ABSTRACT
The purpose of this paper is to identify and discuss the strategies for retention and completion in vocational education. We are reporting on one New Zealand polytechnic institution’s experience in improving the retention and completion rate for a one-year diploma in business programme.

A review of relevant literature pertaining to retention and completion strategies in tertiary education in general and for vocational education in particular was
performed to understand the factors dominant in dropout decisions of tertiary students and to explore retention and completion strategies from a wider body of knowledge. The review focused on strategies influencing institutional and interactive factors to identify this issue. Further, a qualitative study was conducted; data was collected by conducting one-on-one interviews using open-ended questions to survey the faculty teaching on the diploma programme at a New Zealand polytechnic.

The findings revealed faculty employed a range of practices for improving interaction with students, identifying at-risk students, and providing them with support, creating a collaborative learning environment, and employing a constructive feedback system to improve retention and completion in the programme. This study is expected to assist educators and tertiary institutions in prioritising retention and completion issues and adopting suitable strategies to address these issues.

**KEYWORDS**
Retention, completion, student success, vocational education, polytechnic

**RESUMEN**
El propósito de este artículo es identificar y discutir las estrategias para la retención y finalización en la educación vocacional. Estamos informando sobre la experiencia de una institución politécnica de Nueva Zelanda en la mejora de la tasa de retención y finalización de un programa de diplomatura en negocios, de un año.

Se realizó una revisión de la literatura relevante relacionada con las estrategias de retención y finalización en la educación terciaria en general y para la educación vocacional en particular, para comprender los factores dominantes en las decisiones de abandono de los estudiantes de educación terciaria y para explorar las estrategias de retención y finalización desde un cuerpo de conocimiento más amplio. La revisión se centró en las estrategias que influyen en los factores institucionales e interactivos para identificar este problema. Además, se realizó un estudio cualitativo. Los datos se recopilaron mediante la realización de entrevistas individuales, utilizando preguntas abiertas para encuestar a los docentes que enseñan en el programa de diplomatura, en un politécnico de Nueva Zelanda.

Los hallazgos revelaron que los profesores emplearon una variedad de prácticas para mejorar la interacción con los estudiantes, identificar a los estudiantes en riesgo y brindarles apoyo, crear un entorno de aprendizaje colaborativo y emplear un sistema de retroalimentación constructivo para mejorar la retención y finalización del programa. Se espera que este estudio ayude a los educadores y las instituciones de educación superior a priorizar los problemas de retención y finalización, y a adoptar estrategias adecuadas para abordar estos problemas.

**PALABRAS CLAVE**
Retención, finalización, éxito estudiantil, educación vocacional, escuela politécnica
INTRODUCTION

Student retention and success are major strategic challenges for higher education institutions in today’s competitive and globalised higher education market (Law, 2014) with retention rates influencing a tertiary institution’s image and long-term financial stability. While overall student number is one sign of an institution’s success and marketability, today’s performance measures are increasingly focused on student outcomes, namely academic achievement, and completion (Skalicky, J., et al., 2018). The other side of retention is dropping out: students who drop out have concerns about unsatisfactory learning outcomes and accrued tuition debt, while institutions and government have concerns about lower productivity (TEQSA, 2020), hence retention and completion remain persistent issues. High dropout rates are often associated with institutions’ inability to provide students with required resources and support in their academic journey, thus affecting institutions’ brand image (Ortiz-Lozano et al., 2018); these rates are so crucial that regulatory bodies consider these rates when evaluating the performance of tertiary institutions (Wimshurst et al., 2006; Thomas, 2012; Ortiz-Lozano et al., 2018). In the following sections, educator and faculty are used interchangeably.

Vocational education providers must thus understand the elements that influence student retention and academic achievement, as well as developing effective policies and support systems to improve student results.

A great deal of studies modelling and predicting student retention and completion on course and institutional level have been conducted in the developed countries such as the USA, UK, Australia, and Canada (Tight, 2020) and most studies in this field have only focused on university retention issues. Some general reasons for students’ dropout intentions in university are lack of practical training, traditional lecture style teaching methods, lack of commitment to students’ needs from university and little information and support from the university during the course (Olmedo-Cifuentes et al., 2022). While studies have been conducted to identify the factors associated with students’ retention and completion, there is a gap in the available literature regarding tertiary students in New Zealand polytechnics. Our study aims to fill this gap by focusing on New Zealand polytechnics because they present a point of entry into vocational education for many students in New Zealand. University prioritises theoretical academic qualifications and most of their graduate and undergraduate programmes require 4 to 5 years of study, while Polytechnic provides practical vocational training and offers undergraduate courses with a shorter study duration (Te Pūkenga, 2022).

Vocational education is one of the fastest growing sectors in New Zealand. Its contribution to the economy, environment, and society is vital. Polytechnics in New Zealand attract a considerable number of students due to their reputation of providing learners with high-quality applied learning pathways, helping them build advanced technical skills to excel in industry (Tertiary Education Commission, 2020). However, one of the key issues for polytechnics is improving their retention and completion rates. According to statistics from the Tertiary Education Commission (TEC) the qualification completion rate was 54.7% in 2019 which further declined to 53.7% in 2020, indicating the severity of the issue. Though the course completion rates (81.2% in 2019 and 78.9% in 2020) appear reasonable,
constant efforts are required to maintain and improve them over time. All these measures are indications of how well students are engaged and supported by their tertiary institutions (Te Pūkenga Annual Report, 2020).

