Supporting students with Autism Spectrum Disorder in higher education

This project was funded by the National Centre for Student Equity in Higher Education (NCSEHE) of Curtin University



Supporting students with Autism Spectrum Disorder in higher education

Investigators:

Ceridwen Owen (Lead, School of Architecture & Design)
Damhnat McCann (School of Health Sciences)
Christopher Rayner (Presenter, School of Education)
Carol Devereaux & Fiona Sheehan (Disability Services)
Lyndsay Quarmby (Centre for Rural Health)

Research Assistants:

Debbie Hindle, Wendy Roberts, Belinda Jarman, Cathryn Kerr

Advisors:

Darlene McLennan (Manager, Australian Disability Clearinghouse on Education & Training)

Mary Brake (Autism Consultant, Department of Education, Tasmania)



Supporting students with Autism Spectrum Disorder in higher education

Outline:

- 1. Context
- 2. Disability + pedagogy literature + survey
- 3. Built environment literature + student experiences
- 4. Conclusions
- Limitations + future research



1. Context: ASD

What is Autism Spectrum Disorder (ASD)?

A lifelong neurodevelopmental disorder characterised by difficulties in:

- social communication and interaction; and
- restricted or repetitive patterns of behaviour and interests.



1. Context: challenges

What challenges are reported for students with ASD in higher education?

- Managing everyday life and independent study
- Social engagement and socially mediated learning experiences
- Disclosing and seeking assistance



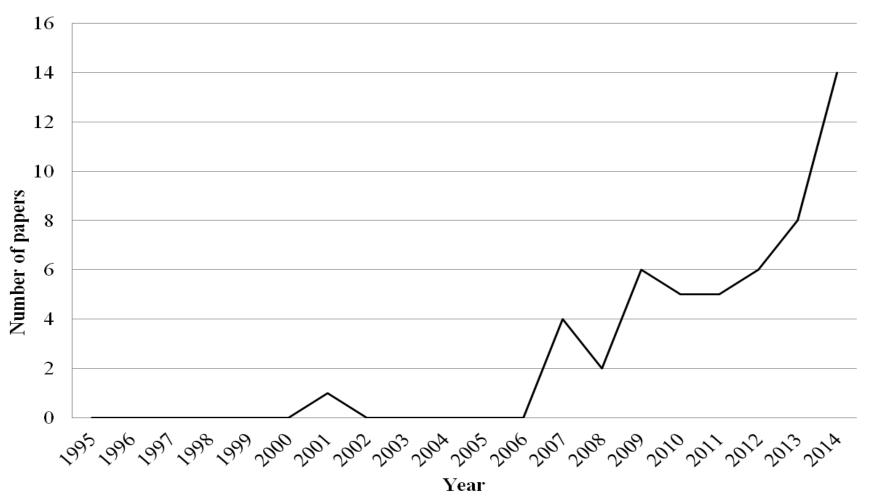
1. Context: scope + methods

What did this project involve?

- 1. Literature reviews
- 2. Online Survey
- 3. Self-directed photography ('photovoice') and interviews



2. Disability + pedagogy: literature





2. Disability + pedagogy: literature

Pedagogy and disability supports:

Papers included: descriptive studies (41%), discussion papers (30%), program evaluations (21%), and literature reviews (8%)

Themes included:

- Supporting effective transitions and orientation
- Collaborative and multidisciplinary approaches
- (Peer) Mentoring and participation support
- Developing students' social, communication, self-advocacy, and university-specific academic skills
- Creating awareness of sensory processing characteristics
- Professional learning for staff in relation to ASD and inclusive teaching practices

2. Disability + pedagogy: existing supports

AUSTED Survey findings:

- A strong emphasis on the provision of individualised assessment and support to reflect the specific needs of each particular student.
- Types of support included transition support, the development of study and organisations skills, facilitating social and/or personal development, and the implementation of specific strategies to address ASD challenges.
- Methods of support included ASD specific mentoring, education of staff and case management, LAP process, external liaison.



