Overcoming the Achievement Divide:

Key Challenges and Solutions for Iowa Schools

> IOWA DEPARTMENT OF EDUCATION NOVEMBER 2012

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Iowa Department of Education

Grimes State Office Building Des Moines, IA 50319-0146

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Foreword

We all want the best schools and brightest futures for lowa's students. It will take all of us, working together, to make the meaningful improvements our state's school system needs to rise to the challenge.

lowa has many good schools. But they can and must do better than they are today, given the demands of our competitive, global marketplace and the growing number of students who face challenges. Students with disabilities, children who do not speak English as their native language, and children who come from low-income backgrounds increasingly are falling behind classmates who do not face similar challenges.

Our school system must adapt to meet the needs of these students, just as it must transform for the sake of all Iowa children and the state's future.

The purpose of this report is to provide an updated portrait of student performance in Iowa, to describe the approach the Iowa Department of Education will use to address our state's challenges, and to introduce one piece of the solution: A framework called Response to Intervention.

Schools need procedures that provide early detection of learning problems in the classroom, that diagnose problems quickly, and that customize instruction and supports to correct the problems before failure occurs. This idea of customized instruction is, in a nutshell, Response to Intervention.

Other states and nations that once envied lowa's schools have made dramatic, whole-system changes that have pushed their education systems past ours. While we honor the past work of generations of lowans who built a strong foundation in education, it is our responsibility to make a focused, dedicated effort to improve our schools for the future.

No matter what their backgrounds are, students must be ready for new jobs that require higherlevel skills as many old jobs become endangered or obsolete. And our schools must be ready to prepare them for success in those jobs. Our young people must be ready to apply what they've learned to complex situations, to solve problems, to communicate effectively, and to innovate.

Our goal is to give lowa children the best education in the world. There will be no shortcuts on that journey. We must have the courage and the will to persevere. Our children deserve nothing less.

Jaron F. Slam

Jason E. Glass, Ed.D. Director, Iowa Department of Education



Jason E. Glass, Ed.D.

Executive summary

lowa has a proud tradition of educational excellence. At the same time, our state faces unprecedented challenges in ensuring that each of our students receives a world-class education. This report both surfaces these challenges and outlines the lowa Department of Education's strategy to ensure that all students have the opportunity to be successful.

The first section of this report provides an updated analysis of student performance in Iowa. In this analysis, three key challenges emerge:

- **I. Average student achievement.** Iowa has slipped from one of the highest-performing states in the nation to the middle of the pack in student achievement.
- **2. Stagnant growth.** Iowa's performance on national assessment results is stagnant for low- and high-achieving students across the board.
- **3.** Significant and increasing achievement gaps for students who face additional challenges. Students whose first language is not English, have special needs, or come from a low-income background perform significantly behind their peers who do not face similar challenges. Schools across lowa, both urban and rural, have increasing numbers of students who face these potential obstacles to learning.

The second section of this report describes the approach that the Iowa Department of Education will take to address these challenges. We will focus on implementing solutions that are:

- **I. Focused on instruction.** Our focus will be on the steady investments in human capital that will elevate the profession and improve the quality of learning in every lowa classroom.
- **2. Proven effective.** We stand a much better chance of improving student performance and closing achievement gaps if our approach is aligned with research-based practices, especially those adopted by the highest-performing and fastest-improving systems in the world.
- **3.** Scalable. We cannot be satisfied with creating pockets of excellence. We must set out to improve the quality of every district, school, and classroom.

The report's final section describes Iowa's Response to Intervention (RtI), a strategy that meets the above criteria and directly addresses the challenges Iowa faces.

Ensuring world-class results for lowa's schools will ultimately take a concerted effort from all stakeholders: teachers, administrators, parents, students, and community members. We hope this report clearly states the challenges we face, but, more importantly, that it inspires the actions that will improve performance and narrow the achievement divide.



Introduction: A pivotal time for lowa's education system

In 1990, Iowa's education system was branded one of the best in the United States for its performance on the National Assessment of Educational Progress (NAEP), introduced that year as the nation's report card and the only state-by-state comparison of student performance.

The quality of lowa's school system hasn't eroded. However, lowa's results have stagnated while other states and nations have launched focused efforts to dramatically improve their education systems. As a result, other education systems have accelerated past lowa, which has moved us from the top to the middle of the pack. At a time when technology and other forces are rapidly reshaping the labor market, well-prepared students are critical to creating a highly skilled workforce as competition for careers now spans the globe.

