



Using the Academic - Behaviour Link to Improve Student Outcomes

Kent McIntosh

University of British Columbia

Brenda Melcher

IS-TAC PBIS Network

Handouts: <http://educ.ubc.ca/faculty/kent.mcintosh>



THE UNIVERSITY OF BRITISH COLUMBIA

Overview

- WHY: The relationship between academic skills and problem behaviour
- HOW: Using this information to support students
 - How SWPBS can improve academic outcomes
 - How quality academic instruction can improve behaviour
 - How to integrate academic and behaviour systems
- A DISTRICT EXAMPLE in Illinois

Handouts: <http://educ.ubc.ca/faculty/kent.mcintosh>



WHY talk about academics and behaviour at the same time?



THE UNIVERSITY OF BRITISH COLUMBIA

Three Tier RTI Model of Academic and Behaviour Support

Academic Systems

Behavioural Systems

Intensive, Individual Interventions

- Individual Students
- Specifically tailored instruction
- Progress monitoring

← 1-5%

1-5% →

Intensive, Individual Interventions

- Individual Students
- Intense, individualized plans
- Function-based

Targeted Group Interventions

- Some students (at-risk)
- Additional instruction
- Progress monitoring

← 5-10%

5-10% →

Targeted Group Interventions

- Some students (at-risk)
- High efficiency
- Rapid response

Universal Interventions

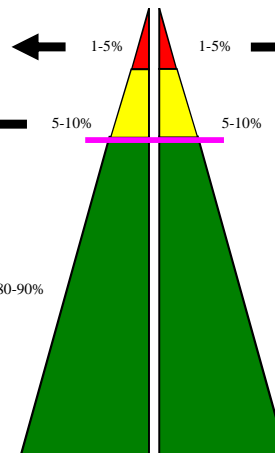
- All students
- Core curriculum
- Preventive, proactive

← 80-90%

80-90% →

Universal Interventions

- All settings, all students
- Teach expectations
- Preventive, proactive



McIntosh et al, 2006. Adapted with permission from Sugai, Horner, & Gresham, 2002



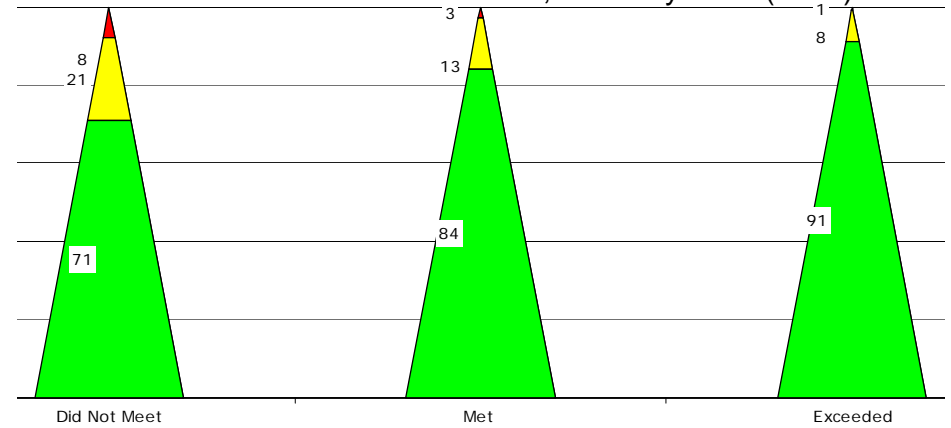
Shared Features of Effective Academic and Behaviour Support Systems

- Commitment to evidence-based practice
- Approach based on principles of effective instruction
- Data-based decision making
- Regular screening
- Universal core curriculum
- Continuum of support beyond universal systems
- Access to reinforcement for desired behaviours



