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## Quality education for all: a case study of success for a neurodivergent learner

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### Introduction

This article showcases an innovative approach to the acquisition of undergraduate degrees known as the Independent Learning Pathway (ILP) at Capable NZ, a School of the Otago Polytechnic. The ILP offers a unique and learner-centric alternative to traditional degree programs, particularly beneficial for mature learners whose prior learning experiences and diverse skill sets may not be fully recognized by conventional models. Through a personalized learning journey, the ILP empowers participants to demonstrate their competencies and obtain qualifications.

#### Significance of the study

The ILP is a unique educational approach which aligns with the broader global initiative encapsulated in Sustainable Development Goal (SDG) Goal 4: "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all." Traditional education models often struggle to cater to the diverse needs and learning styles of adult learners. The ILP addresses this gap by offering a flexible and personalized learning experience, fostering inclusivity, and ensuring that valuable prior knowledge and skills are recognized through a deeply reflective learning process. This, in turn, empowers individuals to pursue further education and contribute more effectively to the workforce and to their communities.

A significant portion of the global population exhibits neurodiverse traits, encompassing conditions like dyslexia, ADHD, and autism. These individuals may face challenges in traditional learning environments due to their unique cognitive strengths and weaknesses. The ILP, with its emphasis on personalized learning strategies and a supportive learning environment, creates a space where neurodiverse learners can thrive.

This article presents a case study exploring the collaborative journey of Rachel, a neurodivergent learner, through the ILP program, alongside her facilitator Glenys, who is a highly experienced facilitator of the ILP approach. By showcasing Rachel's successful experience, this study aims to demonstrate the effectiveness of both the ILP as an innovative and inclusive approach to degree acquisition, and the nature and scope of effective facilitation of learning, in supporting neurodiverse learners and achieving the goals of inclusive education outlined in SDG 4.

### The Sustainable Development Goals

The 17 Sustainable Development Goals, adopted by all United Nations member states in 2015, collectively seek to address pressing social, economic, and environmental challenges to create a more sustainable and equitable world by 2030.

SDG 4, which focuses on Quality Education, includes targets relating to equitable access to vocational and higher education. This goal recognizes the transformative power of education in promoting sustainable development, fostering inclusive and resilient societies, and empowering individuals.

The various targets under SDG 4 include eliminating gender disparities in education and ensuring equal access to all levels of education and vocational training for vulnerable populations. Meeting these targets involves addressing various barriers that hinder individuals from pursuing further education, such as traditional delivery models, time constraints, financial barriers, lack of learner confidence, and the challenges related to recognizing and validating learning from experience.

If the SDG 4 goal and targets are to be met, vocational education delivery will need to adopt innovative and more inclusive approaches, including diversifying learning modalities, greater learner-centricity, redefining qualifications based on outcomes, and recognizing and valuing all forms of valid learning.

The Independent Learning Pathway is one of these innovative and more inclusive approaches.

### The Independent Learning Pathway

#### Definition and background of ILP

In New Zealand, the ILP is a groundbreaking initiative introduced by Capable NZ, a school within Otago Polytechnic. The ILP is an alternative approach to degree acquisition, enabling the highly experienced, mature learner to obtain mainstream qualifications through a unique and highly learner-centric learning journey that affirms and values learning from their diverse experiences, as well as their cultural knowledge.

The ILP is made possible because the NZ Qualifications Authority (NZQA) defines qualifications through graduate profiles, which emphasize graduate outcomes, thereby allowing for a wide range of approaches to the acquisition of the knowledge and skills that enable the graduate outcomes to be met. NZQA also mandates the recognition of relevant prior learning, thereby freeing learners from unnecessary learning activities if graduate outcomes have already been met.

#### Benefits of ILP for mature learners

The ILP approach is for highly experienced learners, generally in work, who are often poorly served by traditional taught delivery models. These learners already have considerable degree-relevant knowledge and skills, often enriched with cultural knowledge and understanding, which usually does not count as part of a taught degree. These learners typically do not enroll in traditional degree programs because they may not have the time or resources to study within a typical delivery framework. Also, they have often experienced a lack of success in prior formal education contexts, thereby lacking confidence and being unable to see themselves as legitimate participants in a tertiary credentialled world.