Academic staff, by their very nature, have a significant interest in student achievement and are frequently viewed as the sole contributors to a student's academic experience inside an institution. When addressing the academic learning path, the function of educators in vocational education is less precisely defined. Academic staff contributions to student retention and completion are a developing topic, and there is a lack of awareness of the work and identities of educators within the higher education sector (Graham, 2013). Therefore, the purpose of our study is to identify the strategies for retention and completion from a wider body of knowledge and to examine the practices used by the faculty at one of New Zealand’s polytechnic institutions in improving the retention and completion rate in a one-year diploma programme.

Although the literature of student retention in higher education is rich on theoretical models and empirical studies, to achieve the purpose of this paper Vincent Tinto’s (1993) Institutional Departure Model is studied. According to Tinto’s model a student enters tertiary education with a range of attributes, educational/work experience, family backgrounds all of which help them in developing initial goals and commitments which further influence their academic performance (Kerby, 2015). These goals and commitments get modified based on students’ experience with the academic and social system. A student who can achieve their personal goal through better grades, open and friendly interaction with faculty and developing peer networks, will strengthen their goals and commitments. This will subsequently influence the student’s decision to stay or leave the institution. Tinto’s model explains such an intricate relationship between student and institution is a key factor influencing retention. This states the significance of higher education institutions understanding the students' academic goals and working towards developing student integration strategies to offer rich learning and development opportunities for students (Talbert, 2012).

A preliminary study about how the variables improving interaction with students, identifying at-risk students, and providing them with support, creating a collaborative learning environment, and employing a constructive feedback system can affect student’s intention to continue the programme of study is also developed. This study is expected to assist educators and tertiary institutions in prioritising retention and completion issues and adopting suitable strategies to address these issues.

To reach our purpose a conceptual framework pertaining to student retention strategies with a key focus on institutional and interactional factors based on Vincent Tinto’s model (Tinto, 1993) is developed. Next, the research methodology is introduced, followed by findings and discussions about the practices adopted by the faculty. Then, a conclusion addressing the directions for future research is presented. Finally, future implications to assist educators and vocational education providers are shared.

CONCEPTUAL FRAMEWORK

Studies have identified that there is no one standard definition of student retention in tertiary education. Tertiary institutions mould their retention definition based on the accreditation criteria of the accrediting and regulating body (Al-
Asfour & Abrahim, 2015). Student retention in tertiary education is generally defined as continual enrolment of students from the first year to the second year of studies (Spady 1970; Tinto 1975; Ishler and Upcraft 2005; Farrell 2009; Cotton, et al. 2017; Burke, 2019). For our study, we consider retention as a measurement of student continuation or successful qualification completion at an institute (Tertiary Education Commission, 2020). Lassibille and Gómez (2008) defined dropout as a student’s decision to leave a certain programme, regardless of the motivation for leaving.

The concept of student retention was first explored in 1960 by Tinto, since then the concept has broadened extensively. Although there are many students’ retention theoretical models developed by earlier researchers, such as Astin (1975), Tinto (1975, 1993) and Bean and Metzner (1985), Tinto’s model has been widely accepted (Tight, 2020), applied and modified by many researchers (e.g., Braxton, et al., 2000; Longwell-Grice and Longwell-Grice 2008; Kerby 2015). Vincent Tinto’s (1993) Institutional Departure Model, also known as the Student Integration Model, explains the dropout process as a longitudinal process which comprises academic systems, social systems, individual expectations, and motivational attributes (Kerby, 2015). According to this model psychological and environmental perspectives are dominant in the dropout decisions of tertiary students. The psychological factors include personal attributes, skills, abilities, and family background (Olmedo-Cifuentes et al., 2022) while the environmental factors include sociological, institutional, and interactional factors (Aljohani, 2016). Applying this concept to the current study we believe that intricate relationships and robust interaction between student, faculty and institution is a key factor influencing retention. Our belief is also supported by the other studies: for example, Talbert (2012) stated the significance of faculty and institution understanding the students’ academic goals and working towards developing student integration strategies to offer rich learning and development opportunities for students.

Wang and BrckaLorenz (2018) found frequent faculty interaction with their students inside and outside the classroom contributes to strengthening students’ sense of belonging to the academic environment. This is supported by other studies that stated satisfaction with faculty support significantly influences overall satisfaction with institutions, leading to students’ intention to complete their studies (Hawthorne & Young, 2010; Young-Jones et al., 2013). Though retention has been identified as the biggest concern, special considerations must be given to non-traditional students, who are at greater risk of dropping out. Non-traditional students are those whose participation in tertiary education is underrepresented due to structural factors such as being the first in the family (O’Shea, 2007; Gupton et al., 2014) to enter tertiary education, disabled (Nichols & Quaye, 2014), working part time or full time but also studying, with family responsibilities, single parents, those who are returning to education after an early departure (Cotton et al., 2017), minority ethnic groups (Bowl, 2001) and students who question their sexual identity (Schueler et al., 2014). Traditional students are those who study full time, get admitted to tertiary education immediately after completing high school and are usually financially independent (Dolch & Zawacki-Richter, 2018). Meeting the academic needs of this diversity in the classroom poses a big challenge to the faculty. Heisserer and Parette (2002, p.2) stated that at-risk students may experience the "feeling that they don't belong, feel rejected, and may not adjust to normal academic challenges associated with college life." Such
feelings of rejection and 'not fitting in' are closely related to students’ dropout decisions. Many studies discussed the importance of early identification of at-risk students as an effective strategy to employ early intervention actions (Larose et al., 2011; Ortiz-Lozano et al., 2018).