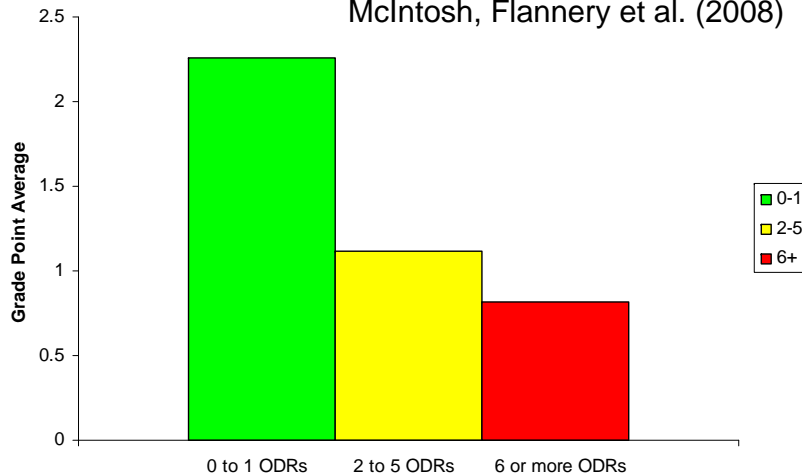
Relation between grade 8 reading test and grade 9 ODRs

Proportions of Grade 9 Office Discipline Referrals by Grade 8 OSA Reading
McIntosh, Flannery et al. (2008)



Relation between grade 8 ODRs and grade 9 academic marks

McIntosh, Flannery et al. (2008)



OUTCOMES FOR STUDENTS ENTERING SCHOOL

	HIGH READING SKILLS	LOW READING SKILLS
HIGH SOCIAL SKILLS	POSITIVE SOCIAL OUTCOMES	AT RISK: READING (AND SOCIAL)
LOW SOCIAL SKILLS	AT RISK: SOCIAL (AND READING)	NEGATIVE SOCIAL OUTCOMES



Pathways to Multiple Problems

- Social behaviour deficit model
 - Social skills problems may lead to academic problems (Dishion, French, & Patterson, 1995; Hinshaw, 1992; Reid and Patterson, 1991; Wehby, Lane, & Falk, 2003)
- Academic skill deficit model
 - Academic problems may lead to behaviour problems (Lee et al., 1999; Roberts et al. 2001)



Pathways to Behaviour Study

(McIntosh, Horner et al., 2006)

- 6-year longitudinal study exploring prediction of problem behaviour in grade five
- Primary Research Question
 1. What reading and behaviour screening measures predict multiple office discipline referrals in grade five?



Just what is DIBELS???

- Dynamic
- Indicators of
- Basic
- Early
- Literacy
- Skills

- A brief, standardized measure of reading and prereading skills from grade K to 6



Just what is DIBELS???

- Used to identify students in need of support and monitor student progress
- **Research validated** indicator of reading skill level and need for reading support
- **Free** (<http://dibels.uoregon.edu>)
- Soon to be available in French (IDAPEL)

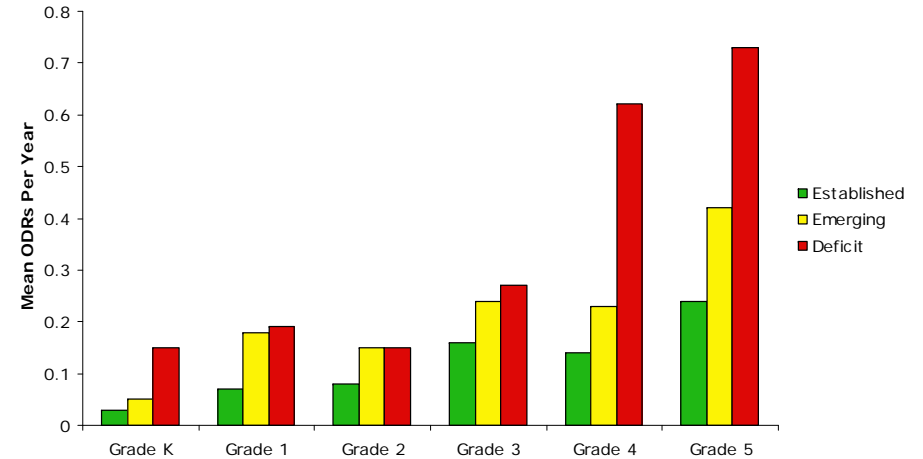


Conditional Probabilities for Multiple Office Referrals in Grade 5

- Office Discipline Referral in kindergarten:
 - Probability: 33%
- *DIBELS Phoneme Segmentation Fluency* (spring):
 - Probability when **established** (35+): 18%
 - Probability when **emerging** (10-34): 25%
 - Probability when **deficit** (0-9): 33%



