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Promising Practices in Professional Growth & Support:

Case Study of Agile Mind

One of a series of ERS publications and tools on teacher Professional Growth & Support, this case study explores how one education reform organization implements a strategic approach to improving teaching effectiveness at the system level. It is part of a set of four case studies of organizations with promising practices in this area.

Four organizations with promising practices in teacher Professional Growth & Support have significantly raised outcomes for low-income students. The charter management networks, Achievement First and Aspire Public Schools, and the two reform organizations, Teach Plus and Agile Mind, have successfully increased student achievement with a sustained focus on teaching effectiveness and capacity. In this publication, we will focus on how Agile Mind's Instructional Guidance Systems in math and science provide school systems with coordinated curriculum, training, assessment, and support materials that bolster teaching and learning. Agile Mind is an example of a potentially cost-effective way to bring high levels of expertise to bear in implementing Common Core standards. In the sister case studies, we explore how Achievement First holistically integrates professional growth with key human capital and teaching support functions; and how both Teach Plus and Aspire Public Schools emphasize teacher teaming around regular student data with support from content experts and teacher leaders. All four of these organizations leverage information and technology to identify priorities for students and teachers.

As these organizations respond to the challenges of Common Core standards, invest heavily in teaching capacity through teacher leadership and collaborative planning time, and capitalize on assessment and evaluation data and technology, they exemplify best practices in Professional Growth & Support. They reinforce what Education Resource Strategies (ERS) terms the Eight Principles of a Strategic Professional Growth & Support System. The eight principles below summarize ERS research and work with partner school systems and are the foundation for ERS' white paper, *A New Vision for Teacher Professional Growth & Support: Six Steps to a More Powerful School System Strategy* and related tools.

In each case study, we describe the mission and background, strategic approaches to Professional Growth & Support, performance results, program costs, lessons learned, and next steps. The distinctive approaches, success factors, and challenges that each organization faces illustrate these principles and the steps that school systems and educational leaders can take to make the most of Professional Growth & Support activities and spending.

Eight Principles of a Strategic Professional Growth & Support System

A strategic Professional Growth & Support system...

1. Integrates all human capital and teaching support functions to support the school system's broader improvement strategy and context
2. Invests primarily in job-embedded teacher growth through school-based content experts, teacher leaders, and time for teacher teams
3. Links results of performance evaluations to opportunities for growth that are ongoing and occur at key career junctures
4. Supports growth throughout a teacher's career by restructuring compensation and career path
5. Organizes sufficient teacher time to meet both individual growth and organization needs
6. Differentiates investments based on school and educator needs and performance levels
7. Ensures accountability and continuous improvement by assigning responsibility and measuring impact
8. Pays for ongoing costs with sustainable funding and leverages external resources, partners, and technology to promote quality and efficiency

Agile Mind in Duval County Public Schools:

Integrating Teacher Development and Support

Overview

Agile Mind’s instructional guidance systems in math and science are designed to jumpstart the reform process and quickly grow teaching capacity, provide support, and improve achievement where school systems are most in need. After partnering with Agile Mind to target low performance among Algebra I students in 6th grade math, Duval County Public Schools saw significant gains in proficiency and pass rates. Agile Mind’s full menu of curriculum aligned to standards, tools, materials, data, and training provides a benchmark of quality and the potential to bolster system-wide teaching practice and student achievement. We include Agile Mind in this set of case studies because it provides an example of a potentially cost-effective way that leverages technology to bring high levels of expertise to bear implementing Common Core standards.

Agile Mind Background	
Description	<ul style="list-style-type: none">• Company provides guided curriculum in math/science, including related software and supports• Affiliated w/ Charles A. Dana Center, University of Texas
Student Performance	<ul style="list-style-type: none">• 80% of Duval County Public Schools Intensified Algebra students gained 1–2 levels on FL Algebra EOC exam
Reach	<ul style="list-style-type: none">• 300K students, 4800 educators in 21 states
Student Type	<ul style="list-style-type: none">• Middle and high school
PGS Strategy Highlights	<ul style="list-style-type: none">• Integrated menu of tools: PD, curriculum, assessments, analytics to support teachers and students

Mission & Program

With the goals of enhancing equity and achievement in mathematics and science, Agile Mind’s mission is “to provide the programs, the tools, and the instructional improvement systems needed to transform student engagement and achievement through exemplary, sustainable teaching practices.”¹ Founded in 2001 in collaboration with the Charles A. Dana Center² at the University of Texas at Austin, Agile Mind programming is based upon research, practice, and empirical data—including extensive work by the Dana Center over many years.