The lowa Department of Education first made a case for dramatic improvements in its July 2011 report, *Rising to Greatness: An Imperative for Improving Iowa's Schools.* The report's aim was to frame the debate about what it will take to restore Iowa's standing as a leader in education. While most Iowans want a better school system, our state has struggled to come together on a path to improvement.

This new report examines the latest metrics by which we gauge student achievement, provides three guideposts to help shape education policy, and proposes an evidence-based solution: Response to Intervention. This solution helps schools identify and diagnose learning problems quickly, customize instruction and supports to correct the problems, and monitor progress along the way.

lowa once led the nation in student achievement. If we want to elevate our education system to be among the best in the world, we must come together around meaningful strategies and stand behind them for years to come.





Analyzing the data

In the July 2012 Harvard University report, *Achievement Growth: International and U.S. State Trends in Student Performance*, Eric Hanushek, Paul Peterson, and Ledger Woessman use assessment scores on the National Assessment of Educational Progress (NAEP) to compare the overall rate of growth in student achievement in fourth- and eighth-grade reading, math, and science in 41 U.S. states from 1992 to 2011. Iowa came in last. The Harvard report validates findings from the Iowa Department of Education's July 2011 report, *Rising to Greatness: An Imperative for Improving Iowa's Schools*.

There was a time when lowa ranked among the top states in terms of student achievement. However, nearly two decades later without adequate growth, things have changed. In fourthgrade reading, lowa's overall achievement is about average when compared to other states and jurisdictions. The average score for students in lowa on the NAEP reading assessment for fourthgrade students in 2011 (221) was lower than that of 1992 (225) and was the same as that of 2009 (221). This score was not significantly different from that of the nation's public schools (220). This confirms that lowa has not seen growth in reading achievement on NAEP in nearly two decades (see Figure 1).

In 2011, the average mathematics score for eighth-grade students in Iowa was 285. This was higher than that of the nation's public schools (283). In addition, the average score for students in Iowa in 2011 (285) was higher than in 1990 (278), but was not significantly different from 2009 (284). This means that the overall achievement of Iowa's eighth-grade students is average when compared to other jurisdictions. Eight states had significantly higher scale scores than Iowa (see Figure 2).

"lowa's school system hasn't gotten worse. But we've seen focused, dedicated efforts in other states and nations to dramatically improve their education systems, so we've gone from the top of the pack to the middle."

> **Jason E. Glass, Ed.D.** Director, Iowa Department of Education

About NAEP

The National Assessment of Educational Progress (NAEP) is the largest nationally representative and ongoing assessment of what America's students know and can do in various subject areas. State assessments began in 1990 and are conducted every other year in mathematics and reading in fourth and eighth grades, and less often in science and writing. In addition, mathematics and reading assessments were given at the 12th-grade level in 2009 and will be repeated in 2013.

Since NAEP assessments are administered uniformly using the same sets of test booklets across the nation, NAEP results serve as a common metric for all states. The assessment stays essentially the same from year to year, with only carefully documented changes. This permits NAEP to provide a clear picture of student academic progress over time.

Subject-matter achievement is reported in two ways—scale scores and achievement levels—so that student performance can be easily understood. NAEP scale-score results provide a numeric summary of what students know and can do in a particular subject and are presented for groups of students. Achievement levels categorize student achievement as Basic, Proficient, and Advanced, using ranges of performance established for each grade. A fourth category, Below Basic, also is reported for this scale.

Achievement levels are used to report results in terms of a set of standards for what students should know and be able to do.

Figure 1: 2011 NAEP Results: Fourth-Grade Reading

Average scale scores in NAEP reading for fourth-grade public school students, percentage within each achievement level, and lowa's percentage at or above Proficient compared with the nation and other participating states/jurisdictions.

