MindPlay

MindPlay is a comprehensive online reading program that offers both a variety of age-appropriate screening assessments for key reading subskills, including phonological awareness, phonics, and fluency and an individualized, online reading intervention. The assessments are designed to be used consistently across different schooling years, providing educators with valuable insights into student progress and areas needing intervention.

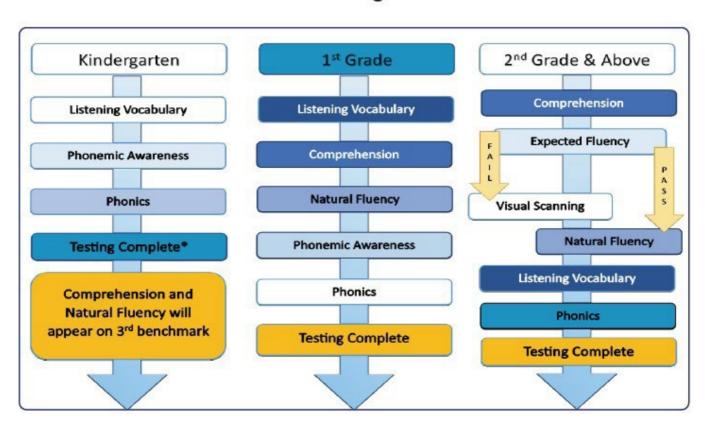
MindPlay's assessments are tailored to be developmentally appropriate for students from early reading through to advanced levels, covering ages typically from 5 to 18 years. The program uses adaptive technology to ensure that the difficulty of tasks matches the student's current skill level, thus avoiding any undue frustration and providing a supportive learning environment.

MindPlay's Universal Screener

This foundational assessment in MindPlay provides an initial, in-depth evaluation of a student's reading abilities. It is designed to identify strengths and areas for improvement within key literacy skills at every developmental stage. The screener assesses phonological awareness by evaluating students' ability to recognize and manipulate sounds in spoken words—a critical early reading skill. It also examines students' proficiency in phonics, assessing their understanding of letter-sound correspondences and their ability to decode words.

Additionally, the screener evaluates reading fluency, including the speed, accuracy, and prosody with which students can read, directly impacting their comprehension and overall reading proficiency.

Universal Screener Grade-Level Testing Paths



Phonics

The phonics portion of MindPlay's Universal Screener is meticulously designed to assess a student's understanding of phonics, a foundational component of literacy that involves the relationship between sounds and their corresponding letters. This assessment is critical for identifying students' ability to decode words, which is essential for fluent reading and effective comprehension.

Key Features of the Phonics Assessment:

- 1. **Letter-Sound Correspondences:** The screener evaluates whether students can accurately match letters and sounds, an essential skill for decoding unfamiliar words. This includes assessing students' knowledge of common phonemes and their ability to apply this knowledge to read words.
- 2. **Word Recognition:** It tests students' ability to recognize whole words by sight, which contributes to reading fluency. This part of the assessment helps determine if students can efficiently decode words without needing to sound out each component, a skill that becomes increasingly important as they encounter more complex texts.
- 3. **Decoding Skills:** The screener examines students' proficiency in using phonics rules to read and interpret words. This includes tasks that require students to blend sounds into words, segment words into individual sounds, and manipulate phonemes within words.
- 4. **Spelling Patterns:** Understanding common spelling patterns and how they relate to phonics is another focus of the assessment. Students are tested on their ability to use knowledge of phonics rules to spell words correctly, which is also indicative of their reading and decoding abilities.

Program Objectives

- Provide direct instruction and targeted feedback to increase and improve those skills.
- 2. Practice phoneme production and recognition as a foundation for phonics instruction.
- 3. Utilize A multisensory approach to instruction
- Provide practice opportunities and a variety of activities necessary to achieve mastery.
- Adapt lessons as needed to ensure success, providing remediation lessons for struggling students needing additional practice.
- 6. Monitor and report on student progress.

Skills Acquired

- Letter recognition
- Keyboard Positions
- Sound-spelling correspondence
- Articulation
- Spelling patterns
- Alternate spelling patterns
- Spelling rules
- Syllabication
- Multi-syllable decoding
- Irregular word recognition
- Homonyms

Phonological Awareness

The phonological awareness component of MindPlay's Universal Screener is intricately designed to assess and identify the development of phonological skills, which are crucial for early reading success. Phonological awareness refers to the ability to recognize and manipulate the sounds in spoken language, a foundational skill that precedes phonics instruction.

