A Randomized Control Trial of shifting perceptions to enhance inclusive school education of students with disability through reasonable adjustments

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Inclusion and the social model of disability

• The right to full inclusion of students with disability into mainstream schools is legislated in Australia, with strong policy drivers at both national and state levels (Iacono, et al., 2018)

• The social model of disability sees ‘disability’ as a result of the interaction between people living with impairments and an environment filled with physical, attitudinal, communication and social barriers.

• Inclusion occurs when adjustments are made to mainstream processes and structures that accommodate the needs that arise from a person’s impairment.
Reasonable Adjustments

We draw on the definition of reasonable adjustments used in the Disability Standards for Education (2005). Adjustment is “measure or action” made at the student, classroom or school level that will assist a student with disability to:

- Apply for admission to enrolment
- Participate in the courses/programs in which they are enrolled
- Use school services and facilities on the same basis as a student without disability
- Be included in education on the same basis as peers without a disability (Dickson, 2019)
Difficulties in Designing Reasonable Adjustments

• Teachers and allied health professionals may lack understanding of reasonable adjustments (McInstry et al., in preparation)

• Overreliance on access to and reliance on teacher assistants (Dickson, 2019; Iacono et al., 2019)

• Allied health therapy may contribute to exclusion of students with disability
  - lack of communication with educators, activities not integrated
  - singling out and removal of students during activities (Dickson, 2019; Iacono et al., 2019)
Currently Focus in Australia

- Determining the number of students with disability who require reasonable adjustments.
- Increasing the skill of professionals in making judgements about the level of adjustments required by students.
- Little research on designing the reasonable adjustments for students to ensure their inclusion in school curriculum and social activities.
Will training that embeds the Social Model of Disability and provides direct instruction result in better designed reasonable adjustments by stakeholders in the education of students with disability?

Building Healthy Communities RFA grant – 18mth Proof-of-concept project

Participants who complete training through our intervention (intervention group) will design reasonable adjustments that are more aligned with the Social Model of Disability than participants who do not complete the intervention (control group)

* be maintained at 2-month follow-up
* generalise to a new scenario for the intervention group
Participants

Recruitment largely through regional and rural Victoria through direct contact with Principals and through word-of-mouth (resulting in some metropolitan participants)

8 Parents
of children with disability attending mainstream primary schools

8 Teachers
or teaching support staff in mainstream primary schools

8 Allied Health
professionals employed by mainstream schools or working with students with disability in mainstream schools

Randomised to either an intervention or control group (blocked and balanced)
Dependent Variable

2 Scenarios of students with disability: Sienna and Parri

General descriptive information about the student with indications of key learning challenges (specific disability not identified)

Description of a class lesson (based on Australian Curriculum)

Examples of goals from the student’s Individual Learning Plan (ILP)

Interviews with Research Assistants

Elicit 3 reasonable adjustments for each scenario to enable the student to be included in the lesson
Research design

1. “Pre” - Intervention (online education) and Control (no material)
   - 1 week
   - Email instructions and scenarios: Sienna & Parri
   - Phone interview

2. “Post” - 4 weeks
   - Email instructions and scenarios: Sienna & Parri
   - Phone interview

3. “Follow-up” - 8 weeks
   - Email instructions and scenarios: Sienna, Parri & Elang
   - Phone interview

The participant was interviewed by the same research assistant over the 3 time points to control for interview style.
Designing reasonable adjustments to support school inclusion for children with a disability

Modules

Welcome

Welcome to the e-Learning package that will help you design and apply reasonable adjustments to support mainstream school inclusion. Your role may be as a parent, educator, education support staff member, or allied health professional. We expect that those of you completing this package will differ in your skills and confidence in designing and applying reasonable adjustments. The best supports for students with disability come from people like yourselves in various roles sharing expertise and experience in supporting students to access the curriculum and develop strong social ties with other students. We hope that learning more about reasonable adjustments will help ensure equal access to school education for students, regardless of the type or extent of their disabilities.
MODULE 2

INTRODUCTION
In this module, you will be introduced to a student, Sally. You will learn about her interests and challenges at school, her support team, and Individual Learning Plan. Reasonable adjustments were developed by Sally's teacher, Jason, as part of his planning for a class activity within a curriculum learning area. These adjustments are presented in this module and are then considered in light of the principles that were described in the Key Concepts module.