ODRs by K *DIBELS PSF* Score



(McIntosh, Sadler, & Brown, 2008)



What are the mechanisms? Two Explanations

1. "Chaotic Classroom" Theory
 - Access to instruction (Levy & Chard, 2001)



MEAP – Grade 4 Reading Assessment

29 Elementary schools in Michigan
(reading and behaviour support)

(Goodman, 2005)

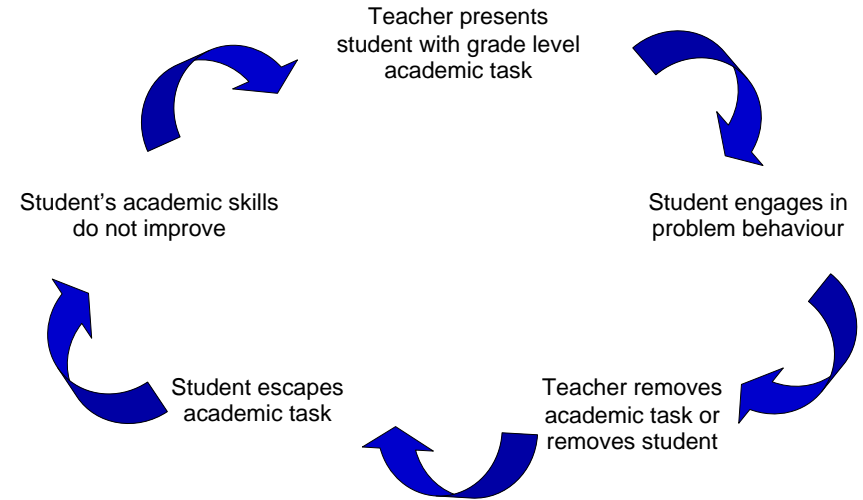


What are the mechanisms? Two Explanations

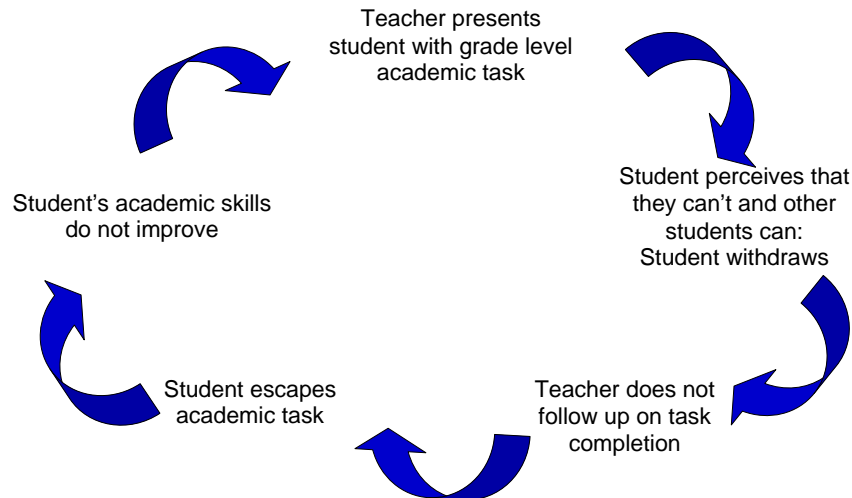
1. "Chaotic Classroom" Theory
 - Access to instruction (Levy & Chard, 2001)
2. Response to Intervention Theory
 - Repeated failure (McIntosh, Sadler, & Brown, 2008)
 - Two responses (Merton, 1968)
 - Aggression
 - Withdrawal
 - Coercive Cycle of Teacher-Student Interaction (Patterson, 1982; McIntosh, Horner et al., 2008)



