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Creating a knowledge base for educational action

Impact of school team support on the communication of students using speech generating devices

Julie McMillan
Flinders University

Parimala Raghavendra & Catherine Olsson, Novita Children's Services

Flinders Centre for Analysis of Educational Futures

<http://caef.flinders.edu.au>

Presentation Outline

- Background
- Design
- Participants
- Conditions & Intervention
- Results
- Implications & future

Background and Significance

- Why communication?
 - Social inclusion
 - Community access and participation
 - Impact on quality of life
- Why SGDs?
 - SGDs provide access to communication
 - Lack of service provider knowledge, skill and support on assistive technology implementation is a major contributing factor to **underutilization and abandonment**; including speech generating devices (SGDs)
- How do we best support school personnel to improve communication outcomes for students?
 - Research suggests onsite assistance is more likely to lead to technology integration into classroom activities.
- How do we know what training and support works?
 - Measure the effect or impact on student communication while looking at fidelity of training procedures

Design

- Single-case (three cases or teams)
- Multiple baseline across
 - Teams
 - Students
 - Data collection = 4 terms

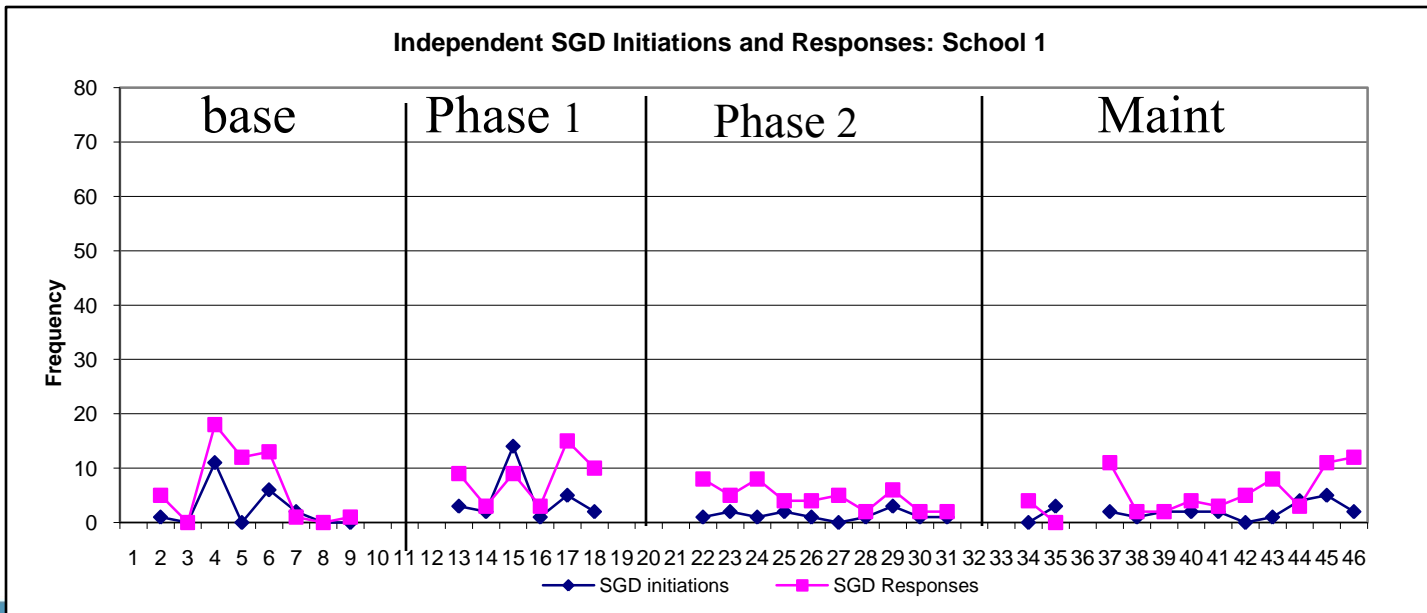
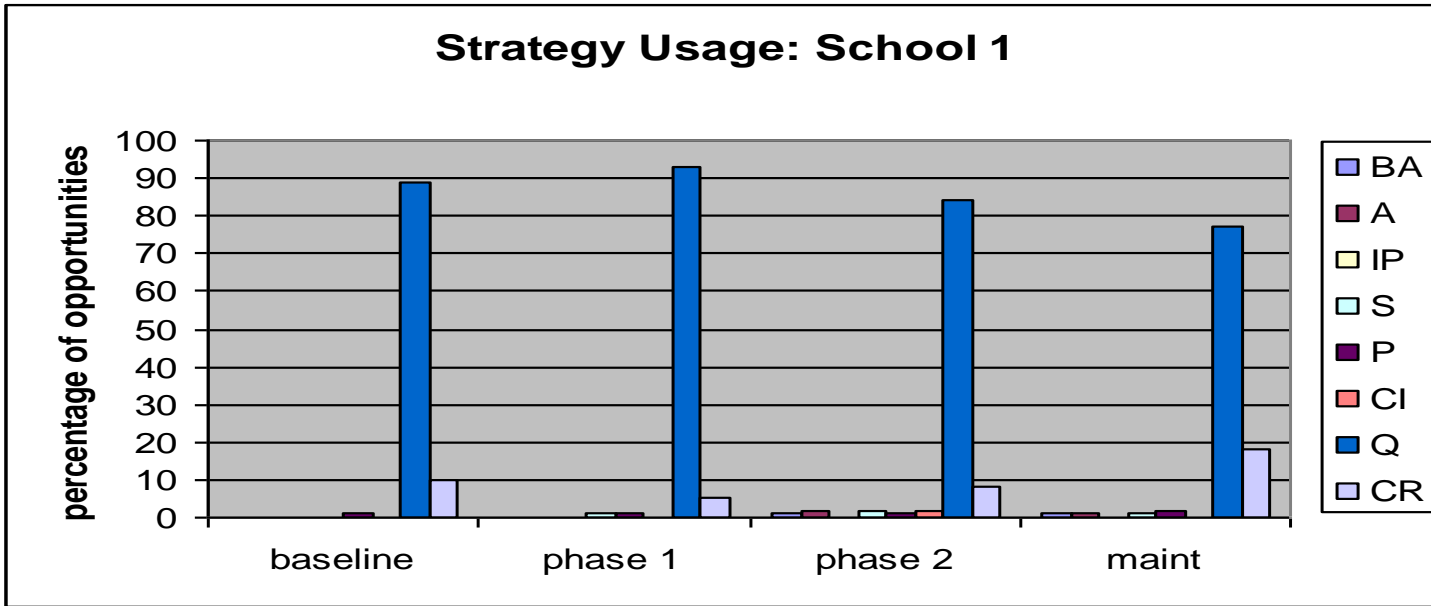
Participants