A study by Asif et al. (2021) described collaborative learning as a social construction process, where the core purpose is to facilitate learning by creating more opportunities for social interaction among students. This peer interaction is noted to develop positive peer relationships and increase satisfaction with the institution (Astin, 1993; Wang and BrckaLorenz, 2018). Furthermore, it enhances generic skills such as critical thinking, communication (Yazici, 2004; Arjomandi et al., 2018), ability to understand perspectives of students from diverse backgrounds (Stacey, 2007) and elevates a sense of belonging which can positively affect student retention rates (Yazici, 2004; Arjomandi et al., 2018). Asif et al. (2021) postulated collaborative learning happens in three stages: in the first stage knowledge is created by sharing, and more sharing implies more learning by students; in the second stage the faculty needs to encourage each member to participate in the learning; and lastly optimal conditions must be created by the faculty for student participation. Thus, collaborative learning can be viewed as a process of interaction among the students that is initiated, mediated, structured, and organised by the faculty (Ertmer & Newby, 2013).

Review studies have discussed the importance of feedback in fostering students’ learning, for example Ferguson (2011) postulated that providing feedback is an effective way to develop students into independent learners who can monitor, evaluate, and regulate their own learning in an academic context and further in a work environment. Further studies state the aim should be to bridge the gap between the actual level of performance and desired learning goals of the student (Lizzio & Wilson, 2008; Evans, 2013). Some authors consider tertiary students as constructors of knowledge and managers of their own learning process (Myers and Myers, 2014; Pereira et al., 2016); feedback then is an effective strategy in optimising communication between students and their peers and faculty (Peters et al., 2019). Studies also highlight students’ perception of feedback to be of paramount importance in influencing learning. Feedback that is on-going, detailed, on time, relevant and provided with clear purpose and standards is more acceptable to students and contributes to academic success (Pereira et al., 2016).

**METHODOLOGY**

The study was conducted in two stages: stage one included a systematic literature review and stage two involved conducting interviews.

The systematic literature review enabled us to understand the retention and completion strategies in tertiary education in general and for vocational education in particular. The systematic literature review was useful to examine the breadth and depth of the existing body of knowledge (Xia & Watson, 2019). The findings of this literature review are presented as two main subtopics: the theoretical student retention model and the current research to explore all the available retention and completion strategies.

As there are many students’ retention models, this literature review focused only on studies that have tested Tinto’s (1993) Institutional Departure Model and
the literature exploring retention and completion strategies with a key focus on institutional and interactional factors based on Tinto’s model (Tinto, 1993).

To limit the search within the scope of the current study, specific inclusion and exclusion criteria were used, only peer reviewed journal articles published between January 2011 and March 2022 were included. All these articles were in English and were specifically related to higher/tertiary education. The following search string was used: “Retention” AND “Completion” AND “Tertiary education” OR “Higher education”. The search string was run on institutional database that provided access to EBSCOhost, ProQuest Business Journals, and Google Scholar. We identified 57 results. Abstracts of each paper were read and validated against the inclusion and exclusion criteria. The final review resulted in selection of 34 relevant peer reviewed journal articles out of which 8 studies addressed Tinto’s model and the remaining 26 addressed strategies for retention and completion based on institutional and interactional factors.

The strategies identified from the literature helped us design the interview questions. Further, to obtain specific information on practices and experiences of the participants we determined that a qualitative approach through an in-depth interview was an effective method (Peterson, 2019).

The interview was designed to understand the practices used by the faculty in improving the retention and completion rate and for them to reflect upon their practices. Four faculty teaching on the programme were selected to discuss the following questions.

1. What strategies do you use to connect with students?
2. Why do you think these strategies could work?
3. What are your strategies to identify at-risk students and once identified what are your next steps?
4. What are your strategies for creating a collaborative learning environment?
5. Why do you think these strategies could work?
6. What are your strategies for providing feedback to students?
7. Why do you think these strategies could work?

The academic experience of the faculty, their key secondary roles and the impact of this experience are presented in Table 1. This information of the participants provides an important foundation for our discussion of retention and completion strategies.
Table 1. Profile of participants

| Participant | Gender | Total Academic experience | Secondary roles | Secondary duties |
|-------------|--------|----------------------------|-----------------|------------------|
| 1           | M      | 10 years                   | School event co-ordinator | Organises business school events for staff and students, providing them an opportunity to interact and network. |
| 2           | M      | 20 years                   | Research lead        | Organises monthly workshops for staff to encourage continuous learning from each other. Topics in the past workshops included: use of educational technology in online teaching and engaging learners. |
| 3           | M      | Over 30 years              | Results co-ordinator | Organises Business school review meetings, where faculty discuss the result outcomes, compare current outcome with past and reflect on corrective measures for improvements. |
| 4           | F      | 16 years                   | Reporting            | Collects data from graduates to evaluate consistency of diploma programme and graduate success outcomes and reports annually to the New Zealand Qualification Authority, also keeps track of students’ retention rate and is continuously involved in measures to improve retention rate. |

The faculty teaching in this programme has a wide range of experience in academics and the professional sector, they are all proficient in using their industry experience in an academic environment. Collectively, they have amassed more than 35 years of teaching experience in a polytechnic environment. All of them have been a part of the diploma programme development and revisions over a period. Faculty stated that their vast experience in teaching adult learners enables them to identify and resolve student concerns and issues.

