

### Promoting Student Engagement: The Impact of the Student Mentoring Academy at CCT College Dublin

Marie O' Neill EDI Officer



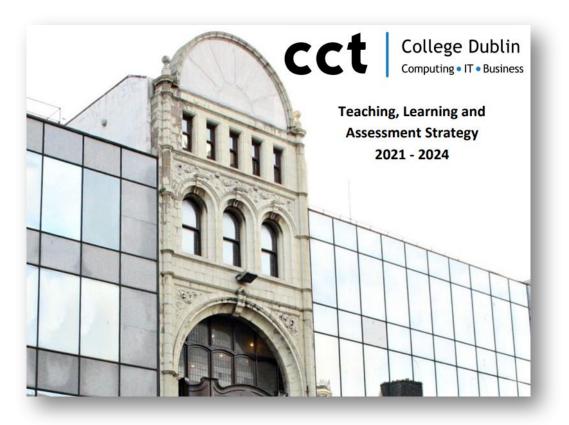


### About CCT College Dublin

- Founded by College President Neil Gallagher in 2005. CCT is based in college owned premises at Westmoreland Street. Approximately 1350 students.
- Offers QQI validated programmes in business and ICT up to and including Level 9 of the NFQ
- Blended learning provider status awarded by QQI in 2020. Devolution awarded in 2023.
- CCT has passed **stage 1 of the AsIAm accreditation process** to become an autism friendly college
- Member of the Higher Education Colleges Association (HECA)
- CCT is a strategic partner of Microsoft Ireland



### Strategic Commitment to Peer Learning at CCT Since the College's Foundation in 2005



https://arc.cct.ie/strategy\_documents/5/

"peer learning is a central priority in relation to the creation of **student identity and the ability to engage in the learning environment**.....for academic success... research shows that peer interaction and social **integration** in higher education are closely linked to student **retention**, progression and performance"

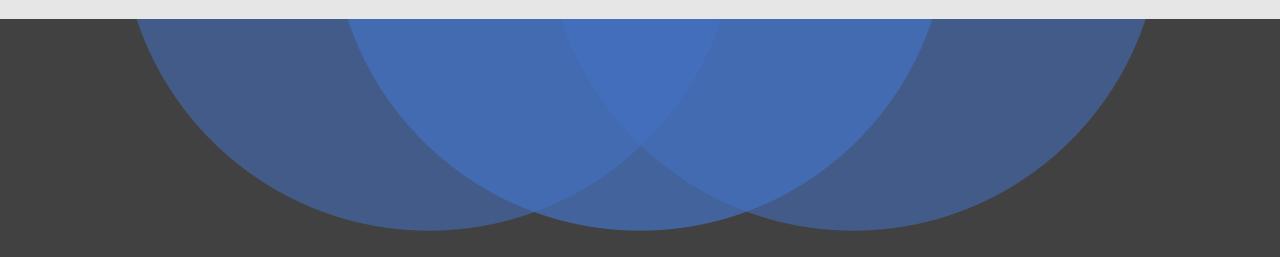
(CCT Teaching, Learning and Assessment Strategy, 2021)

"We believe that the further development, of our Student Mentoring Programme will facilitate the **development of self-efficacy."** 

(Ibid, p.14)



## **1. Background Context**





### **Key Sectoral Priority – Widening Access**



https://hea.ie/policy/access-policy/national-access-pl an-2022-2028/ Students with Disabilities Engaged with Support Services in Higher Education in Ireland 2020/21



creating inclusive environments in education and employment for people with disabilities



students with disabilities registered with support services for the academic year 2020/21

268%

rise in the last 12 years

https://www.ahead.ie/Launch-of-21-Reporton-Numbers-of-Students-with-Disabilites-in-Higher-Education



## **Progression Statistics HEA: Examples**

- •While the overall non-progression rate improved in 2019/20, the non-progression rates for new entrants at Level 6 and 7 is at least double that for entrants to Level 8 courses (16% and 18% at Levels 6 and 7 respectively, compared to 8% at Level 8).
- •As in recent years, the highest overall non-progression rate was in the Services field of study (16% for 2019/20 entrants), closely followed by ICT (15%) and Engineering, Manufacturing & Construction (13%).
- •Mature entrants have a higher non-progression rate than non-mature entrants at Level 8