Key Features of the Phonological Awareness Assessment:

1. **Sound Identification:** This part of the assessment tests whether students can identify individual sounds (phonemes) in spoken words. This is fundamental for developing phonics skills, as it involves recognizing the discrete sounds that correspond to letters.



- 2. **Rhyming and Alliteration:** The screener evaluates students' ability to recognize rhyming words and alliteration, which are important phonological awareness skills. These skills help students understand that words can share common sounds, promoting an awareness of sound patterns within language.
- 3. **Syllable Segmentation and Blending:** Students are assessed on their ability to break down words into syllables and to blend syllables to form words. This skill is essential for reading longer words and enhances students' ability to manage complex vocabulary as they progress in their reading journey.
- 4. **Phoneme Manipulation:** This includes tasks that require students to add, delete, or substitute phonemes in words. Phoneme manipulation is a high-level phonological skill that indicates a deeper understanding of the sound structure of words and is highly predictive of future reading success.

Fluency

The fluency portion of MindPlay's Universal Screener is designed to evaluate a student's ability to read texts smoothly, accurately, and with proper expression. Fluency is a critical bridge between recognizing words and understanding them, and this assessment focuses on measuring how well students can integrate the various components of reading.

Key Features of the Fluency Assessment:

- 1. **Reading Speed:** This evaluates how quickly a student can read a passage of text. Speed is an indicator of how well the student has automated the decoding process, allowing them to focus more on comprehension.
- 2. **Accuracy:** This measures the number of words students read correctly within a given text. High accuracy in reading indicates proficient decoding skills and the ability to recognize sight words effectively.
- 3. **Prosody:** Assessing prosody involves evaluating the use of appropriate pitch, stress, and intonation in reading. This aspect of fluency is essential as it enhances the reader's ability to convey and perceive meaning from the text.
- 4. **Reading Stamina:** Fluency assessments may also gauge how well students maintain their reading speed, accuracy, and prosody over extended periods or throughout longer texts, reflecting their reading stamina.

Comprehension

The comprehension portion of the screener measures a student's ability to understand and interpret text, which is the ultimate goal of reading. This assessment evaluates several key aspects of reading comprehension to ensure students are developing the skills necessary to understand and analyze written materials.

Key Features of the Comprehension Assessment:

- 1. **Literal Understanding:** This involves questions that check for a basic understanding of the text, such as recalling facts, details, and the sequence of events.
- 2. **Inferential Thinking:** Students are assessed on their ability to make inferences based on the information not explicitly stated in the text. This skill is crucial for deeper comprehension and for making logical connections between different parts of the text.
- 3. **Critical Analysis:** This includes evaluating the student's ability to critique the text and to understand deeper meanings, themes, and author's purpose. It reflects higher-order thinking skills that are essential for academic success.
- 4. **Contextual Vocabulary:** Comprehension assessments also examine how well students can use context to determine the meaning of unfamiliar words, which supports their understanding of the text.

Vocabulary

The vocabulary portion of MindPlay's Universal Screener is meticulously designed to evaluate a student's breadth and depth of word knowledge, which is crucial for reading comprehension and overall language development. This assessment component focuses on the student's ability to understand and use words correctly within context, facilitating better communication and reading comprehension skills.

Key Features of the Vocabulary Assessment:

- Word Recognition: This measures the ability of students to identify and understand words, both in isolation and within context. It assesses recognition of sight words and the ability to decode unfamiliar words using phonics skills.
- 2. **Contextual Understanding:** Students are evaluated on their ability to derive the meaning of words based on the context in which they appear. This skill is essential for reading comprehension, as it allows students to make sense of new vocabulary without relying on external references.

MindPlay Vocabulary Placement Test

Covering all eight proficiency levels (1-8), this assessment takes a mere 10 minutes to complete, offering a swift yet comprehensive glimpse into your student's lexical prowess. If students need to revisit a word or concept, the voice button stands ready to replay any word as needed. With a maximum of 40 words on the horizon, our program adapts to their pace.

If a student misses two consecutive prompts, the program adjusts their placement accordingly. This ensures their journey begins from the most enriching starting point, optimizing your student's vocabulary success!