Interviews were conducted on Zoom for participants’ convenience and each interview was audio recorded, each lasting approximately 90 minutes. The first author served as a facilitator and conducted all the interviews to ensure consistency. After interviews were completed, the authors transcribed the recordings. Prior to data analysis each transcript was reviewed by both the authors to ensure accuracy of transcription and exclusion of participants’ names or any other identity. The authors used Giorgi’s (1985) methods of reviewing and grouping qualitative data to identify the themes from participants’ words to analyse the transcripts. The authors read and re-read the transcripts to familiarise themselves with the data and determine themes. The themes identified during data analysis arose from common views, recurrent experiences as well as practices that participants viewed as significant (Powers et al., 2018). To reduce personal bias and increase data trustworthiness and validity the authors first
reviewed the data individually and then collectively synthesised their interpretations.

FINDINGS AND DISCUSSION

The programme chosen for our study is currently offered in synchronous online mode to cater for social distancing and to meet the regulatory requirements of the COVID-19 pandemic. This study found the main elements influencing retention and completion of students in vocational education. Family situations, personal situations, and unplanned events affect learners heavily. Underestimation of the commitment required for tertiary study/workload and a limited understanding of the multiple aspects of study support can also discourage academic continuation. Four strategies that emerged from the literature are establishing student-educator relationships, identifying at-risk students, and providing them support, creating a collaborative learning environment, and providing on-going feedback. Each strategy addresses the research aim. In the following section excerpts from the interviews and participants’ perspectives are discussed.

Strategies to connect with students
A common view among the participants was that developing authentic relationships with the students was critical to connect with them and develop their trust in the faculty. Further, faculty considered communication with the students as paramount to successful interaction. Generally, faculty use various modes of communication as they understand ‘one size does not fit all’: one-on-one emails or phone calls if students prefer to be contacted personally to discuss their academic concerns, ask questions related to assessment or any other academic support and announcements via Moodle for generic course related information. Though the faculty used the same modes of communication, they had different approaches to establish initial connection with the students. Participant 1 said, “My connection with students is based on the principle of is Whanaungatanga (Māori word meaning, sense of family connection), once the student joins our institution, they become a part of wider whanau (family) and I think it is important to convey this principle to students to develop a sense of belonging. As a first step, before the semester starts, I contact all the students enrolled in my course by phone. This helps me to open the line of communication. Experience from past shows students appreciate this individual contact. To keep the momentum going I organise group shared acts such as shared lunches to create an environment of informal chats where students get opportunity to communicate openly.”

Participant 3 had a similar approach: “To initially connect with students, I put more significance on pronouncing names of the students correctly, name is one’s identity, calling out names with right pronunciation is awarding respect, showing them care and heading towards establishing good relationship”.


There are similarities between the attitude expressed by participant 3 and those described by scholars. For example, McLaughlin (2016) asserted incorrect pronunciation of names can isolate students and affect their learning. This is supported by Cornwall (2018) who reported it can make students feel their identity is not important to the faculty, leading to anxiety, shame, and humiliation.

Meanwhile participants 2 and 4 believed in creating a professional environment in the classroom where students feel safe and comfortable to share knowledge and experiences. They reported an emphasis developing a professional environment by teaching in line with the course requirements, encouraging students to ask questions, answering their concerns, and treating them with respect.

Consistent with the literature our study found that all the faculty in the diploma programme and the institute reported that retention is not just students completing the course, it is about giving on-going support to students via robust interactions to meet their study goals (Moxley et al., 2001; Maathuis-Smith et al., 2011). The one-day orientation programme at the institute aims to establish such interaction while showing students the on-going support they can access during their learning. The orientation programme is designed to support their transition into tertiary education (Maathuis-Smith et al., 2011). During the orientation students get the opportunity to talk to their faculty, walk around the campus with them, and learn about the wider range of academic and non-academic support and leadership programmes.

**Identifying and supporting at-risk students**

Generally, the participants considered students who regularly attended the classes were less likely to drop out of the course. To identify non-attending students all the participants, use early alert systems, such as tracking regular attendance. Records of attendance are maintained in the student management database. Students not attending the classes in the first three weeks of the course are then contacted by the school administrator to discover the reasons behind such behaviour and guide them accordingly. According to participant 2, “In addition to tracking the attendance, I keep an eye on the time the student spends on my Moodle course page. Besides, I also observe their participation in class, their interaction with peers during group work and their approach to me. Good observation helps me to track students who need support but are hesitant to ask for it”.

Concerns were expressed about identifying at-risk students in a synchronous mode of teaching. For example, participant 4 found that “attendance in Zoom was lower than face-face teaching in the campus. One reason is we record all Zoom teaching sessions and make them available on Moodle so that students can refer to them again. Some students fail to understand the relevance of attending the class. They rely on these recordings only; it is difficult to predict the behaviour of such non-attendees.” Participant 3 had a similar view: “Only after the first assessments are submitted, I can identify the inactive students and only after it is marked which is usually in the fifth week of the course start, I can identify at-risk students. Once identified I take immediate actions”.

Another alert system the participants discussed at greater length was the use of Revive. Revive is an institution-wide support system that is used extensively to address student’s concerns relating to attendance, lower grades, personal needs, or one-on-one assistance needs. It is used to monitor students to identify
more easily those who would benefit from help and provides a framework to manage and track intervention. Once an at-risk student is identified an issue is opened on Revive by a faculty member, the student concern is then handled by an expert from the Learning Support Services (LSS) team. The LSS provide a range of services offered by expert learning and engagement advisors. Some of their services include help with study skills, time management skills, reading, essay and report writing, oral presentations and exam preparation. Student can use these services individually or in groups, via email or attend workshops on different topics.