Cycle of Academic and Behavioural Failure: Aggressive Response

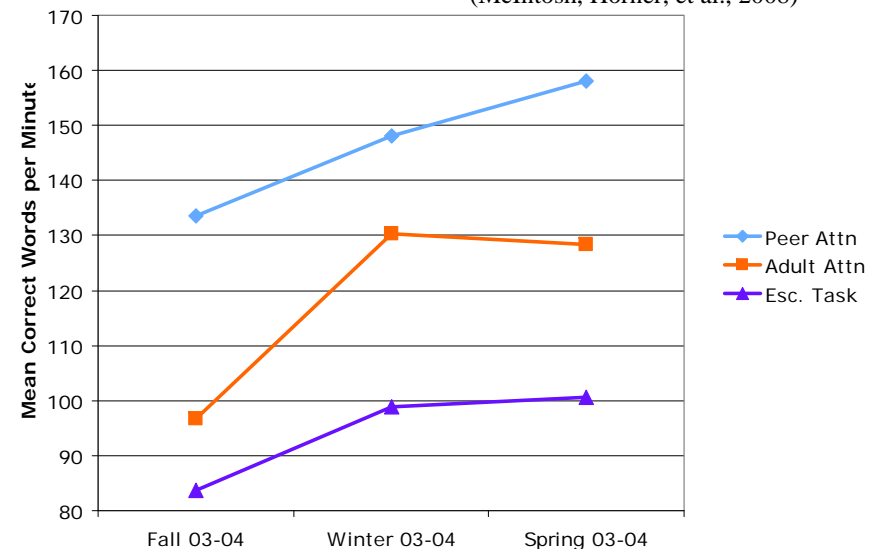


Cycle of Academic and Behavioural Failure: Withdrawal Response



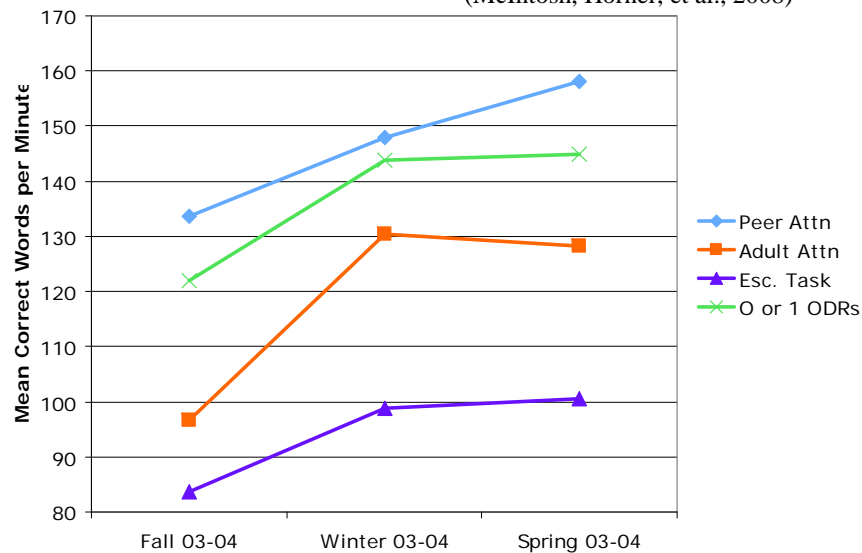
ORF Trajectories by Function Grade 5 (n = 24)

(McIntosh, Horner, et al., 2008)



ORF Trajectories by Function Grade 5 (n = 24)

(McIntosh, Horner, et al., 2008)



BIG IDEAS: Why focus on academics and behaviour together?

- Academic and social competence are critical for positive life outcomes
- Problems in one area may have been caused by problems in the other area
- Early identification and intervention are key to preventing problems in both areas

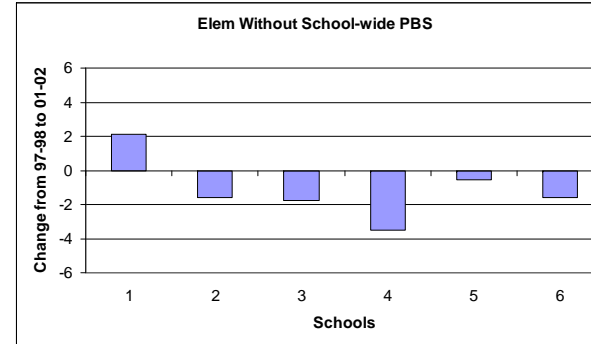
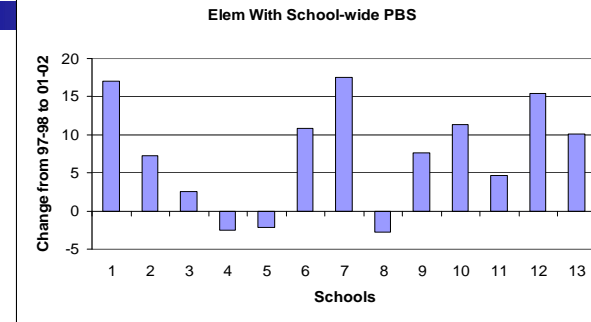
HOW can we use this information to help students?