The ILP approach provides equity of access for this group, offering a process that validates work based, cultural and community experiential learning. The approach guides the learner through a range of tasks to make explicit the learning from their experience and to acquire new learning as necessary to enhance it. As they reflect on their experience, learners analyze and articulate their graduate level competencies and are supported to present these by using degree level academic skills.

As a strategy for equitable access, the ILP:

- Is a structured yet personalized learning journey, managed by the learner with facilitator support.
- Recognizes and credits all relevant prior learning.
- Facilitates the acquisition of new skills and knowledge, with the learner at the forefront, determining when and where learning takes place.
- Focuses on workplace-based learning, embracing learning at, though, from, and for work.
- Equips learners for lifelong learning through critical reflection, a powerful tool for continuous education.

## Supporting neurodiverse learners—Learnings from practice

In the dynamic landscape of contemporary teaching and learning, facilitators often encounter learners with neurodiverse traits or unidentified learning challenges. Understanding the importance of inclusivity, facilitators must embrace neurodiversity to create supportive learning environments. This article outlines strategies for serving neurodiverse learners to foster their academic and personal growth. Furthermore, the strategies for ensuring the success of neurodiverse learners are also applicable to adult learners at large.

## Case study: a neurodiverse learner's journey through the ILP

This case study draws on the joint experiences of the authors and aims to provide guidance for both learners and facilitators on effective facilitation strategies tailored to the success of neurodiverse individuals. Rachel, a neurodivergent learner with ADHD, Irlen Syndrome, and dyslexia, works as a facilitator at Otago Polytechnic's School of Business. Alongside Glenys, a highly experienced facilitator and assessor in Capable NZ, Rachel navigated her transformative learning journey through the Independent Learning Pathway for a management degree, followed by a Master of Professional Practice. Her journey attests to the power of Ako—a teaching and learning relationship that empowers both the learner and the facilitator, exemplifying the potential for neurodiverse individuals to thrive through an innovative educational framework. Rachel, as co-author of this article, has provided her full approval and consent for the disclosure of her identity and the publication of this case study.

Rachel's transformative journey through the Independent Learning Pathway (ILP) underscores the profound impact of personalized learning and supportive facilitation. Throughout her educational pursuits, Rachel experienced a significant personal and professional progression, centered on the cultivation of her own professional identity. This journey was characterized by the development of a strong sense of self and unwavering selfconfidence, facilitated by an environment that celebrated her unique strengths and perspectives, empowering her to embrace her neurodiversity as an asset rather than a limitation.

A pivotal aspect of Rachel's growth was her engagement in rigorous research and continuous learning. This commitment not only enhanced her academic performance but also equipped her with the skills necessary for success in her role as an educator. Rachel's journey also saw her confidently stepping into new roles and opportunities, from organizing symposia to presenting at conferences and writing articles, establishing herself as a respected voice in the field of neurodiversity. Crucial to Rachel's success was the personalized approach provided by the ILP, fostering a strong relationship with Glenys built on trust and open communication. This environment enabled Rachel to comfortably share her thoughts and ideas, supported by Glenys' expertise in identifying and addressing areas of struggle, ultimately demonstrating the potential for neurodiverse individuals to thrive within educational frameworks which prioritize individualized support and empowerment.

By sharing their experiences, Glenys and Rachel hope to inspire other educators and facilitate a collective effort toward creating inclusive and supportive learning environments that enable not just neurodiverse learners, but all learners, to flourish academically and personally.

Neurodiversity encompasses various learning disabilities (e.g., dyspraxia, dyslexia, ADHD, dyscalculia, autism spectrum disorder, Tourette Syndrome) (Clouder et al., 2020; van Gorp, 2022). It asserts that neurological differences are inherent in human diversity, akin to race or gender, emphasizing the unique cognitive strengths of neurodivergent individuals (van Gorp, 2022).

van Gorp (2022) stresses the importance of tailored support in tertiary institutions for neurodiverse learners to succeed, thereby contributing diverse perspectives and strengths to society. Some neurodiverse learners may not disclose their condition(s) for various reasons, such as unawareness, past negative experiences, or discomfort. Scholars argue against pressuring non-voluntary class participation despite potential advantages (Jansen et al., 2017; Hayes, 2021; Kirby, 2021).

