

Preventing School Dropout With Secondary Students

The Implementation of an Individualized Reading and Dropout Prevention Intervention

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A National Crisis

- Approximately 75% of students graduate within 4 years. (Chapman, Laird, & KewalRamani, 2010)
- About 55% of students with disabilities graduate in 4 years. (Data Accountability Center, 2008)
- High school students in the lowest 25% of their class are 20 times more likely to drop out than the highest-performing students. (Carnevale, 2001)
- More than 8 million students in grades 4-12 are struggling readers. (Perie, Grigg, & Donahue, 2005)
- Approximately 53% of high school graduates enroll in remedial courses in postsecondary education. (National Center for Education Statistics, 2001)

Voices of Students At Risk

- “All this stuff in school—it doesn’t get into my head. None of it matters to my life.”
- “When I open a book, just to see those letters makes me want to go away...[I think] ‘Oh, this is frustrating.’”
- “No, I don’t have anyone to count on for support.”
- “At school, it’s all about rules. I don’t learn anything. They just make us tuck in our shirts.”
- “I feel like at any moment, my family can fall apart.”

Solving the Crisis: Preventing School Dropout With Secondary Students



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Research Questions

What is the efficacy of the following with adolescent, struggling readers, compared with a well-documented, school-implemented comparison group:

1. Intensive, individualized reading intervention
2. Dropout prevention intervention
3. Dropout prevention intervention plus intensive, individualized reading intervention

Method

Criteria for Inclusion

Research Design

Participants

Interventions



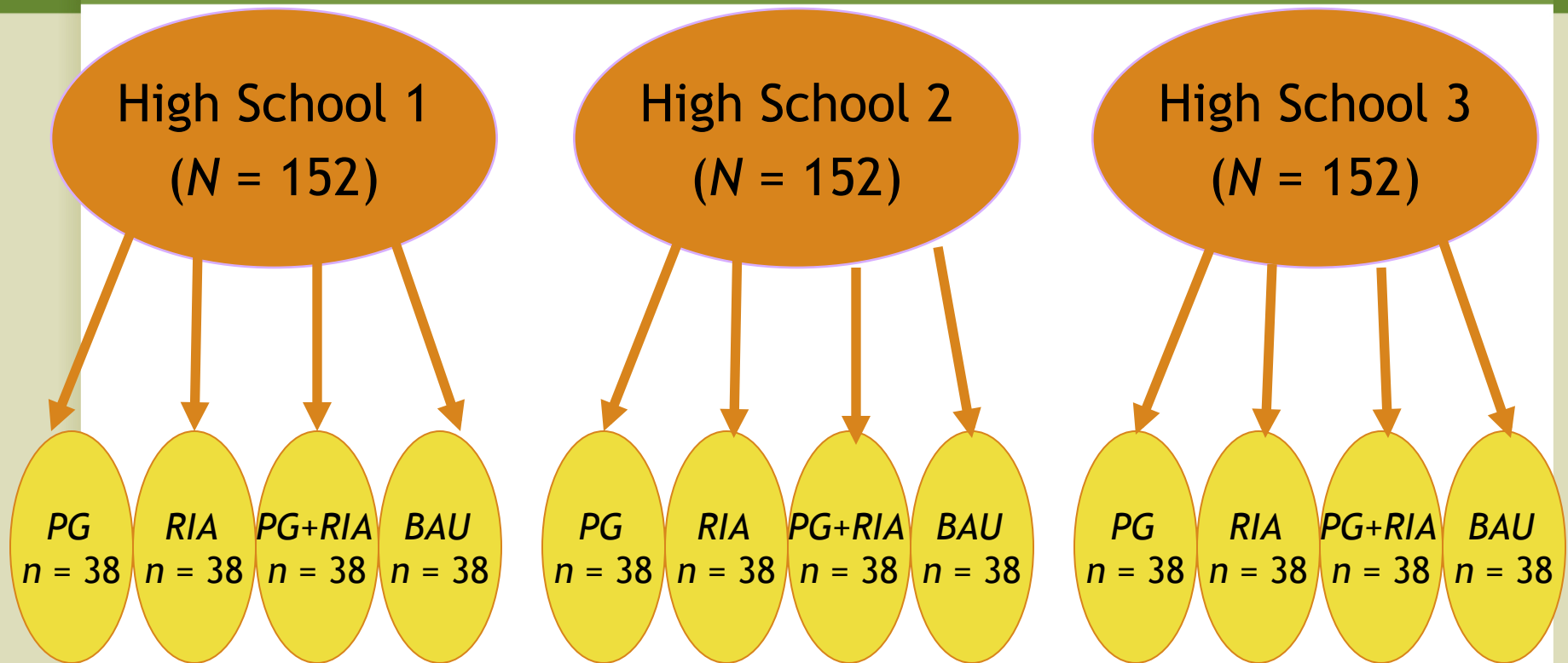
The Meadows Center
FOR PREVENTING EDUCATIONAL RISK