Participant 1 mentioned, “In the first three weeks of course start I constantly remind students of the wide learner support services we have at the institute. I talk to them and ask if they need any help so that best could be done to help them as early as possible.” Participant 3 noted that, “some students enrolled in the diploma often lack academic writing skills. Most of them do not have practice with writing reports, essays, referencing and so on. I direct students needing additional help to LSS. The support from LSS team is highly valuable in guiding such students”. This view was echoed by participant 4, who said, “Most of our students juggle between personal life, work, and studies which means they need a personal education plan. Most of the time it is hard for us to help students to plan their studies due to the teaching, research, and other duties we have. I direct students needing such guidance to the academic support and engagement advisors. They work closely with the student to understand their requirements and provide mentoring support and guidance tailoring to each student needs”.

The above comments illustrate that the participants rely heavily on Revive to open the lines of communication between students, counsellors, and faculty and to provide tailored support to at-risk students. Prior studies have noted the importance of learner support and academic advice offered at the institutional level which can formally implement better quality exchanges between students and the academic environment (Young-Jones, et al., 2013); this can further help students to have meaningful learning experiences thereby leading to achievement of educational, career and life goals (Hunter & White, 2004; Young-Jones et al., 2013). Studies carried out in the New Zealand context have also confirmed the presence of such extra support has positive outcomes on students' retention and success rate (John & Walford, 2020).

Creating a collaborative learning environment

All participants agreed about creating opportunities for social interaction to enable students to actively communicate with their classmates during and after the class. Participants spoke of the need for students to be actively involved in the learning and to take ownership of their learning. Some common practices adopted by the participants include in-class group work such as case studies, problem-solving tasks, debates, negotiations, presentations, or group projects as a summative assessment. A participant mentioned using interactive activities such as brainstorming, think-pair-share activities, in-class quizzes, and Tuākana-Teina (Māori words for older and younger siblings meaning buddying up less experienced with more experienced students) enabling students to learn from
each other’s experience. For instance, participant 4 said, “I cater my teaching to meet the needs of both the traditional and non-traditional students in my class. I do this by Tuākana-Teina where they get chance to learn and share their knowledge and experiences.”

Another strategy some participants discussed at length was the use of Zoom platform’s features and other online tools in the synchronous mode of instruction. They stated that simultaneous use of these features helped to improve interaction among students. For example, participant 2 stated, “Each concept I teach is followed by a group activity. Students discuss and share information by using various online educational tools such as Google slides, Google docs to collaborate on group task, we use Breakout room functions while on Zoom and combine them with Google docs to create a shared space for collaboration. I noticed students engage better while working in groups than individually”.

Participant 1 emphasised the importance of field study, “I use field study to provide students with the experience and feel of real work environment. This stretches them a bit more, I noticed that students enjoy this outside classroom learning experience more than in class environment. This also influences peer interactions better”.

Our study found that students enrolled in this programme came from diverse backgrounds and had varied experiences. There is a mix of traditional and non-traditional students. Non-traditional learners bring in extensive real-life experience from work; they are independent learners, highly motivated and achievement focused (Wyatt, 2011) while traditional learners are prone to distraction and boredom due to lack of focused goals; they spend more time on internet and social media platforms (Dolch & Zawacki-Richter, 2018). This implies the faculty needs to adopt effective ways to create a collaborative environment that is innovative, flexible, acceptable, and yet relevant to the course to meet the learning needs of both the groups.

The findings of our study corroborate with the findings of Kohnke and Moorhouse (2021), who suggested tertiary educators should incorporate different features of Zoom and online educational tools to give students a sense of working together and thereby improve their learning experience in an online environment. Other studies indicate peer interactions and associations in a collaborative environment drive students’ enthusiasm (Tight, 2002; Ali et al., 2009; Arjomandi et al., 2018), leading to cognitive development, enhanced self-confidence, and increased motivation, thus contributing to tertiary students’ academic growth and retention (Callahan, 2009; Talbert, 2012).

**Providing and receiving feedback**

Interestingly all participants considered feedback as a means to optimise communication with the students and to understand their learning needs better. They believe acceptance of feedback by students depends to a great degree on the trust-based relationship developed by interaction between the faculty and student. A few practices discussed by the participants included giving clear instructions (verbal and written) for the formative and summative assessment tasks, clear and precise breakdown of marks for each component of the assessment and organising sessions to discuss the feedback. Providing timely and individual feedback on assessments was also noted by participants as a successful strategy towards retention and completion. Participant 4 said,
“Over the years, I have noticed that timely constructive feedback, on each assessment is appreciated by students as it helps them to see the gaps. I discuss the marking criteria in the class, so they get the justification of the marking and my comments. I also highlight the areas they need to consider for upcoming assessments, that is feed forward. Another strategy that I use is to handover the marked assessments within one week’s time from the due date of the assessment, as I believe if feedback is not timely it becomes irrelevant to students”.

According to participant 1 feedback should be viewed as a two-way process: not only faculty should have the autonomy to provide feedback, but also students should enjoy the power to give their opinion. This participant had a different approach. “I collect student opinions by conducting an online survey on the teaching methodology, assessment design, overall experience, and any other academic concerns. Before the survey I answer some of the questions such as why I am collecting that information, what are we going to do with the information and how the feedback will be used to improve their learning experience. Answering such questions, I believe increases students’ involvement in the feedback process”.

The above comments illustrate that in the feedback process the faculty look for answers to questions like “what are the study goals of the student? Is the student progressing in the right direction? How can the student progress better?” These questions are explained by Pereira et al. (2016) and Hattie and Timperley (2007) as feed up, feedback and feed forward. A study by Young-Jones et al. (2013) reported institutions that provide clear and consistent information on the study requirements and expectations are more successful in thriving and creating a holistic environment where students succeed. Pereira (2016) also stated feedback that is regular, detailed, timely, relevant, and focused on learning and improving students’ performance contributes to academic success.

