

Children with speech language and communication needs in mainstream education- challenges and opportunities

Better Communication Research Programme



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Better Communication Research Programme

Plan of presentation

- What was the Better Communication Research programme
- Importance of quality first oral language classrooms
 - Tool for communication supporting environments
- English national data sets
- Differences between language impairment and ASD – a school based sample
- Evidence based practice – the what works data base
- Implications for therapists in Denmark?

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BCRP – Better Communication Research Programme

BCRP- government commissioned programme of research

Focus - Speech language and communication needs (SLCN)

10 main projects with associated smaller projects including analyses of national datasets, efficacy of interventions, pupil needs, parent views, SLT & EP practice

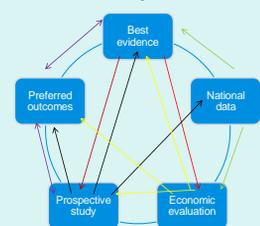
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BCRP – Better communication research programme

Outputs

- Overview and recommendations
- 4 Thematic reports
- 19 Technical reports
- Peer reviewed published papers
- RALLI YouTube clips

Interconnectivity



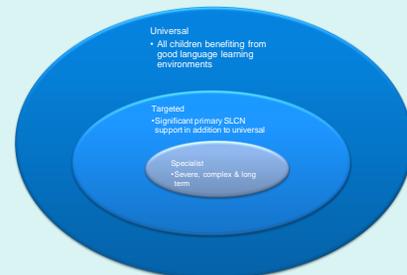
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BCRP studies capturing language support and language learning needs?

Model of support

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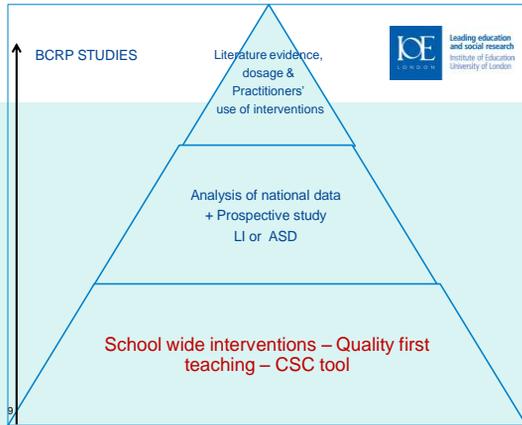
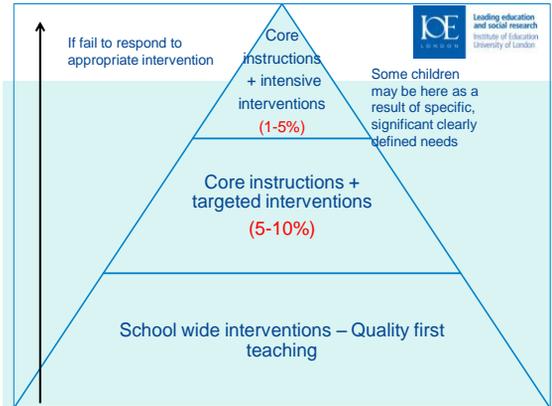
Supporting language learning needs Not a hierarchical system



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HOW DID WE CONCEPTUALISE LEVELS AND INCIDENCE OF NEED?

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Rationale for focussing on school settings

- Increase in children identified with SLCN
 - Impact on services & re-evaluation of working patterns
 - Move towards increasing the “communication friendliness” of the classroom to provide quality first language learning environments.
 - Reduce numbers of children identified with SLCN
 - » Through disadvantage, delay & English language learning needs
- Environments should enhance the speaking and listening skills of all children.
- Awareness resulted
 - » in the introduction of modifications to training with the expectation that this will impact on classrooms and pedagogical techniques
- Lack of objective measure of changes in staff behaviour and classroom environment.
- Need a tool that staff can use to profile their activities and interactions with children

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Communication Supporting Classrooms -Objectives

- Examine the evidence base underpinning elements thought to support communication
 - What evidence is there that certain processes/strategies/modifications are effective?
- Identify key elements with relevant evidence base and develop these into a Communication Supporting Classrooms (CSC) framework
- Produce an observational tool designed to monitor classroom environments and learning spaces that can be used by school staff
- Consider the possibility of developing such a framework into a training schedule