Source: https://hea.ie/2022/04/11/non-progression-rates-among-first-year-students-continue-to-trend-downward/



### **The Academic Literature**

- The academic performance of students is positively impacted by psychosocial and academic support provided by peers (Thiele et al., 2018)
- College students who engage in first-year programmes such a peer mentoring programme experience increased academic success, increased progression to future semesters, enhanced enjoyment of the university experience, sense of belonging, and campus participation. (Graham et al., 2022).
- When student engagement increases, student dropout rates decrease (Bowman and Culver, 2018; Weaver et al., 2017).
- Students in formal mentoring relationships have an increased sense of belonging to their academic institution and have increased confidence and skills in relation to transitioning to the workplace (Hamilton et al., 2019)



### **Peer Mentoring and Inclusion**

- Peer mentoring relationships support the academic outcomes of ethnically diverse first-generation college students (Flores and Estudillo, 2018)
- Peer mentoring programmes support students with developmental or intellectual disabilities (Ames et al., 2015; Hillier et al., 2019; Roberts and Birmingham, 2017)

#### Article Open access Published: 11 November 2022

Female peer mentors early in college have lasting positive impacts on female engineering students that persist beyond graduation

Deborah J. Wu, Kelsey C. Thiem & Nilanjana Dasgupta

<u>Nature Communications</u> 13, Article number: 6837 (2022) Cite this article

4855 Accesses | 2 Citations | 147 Altmetric | Metrics

#### Abstract

Expanding the talent pipeline of students from underrepresented backgrounds in STEM has been a priority in the United States for decades. However, potential solutions to increase the number of such students in STEM academic pathways, measured using longitudinal randomized controlled trials in real-world contexts, have been limited. Here, we expand on an earlier investigation that reported results from a longitudinal field experiment in which undergraduate female students (*N* = 150) interested in engineering at college entry were randomly assigned a female peer mentor in engineering, a male peer mentor in engineering, or not assigned a mentor for their first year of college. While an earlier article presented findings from participants' first two years of college, the current article reports the come

### https://www.nature.com/articles/s41467-022-34508-x



### 2. The CCT Student Mentoring Academy





## Aims of the CCT Student Mentoring Academy

• To support student transition, academic support, progression and student success initiatives at CCT College Dublin.

College Dublin

- To provide **additional academic support** to students studying complex subjects in ICT and Business.
- To support the development of students' social learning and self-efficacy skills whilst enhancing their career development
- To support equality, diversity and inclusion initiatives. Student mentoring is valuable for international students, students with disabilities and mature learners etc.
- To support institutional student partnership initiatives with the aim of developing the leadership and teamwork skills of mentors.
- The Student Mentoring Academy is an extracurricular activity co-led and managed by the Head of Student Services and members of Faculty in partnership with student mentors



# How does the CCT Student Mentoring Academy work in practice?

The Student Mentoring Academy is highlighted during face-to-face and virtual induction

1

Call for mentors shared on Moodle. Applications are assessed by staff involved with the Academy. Mentors volunteer one hour of their time per week.

2

All mentors receive **training** emphasisng academic integrity and the avoidance of collusion. Staff support mentors with their queries and with the co-delivery of larger sessions.

3

**Schedule** for in-demand topics is produced and circulated via Moodle.

Δ

For increased inclusion, the flexible delivery of mentoring sessions is a priority. CCT students can avail group or one-to-one mentoring sessions, online or in person.

5



### **Training Mentors**

- Mentors are selected by faculty based on knowledge, aptitude and interpersonal skills
- Mentors aim to fosters competence, autonomy and relatedness in peer mentees (Deci and Ryan, 2000)
- Mentors are trained to engage in effective listening, communication and problem solving
- The difference between collaboration and collusion is emphasised to mentors as part of the mentor training programme and institutional academic integrity strategies
- Mentors are encouraged to avail of support from staff. Larger mentoring sessions are co-delivered by mentors and faculty.
- In addition to providing pastoral support to mentors and mentees, the Head of Student Services plays a pivotal role in supporting faculty with the sourcing of mentors, scheduling and engagement strategies.