CONCLUSIONS AND LIMITATIONS

Student non-completion is one of the major concerns for all educators polled, regardless of whether they teach via distance education or on campus. A close examination of the literature survey and interview data indicates that educators feel the key contributing variables are connected to what students bring to the academy: their degree of readiness, motivation, and ability to manage the study.

There is a misalignment between students’ and the academic institution’s expectations, particularly for on campus students, which was also deemed significant. Interestingly, factors related to student–faculty interactions and course design revealed that faculty were unsure about the impact of these factors on noncompletion, even though some of these factors related to assessment, feedback, and personal support had been discussed during the interview.

The reasons for students dropping out are complex and it is challenging for faculty and institutions to capture the multifaceted reasons. However continuous efforts must be made at individual level and at institutional level to identify these reasons and address them. Online learning, with its more flexible approach, is presenting a substantial possibility for further broadening participation in New Zealand polytechnics. The programme chosen for the current research is offered in synchronous online mode which implies that the findings can be applied in
face-to-face campus teaching as well as synchronous online teaching. The findings revealed, establishing connection with students via robust communication is a critical factor in understanding the academic needs of tertiary students, especially students at the risk of dropping out, and emphasised the need for providing on-going support. Further creating a holistic environment where students feel comfortable and safe to collaborate with peers increases the possibility of a positive learning experience. The findings also indicate enabling adequate opportunities for feedback promotes students as a key learning resource in ways that foster meaningful interaction and reflection. Based on the findings future implications are provided for educators and vocational education providers to improve student retention and completion rates.

Although the current study has added some insights into retention strategy and practical actions used by the faculty, it is subject to some limitations, which could provide future research avenues. Firstly, the scope of our study is limited to retention strategies based on institutional and interactional factors; future research could involve assessing the same for psychological and sociological factors to inform educators and institutions on ways to improve retention and completion rates. Secondly, the small sample size of participants and consideration of a one-year diploma programme of study cannot be generalised to students in another context. Future research could be carried out with a larger sample size across degree programmes.

**FUTURE IMPLICATIONS**

The findings highlight that student retention and completion have been noted as a complex issue in the literature and the experience of the faculty teaching the diploma programme, hence no single strategy can be considered as the best; a range of strategies needs to be employed when dealing with a different cohort of students. Although not the focus of this research, previous studies have found that institutions chosen by students not just based on educational programmes but also on sports programmes have higher retention rates (Weaver, et al., 2017; Burke, 2019). Hence institutions should encourage intramural and club sports. This not only helps in improving student social integration with the institution and wider community but also influences the choice of institution.

More importantly, the institution should increase and popularise mental health support. The absence of social support and physical health can affect students' academic progression and influence their persistence to continue the qualification (NZUSA, 2018). Research identifies a lack of effective pastoral care to handle these challenges can be a contributor to students dropping out (Tranter et al., 2018). The current study suggests a tailored approach to mental health concerns of students will help in normalising the conversation around mental health issues especially for students who feel hesitant to reach out for support. The institution should also ensure that priority learners feel safe, respected, and accepted while talking about their struggles.

Polytechnics hold an open admission policy; this increases the retention challenges as non-traditional students who lack preparation for academic success are also admitted. Such students should be offered a short course before the start of the programme on study skills, time management, note taking, reading, and writing skills (Al-Asfour & Abraham, 2016).
Based on a study by Tranter et al. (2018) a two-day extensive orientation programme is suggested, as this would help the students understand the programme requirements, encourage interaction with peers and prepare them for the academic environment, thereby reducing their initial nervousness.

Facilitator-led mentoring circles will help students with a similar purpose to form groups to guide the direction of their study based on their needs, share stories with peers, share their study needs, form networks, and identify supportive friendships. Research by Felton-Busch et al. (2013) revealed mentoring circles improve peer interaction, self-awareness, time management and communication skills which leads to increased retention.

REFERENCES

Asif, M., Thomas, G., Awan, M. U., & Din, A. M. (2021). Enhancing student engagement through heterogeneous pedagogical approaches: action research in a university level course in Saudi Arabia. *International Journal of Educational Management, 35*(1), 6-7.

Al-Asfour, A., & Abraham, M. (2015). Strategies for retention, persistence, and completion rate for Native American students in higher education. *Center for Education Statistics, 9.*

Ali, A., Tariq, R.H., & Topping, J. (2009). Students’ Perception of University Teaching Behaviours. *Teaching in Higher Education, 14*(6), 631–647.

Aljohani, O. (2016). A Comprehensive Review of the Major Studies and Theoretical Models of Student Retention in Higher Education. *Higher education studies, 6*(2), 1-18.

Arjomandi, A., Seufert, J. H., O’Brien, M. J., & Anwar, S. (2018). Active teaching strategies and student engagement: A comparison of traditional and non-traditional business students.

Astin, A. (1975). Preventing students from. *Dropping Out. San Francisco, Jossey-Bass Publishers, 3.*

Astin, A. W. (1993). What matters in college? Four critical years revisited. *San Francisco: Jossey-Bass.*

Bean, J. P., & Metzner, B. S. (1985). A conceptual model of non-traditional undergraduate student attrition. *Review of educational Research, 55*(4), 485-540.

Bowl, M. 2001. Experiencing the barriers: non-traditional students entering higher education, *Research Papers in Education, 16*(2), 141-60.