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Communication Supporting Environments

- **an environment in which children are exposed deliberately and recurrently to**
 - high-quality verbal input among peers and adults and
 - in which adult-child verbal interactions are characterised by high levels of adult responsiveness (Justice, 2004)
 - Captured by 5 key elements
 1. Exposure
 2. Deliberateness
 3. Recurrence
 4. High-quality input
 5. Adult responsiveness

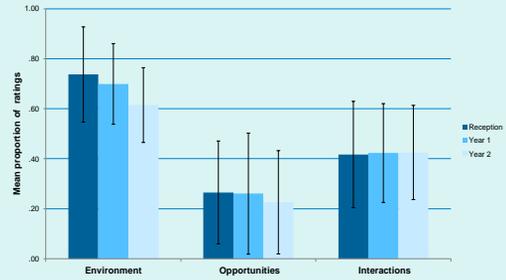
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Research evidence translated to a tool to be used in schools

- Captured
 - **Language learning environment ...**
 - » Elements identified as necessary prerequisites to allow teaching and learning e.g. *Labelling in classrooms, quiet corners*
 - **Language learning opportunities ...**
 - The *what* of learning e.g. *Small group work*
 - **Language learning interactions ...**
 - The *how* of learning e.g. *the ways in which staff talk with children*

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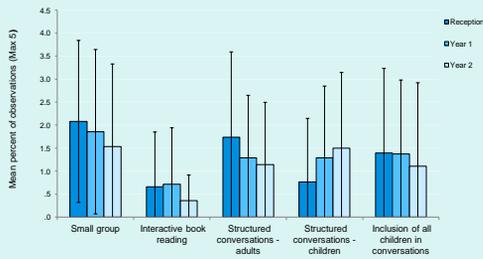
What were we seeing? 102 classrooms



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What weren't we seeing?

Language learning opportunities

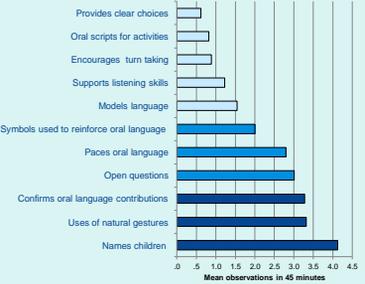


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What weren't we seeing?

Language learning interactions

- 20 evidence based interactions
- Could be recorded a maximum of 5 times in the 45 minute observation

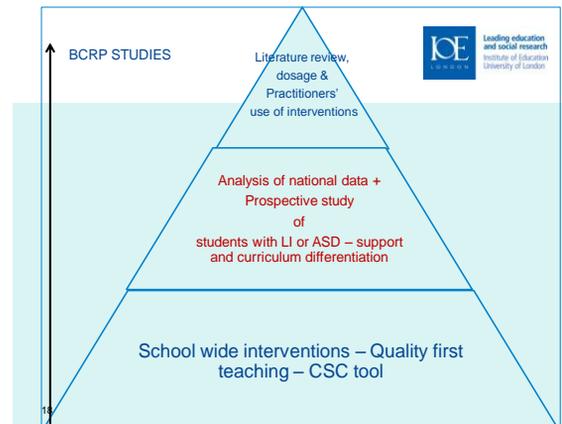


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Communication supporting classroom tool – wider than UK?

1. Would you get similar results in Denmark?
2. What would be the strengths of the tool for the Danish setting?
3. What would be the weaknesses of the tool for the Danish settings?
4. Are there opportunities for developing the tool for use?
5. How would staff in schools respond to the tool?

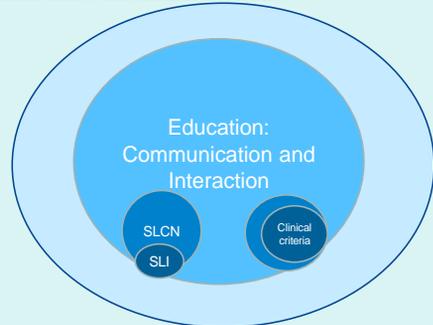
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WHO ARE THE CHILDREN AND YOUNG PEOPLE?