College Dublin Computing • IT • Business

Moodle plays an important role in advertising student mentoring sessions. A dedicated Student Mentoring Academy page is available on Moodle with support resources.

# Student Mentors Available from today!

by Kathleen Embleton - Monday, 6 November 2023, 11:14 AM

Dear Students,

The **Student Mentoring Programme** will begin today Monday, 6th November. We are delighted to have several sessions each week spanning a wide range of topics including programming, maths, machine learning, stats, networking and many more. In addition to the weekly sessions, we will also have student mentors available for one to one tutoring, which the subjects listed on the schedule.

You can find the **schedule** here and you can also find it in the **Student Mentoring in Moodle**, which is located here:

https://moodle.cct.ie/course/view.php?id=1562

All mentoring sessions will be hosted online through Zoom. You can join

#### <u></u>

Day and Time	Subjects
Monday @ 5:30pm	Python
Tuesday @ 11:00am	Programming
	Java, Python, Math
Tuesday @ 5:30pm	Algorithm
	Mathematics
	Programming
Wednesday @ 11:00am	Programming: Obj-Oriented
	Approach
	Introduction to Databases,
	Operating Systems & Architecture,
	Introduction to Programming,
	Introduction to Computing
	Mathematics, programming,
	databases
Thursday @2:45pm	Problem Solving - Maths
	Python, Google Docs and Sheets

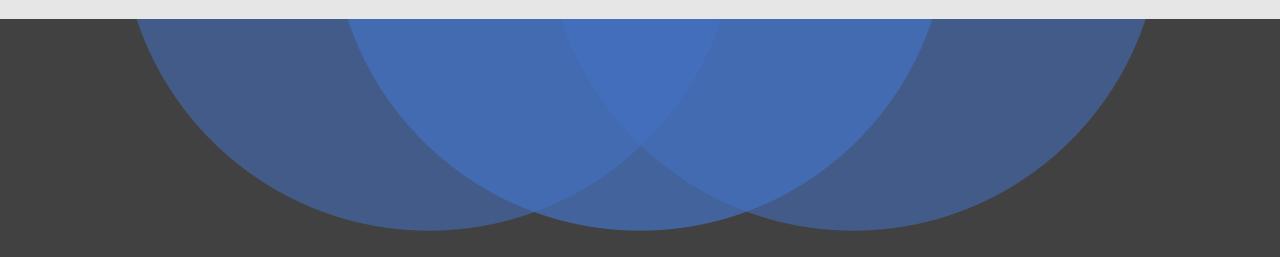


If you are unable to make one of the sessions above, there are mentors available in the topics below. Please email kathleen@cct.ie or ken@cct.ie and we will match you with a mentor. Algorithm Career goals Databases Google Docs and Sheets Introdution to Computing Introdution to Databases Introdution to Programming lava Machine Learning Mathematics Object-Oriented Operating Systems & Architecture Personal development Programming Python Statistics

Mentoring sessions typically focus on course content pertaining to programming and mathematics as well as modules pertaining to Data Analytics such as machine learning. CCT Mentoring Academy initiatives also incorporate laboratory sessions in which software is downloaded and configured such as Java JDK, NetBeans, Packet Tracer, and Virtual Box

