been successful in getting an exchange to Cambridge for 3 months which will be my first time out of Australia. Even better, two of my daughters are starting the diploma next year. This is huge for our family" (DHE student, 2016). Participation in the DHE also has positive flow-on effects outside the university. The diversity of the DHE cohort, which consists of a large number of NESB students, many of whom have come to the region as refugees, has had noticeable effects on broadening the world view of DHE students, and in turn, their families and the wider community: "Before I started the diploma at Uni, I had never met any Muslims. One day, after class I just sat with M***** and just talked, we talked about the uni work, but also about our lives and her religion. It really changed the way I think about the world" (DHE student, 2016).

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The DHE's collaborative whole-of-institution approach to curriculum design has also had significant benefits for discipline specialists and other collaborators, including learning advisors, disability support staff, librarians, and careers advisors. Through this collaboration, staff such as learning advisors, or disability support staff are able to model teaching, learning, and student support practices with academics from across the institution that are contextualised with respect to the discipline content and the learner profile. Academic staff, therefore, co-develop their capacity to design and deliver inclusive curriculum. This collaboration also ensures that staff understand and implement JCU's English Language and Numeracy Policy to meet the institution's obligations under the TEQSA standards for Higher Education, and contribute positively to the scholarship of teaching and learning. As a result of this positive impact, the Diploma of Higher Education team was awarded a JCU Citation for Outstanding Contribution to Student Learning in 2018, as well as being named joint overall winners for the year. JCU academic staff have also shown a deep appreciation for the DHE's approach: Working in a collaborative fashion with the curriculum working group, including members of staff from disability support, Wellbeing, learning advisors, and student support to design appropriate resources and learning episodes that minimise the need for reasonable adjustments has been hugely beneficial. This process has allowed for an integrated approach to design and delivery that, students have reported, is comprehensive and effective (JCU Academic, 2019).

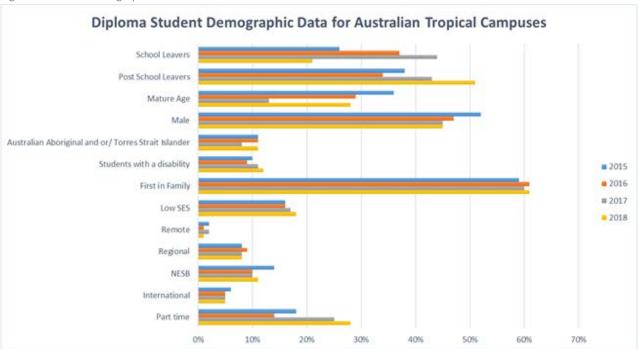
THE HIGHER EDUCATION SECTOR

Although the DHE was only incepted in 2015, curriculum innovations have already been showcased at national and international forums such as the National Enabling Educators of Australia Conferences; the International Conference on Learning and Teaching; the Australian Conference of Science and Mathematics Education; the Equity Practitioners in Higher Education Australasia conference; HERDSA, the TERNZ Conference in Wellington, New Zealand; as well as being published in the Student Success Journal. Contributions of DHE staff to the scholarship of teaching and learning in enabling education have also been broadly disseminated by others in the sector via social media and utilised as best practice guides: "I really enjoyed your presentation at the recent AARE conference. I spoke to you afterward about whether we could access a copy of the video you shared in your presentation. I would like to share this with my Dean as we too have online learning and want to improve on our practice" (Course coordinator, Edith Cowan University's Graduate Diploma of Education, 2016). DHE curriculum innovations have also resulted in a staff member being invited to consult on course design as part of Deakin University's review of enabling offerings in Education. Team members from the DHE have also led international collaborations, working with Malaysia Research University Network (MRUN) and academics from Universiti Sains Malaysia on cross-cultural dimensions of digital literacies instruction.