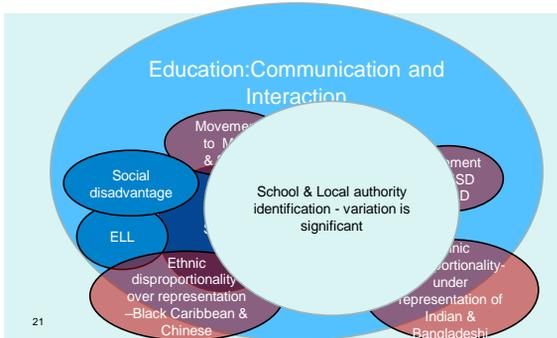
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Speech Language & Communication Needs?



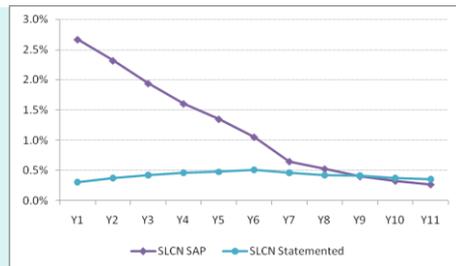
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What is SLCN? Analysis of National data sets

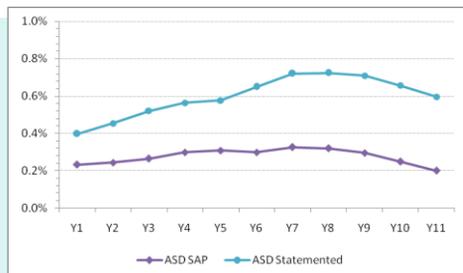


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Prevalence of SLCN by age



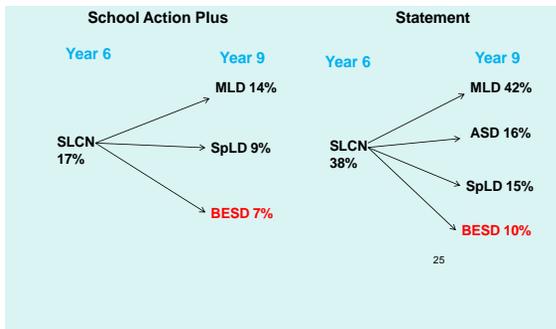
Prevalence of ASD by age



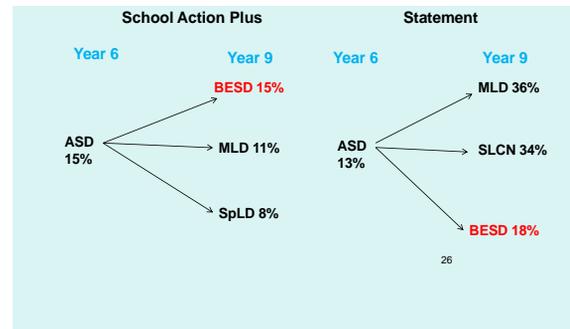
HOW COMMON IS SWITCHING - YEARS 6 TO 9

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Destinations of 'switchers' to other categories: from SLCN between Year 6 and Year 9



Destinations of 'switchers' from ASD to other SEN categories: Year 6 and Year 9



Characteristics of 'switchers'

- For both SLCN and ASD:
 - Low attainment
 - For SLCN only
 - EAL for those switching to School Action or non-SEN, i.e. lower levels of need
 - Challenge in stability of diagnosis, comorbidity and changing need with curricular demands – DSM-5?
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National data sets

- Highlight complexity of identifying SLCN
 - Developmental changes
 - Disconfirm myths about certain types of movement
 - BUT PROBLEMATIC
 - Given variation in assessment and identification as evidenced by differential reporting across types of schools and LAs
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Prospective study designed to help us unpick some of these issues in depth – using objective measures

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Comparison of LI and ASD-

- WHY?
 - Clinically relevant language impairments are often reported in autism spectrum disorders (ASD) and this has given rise to debate about the relationship between ASD and specific language impairment (SLI; Williams, et al., 2008)
 - National data set analyses movement between ASD and SLCN
 - Increase in numbers of pupils with ASD
 - Impacting on resources in schools
 - Use of specialist resource base
 - Referral to special schools designated for pupils with LI
- 30

DESIGN & MEASURES

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Prospective study designed to help us unpick some of these issues in depth – using objective measures

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DESIGN & MEASURES

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Pupils with LI and ASD in mainstream schools and resources?

