



AIM Institute™
for Learning & Research

AIM Integrated Literacy Model (ILM)

MODEL DEVELOPMENT & INSTRUCTIONAL CORE COMPONENTS

Executive Summary

AIM Integrated Literacy Model (ILM)

Background and Need

Over half of elementary-aged students in the United States are not proficient in reading. The results of the 2015 National Assessment of Educational Progress (NAEP) report indicated that 64% of fourth-grade students and 66% of eighth-grade students performed at below basic or basic levels in reading. This means that approximately two-thirds of our students have only partially mastered the skills necessary for proficient reading. Not only did the NAEP (2015) report that students, across age groups assessed, fell below proficient reading levels, but also the poor to mediocre scores have been fairly consistent since 1977.

Why hasn't anyone addressed this problem? Policymakers, researchers, educators, and advocates at all levels have been working hard to learn what needs to be done to change this grim trajectory for many students. Federally, new policies such as the Every Student Succeeds Act (2015) were adopted to ensure all students have access to evidence-based programs. At the state level, leaders have increased the expectations for local education agencies to ensure that all students have equitable access to high quality curriculum and instruction by mandating the Common Core or State Standards. Across the country, district and school leaders stretch tight budgets to fulfill these and other mandates while ensuring that teachers comply with the laws governing the use of evidence-based practices and programs. Leaders struggle to gather information, evaluate, and select the evidence-based programs best able to support their students.

Once selected, programs must be translated into classroom practices, a process that is not always successful. The most common way for local education agencies to ensure teacher accountability and application of evidence-based practices is through professional development, typically delivered by an expert in a lecture style format. The teacher is then expected to contextualize and translate newly-acquired knowledge and fragile skills into their complex classrooms. According to Joyce and Showers (2002), this approach only yields a 5% return on investment yet, the average sized district may spend up to \$18,000 per teacher annually on this type of activity (The New Teacher Project [TNTP] Reimagine Teaching, 2015). It is becoming obvious that traditional professional development approaches or the purchase of more reading programs has not led to improved instructional and student outcomes. As a result, the education community has grown increasingly frustrated as their allocation of scarce resources fails to yield desired results.

Meeting the Need

Academy in Manayunk (AIM), an independent school, was not immune to these problems. Like other schools across the county, their primary goal was to improve literacy outcomes for students of all abilities. AIM recognized that no one “off the shelf” program was sufficient to address the continuum of skills and abilities necessary for students to become proficient readers and writers. So, with their team of expert educators, and input from nationally and internationally renowned researchers, AIM developed a comprehensive literacy framework —the AIM Integrated Literacy Model (ILM).

This summary describes how the AIM ILM was carefully developed to align with policy, research and practice standards. The ILM offers a comprehensive framework to ensure that students experience optimal learning opportunities for developing literacy skills. There is a strong emphasis on the development of educator knowledge and skills in order to ensure the sustained use of best practices in classroom literacy instruction.

How the ILM Was Developed

The Theoretical Model

The underlying theory and starting point for AIM's integrated and comprehensive literacy model is Scarborough's Reading Rope (2001). The reading rope (Figure 1) is a research-based analogy for skilled reading. The two major constructs of the rope – 1) Word recognition and 2) Language comprehension, can be deconstructed into eight contributing processes and skills. Each of the eight strands develop independently and reciprocally over time as students strive to become skilled readers. Skilled reading is defined as fluent coordination of word reading and comprehension processes.