Agile Mind provides programming for many key middle- and high-school math and science courses: middle school math, Algebra I, Algebra II, Geometry, Pre-Calculus, AP Calculus, AP Statistics, and Biology. For each of these courses, the Agile Mind program consists of six components:

1. Content and curriculum (the materials that teachers and students use each day in the classroom)
2. Professional development (both in-person and online)
3. Formative assessments (which include four different types of assessment)
4. Data reporting system (allowing teachers and students to track completion of and performance on online assignments)
5. Test preparation (embedded in the organization of the topic and compatible with most state tests)
6. Materials for homework assignments

In the current (2012–2013) school year, Agile Mind programming is reaching approximately 300,000 students and 4,800 educators in 21 states. An external evaluation of Agile Mind’s Intensified Algebra (IA) project, conducted by Inverness Research Associates,³ had several findings, including:

- 88 percent of teachers say IA materials are likely to benefit students who have traditionally not been successful in mathematics
- 73 percent rate the IA materials “good” or “excellent” in terms of being teacher friendly
- 69 percent say IA materials are superior to alternatives for teaching double-period algebra

Agile Mind in Duval County Public Schools

In 2010, the leadership in Duval County Public Schools (Duval) in Jacksonville, Florida, began worrying about how the district’s students would perform on the first state-wide algebra end-of-course exam, slated for trial in 2010–2011 and becoming official in 2011–2012. Many district students were struggling in math—particularly among those taking algebra in the 9th grade—and would be unlikely to pass the end-of-course exam. 6th grade math performance was also flagging, declining as students made the transition from elementary school (ending after 5th grade) to middle school.

In order to strengthen performance at these troubling points, DCPS sought a partner who could implement proven programming with expertise in math. Duval decided to partner with Agile Mind, starting in fall 2011, to improve mathematics performance for struggling students and build teacher capacity in the two areas identified. Duval implemented Agile Mind’s Intensified Algebra program for the rising 9th grade students who had scored at the lowest level (Level 1: Inadequate Level of Success) on the mathematics portion of Florida’s Comprehensive Assessment Test (FCAT) the previous year.⁴ The program was rolled out to 1,500 students who met these criteria.⁵ The district also implemented Agile Mind programming for intensive 6th grade math for 2,200 students who had scored at Levels 1 and 2 on the FCAT. In total, the programs reached about 3,700 students and 110 teachers in 40 schools during the 2011–2012 school year.

Knowing it would take some time to implement new programming, the district doubted that all teachers would implement with fidelity in the first year. Instead, district leadership hoped to create several proof points for the value of these programs. They reasoned that they could convince others to change practice if a handful of teachers diligently implemented the program and showed outstanding results. They put plans in place to expand the program in the second year (2012–2013), after teachers had a sense of the potential of Agile Mind programming.

As year two of Agile Mind programming began, the number of students served by the 6th grade math program remained about the same (~2,200 students), but the number of students participating in the algebra program increased to 3,600.⁶ Additionally, DCPS added several additional Agile Mind programs in the second year:

- Algebra end-of-course recovery for about 1,200 students to prepare for a retake of the algebra end-of-course exam
- A pilot program in geometry, working with five teachers and 301 students at four schools
- AP Calculus and AP Statistics programming for 1,354 students and 24 teachers

Overall, in the current 2012–2013 school year, the programs are reaching about 7,400 students and 160 teachers in 48 schools.

A Strategic Professional Growth & Support System

Agile Mind designs its programs to be aligned with a school system's curriculum standards and teaching capacity, providing integrated support based on teacher needs and data to monitor student and teacher performance and adjust instruction as needed. Agile Mind's approach helps school systems improve their Professional Growth & Support systems in several research-based ways.⁷

ERS KEY PRINCIPLE

Integrates human capital, professional growth, and teaching support functions to support the school system's broader improvement strategy and context

Agile Mind provides a system in which standard professional development is only one component. The system also includes curricula, assignments, formative assessment, test preparation, and real-time reporting. Systems cannot purchase Agile Mind programming in piecemeal form. Districts must buy all six components, because all are necessary for success.⁸ Agile Mind's goal is that the system is fully integrated into the district and does not function as just an "add-on." In Duval, this means that courses are intentional and built to the structure of the school day; for example, Agile Mind content was adapted to the scope and sequence already outlined by Duval.

A critical and integrated component of the Agile Mind system is its tracking of student achievement and participation in a "real-time" manner. Teachers can view aggregate data to evaluate the performance of individual students and groups of students at any given time. Students also benefit from this tracking,

because they receive detailed data about their work and can thus take responsibility for their learning. Schools can use the data to check that teachers are covering the full curriculum and that students understand each element of the curriculum. Overall, the data reporting system makes student performance, rather than just student completion of work, the central information a teacher receives. The student assessment data allows Duval to adjust instruction and intervention in real time, focusing on continuous student and teacher improvement.