3. Built environment: literature

Literature:

- Key issues sensory sensitivities + disorientation (navigation and wayfinding), spatial variation and 'safe spaces'
- Lack of research literature and policy development in relation to built environment, particularly in higher education
- Disparity in research between student and staff perspectives (particularly in relation to sensory sensitivities)



Site: University of Tasmania

Sample: Six students with ASD

Methods: Self-directed photography ('photovoice') and

interviews





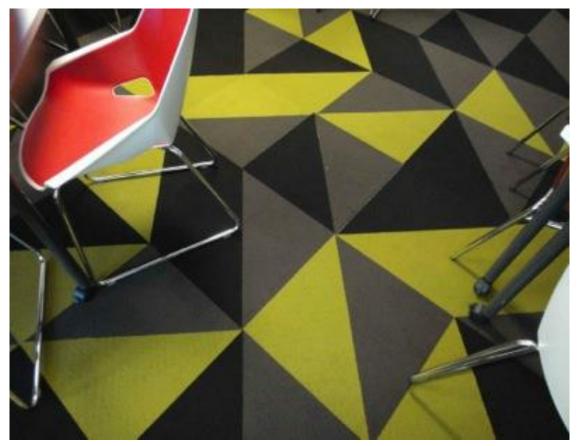
"Please find an alternative for these."

(Participant 3 diary)



"I can cope with this unless I am tired or stressed."

(Participant 3 diary)



When I was taking this photo I felt "nauseous."

Extra information about this photo for the researchers:

"This carpet is new. I liked the old, plain one."

(Participant 6 diary)

"You lose the ability to think or process ... you're essentially stupider in these environments."

(Participant 4 interview)

- Experience of headaches and nausea
- Effects can last hours or even days



"I could not go inside, even to take a picture."

(Participant 3 diary, referring to the cafeteria)





When I was taking this photo I felt "Angry, trapped, hate. Get out of my way."

(Participant 4 Diary)

When I was taking this photo I felt "Relaxed, collaborative, engaged."

(Participant 4 Diary)

"I had made a conscious decision some time ago now that I had to build myself up as much as I possibly can to all of that to get by in life otherwise I'd just be in my little cocoon all the time at home and that's not healthy."

(Participant 6 interview)



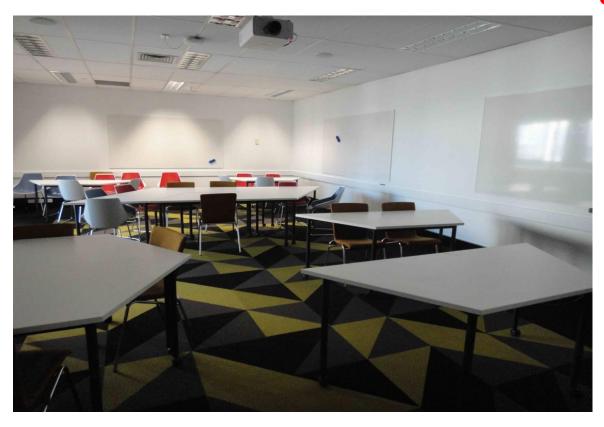
3. Built environment: student experiences cognitive



"I don't understand why there are so many numbers/codes for the same room. I have often got lost. I don't understand the campus map either as that is a coded mess."

(Participant 6 diary)

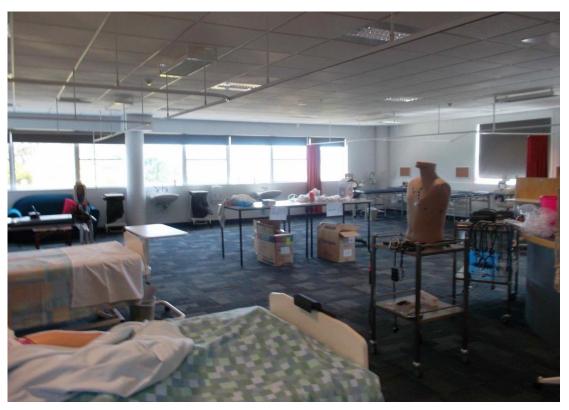
3. Built environment: student experiences cognitive



"This photo makes me think about how I spent a lot of the lesson trying to work out which way to sit.... There are whiteboards almost the whole way around the room. This added to my confusion."

(Participant 6 diary)

3. Built environment: student experiences cognitive



"It makes learning a lot more casual and self-directed ... the whole atmosphere changes a bit. You can kind of realise that you're allowed to do that, there aren't really rules in place. It's more something that just flows."

(Participant 4 interview)

- Student access study centre
- Online and distance education support
- Learning Access Plans
- Staff awareness and support

"... if it wasn't for her [lecturer] I would have pulled the pin. I wouldn't actually be there now, at all. I would have thought, 'No, this is just too hard, I just feel like an idiot.'"

(Participant 5 interview)



"I felt a bit sad that [the logo] is highlighting difference, and the stereotype that someone with a challenge therefore must be in a wheelchair.... This photo makes me think about wanting to re-design the concept of disABILITY."