THE UNIVERSITY OF TEXAS AT AUSTIN
COLLEGE OF EDUCATION

Criteria for Inclusion

- Students qualified who scored 2,200 or below (1 standard error above the failing score of 2,100) on the seventh-grade Reading Texas Assessment of Knowledge and Skills (TAKS).
- If TAKS scores were not available, students qualified if evidence showed they failed any core class (English language arts, social studies, science, mathematics) in any semester of seventh grade or in semester 1 of eighth grade.

Research Design



Random assignment to one of the four conditions
within each school

Sample Attrition by Condition

	R only	DO only	R + DO	C\BAU	Total
	% (n)	% (n)	% (n)	% (n)	% (n)
Still enrolled	72.8 (83)	86.8 (99)	69.6 (80)	87.7 (100)	79.2 (362)
Exited before intervention started	24.6 (28)	8.8 (10)	27.0 (31)	12.3 (14)	18.2 (83)
Exited after intervention started	2.6 (3)	4.4 (5)	3.5 (4)	0.0 (0)	2.6 (12)

R only = Reading intervention only

DO only = Dropout intervention only

R + DO = Reading and dropout intervention

C\BAU = Control, or business as usual

Participants

	R only	DO only	R + DO	C\BAU	Total
	% (<i>n</i>)	% (<i>n</i>)	% (<i>n</i>)	% (<i>n</i>)	<i>n</i>
Total <i>n</i>	22.9 (83)	27.3 (99)	22.1 (80)	27.6 (100)	362
Female	38.6 (32)	36.4 (36)	37.5 (30)	43 (43)	141
Male	61.4 (51)	63.6 (63)	62.5 (50)	57 (57)	221
African American	31.3 (26)	32.3 (32)	36.3 (29)	32 (32)	119
Hispanic	45.8 (38)	46.5 (46)	42.5 (34)	44 (44)	162
White	19.3 (16)	13.1 (13)	17.5 (14)	19 (19)	62
Asian	3.6 (3)	8.1 (8)	3.8 (3)	5 (5)	19
Student with special needs	18.1 (15)	16.2 (16)	21.3 (17)	15 (15)	63
English language learner	14.5 (12)	21.2 (21)	20 (16)	19 (19)	68

Participants: Pretest Scores

	R only	DO only	R + DO	C\BAU	Total
Reading measure	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
AIMSweb Reading Maze	97.74 (13.44)	99.17 (10.84)	95.93 (10.50)	100.58 (11.62)	98.51 (11.70)
TOWRE SWE	90.24 (9.76)	90.39 (10.18)	88.62 (9.05)	90.61 (9.92)	90.02 (9.76)
TOWRE PDE	88.65 (11.00)	89.44 (13.80)	86.82 (12.68)	90.29 (12.86)	88.91(12.70)
Gates-MacGinitie Vocabulary	90.68 (9.99)	88.57 (8.52)	87.36 (8.75)	91.42 (9.66)	89.56 (9.34)
Gates-MacGinitie Comprehension	90.55 (13.40)	90.58 (11.18)	86.77 (11.32)	93.27 (10.77)	90.46 (11.82)
Gates-MacGinitie Total Score	88.86 (11.78)	87.66 (9.69)	84.84 (10.06)	90.72 (10.30)	88.14 (10.61)