	Legend	Below Basic	Basic	Proficient	Adv	vanced	
State/Jurisdiction (Avg. Score)		Percent at or	above Proficient is	higher than Io	owa		State/Jurisdiction
Massachusetts (237)		1	.7 32	35		16	Massachusetts
New Jersey (231)		22	34	32	11	1	New Jersey
New Hampshire (230)		22	34	33	10	0	New Hampshire
Maryland (231)		25	32	29	14		Maryland
Connecticut (227)		27	31	30	12		Connecticut
Pennsylvania (227)		26	32	30	11		Pennsylvania
Vermont (227)		27	32	30	11		Vermont
DoDEA* (229)		21	40	32	7		DoDEA
Virginia (226)		28	33	28	11		Virginia
Colorado (223)		29	32	29	9		Colorado
	Perc	ent at or above Pro	oficient is not signif	icantly differe	ent from Io	owa	
Nebraska (223)		30	34	28	8		Nebraska
Delaware (225)		28	36	29	7		Delaware
Kansas (224)		29	35	28	8		Kansas
North Dakota (226)		26	38	30	6		North Dakota
Montana (225)		27	38	28	7		Montana
Kentucky (225)		28	36	28	8		Kentucky
Minnesota (222)		30	35	27	8		Minnesota
Florida (225)		29	36	27	8		Florida
Rhode Island (222)		30	35	28	8		Rhode Island
New York (222)		32	33	26	9		New York
Washington (221)		33	32	26	8		Washington
Wyoming (224)		29	37	28	7		Wyoming
Missouri (220)		33	33	26	8		Missouri
Ohio (224)		29	38	27	7		Ohio
North Carolina (221)		32	34	26	8		North Carolina
Wisconsin (221)		32	34	26	7		Wisconsin
Utah (220)		32	35	27	6		Utah
Illinois (219)		35	32	25	9		Illinois
IOWA (221)		31	35	27	6		IOWA
Indiana (221)		32	35	26	6		Indiana
Idaho (221)		31	36	26	6		Idaho
Georgia (221)		34	34	25	7		Georgia
NATION (Public) (220)		34	34	25	7		NATION (Public)
Maine (222)		30	37	26	6		Maine
Alabama (220)		33	36	25	7		Alabama
South Dakota (220)		31	37	26	5		South Dakota
Michigan (219)		34	34	25	6		Michigan
Oregon (216)		37	32	23	7		Oregon
Arkansas (217)		37	33	24	6		Arkansas
		Percent at or	above Proficient is	lower than lo	owa		
South Carolina (215)		39	33	22	6		South Carolina
Texas (218)		36	36	23	6		Texas
Hawaii (214)		41	32	21	6		Hawaii
West Virginia (214)		39	34	22	5		WestVirginia
Oklahoma (215)		36	37	22	4		Oklahoma
Arizona (212)		42	32	21	5		Arizona
Tennessee (215)		40	35	21	5		Tennessee
Alaska (208)	1	44	30	20	5		Alaska
Nevada (213)	1	42	33	21	5		Nevada
California (211)	1	44	32	19	6		California
Louisiana (210)		45	33	19 4	1		Louisiana
Mississippi (209)		45	33	18 4			Mississippi
New Mexico (208)		47	33	17 3			New Mexico
District at Columbia (201)		56	25	13 6			District of Columb

Figure 2: 2011 NAEP Results: Eighth-Grade Math Average scale scores in NAEP mathematics for eighth-grade public school students, percentage within each achievement level, and lowa's percentage at or above Proficient compared with the nation and other participating states/jurisdictions.