Partnering with Agile Mind enables Duval to build teaching capacity and content knowledge in an area of highest need: mathematics. Stated goals from the district’s 2009–2012 strategic plan include employing the “Best Teachers and Principals” by “Strengthen[ing] professional development to meet the needs of instructional staffs, school-based and district leaders.”⁹ The Agile Mind system helps Duval to accomplish this goal, filling identified gaps in student achievement and teacher capacity.

Agile Mind PD Component

The Agile Mind system enables districts to adapt PD to the various audiences involved, such as district leaders, coaches, school-based leaders, and teachers. An Agile Mind engagement with a district typically begins with a 2.5-day institute with a set program that helps key players understand how to implement the program successfully. Further event-based and school-based PD sessions are supported by Agile Mind “advisors” who work with those implementing the program in schools. Other PD resources include online tools and webinars focused on effective implementation strategies for specific components of the Agile Mind system.

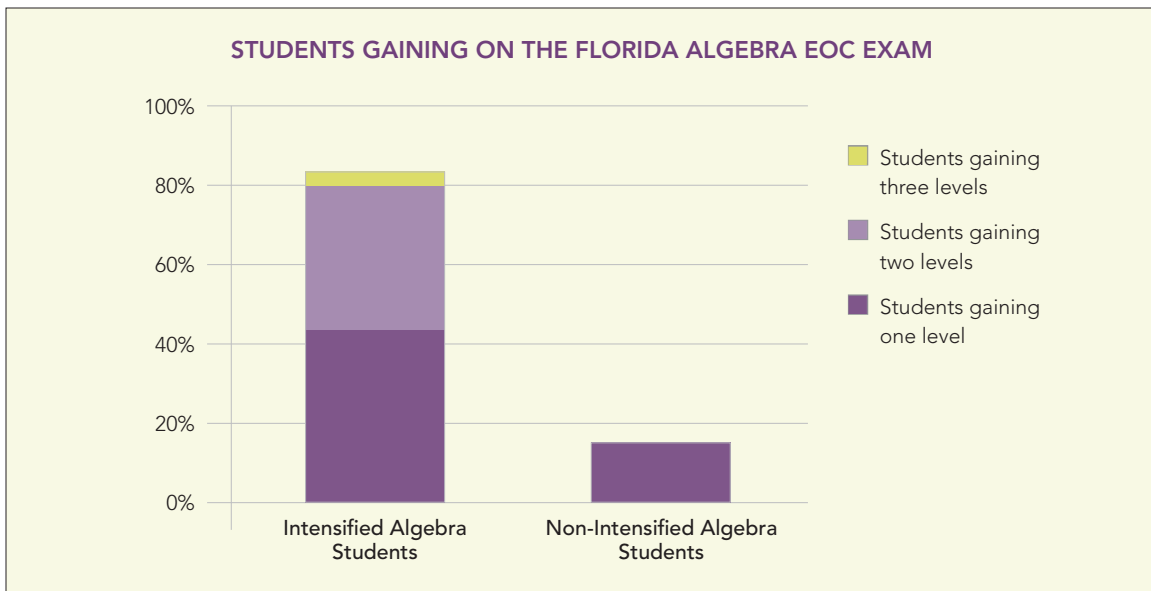
ERS KEY PRINCIPLE

Differentiates investments based on school and educator needs and performance levels.

Agile Mind has designed its professional development component (see inset above) to be adaptable on many dimensions; districts are able to adjust the professional development offerings to meet specific school and educator needs. Having identified a need for additional professional development in turnaround schools, Duval was able to purchase more professional development for those schools. In those schools, teachers receive six days of face-to-face professional development (versus four days for non-turnaround schools), and Agile Mind coaches work with groups of teachers three to four times per year. In addition, Duval decided to increase the amount of professional development (from 102 to 144 face-to-face days) in the second year of Agile Mind programming, to help more teachers implement with fidelity as soon as possible.

Results¹⁰

DCPS students participating in Agile Mind’s Intensified Algebra program showed significant improvement on the Algebra End-of-Course exam versus those students who didn’t participate in the program. Specifically, 84 percent of the students with teachers who fully implemented Intensified Algebra achieved an improvement of one or more levels on the 2012 Florida Algebra End-of-Course exam, and 40 percent of these participating students improved two or more levels. In contrast, only 15 percent of the non-Intensified Algebra students gained one level, and none gained more than one level. (See chart on next page.)



Furthermore, 40 percent of the Intensified Algebra students (who had scored at the lowest level on the FCAT in the previous year) achieved a passing rate on the Florida Algebra End-of-Course exam, while only 48 percent of all of Florida’s 9th grade students—scoring at all levels, 1–5, on the previous year’s FCAT—passed the exam.