Braxton, J. M., Milem, J. F., & Sullivan, A. S. (2000). The influence of active learning on the college student departure process: Toward a revision of Tinto’s theory. *The journal of higher education, 71*(5), 569-590.

Callahan, K. M. (2009). Academic-centered peer interactions and retention in undergraduate mathematics programs. *Journal of College Student Retention: Research, Theory & Practice, 10*(3), 361–389.

Cotton, D. R., Nash, T., & Kneale, P. (2017). Supporting the retention of non-traditional students in Higher Education using a resilience framework. *European Educational Research Journal, 16*(1), 62-79.

Dolch, C., & Zawacki-Richter, O. (2018). Are students getting used to learning technology? Changing media usage patterns of traditional and non-traditional students in higher education. *Research in Learning Technology, 26.*
Ertmer, P.A. and Newby, T.J. (2013), “Behaviorism, cognitivism, constructivism: comparing critical features from an instructional design perspective”, Performance Improvement Quarterly, Vol. 26, pp. 43-71.

Evans, C. (2013). Making sense of assessment feedback in higher education. Review of educational research, 83(1), 70-120.

Farrell, P. L. (2009). Investing in staff for student retention. In The NEA (pp. 85-92).

Ferguson, P. (2011). Student perceptions of quality feedback in teacher education. Assessment & Evaluation in Higher Education, 36, 51–62. doi:10.1080/02602930903197883

Felton-Busch, C., Maza, K., Ghee, M., Mills, F., Mills, J., Hitchins, M., ... & Chamberlain-Salaun, J. (2013). Using mentoring circles to support Aboriginal and Torres Strait Islander nursing students: Guidelines for sharing and learning. Contemporary Nurse, 46(1), 135-138.

Giorgi, A. (Ed.). (1985). Phenomenology and psychological research. Duquesne university press.

Graham, C. (2013). Professional staff contributions to positive student outcomes: a case study. Australian Universities' Review, The, 55(1), 7-16.

Gupton, J. T., Castelo-Rodriguez, C., Martinez, D. A., & Quintanar, I. (2009). Creating a pipeline to engage low-income, first-generation college students. Student engagement in higher education: Theoretical perspectives and practical approaches for diverse populations, 2009, 243-260.

Hawthorne, M., & Young, A. (2010). First-Generation Transfer Students' Perceptions: Implications for Retention and Success. Journal of College Orientation, Transition, and Retention, 17(2).

Hattie, J., & Timperley, H. (2007). The power of feedback. Review of educational research, 77(1), 81-112.

Heisserer, D., and Parette, P, (2002), 'Advising at-risk students in college and university settings'. College Student Journal, 36(1), pp.1-12.

Hunter, M.S. and White, E.R. (2004), “Could fixing academic advising fix higher education?”, About Campus, 9(1), pp. 20-5

Ishler, J. L., & Upcraft, M. L. (2005). The keys to first-year student persistence. Challenging and supporting the first-year student.

John, S. P., & Walford, R. Determinants of tertiary level student satisfaction in New Zealand.

Kerby, M. B. (2015). Toward a new predictive model of student retention in higher education: An application of classical sociological theory. Journal of College Student Retention: Research, Theory & Practice, 17(2), 138-161.

Kohnke, L., & Moorhouse, B. L. (2021). Adopting HyFlex in higher education in response to COVID-19: students’ perspectives. Open Learning: The Journal of Open, Distance and e-Learning, 36(3), 231-244.

Law, B. (2014). The mounting problem of student debt. Community college journal. https://go.spcollege.edu/uploadedFiles/Library_Assets/CCJ-Lawcolumn.pdf

Larose, S., Cyrenne, D., Garceau, O., Harvey, M., Guay, F., Godin, F., ... & Deschênes, C. (2011). Academic mentoring and dropout prevention for students in math, science and technology. Mentoring & Tutoring: Partnership in Learning, 19(4), 419-439.

Lassibille, G., & Navarro Gómez, L. (2008). Why do higher education students drop out? Evidence from Spain. Education Economics, 16(1), 89-105.
Lizzio, A., & Wilson, K. (2008). Feedback on assessment: students’ perceptions of quality and effectiveness. *Assessment and Evaluation in Higher Education, 33*(1), 263–275. doi:10.1080/02602930701292548

Longwell-Grice, R., & Longwell-Grice, H. (2008). Testing Tinto: How do retention theories work for first-generation, working-class students?. *Journal of College Student Retention: Research, Theory & Practice, 9*(4), 407-420.

Maathuis-Smith, S., Wellington, S., Cossham, A., Fields, A., Irvine, J., Welland, S., & Innes, M. (2011). Obtaining high retention and completion rates in a New Zealand ODL environment: A case study of strategies employed by information and library studies faculty at the Open Polytechnic. *Journal of Open, Flexible, and Distance Learning, 15*(1), 31-45.

McLaughlin, C. (2016). The lasting impact of mispronouncing students’ names. *NEA Today.*

Moxley, D., Najor-Durack, A., & Dumbrigue, C. (2001). Keeping students in higher education. London: Kogan Page.

Moore, L. L., Slanda, D. D., Placencia, A., & Moore, M. M. (2020). The Power of a Name: Nontraditional Names, Teacher Efficacy, and Expected Learning Outcomes. *Journal of English Learner Education, 11*(1), 83-103.

Myers, C. B., & Myers, S. M. (2015). The use of learner-centered assessment practices in the United States: the influence of individual and institutional contexts. *Studies in Higher Education, 40*(10), 1904-1918.