(Participant 6 diary)

3. Built environment: student experiences (informal) supports



"... what they all have in common is kind of open space, easy to navigate, not too busy, not too quiet, but open. It's open and outdoors but at the same time it's closed and contained."

(Participant 4 interview)

3. Built environment: student experiences (informal) supports

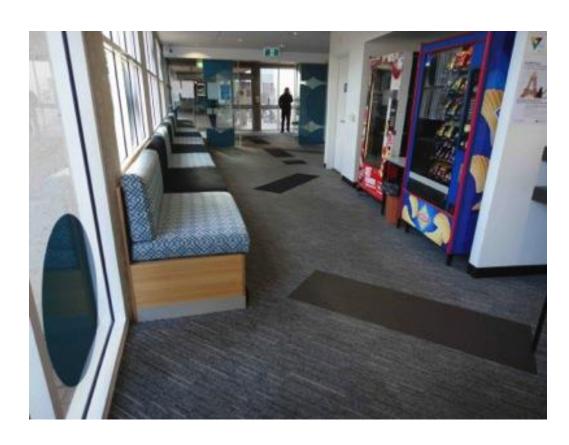


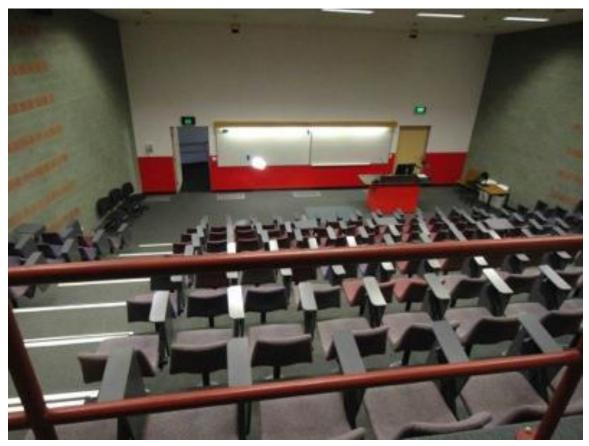
This photo makes me think about "the lady used to save me a sandwich each day. It was much safer here than the other places that sold food. She probably never knew how much she helped me that first year."

(Participant 3 diary)

3. Built environment: student experiences (informal) supports







"I tend to pick a spot all the time. Even in the lecture room I pick a chair, that's my chair."

(Participant 6 interview)



"This is a picture of the scary self-opening door..... It is hard to remember to stop when I am in a rush to get to the safety of the SASC."

(Participant 3 diary)

"...you have to be assertive to be autistic and the world doesn't owe me anything and I don't like to play the victim. Where I just put it out there and say, look I'm autistic, I just need your assistance."

(Participant 5 interview)



Recommendations for disability supports:

- Individualised assistance and effective implementation of Learning Access Plans (LAPs)
- 2. Addressing social and self-management/advocacy skills
- 3. The development of further (peer) mentoring programs



Pedagogical recommendations:

- 1. The use of inclusive practices, such as those informed by Universal Design for Learning (UDL) principles
- 2. Promoting greater awareness and understanding of ASD, particularly among teaching staff
- 3. Enabling students to exercise agency and manage their own learning journey

Inclusive design (built environment) solutions:

- 1. Campus spaces need to be considered holistically
- Spaces need to facilitate navigation and engagement, as well as provide opportunities for withdrawal
- Low cost adjustments (clocks, lighting) can make big differences
- 4. Recent design trends towards hyper-stimulating learning spaces should be balanced with access to quiet environments with natural features
- Development of relevant policy and design guidelines is encouraged

Possibilities for the National Disability Insurance Scheme (NDIS):

- Broadening of the peer mentor role to specifically meet the needs of a student with ASD, and continuing the support traditionally offered for 'transitioning' at the beginning of an individual's study
- 2. Clarification of the type of support available under the NDIS that takes into account the unique (but less visible) disability-related needs of this population

Such initiatives have the potential to assist these students to complete their higher education study, and increase the likelihood of their future employment and economic independence.



5. Limitations + future directions

Limitations: small and specific sample of students

Future directions: examine retention rates for students with ASD and include the experiences of a broader range of participants including:

- individuals with ASD who have failed to access higher education despite academic competency and interest; and
- individuals who have entered higher education but failed to graduate.





I took this photo because "I keep on wanting to fix the skewed building."

When I was taking this photo I felt "a bit agitated."

This photo makes me think about "why people design buildings this way/why they build them incorrectly."

(Participant 6 diary)