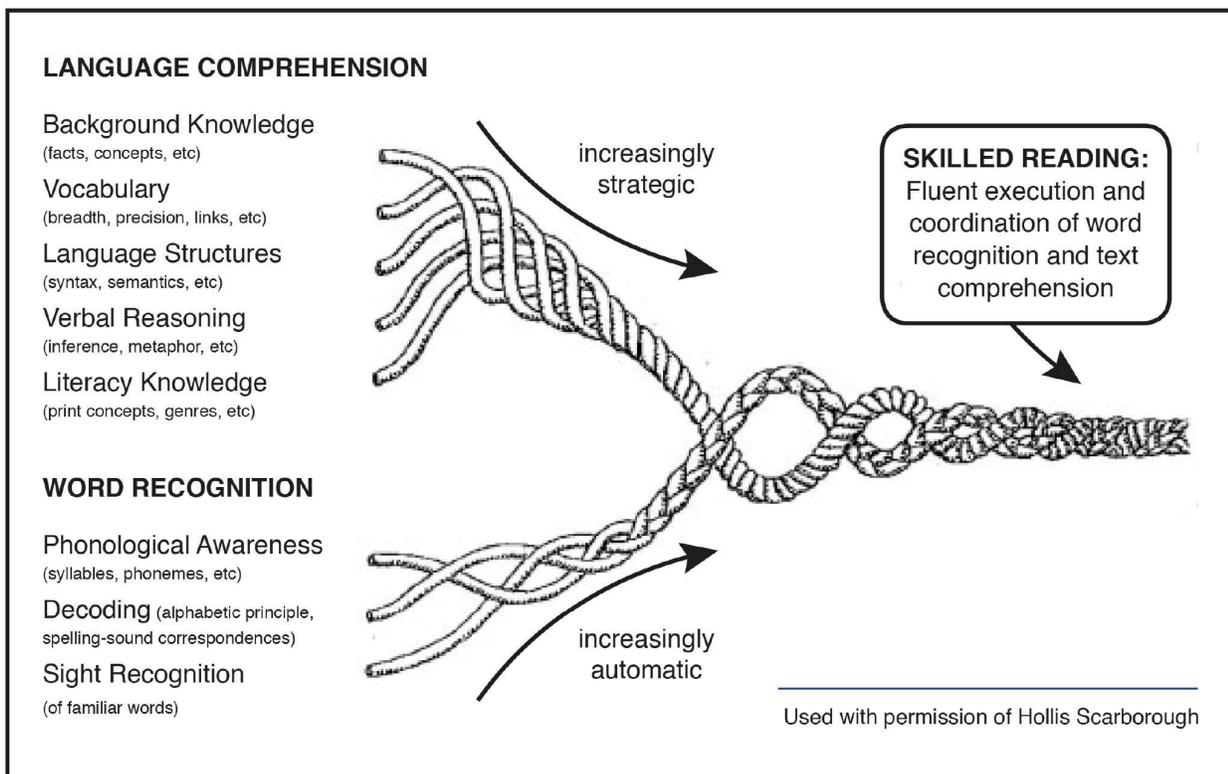


Figure 1. The Reading Rope (Scarborough, 2001)

Knowledge of this model and the research of others, regarding oral language, word recognition and reading comprehension, provide direction for the identification of instructional components that are necessary for reading proficiency. The rope can

also be extremely useful to educators in determining whether or not a literacy curriculum addresses the development of critical contributors to skilled reading and can contribute to a deeper understanding of the identification of student needs. While this theoretical model provides the key “ingredients” for skilled reading, in some cases the processes/skills need to be further translated into specific instructional components, particularly for reading comprehension.

1) Word Recognition: Word recognition refers to the student’s ability to recognize printed words accurately and automatically as a necessary factor for skilled reading. Without this essential factor, even in the presence of language comprehension, skilled reading is in jeopardy.

Word recognition is dependent on three essential independent yet interrelated foundational skills. For example, students who demonstrate poor phonemic awareness and spelling pattern knowledge are likely to struggle with reading proficiency since the strands are very integrated and not necessarily compensatory.

The three strands/skills of word recognition translate to instructional components (see Table 1 below).

Word Recognition Skills	Word Recognition Instructional Components
Phonological Awareness	Phonological Awareness
Decoding	Alphabet, Alphabetic Principle, Basic & Advanced Phonics
Sight Word Recognition	Fluency

Table 1. Word Recognition

2) Language Comprehension: Language comprehension, in concert with word recognition, is necessary for proficient reading. The language comprehension strands of the rope contribute uniquely and in concert with each other to understanding text. It is reported that students with language delays may struggle with these strands in particular. Their development is dependent on instruction and experience over time.