Leger	nd Below B	Basic E	Basic	Proficie	ent	Advanced	
State/Jurisdiction (Avg. Score)	Day		Due Calantia		1	Stat	e/Jurisdiction
Massachusetts (299)	Per	cent at or above		nigher than	1 IOWa	Ma	ssachusetts
Minnesota (295)		36	3 17	34	13	Mir	inesota
New Jersey (294)		35	5 18	33	14	Nev	v Jersev
Vermont (294)		36	18	33	13	Ver	mont
Montana (293)		37	17	35	11	Мо	ntana
New Hampshire (292)		38	18	33	11	Nev	v Hampshire
Colorado (292)		37	20	31	12	Cole	orado
North Dakota (292)		42	15	34	8	Nor	th Dakota
South Dakota (291)		40	18	33	8	Sou	th Dakota
Wisconsin (289)		38	21	32	9	Wis	consin
Kansas (290)		39	20	32	8	Kan	sas
Washington (288)		36	23	29	11	Wa	shington
Maryland (288)		34	26	29	12	Ma	ryland
Texas (290)		41	19	31	9	Tex	as
Virginia (289)		38	22	29	11	Virg	ginia
Ohio (289)		40	21	31	8	Ohi	0
Pennsylvania (286)		35	26	29	9	Pen	insvlvania
Maine (289)		40	22	29	10	Mai	ine
Connecticut (287)		37	25	28	10	Con	necticut
Wyoming (288)		43	20	30	7	Wv	oming
	Percent at or	r above Proficier	nt is not signif	icantly diffe	rent from	lowa	0111115
North Carolina (286)		38	25	27	10	Nor	th Carolina
Idaho (287)		41	23	28	9	Idal	ho
DoDEA (288)		44	20	30	7	Dol	λFΔ
Alaska (283)		39	26	28	7		ska
Litah (283)		38	27	28	7		h
Indiana (285)		43	23	27	7	Indi	iana
Rhode Island (283)		40	27	27	7	Rhc	ialia ide Island
		43	23	26	8		
NATION (Public) (283)		39	28	26	8		TION (Public)
Illinois (283)		40	27	25	8	Illin	
Nobraska (283)		42	26	26	7	Not	uis vracka
Nebi dska (283)		39	28	25	7	Net Oro	JIdSKd
Deleware (283)		42	26	25	7	Ore	gon
Delaware (283)		38	30	25	7	Dela	aware
South Carolina (281)		41	27	25	7	Sou	ith Carolina
IVIISSOURI (282)		37	32	24	7	IVIIS	souri
Arizona (279)		40	29	25	6	Ariz	iona
Michigan (280)	- I - I	41	28	24	6	Mic	chigan
Kentucky (282)	- I i	40	30	23	7	Ken	itucky
New York (280)	Perc	cent at or above	Proficient is I	ower than I	owa	Nev	N YORK
Hawaii (278)	1 1	38	32	24	6		
Arkansas (279)		41	30	24	5	Hav	vali
Nevada (278)		38	33	23	5	Ark	ansas
Georgia (278)		41	32	22 6	3	Nev	/ada
Elorida (278)		40	32	22 6	3	Geo	orgia
Oklahoma (270)		44	28	23 4	L	Flor	rida
California (273)		36	39	19 6		Okl	ahoma
Tennessee (273)		40	36	19 5		Cali	tornia
New Mevico (274)		40	36	20 4		Ten	nessee
Louisiana (272)		41	37	19 3		Nev	w Mexico
LUUISIdiid (2/3)		44	35	18 3		Lou	isiana
VVESL VIIGIIIIA (2/3)		40	40	17 3		We	st Virginia
AldUdIIId (209)		30	40	16 3		Alal	bama
Niississippi (209)		21	52	14 3		Mis	sissippi
						Dist	trict of Columbia
	100 00		20		10		
	TOO 80	60 40	20	υ 20	40	60	

Percent at Below Basic or Basic Percent at Proficient or Advanced

In lowa, our focus is to ensure every child achieves at a high level. This aligns with the intent of the No Child Left Behind Act (NCLB) of 2002. While the law is imperfect, it has been successful in promoting high expectations for all students. NCLB requires states to examine student achievement by specific subgroups in order to ensure all groups of students are progressing toward proficiency targets.

Iowa's Accountability Subgroups						
Race/Ethnicity Groups	Other Subgroups					
 African American American Indian Asian Hawaiian/Pacific Islander Hispanic Two or More Races White 	 Free or Reduced-Price Lunch Eligible (FRL) English Language Learner (ELL) Individualized Education Program (IEP, student with a disability) 					

The chart below provides a snapshot of student proficiency in reading and math across race/ethnicity groups for the 2010-11 school year: lowa test results show the achievement gaps between these groups are large. Overall, white and Asian subgroups had a higher percentage of students scoring at or above the proficient level in reading and math than other student race/ethnicity subgroups.



In Iowa, our focus is to ensure every child achieves at a high level.



What is most striking is that these gaps are largely driven by the challenges that face students who have special needs, come from low-income backgrounds, or are English Language Learners. Students with fewer challenges, regardless of race, tend to perform on par with their non-challenged peers.

The charts below provide a picture of the reading and math proficiency across different subgroups of students. The "non-challenged group" represents students who are not eligible for free or reduced-price lunch, do not have a disability, and are not English Language Learners. The FRL, ELL, and IEP groups represent students who are eligible for free or reduced-price lunch, are English Language Learners, or have a disability, respectively. The remaining four groups (FRL+ELL, FRL+ELL, IEP+ELL, FRL+ELL+IEP) represent students who fall into multiple subgroups.





These results show how student performance is impacted by challenges such as poverty, English language proficiency, and having a disability. This also shows the compounding nature of subgroups—students who face more challenges tend to score lower than students who face fewer challenges. For students who do not belong to multiple subgroups, the achievement gaps between race/ ethnicity groups dramatically decrease. These findings underscore the need for multi-tiered interventions to address the challenges of poverty, language acquisition, and disabilities.