Rachel, who successfully completed her studies by way of the ILP program, attests to the tangible growth in her knowledge, skills, and career confidence. Beyond establishing a professional identity, the ILP cultivates essential 21st-century competencies vital for adaptability and lifelong learning. Its transformative impact is particularly significant for neurodiverse learners, often marginalized in traditional educational settings. Unlike conventional methods, the ILP prioritizes a personalized, one-on-one approach, focusing on understanding each learner's individual needs and preferences. The facilitator's expertise is paramount, as they adeptly observe and inquire to tailor the learning experience accordingly. By enhancing the agency of neurodiverse learners and acknowledging their unique learning styles, the ILP empowers them to excel in their educational journey.

Central to supporting neurodiverse learners is amplifying their voices and experiences, exploring effective workarounds, and breaking negative habits to develop sustainable learning strategies. Effective self-advocacy becomes crucial, and the ILP process equips learners with the tools to assertively communicate their needs. Through seeking support and accessing resources, neurodivergent learners enhance their self-advocacy skills, establishing a supportive network that accommodates their cognitive strengths and challenges effectively.

# Discussion: alignment with SDG 4 and sustainable education

In the context of Sustainable Development Goal 4, the ILP journey becomes a catalyst for the development or enhancement of professional identity and 21st-century competencies. These include heightened identity awareness, values exploration, and selfawareness of competencies and transferable skills. These attributes not only fortify a robust sense of self but also instill career confidence and resilience in the face of uncertainty. As learners reflect on their educational journey, it becomes evident that they have honed the ability to adapt to diverse circumstances, recognizing the tangible benefits of conscious adaptability. This holistic approach to education not only fulfills an individual's aspirations but also aligns with the broader objective of fostering inclusivity and sustainable personal and professional development.

Rachel and Glenys discovered valuable strategies for fostering the success of neurodiverse learners. Key approaches include:

Supportive environment - establish inclusivity by setting clear expectations, providing structure, and fostering individualized learning opportunities. Create a safe space for learners to share their thoughts, concerns, and challenges without judgment. Rather than rushing to make a judgment on whether someone is neurodiverse, it is more effective to observe and ask questions with the belief that understanding will lead to determining how best to support the learner. At the appropriate time, the facilitator and learner may engage in a conversation about the potential benefits of obtaining a diagnosis to further support the learner's journey.

Additionally, positive relationships and a sense of relatedness are vital in the learning context. When learners feel connected to facilitators and peers, they experience a sense of belonging, positively impacting motivation, wellbeing, and persistence in academic pursuits. Facilitators must take responsibility for their professional development to effectively support a neurodivergent learner to be successful.

Multi-modal strategies—cater to diverse learning styles with a range of strategies engaging different senses, such as visuals, hands-on activities, and technology tools, promoting effective communication, for example, a facilitator might use videos (visual), experiments (hands-on activities), and interactive apps (technology tools) to explain a concept.

Clear instructions—ensure clarity in instructions by identifying potential challenges in processing complex information. Utilize

clear, concise, and multi-format instructions, incorporating visual aids, written guidelines, and verbal explanations.

Learner agency—empower neurodiverse learners by fostering agency through goal setting, decision-making, and self-assessment. This approach promotes autonomy, resilience, and aligns seamlessly with the ethos of lifelong learning. For instance, a learner with ADHD can be encouraged to set personalized goals for task focus, make decisions regarding break times, and evaluate their own progress. The ILP's flexible online format facilitates this autonomy, allowing learners to take ownership of their learning journey. However, this autonomy is always in collaboration with their facilitator, ensuring that timelines are adhered to for successful completion of learning tasks and assessments. This personalized approach caters to the diverse needs of neurodiverse learners, providing a supportive environment for their academic and personal growth.

Feedback and reinforcement—provide tailored feedback and reinforcement to support learning, ensuring it is specific, constructive, and timely. This approach aids neurodiverse learners in tracking their progress, pinpointing areas for growth, and fostering confidence. While applicable across educational contexts, the importance of tailored feedback and reinforcement is particularly pronounced within the ILP pathway. For example, a facilitator might provide immediate and precise feedback to a learner with autism, ensuring personalized attention that aids in their comprehension and skill development. This individualized support exemplifies the benefits of the ILP for neurodiverse individuals, enhancing their learning experience and facilitating their academic and personal growth.