The five strands of language comprehension translate to instructional components (see Table 2).

Language Comprehension Processes/Skills	Reading Comprehension Instructional Components
Background Knowledge	Background Knowledge
Vocabulary	Vocabulary
Language Structures	Sentence Comprehension
Verbal Reasoning	Inference
Literacy Knowledge	Text Structures

Table 2. Language Comprehension

Implementation Science

A foundational underpinning of the AIM ILM is Implementation Science. Moving beyond the traditional approaches in education of adopting new programs or practices and then assuming educators will “figure them out,” the ILM ensures that specific strategies are embedded to help teachers integrate the model within their classrooms. Implementation Science best practices have been utilized to both inform the replication and the application of the AIM ILM. For example, using the Implementation Driver framework can serve to ensure sustainability and improved fidelity to the AIM ILM (Duda, Blase, & Fixsen, 2013, Fixsen, Blase, Duda, Naom & VanDyke, 2008).

Implementation Driver Framework: Implementation Drivers are the common features of successful supports to help make full and effective use of a wide variety of innovations. This framework can be applied at any level of the education system (school, building, district, region or state). The Implementation Drivers Framework can be considered the “system” or platform needed to run an effective program, practice or initiative. It is also the key to increasing the likelihood of creating/maintaining high levels of fidelity in practice and sustainability within the organization. The Implementation Drivers are organized with the following arms: 1) Building staff confidence and competence, 2) Aligning organization structures and 3) Developing leadership capacity (See Figure 2). All of these “drivers” or critical elements are designed to align with fidelity to practice. In other words, what implementers (ex. teachers, coaches), actually need to do to apply the program, practice or innovation as intended.

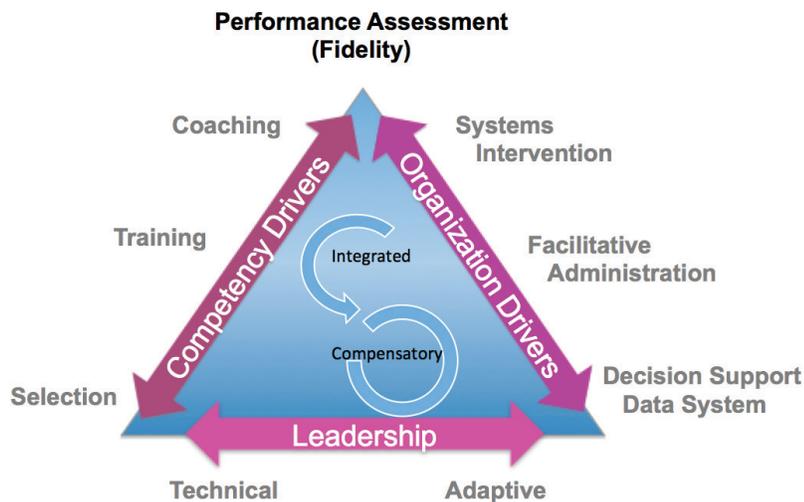


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Figure 2. Implementation Drivers (© Fixsen, Blase, Duda, Naom & Vandyke, 2008)

In the development and replication of the ILM, the Competency Drivers, (selection, training, coaching and fidelity) have been leveraged in two key ways. Firstly, careful attention was used to ensure that there was clarity as to what the application of the model actually looks like in the classroom. This translation from research into practice was critical to ensuring that teachers and school-based literacy leaders have the knowledge and skills necessary to deliver the model as designed. The second way was

to redefine professional development. Training events, e-workshops and coaching supports were aligned to what implementers needed to do to use the model as intended. To support sustainability at the building level, teachers and literacy leaders received individualized supports to successfully navigate “real world” challenges in the classroom and school.