Shifting demographics: Implications for Iowa schools

lowa continues to see increases in the number of students who come from diverse backgrounds, live in poverty, and don't speak English as their native language. In October 2011, 19.3 percent of lowa students were racial or ethnic minorities, a nearly 10-percent increase in 12 years. The number of students participating in English Language Learner programs in Iowa also continues to significantly increase.



In addition, Iowa school districts continue to see rising poverty rates among their students. Surprisingly, while reduced-price lunches have remained stable over the past decade (7.8 percent in 2000 and 7.5 percent in 2011), the number of families eligible for free lunches continues to climb. Iowa sees more families and students with extreme needs.

Percentage of Students Eligible for Free or Reduced-Price Lunch 2000-01 to 2011-12



* Percentages may not equal 100 due to rounding.

"We have greater numbers of students in poverty or who are learning English, and that has an impact on lowa's education standing. This alone does not explain the lack of growth. Instead, lowa's white, affluent students are also underperforming when compared to their counterparts around the country, too. Part of it is that our school system has not adapted and improved to reach all students."

Jason E. Glass, Ed.D.

Director, Iowa Department of Education

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It is not just an urban issue.

Rural lowa districts also face significant challenges.

These challenges impact all districts—large, small, urban, and rural. In the 2011-12 school year, 43 percent of lowa schools were over the average poverty level (defined as greater than the state average of students eligible for free or reduced-price lunch, 40.1 percent). Seventy-one percent of districts with less than 300 students were over the average poverty level of the student population in lowa.

Enrollment Size	Total Number of Districts	Number Greater than 40% FRL	Percentage of Districts 40% or Greater FRL Eligibility
< 300	51	36	71%
300-599	107	40	37%
600-999	85	27	32%
999-2,499	76	33	43%
2,500-7,499	22	9	41%
> 7,500	10	5	50%
State Total	351	150	43%

The system itself needs to adapt in order to provide adequate supports for this growing trend. While it is important to examine the shifts in the state, it is critical to understand what these changes mean to lowa schools and the challenges that lie ahead. Closing achievement gaps once they have developed is difficult, and prevention is more likely to be successful than remediation. For example, solving the eighth-grade mathematics achievement problem well before it is established is easier than solving it in eighth grade (Murphy, 2009). Further, McKinsey and Company (2009) found that racial achievement gaps appear to grow more severe as a child goes from fourth grade to 12th grade and nears entry to the workforce. What follows in this report is the lowa Department of Education's approach to tackling these growing challenges.

The lowa Department of Education's approach to improving performance and closing achievement gaps

For decades, the education community has sought to close the achievement gaps in our state and nation, but we have had trouble maintaining focus and commitment. One lesson has been learned: the issues of inequity in achievement and access cannot be addressed by simply doing the same things harder (Darling-Hammond, 2010). It is critical to identify effective strategies to address the achievement divide in lowa.

This report demonstrates the continued challenges faced by lowa educators in producing world-class results for all lowa students. In addition, it describes a few principles that will guide lowa education into the future.

These include the selection of education programs at the state level that are:

- Focused on instruction;
- Proven effective; and
- Scalable.

Focused on instruction

While policy proposals that deal with issues of funding, time, and structure are important, lowa's schools will only improve if we keep a laser-like focus on improving teaching and learning. Richard Elmore of the Harvard Graduate School of Education points out that to have a positive effect on student performance we must focus on things that have an impact on the relationship between the student and teacher in the presence of content, or what he calls the instructional core.

Proven effective

It is critical that we only spend time, money, and effort on solutions that are supported by evidence. This can be a more difficult determination to make than it might seem, since some evidence exists to support so many things in education. What we are looking for is a significant body of evidence. Put another way, many things work, but we want to implement the things that work best and with the greatest impact.

In addition, we will also look at the policies of the highest-performing and fastest-improving countries in the world and explore how we can adapt these approaches to our local context. Upon finding common factors in the best-performing systems, we can then determine whether we can effectively implement the same programs in lowa.

Scalable

If a program works well in one class when given tremendous resources, but cannot be effectively implemented across an entire school, district, or state, the program can do little to improve education as a whole. As a system, we are interested in programs and interventions that are scalable.