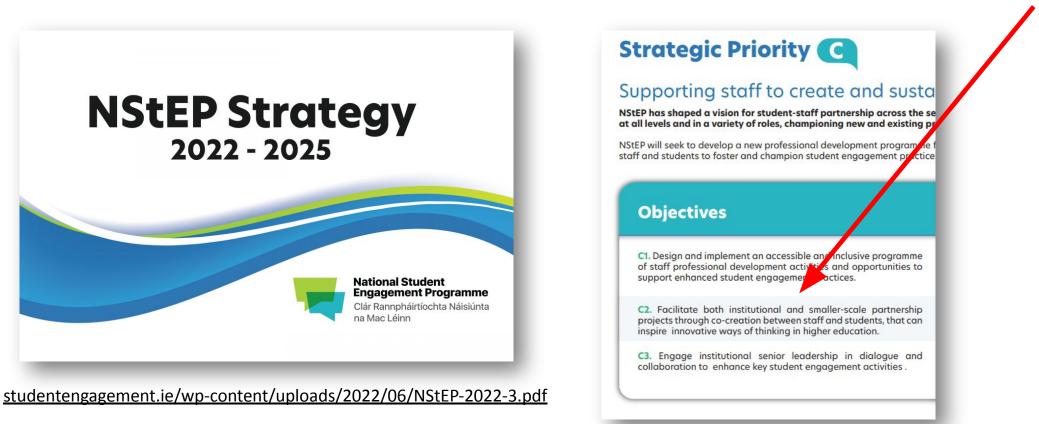


## **3. Recent Developments**



### National Student Engagement Programme

CCT is an Institutional Member of NStEP. Student mentors are equal partners with staff o the CCT Student Mentoring Academy.



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The CCT Student Mentoring Academy has an emphasis on **co-creation between staff and student mentors**. Former student mentor Mariana Braga Vasconcellos created multimedia content to support the recruitment and training of new mentors. **Mariana is now working as human resources professional and is an EMCC certified life coach.** 



https://drive.google.com/file/d/1Bz8cFFtsaCqZaVsX\_s7XWLHM SaOD37Tx/view



### CCT undertakes NsTEP's class representative training programme. Synergies with CCT's Student Mentoring Academy.

Some class representatives also become student mentors. Kathleen Embleton, Head of Student Services leads NsTEP's class representative training programme. She also manages the CCT Student Mentoring Aacdemy in partnership with faculty.



### **Peer Mentoring During COVID-19**

954 Views 2 CrossRef citations to date 0 Altmetric	Articles Creating an Online Peer-to-Peer Mentoring Program: Promoting Student Relationships, Engagement, and Satisfaction during the Era of COVID-19 Alan J. Krause  © & Sarah Y. Moore Pages 296-308   Published online: 01 Jun 2021 © Cite this article © https://doi.org/10.1080/87567555.2021.1925624 © Check for update	f
ample our ducation burnals > Sign in here to start your access o the latest two volumes for 14 days	Abstract In the shift from on campus to online education, liberal arts colleges have lost much of the interaction among students that fosters student engagement, learning, and satisfaction. We present an online, student peer-to-peer mentoring program that creates learning partnerships between students and recreates this vital cocurricular learning online. Assigning mentors and mentees a year apart in the same major and asking them to	Related research i People also read Recommended articles Cited by 2 Cited

#### https://doi-org.ucd.idm.oclc.org/10.1080/87567555.2021.1925624

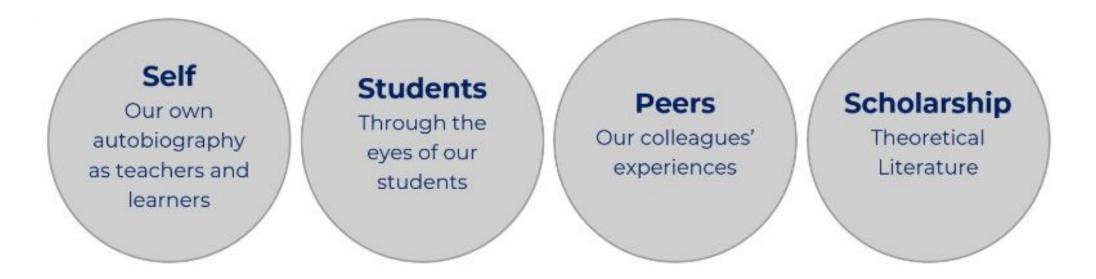


## 3. Impact of the CCT Student Mentoring Academy





### **Brookfield's Reflective Model**



https://valenciacollege.edu/faculty/development/courses-resources/documents/ brookfield\_summary.pdf