- 3. **Synonyms and Antonyms:** The assessment includes tasks that require students to identify synonyms and antonyms, enhancing their understanding of word relationships and nuances in meaning.
- 4. **Word Usage:** Students are tested on their ability to use words appropriately in different contexts, including their capacity to choose the correct word from a set of options that best fits a given sentence or situation.
- 5. **Morphological Awareness:** This involves understanding and using morphemes, the smallest units of meaning in a language, such as prefixes, suffixes, and root words. This helps in understanding the structure of words and assists in decoding meanings and forming new words.

MindPlay also provides appropriate language screening tools for 4 – 6-year-old children (with a focus on phonological awareness screening)

MindPlay's comprehensive literacy program offers a robust solution for identifying appropriate language screening tools for children aged 4 to 6, with a particular focus on phonological awareness screening. This age group benefits greatly from early identification and intervention in the area of phonological awareness, which is crucial for the development of reading and spelling skills.

Key Features of MindPlay's Phonological Awareness Screening for Ages 4-6:

- 1. **Early Phonological Awareness Assessment:** MindPlay's screening tools include assessments specifically designed for young learners. These tools evaluate basic phonological awareness skills, such as rhyming, syllable counting, initial sound recognition, and blending and segmenting sounds. These foundational skills are critical stepping stones in early reading development.
- 2. **Engaging and Age-Appropriate Interface:** Recognizing the unique needs and attention spans of 4 to 6-year-old children, MindPlay's interface is designed to be visually engaging, interactive, and user-friendly. The activities are gamified to maintain young learners' interest and motivation.
- 3. **Adaptive Learning Technology:** MindPlay's assessments are adaptive, meaning they adjust the difficulty level based on the child's responses. This ensures that the screening is neither too easy nor too challenging, providing a precise measure of a child's phonological awareness without causing frustration.

- 4. **Immediate Feedback and Instruction:** Upon identifying areas of need through the screening process, MindPlay provides immediate, targeted instruction that addresses specific deficits. This responsive intervention helps to quickly improve skills that are foundational for future reading success.
- 5. **Comprehensive Reporting:** Educators receive detailed reports that outline each child's strengths and areas for improvement in phonological awareness. These reports are crucial for educators and parents to understand a child's developmental progress and to tailor further instruction and support.
- 6. **Integration with Broader Literacy Skills:** While focusing on phonological awareness, MindPlay also offers the opportunity to integrate these assessments with broader literacy components as children advance. This holistic approach supports seamless progression in literacy education from the earliest stages.

Phonemic Acuity Assessment

A Comprehensive Approach to Sound Mastery

Central to our phonemic awareness program is a thorough assessment that gauges students' proficiency and sound recognition and association. Through the "Counting Sounds" activity, the student is asked to determine the correct number of sounds within a given word. This activity ensures that the student can properly determine the number of sounds in a word that contains the phoneme presented in the lesson. This evaluation is grounded in phonemic awareness principles, aiming to evaluate a student's capability to discern initial consonants and spoken words.

Comprehensive Sound Spectrum

Testing Nineteen Crucial Phonemes

MindPlay's Phonemic Awareness
program operates on the principle of
personalized learning
journeys. By Identifying a
student's Phonemic Awareness Skill
Level, our program
dynamically tailors instruction to suit
their individual needs.
Whether fortifying
foundational skills or fostering
advanced proficiency, our
program adapts to each student's
unique requirements.

Customized Learning Journey

Empowering Every Student's Progress

Our assessment spans a spectrum of nineteen fundamental sounds (phonemes), encompassing consonants, blends, and digraphs. These sounds are exclusively tested in their initial positions, enabling a comprehnesive evaluation of foundational auditory skills. Based on the precision of responses, students are assigned a Phonemic Awareness Skill Level ranging from 1 to 10. The higher the accuracy percentage, the more advanced the Phonemic Awareness Level attained.

MindPlay p[rovides a data management system to support the consistent use its screening tools, including data insights and reporting functions to guide teacher action and instruction.



MindPlay's data management system is designed to provide educators with a comprehensive suite of reporting tools that support the consistent use of its screening assessments. These reports offer detailed insights and analytics to guide teacher action, instructional decisions, and the development of classroom resources. By leveraging these reports, educators can effectively tailor their teaching strategies to meet individual student needs and enhance overall reading development.