Improve Support by Addressing Both Mechanisms

1. “Chaotic Classroom” Theory
 - Create safe, positive classroom environments where instruction can take place
2. Response to Intervention Theory
 - Provide evidence-based reading instruction to encourage success and prevent cycles of failure



Can SWPBS lead to better academic achievement?



4 B I A

4J School District
Eugene, Oregon

Change in the percentage of students meeting the state standard in reading at grade 3 from 97-98 to 01-02 for schools using EBS all four years and those that did not.

(Horner et al., 2005)



Can a school-wide approach to reading lead to better behaviour?



THE UNIVERSITY OF BRITISH COLUMBIA

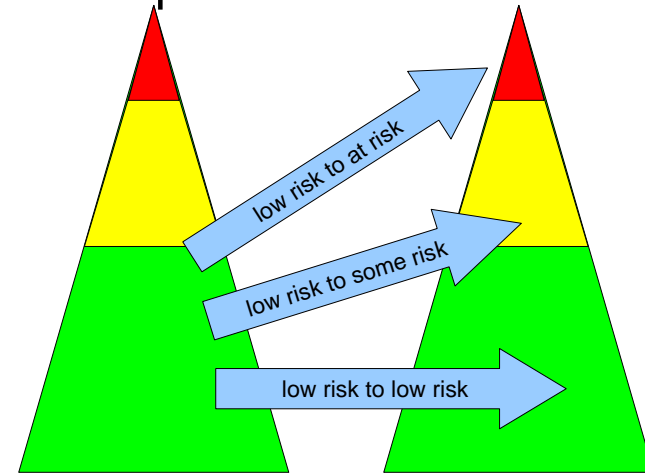
School-wide & Class-wide BEHAVIOUR Systems

1. **Define** school-wide expectations
2. **Teach** expectations
3. **Monitor** and **acknowledge** appropriate behaviour
4. Provide clear consequences for problem behaviour
5. Collect information and use it for decision-making

School-wide & Class-wide READING Systems

1. Dedicate **protected time** for reading/language arts instruction
 - ❖ 60 minutes in K, 90 minutes in 1 to 3
2. Focus instruction on the **big ideas** of beginning reading
 - ❖ Phonological awareness, Alphabetic principle, Fluency with connected text, Vocabulary, and Comprehension
4. Teach students to **mastery**
5. Monitor **student progress**

Risk for Problem Behaviour Grade 5: Response to Intervention in Grade K



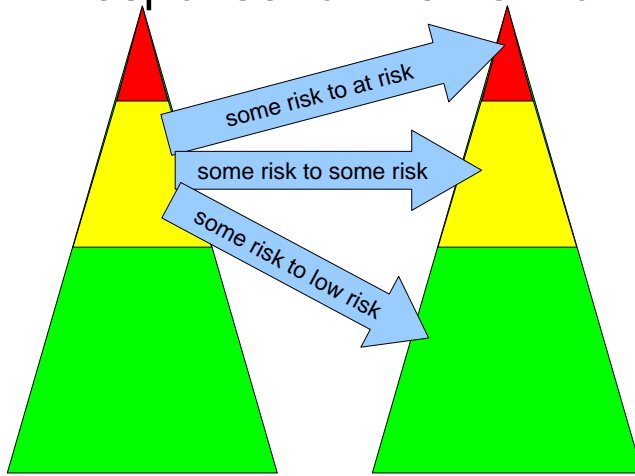
Fall Kindergarten ISF

Winter Kindergarten ISF

Conditional Probabilities for 2+ ODRs

(McIntosh, Sadler, & Brown, in prep)