X 🗇 https://link.springer.com/article/10.1007/s10755-021-09556-8

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Open access | Published: 03 May 2021 | 46, 663-681 (2021)

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Christina Seery, Andrea Andres, Niamh Moore-Cherry & Sara O'Sullivan 🖂

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### https://doi.org/10.1007/s10755-021-09556-8

"Peer mentors are usually full-time students and taking on the mentor role, in addition to study and other obligations, brings a range of logistical, interpersonal, and emotional challenges. There may be difficulties in establishing and maintaining contact with mentees (Heirdsfield et al., 2008)...Mentors may be frustrated when mentees disregard the help they offer, do not respond to messages, do not turn up for pre-arranged meetings, or demand immediate attention" (p.665).

"an unexpected finding from our analysis was the **degree of emotional labour involved in peer mentoring**," (p.674) X 🗅 https://link.springer.com/article/10.1007/s10755-021-09556-8

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"mentors were not yet fully comfortable with the partnership dynamic and that they did not consider themselves equal to the staff (and therefore in a position to decline requests or suggestions) and did not fully feel their ownership of the programme: "I think that the **people organizing just above** us that could help organize events should be presented as facilitators and that it is our own initiative" (FG4). This reflects Kehler et al.'s (2017) findings that significantly more attention needs to be paid to power in students as partners practice" (p/670).

https://doi.org/10.1007/s10755-021-09556-8

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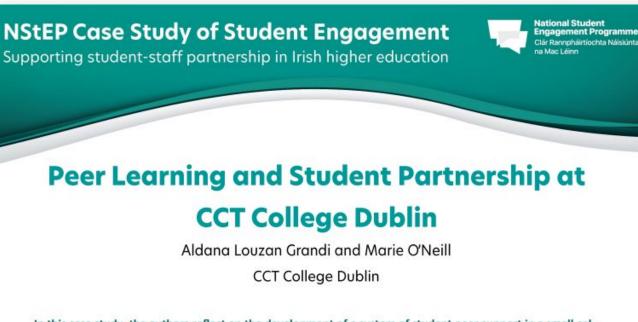
"The partnership approach adopted in this peer mentorship programme provided opportunities for mentors to work with staff as equal partners and maintain that relationship throughout the semester.... This led to an enhanced sense of belonging to the university, a key outcome of this kind of partnership work.... A significant benefit reported by peer mentors was the personal growth that they experienced as a result of participation. They gained confidence in themselves and in their ability to use newly acquired transferable skills outside the **university** (p.670)."



### **Mentor Feedback**

"Seventy-five percent of respondents stated that they had received the necessary information and training to perform effectively as a peer mentor and that being a peer mentor enhanced their own learning as well provided skills for their career development. Most peer mentors also stated that the Student Mentoring Academy was "an important student partnership initiative."

Negative feedback was low. When it did arise, it pertained to mentors' frustration with mentees not engaging sufficiently.



In this case study, the authors reflect on the development of a system of student peer support in a small college through a model of student partnership, ensuring that student agency and empowerment are central to the implementation and outcomes of the project.

#### **Introduction and Context**

Peer learning has been an integral focus of the teaching and learning experience at CCT College Dublin since its foundation in 2005. The CCT Student Mentoring Academy is a key institutional student engagement and suc-

https://studentengagement.ie/wp-content/uploads/2022/11/Louzan-Grandi-and-ONeill-CCT.pdf

# CCT Feedback Survey with Mentors in 2022 (45% response rate)

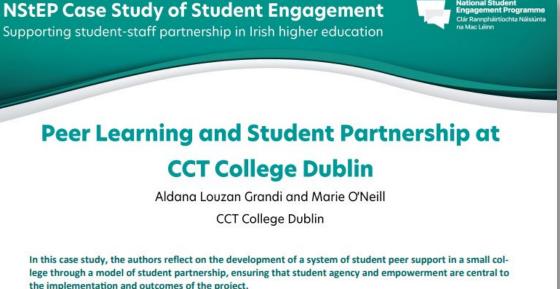
### Mentors

"I contributed by being available for one hour per week to help students with statistics and data preparation"

"I helped students with both databases and programming subjects. I went through some of the basics. I also was involved in answering emails and I was very happy to see students' progress"

"In the mentoring session, I was helping new students with programming and coding"

"going back to the basics also helped me..l kept studying and learning from troubleshooting issues."