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Focusing the efforts of the Iowa Department of Education

When the lowa Department of Education looked at these three qualifications—focused on instruction, proven effective, and scalable—we decided to focus on three main clusters of activities to support improvement:

- **I. Teacher quality ("the who"):** Focuses energy on ensuring that the best and brightest teaching candidates are recruited and supported, and ensuring that those who do enter the profession have the highest-quality learning experiences that result in highly skilled professionals.
- 2. The lowa Core ("the what"): Defines objectively what students need to know and be able to do to be successful in school and beyond.
- **3. Response to Intervention ("the how"):** Supports teachers in differentiating instruction to maintain progress for each learner.

In November 2011, the Governor's Office and the lowa Department of Education released **One Unshakable Vision:World-Class Schools for Iowa**, which outlined several key recommendations to increase teacher quality in Iowa schools. **The Centerpiece: Great Teachers and Principals** section included strategies to attract and support talented educators, improve educator recruiting and hiring practices, create educator leadership roles, build a meaningful peer-based evaluation system, create a transformative teacher salary structure, provide job protections based on effectiveness, and expand principal leadership programs.

The 2012 legislative session included two important task forces: 1) Teacher Leadership and Compensation, and 2) Administrator Evaluation. In August 2012, the Governor's Office and the Department of Education convened the Iowa Teacher and Principal Leadership Symposium to focus on how to organize schools to treat teachers as leaders, with clearly defined roles and responsibilities. The symposium provided a rich set of panelists who shared their thinking about principal and teacher leadership, why it matters, how it's being done in this state and country, and how top-performing school systems around the globe approach leadership.

Over the past several years, much work has been done by lowa educators, schools, and districts to begin to prepare to implement the lowa Core. The lowa Core identifies the essential concepts and skills in the areas of literacy, math, science, social studies, and 21st-century skills (civic literacy, financial literacy, technology literacy, health literacy, and employability skills). Iowa schools and districts are in the midst of implementing the Iowa Core. Iowa high schools were required to implement the Iowa Core in the 2012-13 school year and grades K-8 by the 2014-15 school year.

The final section of this report focuses on Response to Intervention, one element common to the world's highest-achieving systems that also is evidence-based, scalable, and focused on instruction (though it may go by another name).

Response to Intervention: A framework to raise achievement

Response to Intervention (RtI) is a process by which schools use data to identify the academic and behavioral supports each student needs to be successful in school and to leave school ready for life. The process provides students with evidence-based instruction and interventions matched to their needs and monitors student progress to improve their educational outcomes. Rtl also allows educators to evaluate the overall health of their system and target resources by providing the necessary data to determine which elements of the education system are performing adequately and which require further development. Rtl is a decision-making framework composed of evidence-based practices in assessment and instruction. Rtl is not a packaged program, set of assessments, or curriculum that can be purchased.

Rtl is a **general education process**, though it has been effective for students served in special programs (Tran, Sanchez, Arellano, & Swanson, 2011). Rtl takes place within tiered levels of instruction. In lowa, these tiers are labeled Universal, Targeted, and Intensive. Each of these levels provides increasingly intensive instruction, based on student needs, to support student progress toward proficiency (Mellard, McKnight, & Jordan, 2010).

Rtl is often described using an analogy to the medical world. When we see the doctor for a check-up, she has a predetermined set of questions she is interested in answering. For example, is my patient in good health or ill health? To assist in efficiently answering these questions, she will administer a variety of screening exams. These include checking temperature, blood pressure, weight, and pulse. If the screening tests reveal normal results, she pronounces the patient healthy and tells him/her to continue to eat right, exercise, and live a healthy lifestyle.

If the screening tests are outside the normal range—say the patient's temperature is elevated or the patient's blood pressure is high—the doctor typically will prescribe a standard treatment that has proven effective in most other patients with similar symptoms. For a simple infection, she might prescribe antibiotics and rest. For high blood pressure, she might choose a change in diet and exercise habits combined with medication.

In most cases, the doctor's standard treatment will work. However, in a few situations, the patient's condition may worsen, despite medical intervention. At this time, the doctor will order more tests to further diagnose the problem. For an infection that resists treatment by antibiotics, the patient may need much stronger medication. If the patient's blood pressure problem has not stabilized, he/she may need to wear a monitor and undergo additional medication changes. The doctor will continue to make changes when prior treatments are not helping. These changes will occur in the form of an increase in the level and number of tests, interventions, and monitoring of the patient's progress until he/she is on the way to recovery.