Risk for Problem Behaviour Grade 5: Response to Intervention in Grade K



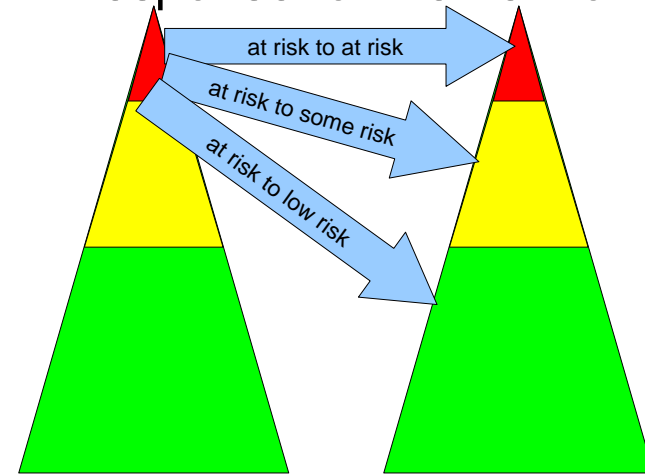
Fall Kindergarten ISF

Winter Kindergarten ISF

Conditional Probabilities for 2+ ODRs

(McIntosh, Sadler, & Brown, in prep)

Risk for Problem Behaviour Grade 5: Response to Intervention in Grade K



Fall Kindergarten ISF

Winter Kindergarten ISF

Conditional Probabilities for 2+ ODRs

(McIntosh, Sadler, & Brown, in prep)



What are the outcomes of combined systems?



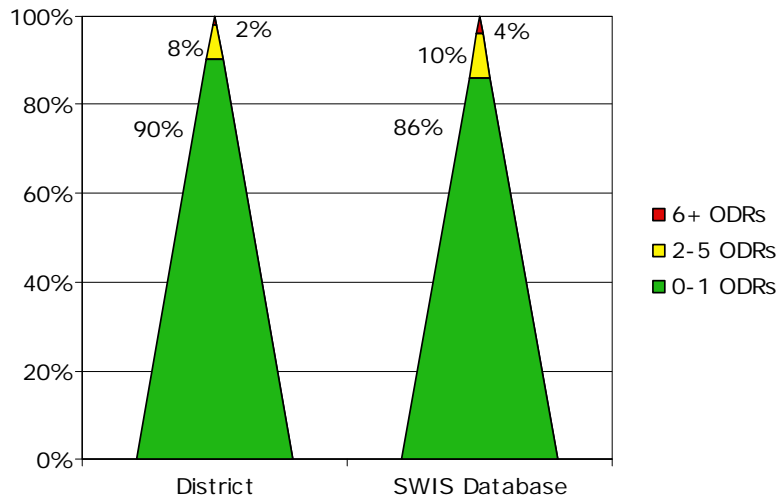
Combined Approach Study

(McIntosh, Chard, Boland, & Horner, 2006)

- Descriptive study exploring effects of a combined approach to reading and behaviour support
- Primary Research Question:
- When effective three tier reading and behaviour support systems are in place, how many students need additional reading and/or behaviour support?



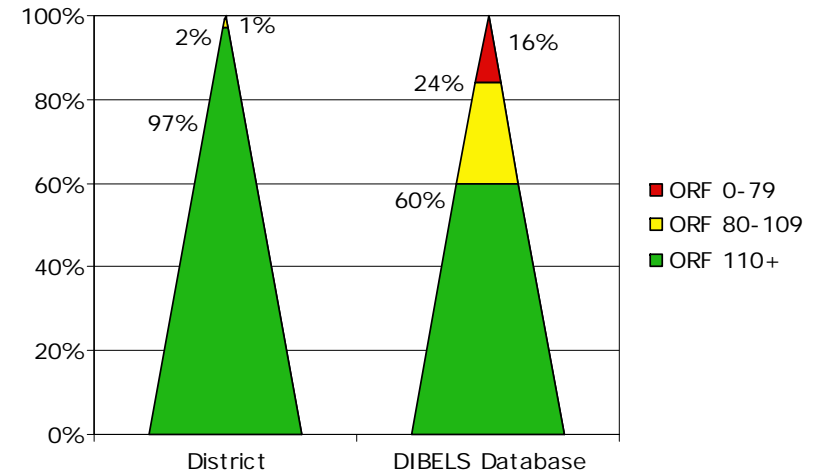
Proportions of K-5 Students by Number of ODRs (2001-2002)



(McIntosh, Chard, Boland, & Horner, 2006)



Proportions of Grade 3 Students by Oral Reading Fluency (2001-2002)



(McIntosh, Chard, Boland, & Horner, 2006)



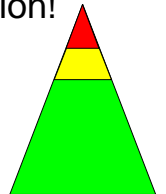
So...how can we integrate academic and behaviour systems?