CRITERION 4: ADDRESSING EQUITY AND DIVERSITY

The DHE's status as an open-access course with no entry requirements is also deserving of celebration. The program was developed around a fundamental commitment for equity, diversity, and the importance of widening educational participation in Northern Queensland and the success of this approach is reflected in the diversity of the cohort (Figure 6). JCU has a legislated responsibility to meet the needs of our region. The pathways program and policies are guided by this obligation, but also designed to challenge socially constructed disadvantage. Numbers of students with a disability, or those who identify as Australian Aboriginal or Torres Strait Islander within the diploma are more than twice the university average (Figure 6).

Figure 6: Student Demographics



Moreover, as there are no educational prerequisites for participation, students may have completed only primary or early secondary schooling before commencing study. This diversity is notable when compared with national rates for commencing undergraduate students, but outstanding when compared with other nationally-available enabling courses (see Figure 1 on p. 1), where participation and completion rates among these key equity groups are consistently lower than national averages (Edwards & McMillan, 2015). Orientation around principles of universal design, with a focus on foundational skills that support student confidence and competence for university study, mediate educational disadvantage. While, cohort demographics clearly demonstrate a sustained contribution to widening participation for key equity groups. Program success is reflected in the sustained strong demand for the course (with the DHE now the second-highest subscribed course at JCU), as evidenced in commencing student data for the Australian Tropical

Campuses (Cairns and Townsville), as shown in Table 3. Moreover, the DHE's whole-of-institution approach to curriculum design, which fosters inclusivity, clearly serves equity goals by helping to level the playing field. A comparison of the diploma/non-diploma students enrolled in Bachelor degrees, shows that when controlled for OP/ATAR scores, the effect of having studied the DHE was to nullify the OP/ATAR effect, whereby those with good OP scores do much better in higher education than those with poor OP scores (as shown in Figure 7). This result is critical in a region

Year	Enrolments	EFTSL
2015	457	271.275
2016	606	341.25
2017	660	358.13
2018	822	393.75
2019	809	403

Table 3: DHE commencing student data

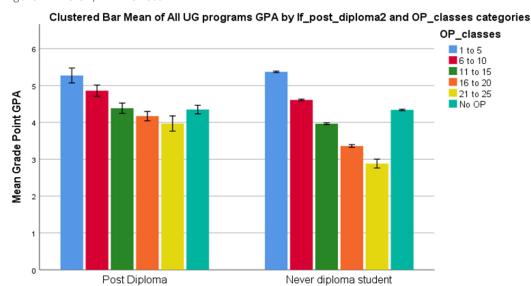
characterised by educational under-participation, and shows the DHE successfully challenges socially-constructed educational disadvantage and increases participation in higher education in Northern Queensland.

I entered the Diploma of Higher Education (DHE) at James Cook University as a mature age student never having studied at a tertiary level before. My decision to go to university was one of the best I have ever made, and I believe the formative teaching I received through the DHE facilitated this positive experience Academically, I have gone on to study at the Australian National University (ANU), graduating with a Bachelor of Arts in 2018, and have returned to complete my honours in sociology in 2019. Moving from Cairns to Canberra and starting at ANU presented many challenges, yet I found myself turning to the learnings I received from the DHE and was able to be successful. I am so thankful that I began my academic career with the DHE. There is no better foundation to prepare you for further university study. (DHE student, 2015)

CONCLUSION

The necessity of providing innovative, highly engaging, and supportive programs that widen participation in tertiary education in Northern Queensland and enable students to learn, work, and contribute to the global

Figure 7: The OP/ATAR effect



community has driven the creation and delivery of the highly successful DHE. The DHE has established an outstanding transition curriculum, resources, and embedded services that provide a

cohesive and powerful suite of motivating active-learning experiences and strong student support across a whole course. Along with the deliberate fostering of a high-support, high expectations curriculum, the DHE supports students as they build their confidence and competence for study. This whole-of-institution collaborative approach to holistic curriculum design and student support strongly supports student engagement and retention, and has shown sustained enrolments, conversions, student success, and satisfaction rates since 2015.

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