Rtl allows us to apply similar thinking to the educational process. First, what are the critical questions educators need to be asking about their students? For example, are our students on track to be successful in reading or are they at risk? Additionally, educators might want to ask questions about specific subgroups: How are our students who speak English as a second language performing compared to their peers? Or, are our highest-performing students continuing to grow in skills? Rtl is not just for students who are at risk—it's also for those who are exceeding expectations. Students who are achieving at very high levels may need additional support to perform at their best. Rtl, if implemented properly, allows educators to address the needs of all students.

"Response to Intervention is a proven procedure that works in schools. We have to think of how we grow this approach in lowa with very low variability and high quality."

Jason E. Glass, Ed.D.

Director, Iowa Department of Education



Critical components of Response to Intervention

The essential components that must be in place to ensure that Rtl is implemented effectively include:

- Robust, universal instruction in the Iowa Core;
- Universal screening;
- Evidence-based, instructional interventions at the Targeted and Intensive levels;
- Progress monitoring; and
- Data-based decision-making (Glover & DiPerna, 2007).



The RTI Model

FIDELITY OF IMPLEMENTATION



Robust, universal instruction

Rtl emphasizes the importance of evidence-based, rigorous instruction for all students in the general curriculum. Lembke and Stormont (2005) discuss the importance of identifying and selecting researchbased practices, which are fundamental to the implementation of Rtl. Without evidence-based instruction at the Universal level, it is not possible for an Rtl model to function effectively. If instruction at the Universal level is ineffective for 80 to 90 percent of students, too many students will require intervention at the Targeted or Intensive levels, placing a resource burden on the education system that cannot be sustained.

Universal screening

Universal screening assessments are administered three times each year—fall, winter, and spring—to all students. It is important that all students are tested during universal screening so educators have a true picture of how everyone in the class, grade, or school is performing. Rtl uses universal screening information to identify struggling students at the earliest grade levels and to provide students with additional instructional time and intensity during the school day. Rtl also provides more advanced curriculum and additional instructional time and intensity to those who are on track to exceed benchmarks and need extended learning. Universal screening is a critical step in the Rtl process, as it provides information on the prospective future performance of all students and enables teachers to intervene early to help struggling students or to provide advanced learners with additional support (Jenkins, Hudson, & Johnson, 2007).

Evidence-based, instructional interventions at the Targeted and Intensive levels

Students performing below benchmark, leaving appropriate room for error, may be provided with Targeted or Intensive instruction and supports, depending on how discrepant their scores are. Students performing above benchmark may also be provided with Targeted or Intensive instruction and supports.

Students receiving intervention at the Targeted level get all of the instruction and support in the Iowa Core at the Universal level, plus small-group instruction targeted to their needs. Students receiving intervention at the Intensive level get all of the instruction and support at the Universal level, plus individualized instruction targeted to their specific needs. What changes as students move from one level of the Rtl system to the next is the duration and intensity of the instruction.

Progress monitoring

With Rtl, students are monitored often to ensure they are progressing, and when they are not, they receive additional learning opportunities. Progress-monitoring data are essential to a functional Rtl system (Fuchs & Fuchs, 1999). Students who are performing as expected for their grade level with Universal instruction are monitored three times a year with the universal screening process. Students who are receiving Targeted instruction and supports are monitored more frequently, typically every other week. Students who are receiving Intensive instruction and supports are monitored at least weekly. The rate of progress monitoring increases with the level of intensity of instruction so that students who need additional support-those at the Targeted and Intensive levels-do not lose valuable time to interventions that are not working for them. If progress monitoring data demonstrate that a particular intervention is not having a positive effect on a student, educators know to do two things: check for fidelity of implementation of the intervention, and, if necessary, change the intervention.

Data-based decision-making

An Rtl system relies heavily on data and the ability of educators within that system to make informed decisions based on data. While universal screening and progress monitoring encompass the majority of the data in many systems, these are combined with other sources of information to reinforce a continuous process of assessment and instructional change. Sometimes educators will determine that more data are required to make appropriate decisions, and this is more often the case with students who need Intensive instruction and support. If the necessary data cannot be culled from existing sources, such as test scores or formative assessment data, a diagnostic assessment may be useful. It's time to move beyond conversations about whether a strategy is right or wrong, and together start talking about policies and approaches that work. Together, we can put lowa on the path to world-class schools.





Implementing Rtl in Iowa

It is incumbent upon the lowa Department of Education to provide leadership in the successful scaling and implementation of Rtl. The Department has developed a statewide implementation plan for Rtl that encompasses four stages: developing consensus, building infrastructure, implementing Rtl, and sustaining implementation.