Evidence-Based Instructional Practices

The AIM ILM consists of both evidence-based programs (EBPs) and evidence-informed initiatives (EIs) for students. Additionally, a coordinated continuum of professional learning is based on the evidence. The EBPs include structured literacy programs that primarily address the development of foundational skills (phonemic awareness, alphabetic principle, decoding, spelling, and fluency) The EIs are multi-component programs or frameworks that are rooted in research and experience, whose individual components may not have been formally studied. These address additional basic skills related to Word Recognition, as well as ELA Comprehension, ELA Writing, and Interactive Humanities. Effective implementation of these programs and practices demand a depth of professional knowledge and skills related to literacy.

The AIM Integrated Literacy Model is dependent on the recognition that creating informed literacy environments rests on informed educators who are supported in translating research into practice. The model demands a commitment and openness to learning and a willingness to change. Educators are asked to view learning as not only the work of their students but also their responsibility.

It also acknowledges that all educators should have access to the science of reading and writing. A lack of knowledge and attention influences the implementation of effective practices that in turn, affect student outcomes. In recent years, there have been major research findings regarding the acquisition of skilled reading. Yet, the influence on teacher preparation programs, professional development, instructional approaches and/or programs has been limited. Teachers cannot be expected to use what they do not know to inform instructional practices. The value of having comprehensive evidence-based standards for the preparation and development of educators has become increasingly apparent. In the words of Louisa Moats (2014):

“the disciplinary knowledge base required to teach students with reading and related difficulties must be unambiguously explained in the standards by which teachers are educated and evaluated, and then programs must be set up to build teachers’ insight as well as their knowledge of basic reading psychology, language structure, and pedagogy.”

The International Dyslexia Knowledge and Practice Standards for Teachers of Reading (2010) were developed in response to this need. They provide “a content framework” and “delineate proficiency requirements for practice.” The standards outline the knowledge base necessary to successfully teach all students how to read including those that struggle. AIM ILM professional development opportunities are aligned with the research, including models such as the Reading Rope, and these standards. Collectively, they have provided a foundation for the development of ILM professional learning opportunities such as the Pathways to Proficient Reading Course and Interactive eWorkshops.

The AIM ILM Model also recognizes that professional learning is not one-dimensional. While educators need opportunities to learn content and pedagogy, learning is an iterative process requiring interactions with others. Consequently, the ILM professional development model provides a continuum of professional learning opportunities. It is a multi-faceted approach ensuring teacher participation in self-reflection through knowledge surveys, professional conversations that prompt processing and application of learning while being supported through a scaffolded coaching model.

Aligning to Standards: While evidenced-based professional standards provide the foundation for professional learning, it is also essential to understand student expectations. Standards, guidelines, policies and mandates in education are designed to ensure that the best possible knowledge is used to address priority areas for students and to improve the profession of teaching and educator leadership. To ensure that all students would benefit from the AIM ILM, the following standards were reviewed and used in developing the instructional core components of the AIM ILM and, as previously noted, professional learning opportunities:

1. The International Dyslexia Association (IDA) Knowledge and Practice Standards for Teachers of Reading (2010)
2. Common Core State Standards (2009)
3. Pennsylvania Common Core State Standards (2013)

The AIM Integrated Literacy Model

Creating a Multi-Component Integrated Literacy Model

The AIM ILM was built on the underlying principles described above, over a decade of experience testing out these concepts at AIM academy and through an extensive review of the literature and consultation with experts in the field.

The AIM ILM includes six non-negotiable instructional core components and related subcomponents that have been shown to be successful for improving skilled reading outcomes for students in grades K-3.

The six instructional core components that encompass the ILM are:

1. Assessment (which is the foundation in all components)
2. Oral Language
3. Word Recognition
4. ELA Comprehension
5. ELA Writing
6. Interactive Humanities

AIM Institute is committed to delivering a literacy model that reflects an understanding of the synergistic relationship that

exists between theoretical model(s), evidenced-based and informed practices and implementation science. This relationship is foundational to developing a model that acknowledges the importance of integrating the core components of oral language and assessment with the remaining four that address the foundational skills of reading and writing as well as, the higher order skills of constructing and expressing understanding.

