Neurodiversity and education

Making teaching, learning and assessment more inclusive

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Objectives

1. What is inclusive education?
2. What is neurodiversity?
3. Inclusive education in practice
Part One

What is inclusive education?
Activity 1

- How would you define ‘inclusive education’?
Inclusive education: a definition

- Teaching that engages students in learning which is meaningful, relevant and accessible to all.
- Individual difference is a source of diversity, which can enrich the lives and learning of other people.
‘There’s an APP for that’

Access  Participation  Progress
Common conditions

- Dyscalculia
- Dyspraxia
- Dyslexia
- Attention Deficit Hyperactivity Disorder (ADHD)
- Developmental Language Disorder (DLD)
- Autism Spectrum Condition (ASC)
‘Balls in buckets’

Number of balls = severity of challenge (some balls are easier to see than others!)

Threshold for diagnosis

The system works well for people with one area of challenge…

Dyslexia! Here are some reading strategies.

…but works less well for those with multiple or less identified needs, especially if none reach the threshold for diagnosis.

Your behaviour is disrupting the class – perhaps removing you is the answer?

Amanda Kirby (2018)
Commonly observable presentations

- Behaviour
- Concentration and attention
- Communication and language
- Executive functions
- Motor
- Mental health
- Literacy
- Numeracy
Activity 2: ‘Balls in buckets’ – from the few to the many

- In your current teaching or school experience, how many students have come across who may have an 'unidentified' support need, but don't meet the threshold to access support?

- You may like to consider students who:
  - Face barriers to their learning
  - Demonstrate tendencies that you might associate with one or more specific learning difficulties
  - Experience challenges with their mental health
  - Are high achievers but struggle with perfectionism

- Make a note of this number and be prepared to share this with the group

- How many students have we identified between us?
- What are your initial thoughts on this collective number?
Part Two

What is neurodiversity? (An alternative approach)
Terminology

Neurodiversity
• The different ways that we all think, move, hear, see, understand, process information and communicate with each other. We are all neurodiverse.

Neurotypical
• The group that thinks, moves, hears, sees, understands and processes information which meets social or cultural norms.

Neurodivergent
• Having or related to a type of brain that is often considered as different from a socially constructed or defined norm.

Neurodiversity and Education, Ellis, Kirby & Osborne (2023)
The importance of neurodiversity

“Neurodiversity may be every bit as crucial for the human race as biodiversity is for life in general.

“Who can say what form of wiring will prove best at any given moment?”

Harvey Blume (The Atlantic, 1998)
It’s all the same brain

More recently evolved areas

“Primitive” areas

Front of head
Reposition theories of learning:
‘You can’t Bloom before you can Maslow’

Performance = potential $\textit{minus}$ interference

Tim Gallwey (1972)
Activity 3: What interferes with your own 'performance'?

- Reflect on the types of 'interference' you* have experienced which have potentially undermined or impacted on your ability to thrive.

- What ‘interferences’ (such as illness or additional pressures):
  (a) Do you* currently experience?
  (b) Have you* had to manage in the past?

- Reflect on:
  (a) The extent to which these ‘interferences’ have impacted on different areas of your* life such as your* own learning, work, family or community involvement.
  (b) How the interferences and the impact have changed over time.

*If you feel more comfortable doing so, think instead about someone you know.
Inclusive education in practice

Part Three
Levels of learning and teaching

- Personalised interventions
- Differentiated activities and testing; additional support
- First-class teaching strategies (e.g. active learning, assessment for learning)
‘Patterns beyond labels’

Where learning takes place – e.g. access to a building or resource

What students are asked to learn and the clarity of instructions we give them

Physical

Cultural

Cognitive

How students learn and how they demonstrate their learning

Eaton & Osborne (2019)
Activity 4: Patterns beyond labels

1. Using the lenses template and the pack of barriers to learning provided:
   a) Identify which lens/lenses the barriers or interferences fit(s) under
   b) Discuss whether each barrier
      ▶ Sits neatly under a particular lens, or
      ▶ Relates to more than one lens

2. Can you think of other types of barrier or interference your students have commonly experienced?
   ▶ Make a note of these on the blank cards provided in the pack

3. As a team, agree where each 'barrier' should be placed on the lenses template and identify a spokesperson to feed this back to the whole group
‘The 3 (or 4) Rs’

Illustration by Rebecca Hurry in
*Neurodiversity and Education*, Ellis, Kirby & Osborne (2023)
Activity 5: The 3Rs

- Using one of the barriers from the last activity (either one provided or one that your group identified), **consider how you can apply the 3 Rs (Remove, Reduce and Rethink)** to help students

- Note how you could remove, reduce or rethink the barrier you have chosen

- Consider:
  - **Interventions** that you could make as a teacher at the **design** or **delivery** stage
  - **Strategies** your students might be able to draw upon to support their own learning in the classroom and beyond
Quick wins for teachers

- Make links between learning
- Manage the environment
- Offer choice
- Break down information and tasks
- Provide clear and explicit instructions
- Back up verbal instructions with written ones
- Balance interaction between listening and doing
- Use visual prompts
Quick wins for schools

- Draw on your knowledge and expertise of your students and your local context
- Start small with strategies that are easily adaptable; take incremental but sustainable steps
- Prioritise professional development in inclusive teaching and learning
- Implement whole-school policies that address inclusive education so that colleagues feel supported with a joined-up approach
- Evaluate impact so that effective interventions can be scaled up and reproduced in different contexts
Neurodiverse teachers

• Recruiting
• Onboarding
• Supporting
• Adjusting
  • Classroom
  • Staffroom
  • Staff meetings
  • Preparing lessons
  • Assessing and reporting
• Role-modelling
Activity 6

What could you do in your own school (or place of work) to support colleagues who are neurodivergent?
In summary
Neurodiversity and education: Making teaching, learning and assessment more inclusive

PERFORMANCE = POTENTIAL minus INTERFERENCE

Access  Participation  Progress

Physical  Cultural  Cognitive
THE CURB-CUT EFFECT

WHEN WE DESIGN FOR DISABILITIES

... WE MAKE THINGS BETTER FOR EVERYONE

Sketchplanations
Resources and next steps

www.cambridgeinternational.org/education-briefs

Podcasts

1. Defining neurodiversity
2. Embracing neurodiversity

https://brighterthinkingpod.libsyn.com/
Chapter 14: **Assessment for All**

*In this chapter, you will:*

- Learn about the challenges that some students may face when taking assessments
- Learn what assessment organisations do to enable students to access more traditional forms of assessment
- Explore some alternative assessment methodologies, such as designing assessments with inclusivity in mind.

Contents:
1. What is neurodiversity?
2. Framing neurodiversity – past and present
3. The 3Ms – Missed, misdiagnosed and misunderstood
4. Mental health and wellbeing
5. Reframing
6. Universal design
7. The inclusive classroom
8. Teaching and learning
9. Assessing neurodiverse learners
10. Neurodiversity in the education workplace
Thank you
Your feedback

- Please let us know your views on this session
- Scan the QR code and share your feedback with us