- 3 primary schools: Special school, special class, general education classroom 5th grade.
- 3 school teams: Teachers, instructional assistants, SLPs, parents.
- 3 students with CCN: 8-11 years of age, cerebral palsy, autism and intellectual disability, prescribed with SGDs.

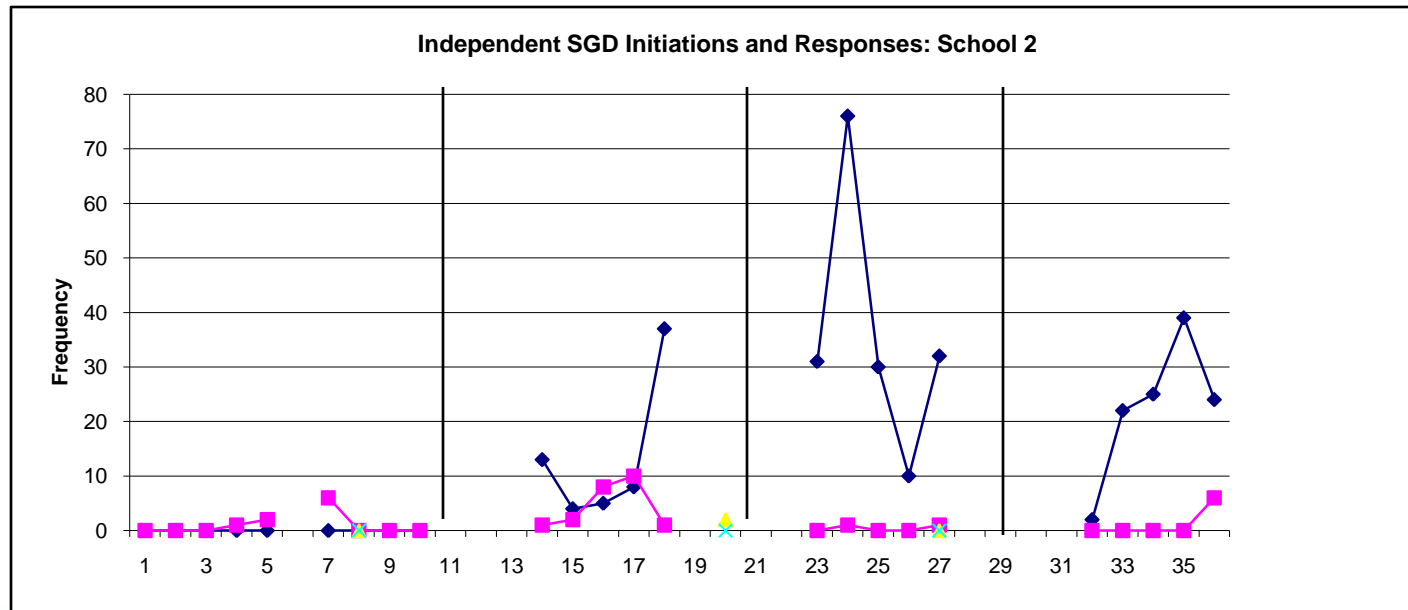
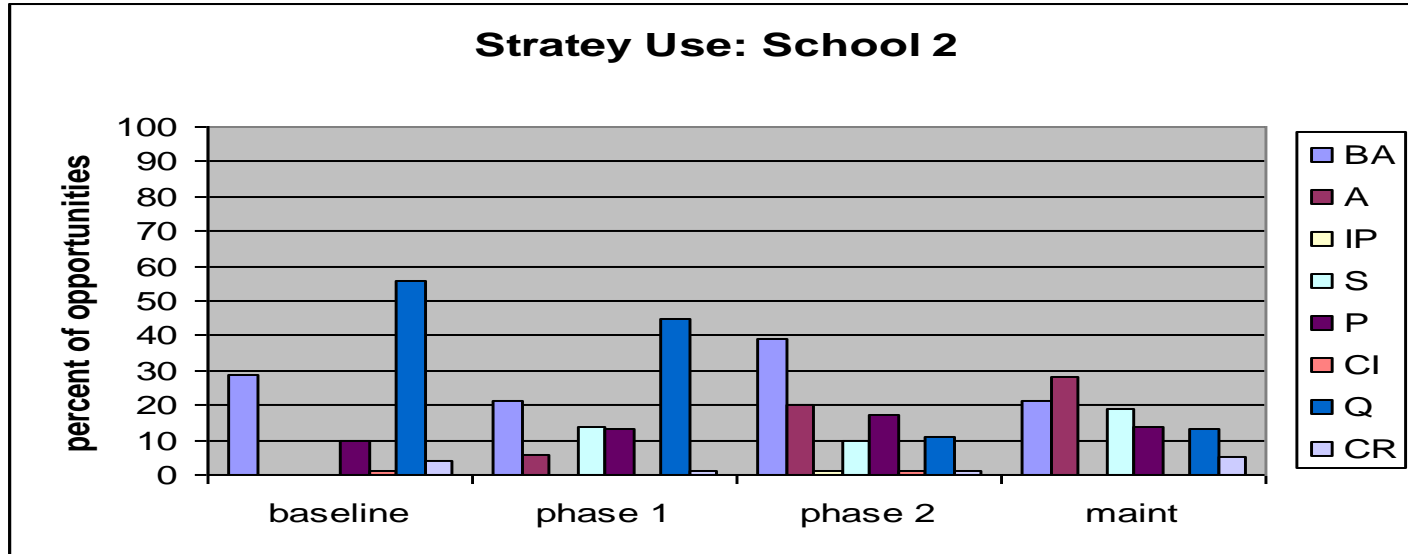
Four Conditions

- Baseline: operate as normal
- Phase 1
 - Device training (varied between 1-6 hours).
 - Team meeting (1 – 1 ½ hours)
 - Strategies to create communication opportunities using SGDs (in class sessions, 15 – 30 minutes)
 - Follow-up session from SLP (30 min)
- Phase 2
 - Team meeting
 - Time delay instructional procedure (in class sessions, 30 minutes)
 - Follow-up session from SLP (30 min)
- Maintenance
 - Final team meeting during maintenance phase