SALLY IN SCHOOL
TEAM
INDIVIDUAL LEARNING PLAN
A CURRICULUM LEARNING ACTIVITY
REASONABLE ADJUSTMENTS & EVALUATION

MODULE 3

INTRODUCTION
In this module, you will be introduced to a student, Jamal. You will learn about his interests, strengths and challenges at school and his Individual Learning Plan and how it was developed. In this module, you are asked to consider a number of reasonable adjustments suggested for Jamal in relation to a curriculum learning area activity, and decide which would best support inclusion based on principles from the previous modules.

JAMAL IN SCHOOL
TEAM
INDIVIDUAL LEARNING PLAN
A CURRICULUM LEARNING ACTIVITY
REASONABLE ADJUSTMENTS & EVALUATION
REASONABLE ADJUSTMENTS THAT JASON MAY HAVE DESIGNED

ADJUSTMENT 1

Marlena will work with Sally at a desk in the corner of the room and re-read her the story, then she will provide her with crayons and paper, and choose a section of the book that she thinks Sally will be able to depict in her drawing. She will guide Sally in the activity of drawing, and when the students come together will help Sally explain what she has drawn.
REASONABLE ADJUSTMENTS THAT JASON MAY HAVE DESIGNED

ADJUSTMENT 1

It is possible that this activity will help Sally to understand the story, but re-reading may not be sufficient and the task may be focused on her perceived needs rather than strengths, and there is the danger that Marlena will do the explanation for Sally. As a result, the potential for learning as well as the authenticity is questionable. Sally has no agency, as there are no opportunities for her to make a choice. It is not inclusive as Sally is segregated from her peers and is being singled out as the person with an adult close by who will explain her story.

Is it a good reasonable adjustment?
**REASONABLE ADJUSTMENTS THAT MAY BE DESIGNED**
(Select which adjustment you think is best for each. Click either A, B or C)

**ADJUSTMENT 1**

<table>
<thead>
<tr>
<th>A. Gen, the teacher assistant, will individually describe to Jamal what his peers will be doing whilst he sits to the side of the playground and awaits their return from a separate planning activity.</th>
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<tbody>
<tr>
<td>B. Carly (teacher) will ensure Jamal is teamed with two of his classroom peers who she has previously supported to learn how to give Jamal opportunities to turn-take in a conversation by watching for and responding to his smiles and sounds. Carly asks the group to prepare by discussing the goal of the playground collection activity as part of the larger art activity, and for the peers to involve and respond to Jamal when they are gathering the artefacts in the playground.</td>
</tr>
<tr>
<td>C. Jamal is seated next to two peers, who tell him about some samples they have found and place them in his hands, as they describe the textures.</td>
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Check your answer  
Check your answer  
Check your answer
**REASONABLE ADJUSTMENTS THAT MAY BE DESIGNED**
(Select which adjustment you think is best for each. Click either A, B or C)

**ADJUSTMENT 1**

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<tr>
<td><strong>A.</strong> Gen, the teacher assistant, will individually describe to Jamal what his peers will be doing whilst he sits to the side of the playground and awaits their return from a separate planning activity.</td>
<td><strong>B.</strong> The best adjustment as this is the most inclusive scenario. It adds agency to the situation with peer interactions that value Jamal’s contributions and allow his active engagement, thereby improving his chance to learn. Authentic learning is maximised here, although it is not clear how Jamal’s strengths in responding to sensory information is being used.</td>
<td><strong>C.</strong> Jamal is seated next to two peers, who tell him about some samples they have found and place them in his hands, as they describe the textures.</td>
</tr>
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Check your answer ▶ Check your answer ▼ Check your answer ▶
Data extraction and rating of reasonable adjustments

- Research Assistants make a written record of each reasonable adjustment during the interview.
- Another researcher who was not involved in data collection extracts the reasonable adjustments for transfer to a Qualtrics platform.
- An external rater scores the reasonable adjustments using the Reasonable Adjustments for Inclusive Education (RAIE) rating scale which includes a detailed rating guide.
- A researcher not involved in any other steps of the project completes ratings for ~30% of data for rating reliability.
For each reasonable adjustment – Reasonable Adjustments for Inclusive Education scale

