

The use of multi-sensory environments in schools enrolling students with severe disabilities in NSW

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What is an MSE?

- Room or space containing equipment designed to provide sensory stimulation.

Claims

- Provide sensory stimulation
- Relaxes and calms those with challenging behaviour
- Motivational effects
- “Promote” motor development, cognitive development, language and social interaction
- Promote control and autonomy – choice
- Build trust and relationships
- Enhance self-esteem

- What does the research say?

Reviews

- Hogg et al. (2001) 19 studies, 4 with children
 - Little evidence of generalisation of effects
 - Poor quality research
- Lancioni, Cuvo & O'Reilly, (2002) 21 studies, 5 with children
 - Evidence for positive effects is “rather preliminary and circumscribed”

Reviews (Lai, 2003)

- Lai (2003) 4 studies with children
“Interpret with caution”
 - Botts et al. (2008) 5 quality studies, 2 included children
“an unproven intervention”
- Lotan & Gold (2009)
“prevent a confirmation of this method as a valid therapeutic intervention at this time”

MUSEC MSE Research

- Prior work and personal experience indicated that MSEs are being used in many SSPs
- The overarching research questions were
 - Why are schools installing and using MSEs?
 - How are they being used?

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- Two parts to our study
- Interviews
 - with people in schools to uncover the background to MSE installation and use
 - with teachers to establish how MSEs are used and why
- Survey of all NSW SSPs

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- Rationales from schools and teachers
- Exposure to an MSE will have positive effects
- Sensory stimulation is beneficial for students with high support needs (sensory curriculum)
- Sensory stimulation relaxes students who are anxious

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- General acceptance of a range of other claims
 - Eg reduce distraction, choice and control

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- Planning, programming and specific goals
- Agree that use should be planned
- Little information about how this was done
 - only one teacher was clear about this
- No specific planning for single sessions was evident

MUSEC MSE Research - Teaching

- Only one teacher reported specific teaching strategies and a range of skills taught
- One reported switch use
- One reported visual tracking
- Otherwise just described equipment use

MUSEC MSE Research - outcomes

- Apart from one teacher, only generic outcomes were described

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- Adoption staff-driven
- Little awareness of the literature (even pro-MSE books)
- Uncritical and accepting of supplier claims
- Little or no advice from NSW DET
- Seen as a teaching resource in principle, not just leisure

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- Teachers positive about purported effects, but these seen as emerging from using the MSE and the equipment, not instruction
- Lack of evidence of programming, teaching and monitoring
(apart from one teacher)

MSE Research - survey

- Sent to all 50 SSPs enrolling students with severe disabilities in NSW
- 36 responses – 72%
- 19 had an MSE

MSE Research - survey

- Reasons for establishing MSE
 - Benefits as described by other teachers or schools (73.7%)
 - Philosophical appeal of a multisensory approach (73.7%)
 - Advice from therapists (63.2%)
 - Advice from equipment suppliers (36.8%)
 - Research evidence about efficacy (31.6%)

MSE Research - survey

- Sources of Information
 - Other schools that had MSEs (89.5%)
 - Teachers at this school (78.9%)
 - Suppliers of equipment for MSEs (68.4%)
 - Occupational therapists (63.2%)

 - Information from academic journals by 21.1%
 - No use of information from universities

MSE Research - survey

Purpose

- Provide an enjoyable experience (94.7%)
- Relax and calm students who are anxious (94.7%)
- As a passive leisure activity (89.5%)
- Teach/practise communication skills (89.5%)
- Provide students with a range of sensory experiences (89.5%)
- Teach/practise cause/effect relationships (84.2%)
- Relax and calm students who are exhibiting challenging behaviour (78.9%)

MSE Research - survey

Benefits

- Sensory stimulation (94.7%)
- Opportunity to relax – a break from the demands of others (89.5%)
- Reduction in anxiety after using MSE (84.2%)
- Improving attention to tasks after a session (36.8%)
- Reduction of self-stimulatory behaviour after using an MSE (31.6%)

MSE Research

Issues

- Who should advise schools?
- Role of suppliers?
- What is the role of research evidence when schools make decisions?
- Enjoyable experience? Passive leisure?
- Lack of planning, teaching?
- Role of education depts in setting policies and guidelines?