#### **Introduction and Context**

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#### https://studentengagement.ie/wp-content/uploads/2022/11/Louzan-Grandi-and-ONeill-CCT.pdf

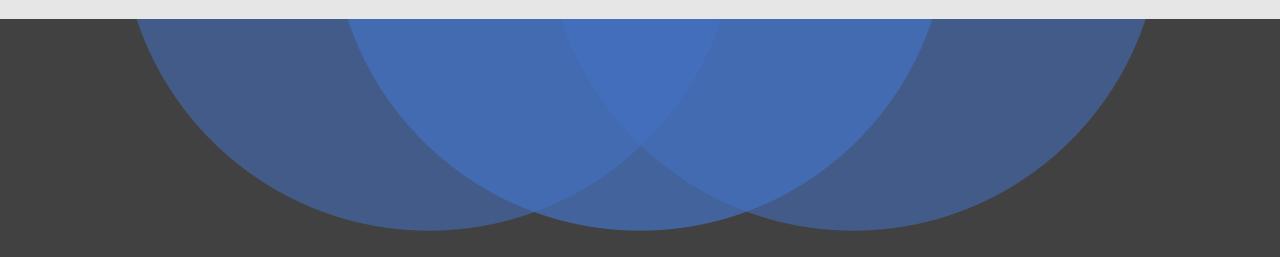
## Other forms of Impact

- Aldana Louzin author of the NStEP case study and a former member of the Student Mentoring staff team described how her involvement with the academy enhanced her leadership skills. She also observed that mentees acquired more confidence becoming more engaged in class, asking more questions etc. Anecdotal feedback from other lecturers is similar.
- Many student mentors went onto assume leadership roles on other college fora. Mariana Braga Vasconcellas as an example became Co-Chair of the CCT Academic Integrity Committee and institutional representative to the National Academy Integrity Network.
- Increased data gathering from staff, mentors and mentees in relation to the impact of the Student Mentoring Academy is required also investigating potential correlations with student progression and retention figures. A question about the Student Mentoring Academy is now incorporated into the Annual CCT Engagement Survey.





## **4. The Future**





Review Journal of Autism and Developmental Disorders https://doi.org/10.1007/s40489-022-00325-7

**REVIEW PAPER** 



#### A Scoping Review of Peer Mentoring Programs for Autistic College Students

Isabelle F. Morris<sup>1</sup> · Christy Matta<sup>1</sup> · Lawrence K. Fung<sup>1</sup>

Received: 7 June 2021 / Accepted: 11 May 2022 © The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature 2022

#### Abstract

Many autistic college students struggle with academics, mental health, and career development. Despite a proliferation of peer mentoring programs, there is little consensus as to what approaches are effective and even less published data on the impact of such programs on student outcomes. The purpose of this review is to describe peer mentoring programs for autistic college students and understand whether they are improving outcomes. The search identified 21 articles, with half reporting student outcomes data. Most programs provided weekly one-on-one mentoring individualized to student needs and offered additional supports (e.g., social skills group). Among them, three tracked academic outcomes, three reported non-academic outcomes, and one followed both academic and non-academic outcomes.