Flexibility and adaptability—flexibility and adaptability are crucial within the ILP, allowing for the recognition of individual strengths, challenges, and learning paces. Facilitators adeptly modify strategies and offer additional support or accommodations as necessary. For example, in the case of a learner with dyslexia facing difficulties with traditional reading, a facilitator might provide audiobooks, utilize visuals, and extend time, showcasing the ILP's ability to tailor teaching methods to meet unique needs effectively.

Glenys and Rachel discuss the importance of effective facilitation through personalized adaptation of teaching methods within the ILP. For instance, when Rachel encountered difficulties with text-based learning materials, Glenys seamlessly incorporated visual aids alongside text, enhancing comprehension and empowerment. This personalized approach, established in trust and rapport, allowed Rachel to openly address her learning challenges. The transformative impact of tailored learning approaches was evident as Rachel discovered her preferred visual and auditory learning styles, benefiting not only her own journey but also her son's. As an emerging educator, Rachel utilized visual aids to introduce learning styles to her students, promoting self-awareness and autonomy.

In Ker's (2017) Effective Facilitation Model, emphasis is placed on building relationships, fostering trust, and promoting effective communication. Facilitators, equipped with diverse skills in the teaching and learning environment, play a pivotal role in adopting a learner-first approach. This involves empowering learners to take responsibility for their learning and cultivating a sense of agency. Ker stresses intrinsic motivation, emphasizing the importance of genuine interest in the subject matter for increased engagement, deeper learning, and improved academic outcomes.

However, Ker acknowledges that intrinsic motivation alone is insufficient. Support and encouragement are crucial to sustain learners' efforts. Autonomy-supportive environments, offering choices and self-direction, play a pivotal role in maintaining motivation. Providing feedback that recognizes progress and accomplishments contributes to a sense of competence, encouraging learners to strive for higher performance.

van Gorp (2022) adds valuable insights into the importance of effective facilitation, emphasizing the dynamic nature of learning. Facilitators, according to van Gorp (2022), demonstrate adaptability to evolving learner needs, creating a flexible and responsive environment. This approach involves recognizing and appreciating the diverse backgrounds and experiences learners bring, fostering inclusivity, and promoting a supportive learning community.

Additionally, van Gorp (2022) delves into the long-term benefits of learner success, underscoring the enduring impact of effective facilitation. She believes that sustained facilitator support contributes to ongoing learner achievement and development. This perspective aligns with the overarching goal of facilitating quality education, underscoring the importance of facilitators continuously refining their approaches to meet the diverse needs of learners, including neurodivergent individuals.

#### Conclusion

This article underscores the importance of addressing the unique needs of neurodiverse learners in higher education, as Ker (2017) and van Gorp (2022) have emphasized. It highlights that facilitators need to possess adept skills in tailoring approaches to the individual's needs, establishing robust relationships, and recognizing the distinctive challenges and strengths of neurodiverse learners. By acknowledging the diverse nature of neurodiversity, facilitators can create an empowering and supportive environment, enabling neurodiverse learners to excel academically. Sustainable education for neurodiverse individuals involves embracing their unique strategies, prioritizing resilience, and promoting self-advocacy.

Overall, this article demonstrates how the ILP aligns with the vision of "inclusive and equitable quality education and lifelong learning opportunities for all" outlined in SDG 4. It discusses how the ILP approach in New Zealand allows experienced mature learners to obtain qualifications through a learner-centric and flexible process, recognizing and valuing all relevant prior learning. The article delves into how the ILP aligns with specific SDG 4 targets, including eliminating gender disparities, ensuring equal access for vulnerable populations, and fostering sustainable development through education. Including a case study featuring a neurodivergent learner and facilitator who successfully completed the ILP journey adds a practical dimension to the discussion.

In essence, this article provides valuable insights for those interested in innovative and inclusive vocational education models,

offering a holistic perspective on supporting neurodiverse learners and contributing to the broader goals of SDG 4.

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### **Conflict of interest**

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