162 – meeting diagnostic criteria
included a low NV group <85 on non-verbal measure
and assessed at all time points

SES and IDACI – did not differ between cohorts and equivalent/representative of local authority

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Measures

- combination of standardised assessments and instruments.
 - language, cognition, memory, literacy, autism features, quality of life and behaviour
- Attainment from the Department for Education and measures of social disadvantage
- Data from teachers on classroom support, from Special Educational Needs Co-ordinators (SENCOs) on resources provided to pupils, and from parents on their views.
- We also observed the pupils in an English language or literacy lesson.

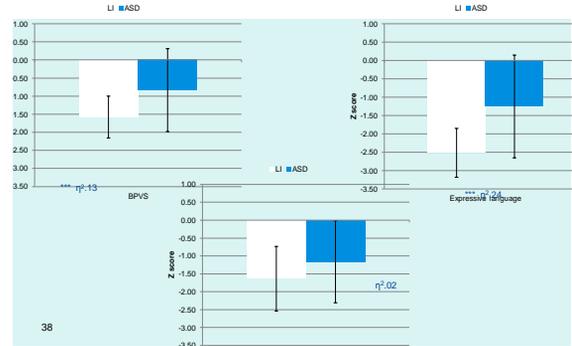
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Summary cohort profiles

- Depressed language and communication skills in both cohorts but substantial variation within cohorts
 - Similar patterns for
 - Academic attainment and cognition
 - Behaviour and social well being
- Substantial overlap between the needs of pupils with LI and ASD
- Some specific differences between these cohorts
- LANGUAGE AS AN EXAMPLE

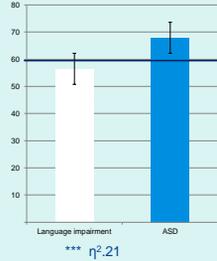
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LANGUAGE MEASURES BY PRIMARY NEED



However overlap on key markers

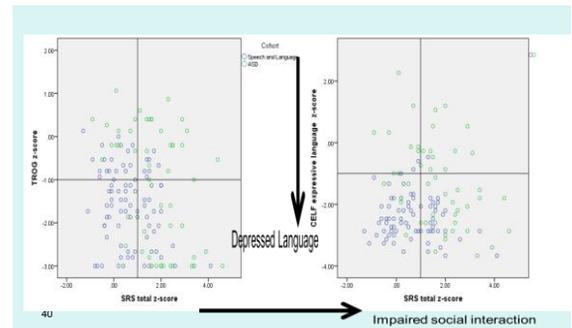
Social Responsiveness SS
high score > 60 indicator of ASD



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Overview

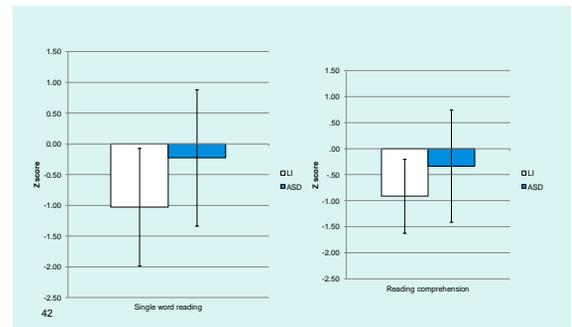
- Pupils with LI, on the whole more depressed on structural measures of language
- Pupils with ASD, on the whole more depressed on semantic measures of language – communication and social interaction
- But
 - Both groups demonstrating difficulties with speech language and communication
 - Significant variation within groups as evidenced by large SDs