Results: Team & student 1

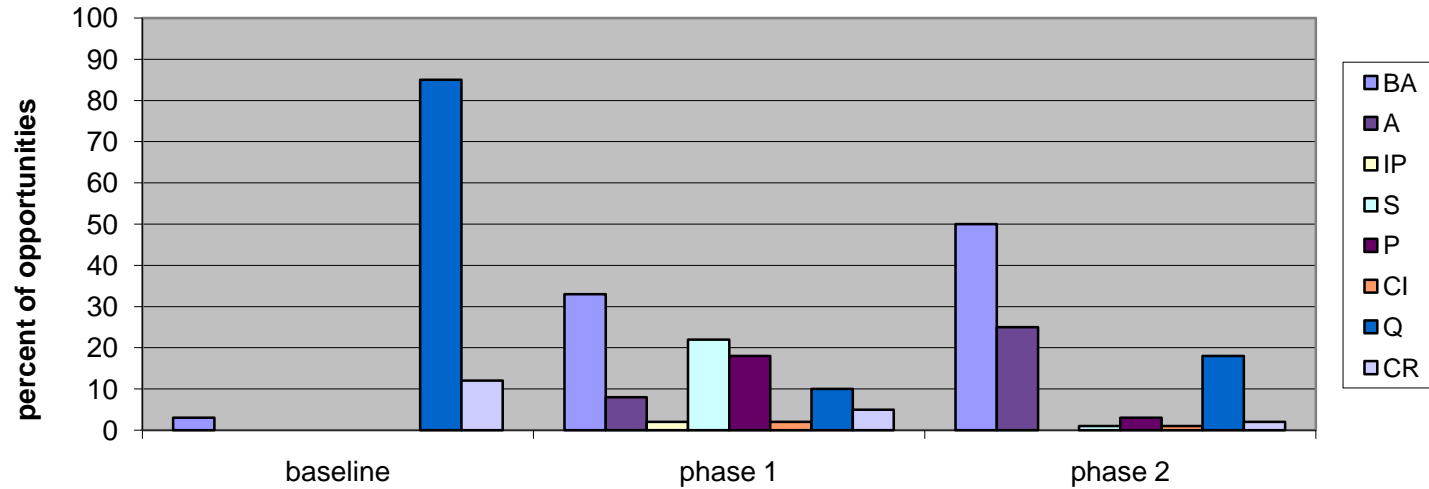


Results: Team and student 2

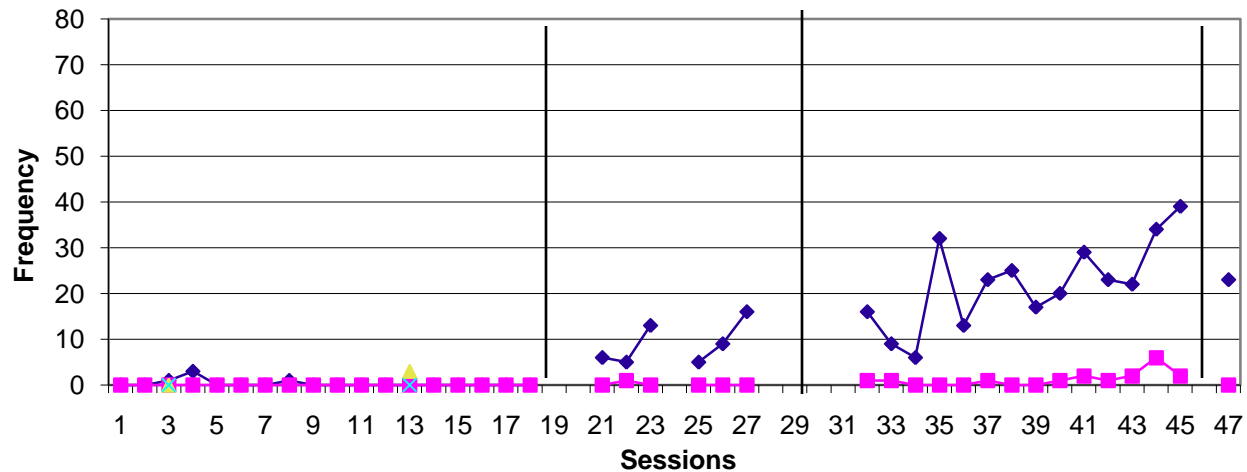


Results: Team and Student 3

Strategy Use: School 3



Independent SGD Initiations and Responses: School 3



Summary of Results

- limited change for team 1- high level of questioning and limited strategy use across conditions
- No change for student 1 across conditions
- Proportion of questioning decreased for teams 2 and 3
- Proportion of different types of strategies used increased for teams 2 and 3 in phases 1 and 2
- Students 2 and 3 increased SGD initiations substantially during phase 1(strategy) and further in phase 2 (instruction)

Implications: Practice

To improve communication initiations of students using SGDs:

1. Sufficient opportunities for communication in the classroom must be created
2. The types of opportunities are important; strategies should be multiple and varied
3. Systematic instruction is important for some learners with complex communication needs
4. School personnel require onsite, in classroom opportunities for learning, practise and feedback

Implications: Service delivery

1. Type of PD & service provided is critical for impact on learning outcomes; requires careful consideration and planning. *FURTHER RESEARCH NEEDED*
2. Ongoing training and support in classrooms and schools has the most potential to impact student communication outcomes
3. Outcomes should inform practice and service delivery; important for service providers to measure student or client communication outcomes
4. A school team approach to learning and problem solving promotes collaboration, sharing of tasks, follow-up and responsibility for action across service agencies/disciplines
5. Teams need planned TIME to communicate and collaborate



Julie McMillan

Flinders University

School of Education

8201 5748

Julie.mcmillan@flinders.edu.au

<http://caef.flinders.edu.au/resgroups/RISE/index.html>