THE UNIVERSITY OF BRITISH COLUMBIA

Supporting Students in Academics and Behaviour

1. Provide **quality universal support** for all students in reading and behaviour
2. Provide **combined academic and behaviour support** for students who need additional support
 - Don't exclude students from instruction!
 - Functional Behaviour Assessment
 - Consider academic skills
 - Monitor progress in both areas



THE UNIVERSITY OF BRITISH COLUMBIA

Considerations for Integrating Systems

- Start with high quality universal support
 - Use what you have learned in one area to apply to the other
 - The approach and decision-making are the same
 - Identify and use data systems to monitor students in each area
- Combine teams?
 - school-wide and individual support
- Identify and work toward shared, valued **outcomes** (McIntosh, Horner, & Sugai, in press)



A District Example

Brenda Melcher



Contact Information

■ Kent McIntosh: kent.mcintosh@ubc.ca



Now Hiring:
Associate Professor
Asst. Prof (2010-11)
Graduate Students

Come join us in school psychology!
<http://ecps.educ.ubc.ca/scps>



Selected References

- Dweck, C. S., & Wortman, C. B. (1982). Learned helplessness, anxiety, and achievement motivation: Neglected parallels in cognitive, affective, and coping responses. In H. Krohne & L. Laux (Eds.), *Achievement, stress and anxiety* (pp. 93-125). Washington, DC: Hemisphere.
- Goodman, S. D. (2005, October). *Implementation of reading and behavior support at the state level*. Paper presented at the 2005 PBIS Forum, Chicago, IL.



Selected References (cont.)

- Merton, R. K. (1968). *Social theory and social structure*. New York: Free Press.
- McIntosh, K., Chard, D. J., Boland, J. B., & Horner, R. H. (2006). Demonstration of combined efforts in school-wide academic and behavioral systems and incidence of reading and behavior challenges in early elementary grades. *Journal of Positive Behavior Interventions, 8*, 146-154.
- McIntosh, K., Flannery, K. B., Sugai, G., Braun, D. H., Cochrane, K. L. (2008). Relationships between academics and problem behavior in the transition from middle school to high school. *Journal of Positive Behavior Interventions, 10*, 243-255.



Selected References (cont.)

- McIntosh, K., Horner, R. H., Chard, D. J., Boland, J. B., & Good, R. H. (2006). The use of reading and behavior screening measures to predict non-response to school-wide positive behavior support: A longitudinal analysis. *School Psychology Review, 35*, 275-291.
- McIntosh, K., Horner, R. H., Chard, D. J., Dickey, C. R., & Braun, D. H. (2008). Reading skills and function of problem behavior in typical school settings. *Journal of Special Education, 42*, 131-147.
- McIntosh, K., Horner, R. H., & Sugai, G. (in press). *Sustainability of systems-level evidence-based practices in schools: Current knowledge and future directions*. In G. Sugai, R. H. Horner, G. Dunlap & W. Sailor (Eds.), *Handbook of positive behavior support*. New York: Springer.



Selected References (cont.)

- McIntosh, K., Sadler, C., & Brown, J. A. (2008). *Kindergarten Reading Skills and Response to Instruction as Risk Factors for Challenging Behavior*. Manuscript in progress.
- Patterson, G. R. (1982). *Coercive family process*. Eugene, OR: Castalia Publishing.
- Stollar, S. A., Schaeffer, K. R., Skelton, S. M., Stine, K. C., Lateer-Huhn, A., & Poth, R. L. (2008). Best practices in professional development: An integrated three-tier model of academic and behavior supports. In A. Thomas & J. P. Grimes (Eds.), *Best practices in school psychology V* (pp. 875-886). Bethesda, MD: National Association of School Psychologists.