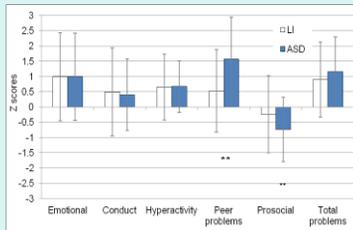
Reading

SIMILAR PATTERNS FOR ACADEMIC PERFORMANCE AND SOCIAL EMOTIONAL INDICATORS

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Health related quality of life – self report

Overall quality of life reported to be significantly poorer for pupils with ASD

- physical well-being
- autonomy.
- parent relations and home life
- social support and peers
- school environment

Summary cohort profiles

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 - Similar patterns for
 - » Academic attainment and cognition
 - » Behaviour and social well being
- Substantial overlap between the needs of pupils with LI and ASD
- Some specific differences between these cohorts – differs across dimensions
- Statistical analysis (regression) examining predictors – highlight **structural** or **semantic** aspects of language - not cohort as key factor

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Impacts for teaching and learning

- So how did the needs of this diverse group of learners with Language and communication needs play out in the classroom context

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Reports of support and approaches to pedagogy

- High levels of support from LSAs
 - Significantly more 1-1 for pupils with ASD
- SLT for a significant minority of pupils
 - **significantly reduced for pupils in secondary schools**
- More SLTs with ASD than LI
- Less direct pupil involvement by SENCOs
- Very little contact with EP or other services.

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Reports of support and approaches to pedagogy

- Little use of specialist programmes
- Teachers reported on 12 different strategies
- Few differences between cohorts
- Two factors *content* and *structure* – *not related to diagnostic group*
- *Content* - reduced language measures
- *Structure* - raised measures of pragmatic difficulty

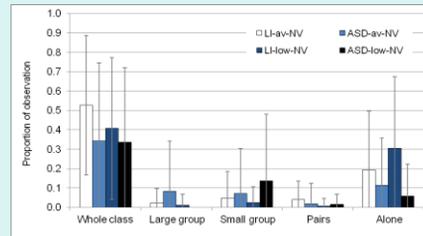
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Classroom observation

- Literacy lessons = 158
- Systematic observations at 2 minute intervals
- Observation schedule captured who pupil was working with, type of activity, on/off task behaviour, features of autism
- Focus on low non-verbal here as it impacts on the pattern
- In less than 50% of observations were
 - Key vocabulary written on the board
 - Lesson objectives written on the board
 - Visual supports – plans, mind maps etc used

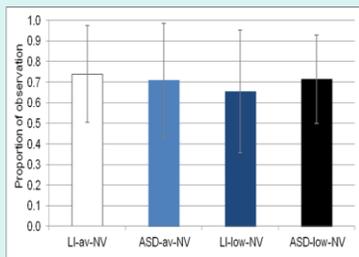
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Mean (\pm SD) proportion of target pupil's working arrangements across the observation period



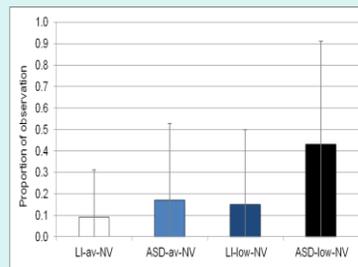
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Were pupils engaged and on task?



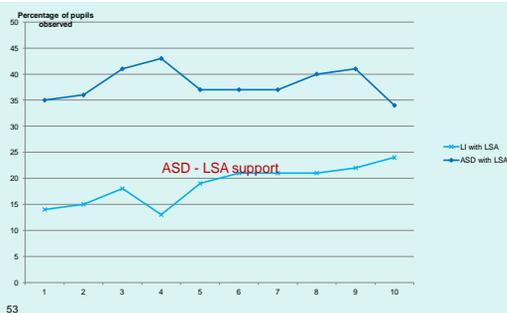
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Was there evidence of task differentiation ?



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Was there evidence of LSA support?



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What we observed in classrooms?

