



**INSTRUCTIONAL
DECISION MAKING:
YEAR 1 (2006-07) EXECUTIVE
SUMMARY**



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INTRODUCTION

The purpose of Instructional Decision Making (IDM) is to implement a set of systems and strategies that are designed to improve a school's capacity to increase student achievement. Critical to the successful implementation and sustainability of IDM is for schools and Heartland to partner in the continuous improvement process, which includes evaluation of implemented practices. The purpose of this report is to communicate agency-wide results from the first year of IDM implementation in Cohort 1 schools.

BACKGROUND INFORMATION

Influence of Research

Heartland's IDM framework draws heavily from practices related to *response to intervention* (RtI). Response to intervention is "an integrated approach to service delivery that encompasses general and special education" and includes "the practice of (1) providing high-quality instruction/intervention matched to student needs and (2) using learning rate over time and level of performance to (3) make important educational decisions" (Batsche et al., 2005). The influence of RtI on IDM can also be seen in IDM's rationale: schools need one process to make instructional decisions that are (a) efficient, (b) proactive, (c) based on early intervention, (d) matched to student needs, (e) integrated, and (f) focused on the learning of each student. A multi-tiered model (e.g., Adelman & Taylor, 1999; Sugai, Horner, & Gresham, 2002) is

frequently used to apply RtI practices to efficiently allocate resources to meet the needs of each student. Within IDM, the three different intensities are called core-alone, core plus supplemental, and core plus intensive.

Influence of Policy

While the proficiency requirements of *No Child Left Behind* (NCLB) relate to the objective of IDM to improve outcomes for each student, additional features of the policy influence IDM as well. For example, the increased focus on research-based practices called for in NCLB are mirrored in the beliefs and practices found in IDM.

Similar to NCLB, the recently reauthorized *Individuals with Disabilities Education Improvement Act* (IDEIA) also influences IDM. For example, the practices associated with RtI as they relate to making decisions for special education eligibility have been present in schools with whom Heartland has partnered since 1994 (Heartland Area Education Agency 11, 1994). While data-based decision-making practices for the purpose of special education determination may not be new for Heartland and its partnering schools, it is important to note that these practices are fully incorporated within the IDM framework, and they make up a small proportion of the decisions made and the students influenced by IDM.

Role of Outcomes Evaluation

The primary purpose of outcomes evaluation of IDM is to determine the extent to which the implementation of IDM has an impact on student outcomes, at the individual school level and across

all participating schools. The secondary purpose of outcomes evaluation of IDM is to create a profile of performance and need across participating schools to help Heartland better allocate agency resources matched to school needs. Fundamental to this evaluation framework are three basic questions: (1) How much did we do? (i.e., quantity of effort), (2) How well did we do it? (i.e., quality of effort), and (3) Is anyone better off? (i.e., quantity and quality of effect) (Friedman, 2005).

METHOD

Demographics

Thirty-seven schools received training from Heartland on IDM in the areas of reading and/or math. These 37 schools were divided into the following cohorts: Cohort 1 schools (n = 20) received initial training during the 2005-06 school year, while Cohorts 2 (n = 5), 3 (n = 5), and 4 (n = 7) received initial training during the 2006-07 school year. All remaining information will be based only on Cohort 1 schools (18 elementary and 2 middle or junior/senior high schools) because these schools completed their first year of implementation after finishing Year 1 of professional development, whereas Cohorts 2 through 4 only finished Year 1 of professional development in 2006-07 and were not considered to be in the implementation phase.

Measures

Student Performance Measures. Dynamic Indicators of Basic Early Literacy Skills, 6th edition (DIBELS; Good & Kaminski, 2002) were used in most schools as a screening measure in kindergarten through sixth grade to identify children who were on track as well as who were at-risk for acquiring important early literacy skills. Information on the measures, the recommended assessment schedule, and the benchmark goals can be found at the official DIBELS



Web site (<http://dibels.uoregon.edu>). The Iowa Tests of Basic Skills (ITBS) developed for grades 1 through 8, and the Iowa Tests of Educational Development (ITED), developed for grades 9 through 12, were used in all participating schools. The ITBS/ITED are standardized, group-administered, multiple-choice achievement batteries designed for norm-referenced interpretations.

Special Education Eligibility. The percentage of students eligible for special education services in each building was collected to document the relationship between special education placements and systemic school improvement efforts. Special education eligibility rates included all school-age students receiving IEP services, regardless of goal area or weighting.

Protocol for Evaluating School-wide Academics. The Protocol for Evaluating School-wide Academics (PESA), developed by Heartland's research and evaluation team, has 46 items, called Indicators, organized into six categories, called Key Features. Key Features and Indicators were selected to tightly align with content identified as critical for successful implementation of IDM within Heartland's professional development and other IDM supports.

Professional Development

The first year of IDM training consisted of six sessions for Cohort 1. Each school was asked to select and bring a leadership team to the training sessions that consisted of both school and AEA staff who could fulfill specific roles on the team. Content covered included (a) an overview of the decision-making structure and ten guiding questions, (b) selection of assessments and use of data, (c) differentiation of instruction and supports within the decision-making framework based on student needs, and (d) facilitation of the change process. The second year of training for Cohort 1 schools involved opportunities for differentiated support based on school needs.