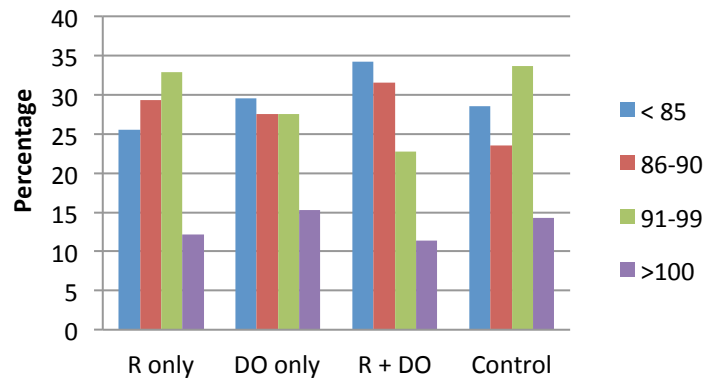
TOWRE = Test of Word Reading Efficiency

SWE = Sight Word Efficiency

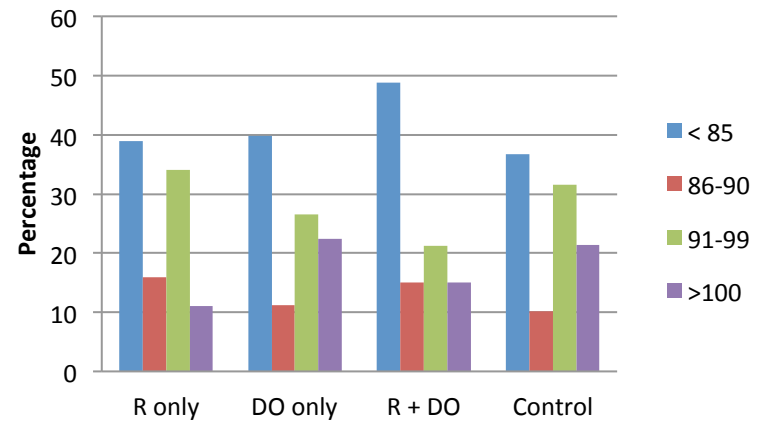
PDE = Phonetic Decoding Efficiency

Distribution of Pretest Scores

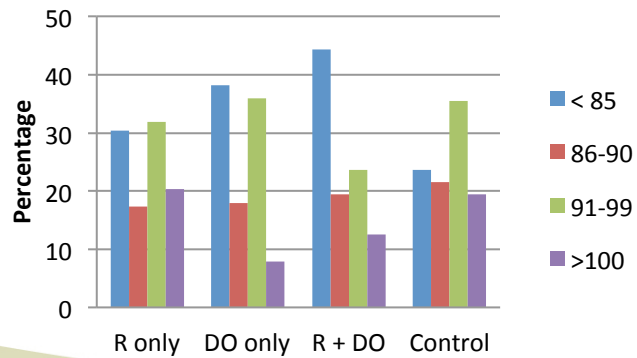
TOWRE Sight Word



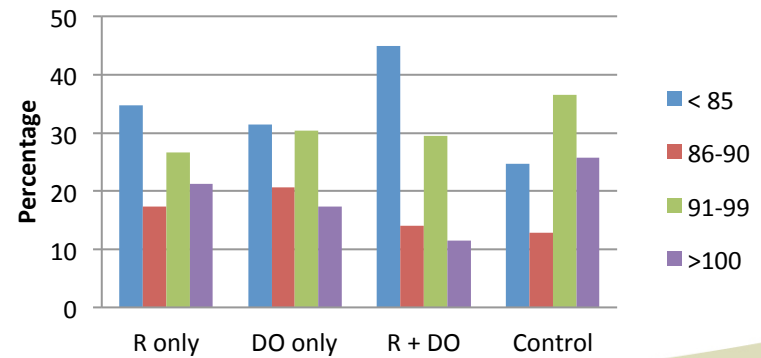
TOWRE Phonetic Decoding



Gates Vocabulary



Gates Comprehension



Interventionists

- **Three Project GOAL advisors (one in each high school):**
 - 60-student caseload each
 - Project GOAL
 - Project GOAL plus Reading Interventions for Adolescents (RIA)
- **Three RIA teachers (one in each high school):**
 - Five periods
 - RIA
 - Project GOAL plus RIA
 - Mixed-ability classes