Nichols, A.H., & Quaye, S.J. (Eds.) (2014). Beyond Accommodation: Removing Barriers to Academic and Social Engagement for Students with Disabilities. New York and London: Routledge.

NZUSA. (2018). Report on Student Mental Health in Aotearoa: Kei Te Pai Study. *New Zealand Union Of Students Associations*

Olmendo-Cifuentes, I.; & Martínez-León, I. (2022). University dropout intention: analysis during covid-19. *Journal of Management and Business Education, 5*(2), 97-117. https://doi.org/10.35564/jmbe.2022.0007

Ortiz-Lozano, J. M., Rua-Vieites, A., Bilbao-Calabuig, P., & Casadesús-Fa, M. (2018). University student retention: Best time and data to identify undergraduate students at risk of dropout. *Innovations in education and teaching international.*

O'Shea, S. (2007). Well, I got here... but what happens next? exploring the early narratives of first year female students who are the first in the family to attend university. *JANZSSA, (29)*, 36-51.

Pereira, D., Flores, M. A., Simão, A. M. V., & Barros, A. (2016). Effectiveness and relevance of feedback in Higher Education: A study of undergraduate students. *Studies in Educational Evaluation, 49*, 7-14.

Peters, H., Zdravkovic, M., Joao Costa, M., Celenza, A., Ghias, K., Klamen, D., & Weggemans, M. (2019). Twelve tips for enhancing student engagement. *Medical teacher, 41*(6), 632-637.

Peterson, J. S. (2019). Presenting a qualitative study: A reviewer's perspective. *Gifted Child Quarterly, 63*(3), 147-158.

Powers, K., Herron, E. K., Sheeler, C., & Sain, A. (2018). The lived experience of being a male nursing student: Implications for student retention and success. *Journal of Professional Nursing, 34*(6), 475-482.

Schueler, L.H., Hoffman, J.A., & Peterson, E. (Eds.) (2014). Fostering Safe, Engaging Campuses for Lesbian, Gay, Bisexual, Transgender, and Questioning Students. New York and London: Routledge.
Spady, W. G. (1970). Dropouts from higher education: An interdisciplinary review and synthesis. *Interchange, 1*(1), 64-85.

Talbert, P. Y. (2012). Strategies to Increase Enrolment, Retention, and Graduation Rates. *Journal of Developmental Education, 36*(1), 22.

Tertiary Education Commission. (2020). *Educational Performance indicators for TEOs*. [https://tec.govt.nz/funding/funding-anperformance/performance/teo/epi-reports/](https://tec.govt.nz/funding/funding-anperformance/performance/teo/epi-reports/)

Tertiary Education Commission. (2020). *Tertiary Education Strategy*. [https://tec.govt.nz/focus/our-focus/tes/](https://tec.govt.nz/focus/our-focus/tes/)

TEQSA. (2020). *Good Practice Note: Improving retention and Completion of students in Australian higher education*. [http://files.eric.ed.gov/fulltext/ED606440.pdf](http://files.eric.ed.gov/fulltext/ED606440.pdf)

Te Pūrongo ā-Tau Annual Report. (2020).

Te Pūkenga. (2022, May 30). What’s the difference between universities, polytechnics and institutes of technology? [https://www.toiohomoai.ac.nz/faq/whats-difference-between-universities-polytechnics-and-institutes-technology](https://www.toiohomoai.ac.nz/faq/whats-difference-between-universities-polytechnics-and-institutes-technology)

Tight, M. (2020). Student retention and engagement in higher education. *Journal of further and Higher Education, 44*(5), 689-704.

Tight, M. (2002). *Key concepts in adult education and training*. New York: Routledge Falmer.

Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of educational research, 45*(1), 89-125.

Tinto, V. (2007). Research and practice of student retention: What next? *Journal of college student retention: Research, Theory & Practice, 8*(1), 1-19.

Thomas, L. (2012). Building student engagement and belonging in Higher Education at a time of change. *Paul Hamlyn Foundation, 100*(1-99).

Tranter, S., Gaul, C., McKenzie, S., & Graham, K. (2018). Initiatives aimed at retaining ethnically diverse student nurses in undergraduate programmes: An integrative review. *Journal of Clinical Nursing, 27*(21-22), 3846-3857.

Wang, R., & BrckaLorenz, A. (2018). International student engagement: An exploration of student and faculty perceptions. *Journal of International Students, 8*(2), 1002–1033. [https://doi.org/10.5281/zenodo.1250402](https://doi.org/10.5281/zenodo.1250402)

Weaver, A. G., Forte, D. J., & McFadden, C. W. (2017). Perceptions of higher education administrators regarding the role of club sports in the recruitment and retention of male students. *Recreational Sports Journal, 41*(1), 42-54.

Wimshurst, K., Wortley, R., Bates, M., & Allard, T. (2006). The impact of institutional factors on student academic results: Implications for ‘quality’in universities. *Higher Education Research & Development, 25*(2), 131-145.

Wyatt, L. G. (2011). Non-traditional student engagement: Increasing adult student success and retention. *The Journal of Continuing Higher Education, 59*(1), 10-20.

Xiao, Y., & Watson, M. (2019). Guidance on conducting a systematic literature review. *Journal of Planning Education and Research, 39*(1), 93-112.

Yazici, H.J. (2004). Student Perceptions of Collaborative Learning in Operations Management Classes. *Journal of Education for Business, 80*(2), 110–118.

Young-Jones, A. D., Burt, T. D., Dixon, S., & Hawthorne, M. J. (2013). Academic advising: does it really impact student success? *Quality Assurance in Education, 21* (1), 7-19.
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