Developing consensus

The consensus-building phase began in fall 2011. The Department established a team to oversee the work, wrote the implementation plan, identified foundational research pieces on which Iowa's Rtl model is based, and assessed the knowledge and skills of Department staff around Rtl. The Department team also met with Area Education Agency (AEA) personnel critical to the effective implementation of Rtl across the state.

Building infrastructure

Building the infrastructure to support statewide implementation of Rtl is a current and ongoing project that involves the work of the Department, AEAs, school districts, and education partners. This work includes:

- Establishing a state implementation network;
- Reviewing and editing, as necessary, state policies and procedures;
- Identifying and allocating financial supports;
- · Developing statewide professional development; and
- Establishing a new Rtl data system.

Implementation

Implementation relies heavily on collaboration between the Department, AEAs, and schools to deliver uniform professional development, as well as evidence-based practices in instruction and assessment. The Department's Assessment Workgroup has conducted a thorough review of universal screening and progress-monitoring tools that may be used in an Rtl system, and will be adopting one screening and one progress-monitoring tool for use statewide in the new Rtl data system. The Content Workgroup has conducted a review of the evidence in instruction and produced a white paper focusing on the universal, targeted, and intensive levels. The Department will continue to review the interventions this fall.

Sustainability

Sustainability involves two items—ensuring that the model for Rtl scalability is sound, and evaluating the process and outcomes of the work. The Department will coordinate with the State Implementation Network to develop and adopt the scaling and sustainability model. The Department has established an evaluation team responsible for evaluating the process to bring Rtl to scale in the state and the outcomes achieved for students. In addition, implementation will focus initially on kindergarten through sixth grade in reading, but will expand to math, social/emotional/behavioral domains, and grades 7–12. The initial focus on reading in the early grades is purposeful because as a state, we can only bring the practice to scale effectively with limited scope initially, and we have chosen to focus on the area where the most evidence exists.

Conclusion

lowa's education system faces more challenges today than ever, despite its tradition of excellence. Rural and urban schools are educating a growing share of students who live in poverty, who do not speak English as their native language, and who have special needs. There is a clear link between these challenges and poor academic performance.

So how do we raise the state's education system to be among the highest-performing in the world? In the absence of unlimited resources, we must put in place strategies that will have important, systemic effects. The following three questions will guide our work to shape an effective policy agenda:

- Is it focused on instruction?
- Is it proven effective by evidence and international benchmarking?
- Is it scalable?

The lowa Department of Education will focus its efforts on three areas that impact the instructional core:

- **Standards and curriculum:** Set high-quality expectations that we want students to aspire to in core subjects, as well as in other areas such as physical education, fine arts, and character education; design a curriculum to eliminate variability in instruction; and then align our system (assessments, teacher preparation, professional development) to those.
- Educator quality: Look at how we recruit educators, how we prepare and support them, and issues of leadership, compensation and career paths.
- **Customized instruction:** Schools need procedures that provide early detection of learning problems, that diagnose the problem quickly, and quickly customize instruction and supports to correct it before failure occurs. This idea of customized instruction is, in a nutshell, Response to Intervention.

Finally, this report has presented Response to Intervention as one solution that aligns with the Department's future work. Rtl is an evidence-based system that is designed to meet the needs of all students. It is not sufficient in itself to elevate lowa's education system to one of the best in the world, but it is a necessary step in the process. Effective teachers have been implementing many of the Rtl directives for years. Rtl provides a more structured and formal data-powered approach to the science of teaching. Rtl challenges educators to merge the art of teaching with the data-driven world—the art and science of teaching. As research continues to provide a scientific basis for what and how we teach, the art of teaching will continue to improve.

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Acknowledgments

Dianne Chadwick, Ed.D.

Administrative Consultant Bureau of Information and Analysis Iowa Department of Education

Jason E. Glass, Ed.D.

Director Iowa Department of Education

Michelle Hosp Education Program Consultant Iowa Department of Education

Staci Hupp Communications Director Iowa Department of Education

Jay Pennington

Bureau Chief Iowa Department of Education **W. David Tilly, Ph.D.** Deputy Director Iowa Department of Education

Xiaoping Wang, Ph.D. Administrative Consultant Iowa Department of Education

Amy Williamson Bureau Chief Iowa Department of Education

Ryan Wise Policy Fellow Iowa Department of Education