Keywords Autism · Neurodiversity · College · Higher education · Peer mentoring · Support program

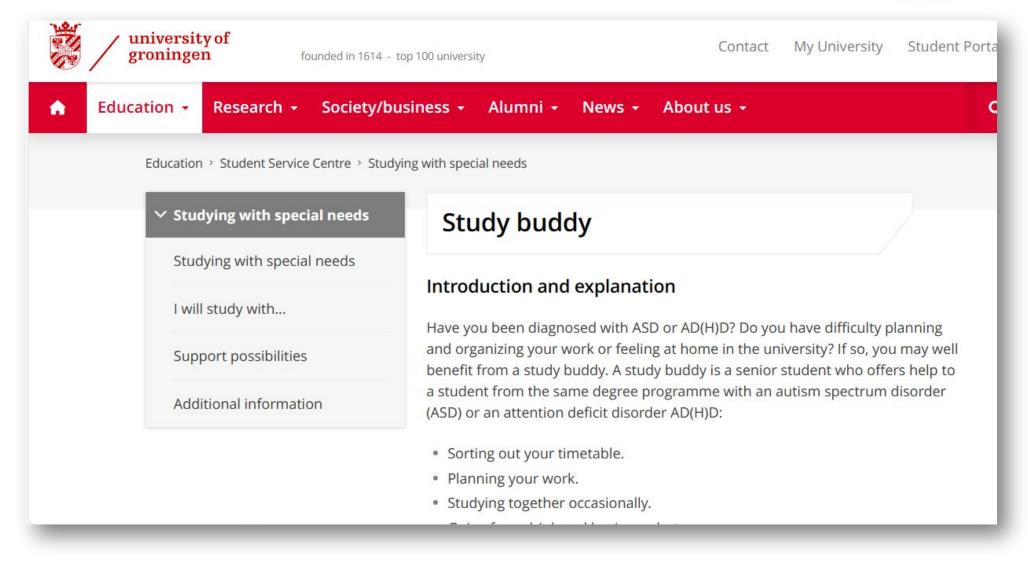
The prevalence of autism continues to rise dramatically in the past 30 years. About 0.7–1.9% of students in the US institutions of higher education are on the autism spectrum (Maenner et al., 2020; White et al., 2011). About one-third of autistic students who completed higher school attend institutions of higher education (Shattuck et al., 2012). In

generally (7.7%) and more than triple that of non-disabled graduates (Equality Challenge Unit, 2015). Autistic college graduates worked full time at nearly half the rate of nondisabled individuals (Equality Challenge Unit, 2015). In the USA and Australia, only about 20% of young autistic adults worked full time compared to 40% of those with intellectual

https://med.stanford.edu/content/dam/sm/neurodiversity/documents/Manuscripts /Morris-2022---A-Scoping-Review-of-Peer-Mentoring-Programs-for-Autistic-College-S tudents.pdf







https://www.rug.nl/education/student-service-centre/bijzondere-omstandigheden/studying-with-special-needs/studiemaatje?lang=en#:~:text=Introduction%20and%20explanation&text= <u>A%20study%20buddy%20is%20a,Studying%20together%20occasionally</u>.



## Conclusion

Boud- What is peer learning and why is it important?

"the opportunity to learn from each other. It gives students considerably more practice than traditional teaching and learning methods in taking responsibility for their own learning and, more generally, learning how to learn. It is not a substitute for teaching and activities designed and conducted by staff members, but an important addition to the repertoire of teaching and learning activities that can enhance the quality of education"