Funding

The first year (2011–12) of DCPS’s engagement with Agile Mind cost \$450,000,¹ for both Intensified Algebra and grade 6 math. Duval invested approximately a quarter of a million dollars, or \$3,676 per participating teacher and \$92 per student, on the instructional materials, training, coaching, and professional development for Agile Mind’s Intensified Algebra.* The idea of spending this sum of money on a single program is less prohibitive when compared against the aggregate costs of curricula, professional development, coaches, and real-time data analytics. In comparison, half-time math coaches for each of the 40 participating schools would total well over a million dollars.

The second year (2012–13) will cost \$850,000. These costs can be divided between two major categories, as shown in the table on the next page.

The higher cost in year two is a result of the expanded programming and the fact that Duval has increased the number of teacher professional development days. Agile Mind anticipates that professional development costs could decline in future years—even if the number of students served remains the same—as teachers become seasoned in the use of Agile Mind programming. However, if teacher turnover is high for the grades and subjects targeted, it may not be possible to decrease the amount of professional development, because new teachers would require it.

Category	Description	Amount in 11/12	Amount in 12/13
Professional services	The on-the-ground support at a school and district level	\$200K	\$260K
Instructional programs	Includes online materials, print materials, teachers' guides, formative assessments, data reporting and analytics	\$250K	\$590K

Duval has funded Agile Mind programming with a combination of Title I funds and School Improvement Grants; the district did not use any operating dollars in the funding of this work.

Lessons Learned & Next Steps

Agile Mind provided Duval with content, training, expertise, and materials without the need to create them in-house. Such Instructional Guidance Systems can be an option when school systems lack internal capacity or choose to devote attention to other issues and areas. To maximize gains from such programs, school systems need to ensure that the structures and schedules are in place for full implementation. Despite performance gains, daily schedules have prevented Duval from full fidelity of implementation in some settings. For example, Intensified Algebra ideally should be implemented for 90 minutes per day for 180 days, but the actual approach has varied by school. Due to the logistical challenge of block schedules and a lack of confidence in the approach on the part of some teachers and leaders, only a handful of schools implemented with fidelity in the first year. Going forward, Duval is working to free the needed resources for fuller implementation and weighing the costs and benefits of maintaining the program at current levels.

Sources

- ERS interview with Agile Mind leadership (Linda Chaput, Founder and CEO; David Savage, VP and National Director of Professional Services; Gregg McFarland, President of Agile Initiatives; Stephanie Surles, Senior Program Manager for Strategic Development) in August & November 2012.
- ERS correspondence with Duval County Public Schools (Kathy LeRoy, CAO) in December 2012.
- Agile Mind website. www.agilemind.com
- Iverness Research Associates (June 2012). Evaluation Brief. "What Teachers Think of Intensified Algebra I: A Study of Teacher Experience." Iverness, CA.

Endnotes

- 1 www.agilemind.com
- 2 The Charles A. Dana Center is a research unit of the College of Natural Sciences at The University of Texas at Austin. Established in 1991, the Dana Center's organizing mission is to develop a next generation of mathematicians, scientists, and knowledgeable citizens who reflect the full diversity of American society.
- 3 Inverness Research Associates prepared and administered a survey to teachers who were using Intensified Algebra I materials around the nation in 2010–2011. Of the 167 teachers contacted, 67 (40 percent) responded to the survey in spring 2011. Evaluation brief provided by Agile Mind, but completed by Inverness Research Associates (www.inverness-research.org).
- 4 "Duval IA Text and Graphs for FL on letterhead FINAL.doc" (Word doc provided by Agile Mind).
- 5 In 11/12, the Intensified Algebra program was not rolled out in all schools.
- 6 The growth in Intensified Algebra came from rolling out the program to 9th graders in more schools, adding some students who had scored at Level 2 on the FCAT, and adding some students who were taking algebra in 8th grade, but had scored lower than peers on FCAT.
- 7 See the *Eight Principles of a Strategic Professional Growth & Support System* in the Appendix. A review of relevant research can be found in ERS' white paper, *A New Vision for Teacher Professional Growth & Support: Six Steps to a More Powerful School System Strategy*, generously funded by the Bill & Melinda Gates Foundation.
- 8 Districts can choose to buy additional PD (beyond what is stipulated in the six components) and supplemental Assessment material.
- 9 http://www.duvalschools.org/static/aboutdcps/superintendent/downloads/DCPS_Strategic_Plan_May_2008.pdf
- 10 DCPS results provided by Agile Mind
- 11 Cost for Intensified Algebra is higher than for other Agile Mind courses, both because it supports a double block in instruction and because it encompasses printed collateral material.

* Only Duval's 2009–2010 financial data is reflected in this report's analyses, which pre-dates the system's 2011–2012 adoption of Agile Mind.

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Agile Mind: *Linda Chaput, Founder and CEO; Massie McAdoo; David Savage, VP and National Director of Professional Services; Gregg McFarland, President of Agile Initiatives; Stephanie Surles, Senior Program Manager for Strategic Development*

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