AIM's innovative approach provides literacy instruction that is aligned with the standards, is rigorous in nature, attends to differentiation and is effective. The six instructional core components of the AIM ILM are considered "non-negotiable", meaning that in order to fully experience the benefits of the model, all components need to be used with fidelity (as intended). Since the six instructional core components appear to be broad, it was essential to further define what the instructional core components "look like" in practice. As a result, each core component has a handful of subcomponents that can then be operationally defined into actions that are both observable and measurable in the school and classroom settings.

The AIM ILM at a Glance

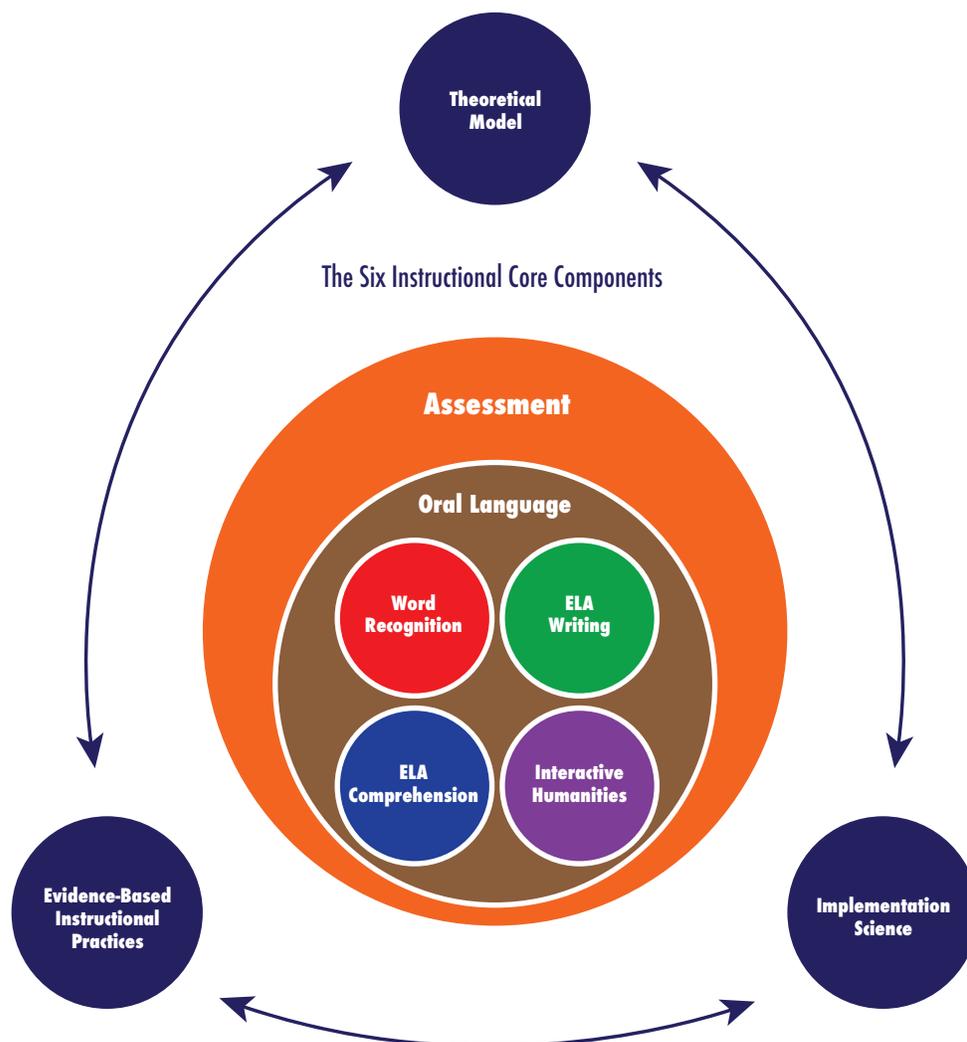


Figure 3: AIM ILM Instructional Core Components (AIM Academy, 2016)

The AIM Approach: ILM Instructional Core Components, Sub-Components and Related Research