# Thank you

## @marielibrarian

<u>linkedin.com/in/marie-</u> o-neill-9340747a



## References

- AHEAD 20/21 Report on Numbers of Students with Disabilities in HE. <u>https://www.ahead.ie/Launch-of-21-Report-on-Numbers-of-Students-with-Disabilites-in-Higher-Education</u>
- Ames, M.E., McMorris, C.A., Alli, L.N. and Bebko, J.M. (2015), "Overview and evaluation of mentorship program for university students with ASD", Focus on Autism and Other Developmental Disabilities, Vol. 31 No. 1, pp. 27-36, doi: 10.1177/1088357615583465.
- Boud, T (n.d.) What is peer learning and why is it important? https://tomprof.stanford.edu/posting/418
- Bowman, N.A. and Culver, K.C. (2018), "When do honors programs make the grade? Conditional effects on college satisfaction, achievement, retention, and graduation", Research in Higher Education: Journal of the Association
- CCT College Dublin (2021). Institutional Teaching, Learning and Assessment Strategy, 2021-24. (Academic Research Collection). <u>https://arc.cct.ie/strategy\_documents/5/</u>
- Deci, E.L. and Ryan, R.M. (2000), "The 'what' and 'why' of goal pursuits: human needs and the selfdetermination of behavior", Psychological Inquiry, Vol. 11 No. 4, pp. 227-268, available at: https:// selfdeterminationtheory.org/SDT/documents/2000\_DeciRyan\_PIWhatWhy.pdf
- Flores, G. and Estudillo, A.G. (2018), "Effects of a peer-to-peer mentoring program: supporting first year college students' academic and social integration on campus", Journal of Human Services: Training, Research, and Practice, Vol. 3 No. 2.
- HEA (2022a) National Access Plan 2022-2028. <u>https://hea.ie/policy/access-policy/national-access-plan-2022-2028/</u>
- HEA (2022b) Non-progression rates among first year students continue to trend downward. Higher Education Authority. https://hea.ie/2022/04/11/non-progression-rates-among-first-year-students-continue-to-trend-downward/



- Graham, M., Wayne, I., Persutte-Manning, S., Pergantis, S. and Vaughan, A. (2022), "Enhancing student outcomes: peer mentors and student transition", International Journal of Teaching and Learning in Higher Education, Vol. 34 No. 1, pp. 1-6.
- Hamilton, L.K., Boman, J., Rubin, H. and Sahota, B.K. (2019), "Examining the impact of a university mentorship program on student outcomes", International Journal of Mentoring and Coaching in Education, Vol. 8 No. 1, pp. 19-36.#
- Hillier, A., Goldstein, J., Tornatore, L., Byrne, E. and Johnson, H.M. (2019), "Outcomes of a peer mentoring program for university students with disabilities", Mentoring and Tutoring: Partnership in Learning, Vol. 27 No. 5, pp. 487-508.
- Alan J. Krause & Sarah Y. Moore (2022) Creating an Online Peer-to-Peer Mentoring Program: Promoting Student Relationships, Engagement, and Satisfaction during the Era of COVID-19, College Teaching, 70:3, 296-308, DOI: 10.1080/87567555.2021.1925624
- Louzin, A & O' Neill M (2022) Peer Learning and Student Partnership at CCT College Dublin. NStEP. <u>https://studentengagement.ie/wp-content/uploads/2022/11/Louzan-Grandi-and-ONeill-CCT.pdf</u>
- Morris, I.F., Matta, C. & Fung, L.K. A Scoping Review of Peer Mentoring Programs for Autistic College Students. Rev J Autism Dev Disord (2022). https://doi.org/10.1007/s40489-022-00325-7
- Roberts, N. and Birmingham, E. (2017), "Mentoring university students with ASD: a mentee-centered approach", Journal of Autism and Developmental Disorders, Vol. 47 No. 4, pp. 1038-1050, doi: 10.1007/s10803-016-2997-
- Seery, C., Andres, A., Moore-Cherry, N., & O'Sullivan, S. (2021). Students as Partners in Peer Mentoring: Expectations Experiences and Emotions. Innovative Higher Education. https://doi.org/10.1007/s10755-021-09556-8
- Thiele, L., Sauer, N.C. and Kauffeld, S. (2018), "Why extraversion is not enough: the mediating role of initial peer network centrality linking personality to long-term academic performance", Higher Education: The International Journal of Higher Education Research, Vol. 76 No. 5, pp. 789-805, doi: 10.1007/s10734-018-0242-5
- Weaver, A.G., Forte, D.J. and 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, Vol. 41 No. 1, pp. 42-54, doi: 10.1123/rsj.2016-0023.
- Wu, D.J., Thiem, K.C. and Dasgupta, N. (2022). Female peer mentors early in college have lasting positive impacts on female engineering students that persist beyond graduation. Nature Communications, 13(1). doi: https://doi.org/10.1038/s41467-022-34508-x
- University of Sydney (2010) Brookfield's Four Lenses: Becoming a Critically Reflective Teacher