Engagement Measures

- **School Dropout Risk Inventory (SDRI; Vaughn, Roberts, & Wexler, 2010):** Group-administered, 68-item measure that enables efficient screening of dropout risk
- **Student Engagement Instrument (SEI; Appleton & Christenson, 2004):** Group-administered, 32-item measure of attitudes, perceptions about school, education, and family involvement
- **Perception of Ability Scale for Students (PASS; Boersma & Chapman, 1992a; 1992b):** Posttest only—individually administered, 70-item measure of perceptions about school in general but specifically about language arts, reading, spelling, and arithmetic

Reading Measures

- **Test of Word Reading Efficiency (TOWRE; Torgesen, Wagner, & Rashotte, 1999):**
 - Sight Word Efficiency subtest: Individually administered measure of the number of printed words one can accurately identify in 45 seconds
 - Phonetic Decoding Efficiency subtest: Individually administered measure of the number of pronounceable, printed nonsense words one can accurately decode in 45 seconds
- **Woodcock Johnson-III Spelling subtest (Woodcock, McGrew, & Mather, 2001):** Individually administered measure of the ability to write orally presented letters and words correctly

Reading Measures (cont.)

- **Gates MacGinitie Reading test** (MacGinitie, MacGinitie, Maria, & Dreyer, 2000): Group administered measure of reading comprehension
- **Meta-Comprehension Strategy Index** (Schmitt, 1988): Group administered measure of awareness of strategic reading processes
- **REWARDS Plus Content Mastery** (The Meadows Center for Preventing Educational Risk, 2010): Researcher-developed proximal measure of content retention

Reading Intervention Overview: RIA

Reading Interventions for Adolescents

RIA

- Aligns with research with older readers and Institute of Education Sciences (IES) Improving Adolescent Literacy practice guide:
 - Vocabulary instruction and discussion
 - Background knowledge and comprehension
- Uses a standardized word study approach:
 - REWARDS (Archer, Gleason, & Vachon, 2003)
 - Silent timed reading with phrase fluency work
- Aligns with the district core content curriculum

6-Day Units

Day	Focus	Agenda	
1	Unit introduction and Collaborative Strategic Reading (CSR), before reading	<ul style="list-style-type: none"> • Unit focus question • Background knowledge • Vocabulary 	<ul style="list-style-type: none"> • Preview passage • Anticipation guide
2	CSR, during reading	<ul style="list-style-type: none"> • Phrase fluency • Vocabulary 	<ul style="list-style-type: none"> • CSR, during reading
3	CSR, after reading	<ul style="list-style-type: none"> • Phrase fluency • Vocabulary • CSR, after reading 	<ul style="list-style-type: none"> • Evidence compiling • Summary writing
4	Discussion	<ul style="list-style-type: none"> • Phrase fluency • Vocabulary 	<ul style="list-style-type: none"> • Discussion preparation
5	Discussion	<ul style="list-style-type: none"> • Phrase fluency • Vocabulary word map 	<ul style="list-style-type: none"> • Content quiz • Discussion
6	Independent reading	<ul style="list-style-type: none"> • Phrase fluency • Silent timed reading 	<ul style="list-style-type: none"> • Content quiz review

A Closer Look at Day 2

RIA: 6-Day Instructional Unit Planner

Day Two Daily Objective: _____

1. Opening Activity—5 min

- Phrase Drill

2. Vocab activity—(circle which activity you choose to use) —3-5 min

- Yes/No/Maybe
- Which word fits
- Relationships among words
- Turn and Talks
- Concept sorts

3. During Reading Activities— (CSR groups) 35-40 min

- Clicks and Clunks
- Main Ideas

4. Exit Slip

Scaffolding:

What:

When:

Differentiation:

What

When:

Cross Content Connections:

What:

When:

Connections to Previously Taught Material (i.e. REWARDS):

What:

When:

Dropout Intervention Overview: Project GOAL

Graduation = Opportunities for Advancement and Leadership

Checking and Connecting



Project GOAL

Aligns with IES Dropout Prevention practice guide recommendations (Dynarski et al., 2008):

1. Use data systems to support the identification of students at high risk of dropping out.
2. Assign adult advocates to students at risk of dropping out.
3. Provide academic support and enrichment to improve academic performance.
4. Implement programs to improve students' classroom behavior and social skills.
5. Personalize the learning environment and instructional process.
6. Provide rigorous and relevant instruction to better engage students in learning and provide the skills needed for graduation and beyond.