INSTRUCTIONAL CORE COMPONENTS	SUB-COMPONENTS	AIM APPROACH	RELATED RESEARCH*
Assessment	<ul style="list-style-type: none"> • Screening & Progress Monitoring (AIMSweb®; DIBELS®) • Informal Diagnostics • Formative & Summative Assessments • Standardized Diagnostics 	<ul style="list-style-type: none"> ✓ AIMSweb® (benchmarks/screening & progress monitoring) ✓ AIM Writing Analysis (Phonological & Orthographic Errors) ✓ Informal Decoding Survey ✓ AIM Decision Making Flow Charts 	<ul style="list-style-type: none"> • Farrall, M. L. (2012) • Spear-Swerling, L. (2015) • Shinn, M. R. (2010)
Oral Language	<ul style="list-style-type: none"> • Phonology • Morphology • Syntax • Semantics • Pragmatics 	<ul style="list-style-type: none"> ✓ Language systems connected to all components of the AIM ILM 	<ul style="list-style-type: none"> • Scarborough, H. (2001) • Stone, C. A., Silliman, E. R., Ehren, B. J. & Wallach, G. (2014) • Moats, L. C. (2010)
Word Recognition	<ul style="list-style-type: none"> • Phonological Awareness • Decoding: Alphabet, Alphabetic Principle, Basic & Advanced Phonics • Fluency 	<ul style="list-style-type: none"> ✓ AIM Structured Literacy Lesson Plans 	<ul style="list-style-type: none"> • Brady, S. A., Braze, D. & Fowler, C. A. (2011) • Ehri, L. C. (2014) • Moats, L. C. (2010) • Moats, L. C. & Hall, S. (2009) • Scarborough, H. (2001) • Seidenberg, M. (2017)
ELA Comprehension	<ul style="list-style-type: none"> • Background Knowledge • Vocabulary • Sentence Comprehension • Inference • Text Structures 	<ul style="list-style-type: none"> ✓ AIM Structured Literacy Lesson Plans ✓ AIM Comprehension Framework ✓ AIM Instructional Routines: <ul style="list-style-type: none"> • Vocabulary (complex & simple) 	<ul style="list-style-type: none"> • Kintsch, W. (1998) • Oakhill, J. & Cain, K & Elbro, C. (2014) • Rand Reading Study Group (2002) • Scarborough, H. (2001)
ELA Writing	<ul style="list-style-type: none"> • Spelling • Handwriting • Mechanics • Planning and Organizing • Composing • Reviewing and Editing 	<ul style="list-style-type: none"> ✓ AIM Structured Literacy Lesson Plans ✓ AIM Writing Framework 	<ul style="list-style-type: none"> • Berninger, V. & Amtmann, D. (2003) • Mather, N., Wendling, B. J. & Roberts, R. (2009) • Stone, A. C., Silliman, E. R., Ehren, B. J. & Wallach, G. (2014) • MacArthur, C., Graham, S. & Fitzgerald, J. (2016)
Interactive Humanities	<ul style="list-style-type: none"> • Background Knowledge • Vocabulary • Making Inferences • Arts-Based Interdisciplinary Learning • Dramatic Frameworks 	<ul style="list-style-type: none"> ✓ AIM Structured Literacy Lesson Plans ✓ AIM Comprehension Framework ✓ AIM Instructional Routines: <ul style="list-style-type: none"> • Vocabulary 	<ul style="list-style-type: none"> • Compton, D., Miller, A., Elleman, A. & Steacy, L. (2014)

Table 3. The AIM Approach (* For a more exhaustive list see references below)

Conclusion

The AIM ILM is a comprehensive model that successfully translates the most cutting-edge research in how students become proficient in literacy and how to prepare educators to successfully deliver curriculum. The interdisciplinary design of the AIM ILM addresses the foundational skills for reading and writing such as word recognition, spelling and handwriting and also develops the language processes and skills necessary for comprehension and written expression in all areas. From inception, the AIM ILM is

designed to help schools create a sustainable system to continue supporting educators so that students of all abilities can benefit from generations to come.

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* Indicates related research from Table 3.

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