Each dimension rated on scale of 1 (low) to 5 (high)

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<tr>
<th>Dimension</th>
<th>Description</th>
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<tr>
<td>Authenticity</td>
<td>The extent to which the adjustment is considered a genuine learning activity, rather than to function simply to occupy the student while others in the class are engaged in learning.</td>
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<td>Real Learning</td>
<td>The extent to which the RA will address the student’s specific need(s) as identified in the scenario so that the opportunity for the student to learn is enhanced.</td>
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<td>Agency</td>
<td>The extent to which a student is actively given a choice or control in the activity.</td>
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<td>Strengths-based</td>
<td>The extent to which the reasonable adjustment provides opportunities to incorporate a student’s skill strengths and interests, as reported in the scenario, to further build and extend their learning and development.</td>
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<tr>
<td>Inclusion</td>
<td>The extent to which the RA and the activities described include or engage the student with peers in the same activities - even if additional supports are provided, or if the level or specific type of learning outcome differs.</td>
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Example of suggested reasonable adjustment (not taken from a RCT participant)

Scenario activity - Parri is fascinated by insects and will often become totally focused on them, often bringing them into the classroom. The class Mathematics lesson is about finding landmarks around the school and identifying their grid references on a map of the school

Suggested Reasonable Adjustment

Change the maths lesson task to suit Parri and perhaps other kids with a disinterest in the task, by saying to Parri, “where is the best spot to find grasshoppers” and he looks at that on the grid, while the other children are looking for specific landmarks that could be near where Parri is looking, e.g., he might look for the sandpit that has the earwigs in it
Protocol

• 24 page protocol document – serves as “the guide” to the conduct of research activities
• Consider the finer details of research activities
• Ensures consistency and accountability
• Ensuring blinding at key points

Participant flow

• 48 column document tracking participant movement
• Traffic light system to assist with visual monitoring of engagement
• Central for research assistant communications and project management
• Project management – reduce confounding variables (eg. delay to time intervals)

<table>
<thead>
<tr>
<th>TIME 1 DATA COLLECTION</th>
<th>These 2 shaded rows: Nadia / Jo only</th>
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<tbody>
<tr>
<td>Time 1 scenario emailed (Y/N)</td>
<td>Time 1 scenario email date</td>
</tr>
<tr>
<td>Time 1 Phone call date</td>
<td>Audio and recording tasting</td>
</tr>
<tr>
<td>Interview conducted (Y/N)</td>
<td>Interview conducted by who?</td>
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<tr>
<td>Interview notes/audio saved to P drive (Y/N)</td>
<td>Sent to TI for RA extraction (Y/N) and date</td>
</tr>
<tr>
<td>Treatment condition email sent (Y/N)</td>
<td>Treatment condition email date</td>
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<tr>
<td>Notification by participant that treatment condition email received (Y/N)</td>
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Withdraw

On hold

Active
Points of blinding – concealment of information

Group allocation (intervention or control group participant)
Time point of data collection (pre, post, follow-up)

<table>
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<tr>
<th>No blinding</th>
<th>Full Blinding</th>
<th>Partial blinding (not blind to time point)</th>
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<td>• Project management</td>
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<td>• Project consult</td>
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<td>• Reduce risk of reveal by minimising researchers not blinded</td>
<td>• Data extraction</td>
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Data coded to prevent revealing
Current status

- N=31 – recruited more than target to manage potential drop outs/withdrawals (n=3)
- ~600 reasonable adjustments have been generated and rated
- Follow-up interviews with n=3 regarding use of intervention
- Data analysis underway (group allocation remains protected until completed)

Outcomes

- Generation of online resource for professional development
  - Particularly important for rural education workforce
- Get sense of whether Teachers, Parents and Allied Health professionals are on the same page in regards to designing reasonable adjustments
- Control participants will be provided with intervention link at end of study
Thank You

References


Images throughout presentation: from online intervention site and https://www.smiletemplates.com/free/powerpoint-infographics/0.html