Project GOAL Advisor Responsibilities

- Check all students' data to determine status
- Check with school staff regarding student concerns
- Target interventions and map a plan for implementation
- Connect regularly with parents and guardians to support commitment to school
- Implement GOAL sessions (problem solving and goal setting)
- Explore postsecondary options with students
- Motivate students by acknowledging improved academics or behavior
- Attend truancy court hearings, when appropriate
- Provide intervention to students in alternative schools

Determining Risk Status

Weekly	Intensive	Basic	Monitoring
Period absences (unexcused, excused, and total tardies)	≥ 8	3-7	≤ 2
Behavior (referrals and in-school/ out-of-school suspensions)	> 1	1	0
Grades (class score %)	$\leq 69\%$ any class	70%-74% any class	$\geq 75\%$ all classes

Weekly Student Progress Check

School: XX High School		Advisor: XXXXX		Date: _____		II= 2											
Project GOAL Student Progress Check						BI= 2											
__ weekly progress (week of _____)		or		Cycle 3 progress (dates of _____)		M= 1											
Student Name	GRADES		ATTENDANCE		BEHAVIOR		*		NOTES	Status	INTERVENTION PLAN FOR NEXT WEEK					Completed	
	Low C (70-75)	F Far from Passing	F Close to Passing	Unexcused Absence	Excused Absence	Class Skips/Tardy Tank	Referrals	ISS			OSS	Other Concerns Present	Actions & Interventions planned to implement during the following week that target a student's risk behavior				
											M	T	W	R	F		
Example Student A	1	2	1	3	3	1			* Failing Alg 64% and Bio 68%, continues to skip Art and failing badly-41%	II	3		3				x
											2		L				x
														AS			x
Example Student B	3			1	4				tardies-all in P5 Span	BI	3		5				nw
Example Student C	2					1	1		Spanish 75% and Geog, 72%, Ref & ISS for bullying (P2)	MO	7		2				x
											3		2T	BS			nw
Example Student D	1			7					* Conn 42; BioPreAP 56; Geom 70	II	1		2		2		2 x
Example Student E	2								75% on weekly Alg test brought down first time in 3 weeks, cont to earn ave 75% in French	BI	1						x

- Quick Reference for Interventions
1. Connect Commitment with student about _____ (May develop into Conversation)
 2. Check in with school staff about _____
 3. Observe student in _____
 4. Connect Conversation about _____
 5. Home Connection about _____
 6. Other

Project GOAL Expected Weekly Intervention

	Individual activities			Group activities		
	Connect commitment	Connect conversation	Home connection	College and career exploration	GOAL session	Motivation
Intensive interventions		2*	1* (newsletter)	1 (monthly)	1 (biweekly)	2 (biweekly)
	7 (total)					
Basic interventions		1*	1* (newsletter)	1 (monthly)	1 (biweekly)	1 (biweekly)
	5 (total)					
Monitoring only	1*		(newsletter)	1 (monthly)	1 (biweekly)	1 (biweekly)
	1 (total)					

*At minimum.

Examples of Individual Intervention

Component	Connect commitment	Connect conversation	Home connection
Intensive interventions	Recognizing a student's attendance: "I noticed you arrived to class on time 2 days in a row. Good job!"	Role-playing with a student on how to approach his algebra teacher during lunch to find out when tutorials are held	Meeting with a parent or guardian to develop a contract for the student to follow the school's behavioral expectations
<i>Frequency</i>		2/week*	1/week
Basic interventions	Telling a student: "Tryouts for the basketball team are next week."	Discussing the increasing number of absences a student has in the period after lunch	Calling a parent or guardian to ask whether the student can attend the military presentation after school
<i>Frequency</i>		1/week*	biweekly
Monitoring only	Saying to a student in the hall: "Good morning. It's nice to see you today."	Talking with a student about how to study for biology quizzes	Mailing a newsletter to a student's parent or guardian with updates on the upcoming field trip
<i>Frequency</i>	1/week*		

*At minimum. A connect conversation always targets a student's risk indicator(s).