RESULTS

QUESTION 1

Question 1 –

Is there an increase in the percentage of students who meet performance criteria by grade level each year?

Results from both DIBELS and ITBS/ITED data were variable. The percentage of Cohort 1 schools that increased the percentage of students Established on the DIBELS Phoneme Segmentation Fluency (PSF) measure (kindergarten only) or Low Risk on the DIBELS Oral Reading Fluency (ORF) measure (grades 1 through 6) during spring administration is presented in Table 1. Table 2 presents the percentage of Cohort 1 schools that increased the percentage of students proficient (41st percentile and above on national norms) on the ITBS/ITED Reading Comprehension subtest or the ITBS/ITED Math Total score at each grade level. Variable results might be due to several factors, such as variation of implementation across grade levels, small numbers of students per grade at the building level, or because schools with grade levels that started with a lower percentage of students proficient are more likely to demonstrate more growth than schools that started with a higher percentage of students proficient.

Table 1

Question 1a: Percentage of Schools Increasing the Percentage of Students Proficient on Spring DIBELS by Grade

Grade ^a	Percentage of Buildings	Number ^b
K	61.5	13
1	46.2	13
2	76.9	13
3	92.9	14
4	28.6	14
5	85.7	14
6	50.0	8

Note. Data taken from the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) Spring Distribution Report. ^aPhoneme Segmentation Fluency scores were used for kindergarten, and Oral Reading Fluency scores were used for grades 1-6. ^bTotal number of schools that collected data at each grade level.

Table 2

Question 1b: Percentage of Schools Increasing the Percentage of Students Proficient on ITBS/ITED by Grade

Grade	Reading		Math	
	Percentage of Buildings	Number ^a	Percentage of Buildings	Number ^a
2	100.0	2	--	0
3	81.3	16	0.0	1
4	56.3	16	0.0	1
5	58.8	17	50.0	2
6	63.6	11	100.0	1
7	100.0	1	--	0
8	100.0	1	--	0
9	0.0	1	--	0



Note. Data taken from the Iowa Tests of Basic Skills (ITBS) for grades 2 through 6 and from the Iowa Tests of Educational Development (ITED) Reading Comprehension and Math Total for grade 9. Dashes indicate that no schools participated at that grade level. ^aTotal number of schools that collected data at each grade level.

QUESTION 2

Question 2 –

Is there an increase in the percentage of students who require core-alone services by grade level from fall to spring?

Data from DIBELS yielded mixed results. Data were taken from the DIBELS Summary of Effectiveness by District report for each school and each semester (i.e., fall to winter, winter to spring) to determine the percentage of students falling into each instructional recommendation (i.e., *benchmark, strategic, or intensive*). Table 3 presents the percentage of Cohort 1 schools that increased the percentage of students requiring core-alone services from fall to spring in 2006-07. The percentage of students with a benchmark instructional recommendation (i.e., core-alone services) in fall was compared to the percentage of students with a benchmark instructional recommendation in spring. Possible reasons for the variability are that many students may have made progress but not at the level required to reach benchmark or there was a lack of consistent implementation of the essential components of IDM across the entire school year.

Table 3

Question 2: Percentage of Schools Increasing the Percentage of Students Requiring Core-Alone Services from Fall to Spring by Grade

Grade	Percentage of Buildings	Number ^a
K	100.0	11
1	25.0	12
2	35.7	14
3	53.8	13
4	46.2	13
5	66.7	15
6	11.1	9

Note. Data taken from the Instructional Recommendation scores from the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) Summary of Effectiveness Report.

^aTotal number of schools that collected data at each grade level.



QUESTION 3

Question 3 –

Are core-alone, core plus supplemental, and core plus intensive services effective in supporting students to meet performance criteria by grade level from fall to spring?

It appears that, as a group, most Cohort 1 schools did not meet criteria for effective instructional services during the 2006-07 school year. Results are reported by grade level and type of support (Table 4). Data were taken from the DIBELS Summary of Effectiveness by District report to determine the movement of students from one instructional recommendation to another (e.g., from strategic at winter to benchmark at spring). The goal is to have at least 95% of students at benchmark to remain at benchmark at the next testing period, at least 80% of students needing strategic support to move to benchmark support, and at least 80% of students needing intensive support to move to either strategic or benchmark support (Kaminski, Cummings, Powell-Smith, & Good, 2008).

In general, results seem to indicate that students in most Cohort 1 schools previously performing at benchmark do not sufficiently maintain that level of performance over the course of the school year, nor do students in most Cohort 1 schools make enough progress to meet strategic or benchmark criteria if they were not previously meeting benchmark criteria. This may be due to a variety of factors, including higher performance expectations as the year progresses, and/or a decrease in the quality of instructional delivery and supports during the second semester of the school year.