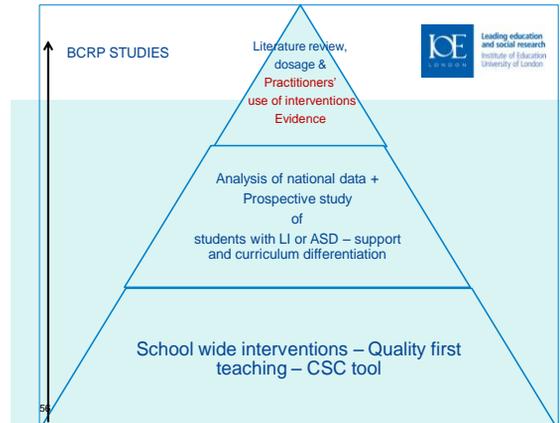
- Task differentiation and off task behaviour varied within and between cohorts.
- Differences in the pupils' scores on language or cognitive assessments did not account for this variation
- Pupils observed to be engaged with the lessons
- Little evidence of disruptive behaviour or pupils being engaged in irrelevant tasks
- Support varied across pupils but this was not related to students level of need on the SEN register (statement/not)
- **However, pupils with ASD were significantly more likely to be working with a LSA or to be working outside the classroom**

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General conclusions

- Variation within populations
- Overlap between populations
- Age features of cohort identification
- Features of the language system more important for performance and behaviour than diagnostic group

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Practitioner experience?

ROLE OF EVIDENCE BASED PRACTICE?

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- 536 complete responses to on-line survey about practice;
- 3 most commonly used interventions then examined in detail;
- 75% of SLTs reported their most common age ranges were within the 2-7 years range;
- Primary SLCN with language as the primary difficulty was the most common area reported (36%). Primary SLCN with speech as the primary area was reported by 19% and Autism Spectrum Disorder (ASD) by 11.4%;
- Mainstream schools were reported most frequently (35%) followed by community clinics (17%) and special schools (12%);
- 38 published programmes and 126 home grown specified. A further 163 'Other published programmes' mentioned without details.

Integrating evidence base and the practitioner experience

Standard interventions in Denmark

How do you make decisions?

Is there an evidence base?

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The *What works for SLCN Resource*;

57 interventions either currently in use or published in the research literature plus 3 "Up and coming";

3 (5%) were found to have the strong level of evidence, 32 (56%) had moderate evidence and 22 (39%) had indicative evidence;

Most interventions focus on work with preschool and primary school children;

30% of the interventions were specifically relevant for improving a child's speech, 39% targeted language, and the remainder were aimed at a combination;

Five were universal interventions, 13 were clearly targeted and 16 specialist.

Practice

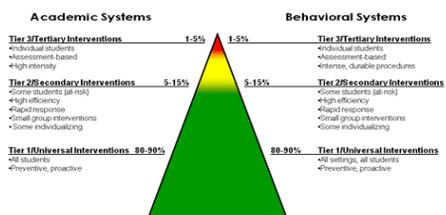
- Growing body of evidence
- Increasing understanding of the role of context
- Some areas clearly mutable, others less so
- Need to raise understanding and application of the use of evidence
- Need more replications of studies with the most positive outcomes
- Need more evaluations of universal interventions
- Need to explore the potential for roll

And the "What works" (WW) for children with speech and language needs and the Communication Trust WW interactive website:-



Implications for practice

- Consider children's needs in the context of response to intervention model (RTI)
- Objective evidence based measures for each level
- Child characteristics may impact on RTI (e.g. phonological awareness see Boyer-Ciure et al, 2011)



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Depends on:

- Effective universal provision
 - BCRP contribution Communication Supporting Classrooms Tool <http://www2.warwick.ac.uk/fac/soc/cedar/better/cscobsvt/>
 - Effective Secondary and tertiary interventions
 - BCRP contribution <https://www.thecomunicationtrust.org.uk/schools/what-works.aspx>
- See ASHA <http://www.asha.org/slp/schools/prof-consult/RTI/>
National center on RTI <http://www.rti4success.org/>

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Thank-you for listening Questions Comments

National data sets: Vignoles, Meschi, Strand & Lindsay
Prospective study: Ricketts, Lindsay, Charman, Palikara, Peacey & Patel

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