Examples of Group Intervention

Component	College and career exploration	GOAL session	Motivation
Intensive interventions	Arranging for a student to meet with a graphic designer to discuss career options and art aspirations	Setting a behavioral goal with a student to decrease the number of referrals	Awarding a PEEPS point when a student volunteers to help a peer
<i>Frequency</i>	1/month	biweekly	2
Basic interventions	Meeting with a student and the counselor to verify that the student's schedule includes the prerequisites for the local culinary school	Modeling how to solve a problem based on a scenario presented to the group	Rewarding a student for earning a PEEPS point from his geography teacher
<i>Frequency</i>	1/month	biweekly	1
Monitoring only	Exploring postsecondary education institutions in the area	Discussing a student's response to a journal topic	Cashing in points for a student's monthly incentive
<i>Frequency</i>	1/month	biweekly	1

Advisor Log and Daily Field Notes

STUDENT	CHECK			CONN		GRP ACT		HOME CONN		MOT	DETAILS	
	check student risk data	check with school staff	observe student	connect commitment	*connect conversation	attend GOAL session	attend CCE/FT speaker	home contact made/met parent	home contact-attempt	participate in incentive	Other/notes: (typical day, special schedule, specific details about an intervention)	Follow-up needed?
Example Student A	X			XX							Ck Art tomorrow again	X
Example Student B	X										Absent all day--Unex	X
Example Student C	X		X	X	XX						F: Geog to help problem solve about his bullying ref IS: moved seat, don't talk to student	
Example Student D					X						F: planned how to manage hwork IS: write down all hw given in each class for one day -I gave him a nbk & will ck each day for a week or contract	X
Example Student E				X								

Fidelity of Implementation

- Fidelity checks are completed once per month for all reading intervention teachers.
- Fidelity checks are completed four times per year for all dropout prevention advisors and twice for each advisor's group sessions.

Fidelity Measure: Adherence

TOTAL TIME OF OBSERVATION _____ *hrs* _____ *min*

TOTAL FIDELITY SCORE _____ /36

Attach the previous Student Progress Check weekly/cycle sheet with the respective Daily Monitor Log of Interventions and Field Notes forms.

IA. Adherence of Checking Student Data

1. Advisor checked student data to determine status for all students (weekly progress check) __yes __no
2. Advisor planned targeted interventions for all II and BI students (weekly progress check) __yes __no

ADHERENCE OF CHECKING: FIDELITY SCORE _____ /2

IB. Adherence of Connecting

3. Advisor mapped a plan to implement the targeted interventions, min. of 1/period (daily plan) __yes __no
4. Advisor implemented the daily plan or diverged for valid reasons (daily plan) __yes __no
5. Advisor logged the intervention components/dosage students received (daily field notes) __yes __no

ADHERENCE OF CONNECTING: FIDELITY SCORE _____ /3

II. Implementation Quality of Project GOAL

Overall Scores

- Advisor's performance indicator implementation quality _____ /24
- Advisor's global observation implementation quality _____ /7