Table 4

Question 3: Percentage of Schools With Effective Core-Alone, Core Plus Supplemental, and Core Plus Intensive Services in Reading from Fall to Spring by Grade

Grade	Core-Alone	Core+ Supplemental	Core+ Intensive	Number ^a
K	9	18	45	11
1	0	0	8	12
2	13	0	0	15
3	7	0	0	14
4	7	0	0	14
5	20	0	0	15
6	0	0	0	9

Note. Data taken from the Dynamic Indicators of Basic Early Literacy Skills Summary of Effectiveness by District report. ^aTotal number of schools that collected data at each grade level.



QUESTION 4
Question 4 – What percentage of students receive special education services each year by school?

Since no baseline was established for students receiving special education services, no statements about change can be made at the agency level. Data from an internal Heartland database were used to determine the percentage of students receiving special education services by school. Each school's percentage was aggregated to calculate an agency-wide median. The median percentage of students eligible for special education services from the 19 Cohort 1 schools was 10.0% (range = 6.7 to 18.1%), which is below Iowa's state average of 13.3% in 2005-06 (Iowa Department of Education, 2006). One K-5 school was missing one year of data.

QUESTION 5
Question Five – Is there an increase in the percentage of essential components implemented each year?

The data available appear to yield mixed results. Data from the PESA were used to determine the percentage of essential components implemented at each school by dividing the sum across all PESA indicators by the total number of possible points. Since implementation data were collected in 2006-07 with two different versions of the PESA, data are reported for Cohort 1 schools that completed the abbreviated principal or designee interview (n=16) and the full interview plus permanent product review (n=3). Since this is the first year implementation data were collected, data are used to establish a baseline and describe the levels of implementation amongst participating schools. Therefore, data aggregated across all schools for the agency-wide analysis are reported as an overall median percentage of components implemented, as well as the range of implementation scores (Table 5). One possible explanation for the difference between the schools that had the full PESA and abbreviated PESA is that schools with the abbreviated PESA self-reported their implementation using an interview format only, thus their data are possibly an overestimate of IDM implementation.

Table 5
 Question 5: Median Percentage of Essential Components Implemented in Cohort 1 Schools

Group	Median Percentage	Range	Number ^a
Abbreviated PESA Schools	83	66–99	16 ^b
Full PESA Schools	59	57–64	3

Note. Data taken from the Protocol for Evaluating School-wide Academics (PESA). ^aTotal number of schools that collected data at each grade level. ^bData from K-6 and 7-12 buildings in one participating district aggregated for this analysis.

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DISCUSSION

Interpretation of Results

Overall, it appears that most schools in Cohort 1 are not making much growth in the percentage of students proficient, although kindergarten may be an exception. Performance is highly varied across grade levels, with no apparent pattern. When data from questions 2 and 3 are considered together, it appears that, although many (but not most) schools are demonstrating growth in the overall percentage of students meeting benchmark, few actually have effective core-alone, core plus supplemental, or core plus intensive services. Although the percentage of students in Cohort 1 schools receiving special education services is lower than the state average, it is difficult to attribute that to the implementation of IDM. Furthermore, it is difficult to attribute any student outcomes to the implementation, or lack thereof, of IDM due to the mixed results from schools using the abbreviated versus the full PESA. Nevertheless, these results do hold promise for future decision-making and implementation efforts.

Implications and Next Steps

Results of this large-scale outcomes evaluation suggest several important implications as well as next steps. One implication is that the full PESA that relied more on permanent product review likely yielded more accurate results than the abbreviated PESA. For the 2007-08 year, after a rescaling of items, the full PESA will be used with every participating school, and outcomes evaluation will be systematically incorporated into professional development trainings for subsequent cohorts. A second implication is the need for implementation data that can be linked back to student outcomes. Once the PESA is improved, we will be better able to examine the relationship between implementation of IDM and student outcomes.

A third implication relates to the need for high quality instruction at the core and supplemental/intensive intervention levels. Results for questions 2 and 3 suggest that a more thorough investigation of the core is warranted. If students do not receive high quality instruction at the core, it could place stress on the system (Torgesen, 2002), including potential increases in the special education eligibility percentages (question 4). One change for the 2007-08 school year is to assign internal and external coaches to provide additional support as schools move from Year 1

of professional development to Year 1 of implementation to engage in a variety of new practices, including examining the core if necessary.

Since this current outcomes evaluation focuses primarily on reading results, a final implication is to continue searching for screening, diagnostic, and formative evaluation measures as well as research-based interventions in math. At this time, question 2 and 3 cannot be answered in math. Models of tiered instruction for math are beginning to appear (e.g., Diane Pedrotty Bryant at http://www.texasreading.org/utcr/pd/SERP_Math.asp), but the methodology is not as well-established as in reading.



CONCLUSIONS

Instructional Decision Making, a proactive RtI initiative supported by the Iowa Department of Education, is meant to be a seamless, school-wide system of support that uses different sources of data to identify systems-level and student-level needs. It involves the systematic use of student achievement data to identify instructional needs and the coordination of resources to provide necessary instruction to all students. Although the results from the first year of outcomes evaluation are mixed, they are encouraging. Thus, IDM holds promise as a decision-making framework to better meet the needs of systems and students.

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