IMPLEMENTATION QUALITY OF CONNECTING: FIDELITY SCORE _____ /31

Fidelity Measure: Quality of Connecting

Descriptive Information						
Date:	Advisor:	Site:				
Weekday:	Observer:	District:				
Period(s):	Length of Observation:	Observation Round:				
Performance Indicators						
Implementation of Project GOAL			Implementation Quality			
Daily	Seeking information (Checking; Connecting; Home Connection)		4	3	2	1
	<ul style="list-style-type: none"> Information is actively sought from teachers, staff, parents, and/or students to enhance interpretation of student data Def: Time spent discussing issues related to a student, asking questions, listening to, collaborating on student issues, and investigating to determine underlying issues concerning the student. Ex. Talking with a student, parent, staff member, or related support staff regarding students' attendance, behavior, and grades 		<i>Notes</i>			
	Connecting (Commitment)		4	3	2	1
	<ul style="list-style-type: none"> Interactions are personalized and informed Def: Time spent talking with a student before, during, and after classes, observing a student in and outside of the classroom, and demonstrating knowledge of a student's current attendance, tardies, referrals, and suspensions to inform and personalize the student connection Ex. Saying "Good morning, Sheree. It's nice to see you today." to a student in the hallway 		<i>Notes</i>			
	Connecting (Conversations)		4	3	2	1
	<ul style="list-style-type: none"> Conversations are targeted and individualized Def: Time spent engaging in a targeted, directed conversation that typically concludes with specific next steps for a student to follow, which may include problem solving of academic or behavioral issues, discussing a student's personal concerns, and providing instructional support Ex. Strategizing with a student to arrive to school on time or to attend tutorials for a failing class 		<i>Notes</i>			

GOAL Session Fidelity

Dropout Prevention Intervention Group Session Fidelity

Dropout Prevention Intervention Group Session Fidelity		
Advisor:	Date:	Site:
Group size:	Lesson #:	Observer:

Components	Start Time	End Time	Implementation					Quality		
			3	2	1	Not at all	NA	3	2	1
Set the Purpose										
<i>Review the session agenda</i>										
<i>Explain the objective(s) of the lesson</i>										
Present the Lesson										
<i>Model the skill</i>										
<i>Provide opportunities to practice the skill</i>										
Reflect and Set the Goals										
<i>Students reflect on their progress in meeting their goal(s) (complete goal reflection sheet)</i>										
<i>Students revise current goal(s) or set new goal(s) and immediate steps (complete goal setting template)</i>										
<i>Comments:</i>										

Reading Fidelity

Vocabulary Components				IMPLEMENTATION QUALITY				
Time Management				4	3	2	1	N/A
How much time spent on directions? _____ minutes								
How much time spent on off task behavior? _____ minutes								
Total amount of time spent on vocabulary. _____ minutes								
Vocabulary Sub-components	Observed	Partially Observed	Not Observed	Notes:				
Explicit vocabulary instruction.				_____				
Vocabulary strategies:				_____				
• Context clues (re-read sentences)				_____				
• Word parts (pre-fix/suffix/root words)				_____				
• Cognates				_____				
Multiple exposures to vocabulary embedded.				_____				
Comprehension Components				IMPLEMENTATION QUALITY				
Time Management				4	3	2	1	N/A
How much time spent on directions? _____ minutes								
How much time spent on off task behavior? _____ minutes								
Total amount of time spent on comprehension. _____ minutes								
Comprehension Sub-components	Observed	Partially Observed	Not Observed	Notes:				
Direct instruction in comprehension strategies.				_____				
Teacher utilizes multiple comprehension strategies				_____				
• summarize main ideas both,				_____				
• paraphrasing,				_____				
• drawing inferences				_____				
• answering questions at different points in the text,				_____				
• using graphic organizers				_____				
Students utilize multiple comprehension strategies.				_____				
Pair practice occurs				_____				
Independent practice occurs				_____				

Implementation Challenges of Efficacy Studies in High Schools

School-Level Challenges

- Information dissemination:
 - Between the district, researchers, and individual campuses
 - Accurate student data from schools and district
- Logistics:
 - Time to accurately screen, select, and randomly assign students before they select classes for following year
 - Hours of school day/finding time to meet with interventionists
 - Scheduling students
 - Block schedule versus traditional schedule
 - Space to conduct intervention
 - Variability in school policies

Student-Level Challenges

- Secondary credits
- Postsecondary aspirations
- Grades and examinations
- Differentiation
- Attendance
- Motivation and incentives
- Mobility of at-risk participants
- Attrition during ninth-grade transition

Personnel-Level Challenges

- Hiring highly qualified, certified reading teachers and advisors with a “social work” background
- Hiring district-approved personnel
- Finding qualified substitutes when intervention teachers are absent for extended periods of time
- Replacing teachers quickly
- Following all district human resources policies (e.g., fingerprinting)
- Ensuring time for teachers to attend researcher, district, and school training