Reports Available Within MindPlay:

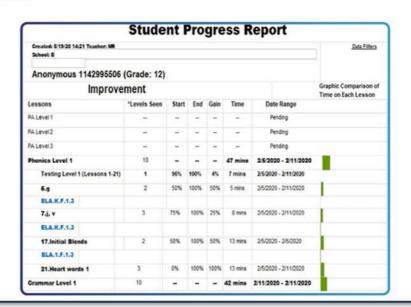
1. **Student Progress Report:** This report tracks individual student progress over time, detailing achievements and areas needing improvement across all components of the literacy program, including phonological awareness, phonics, fluency, vocabulary, and comprehension.

Progress Reports

Progress Reports

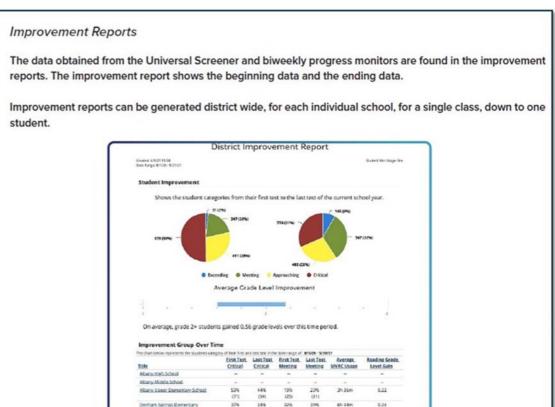
This report allows the administrator or teacher to see the exact lesson(s) assigned to a student based on need. It shows the objective assigned, mastery, time on task and date of completion.

IEPs can be written with the help of the progress report allowing teachers to be specific in addressing the exact needs of the student.



- 2. **Classroom Summary Report:** Provides an overview of the entire class's performance, allowing educators to quickly gauge the general literacy health of the class and identify collective strengths and weaknesses.
- 3. **Detailed Skill Report:** Offers in-depth analysis of specific skills for each student or the class as a whole. This report helps educators understand particular areas of literacy that may require more focused instruction, such as decoding skills, fluency rates, or comprehension levels.
- 4. **Usage Report:** Shows how frequently and effectively students are using MindPlay. It includes data on time spent, lessons completed, and overall engagement with the program, which can be crucial for evaluating the implementation fidelity and student adherence to assigned literacy activities.
- 5. **Improvement Report:** Illustrates students' growth and improvement over a specified period. This report is essential for assessing the effectiveness of instruction and interventions, demonstrating student gains in a quantifiable format.
- 6. Intervention Planning Report:

Helps educators develop targeted intervention plans based on the detailed data provided by the MindPlay screener and continuous assessment tools. This report identifies students who are struggling, and outlines recommended strategies and resources to support their specific needs.



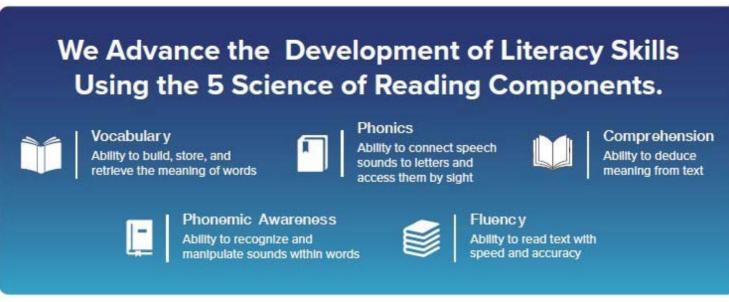
- 7. **Parent Report:** Designed to communicate students' progress and areas for improvement to parents or guardians in a clear and concise manner. This report facilitates home-school collaboration and encourages parental involvement in their child's literacy development.
- 8. **Administrator's Dashboard:** Provides school and district administrators with a high-level view of literacy outcomes across multiple classes or schools. This tool is essential for resource planning, monitoring program effectiveness, and making data-driven decisions for literacy curriculum enhancements.

MindPlay Reading is evidence-based and aligned to a structured literacy approach

MindPlay Reading® is an innovative online intervention software program that employs the principles of the Science of Reading to deliver comprehensive reading and language arts instruction. Designed to meet the language needs of developing and struggling readers, it offers individualized and systematic instruction in code-based reading and language arts. This program has proven effectiveness in improving reading, spelling, and vocabulary skills for K-12 students, including those in Tier I, II, and III categories, English-language learners, and various socio-economic backgrounds.

Central to MindPlay's Reading intervention software are interactive video clips featuring "virtual coaches," actual individuals who provide tailored guidance and instructional differentiation in response to students' interactions with the software. These coaches serve as expert guides, aiding students in navigating lessons and activities tailored to enhance their literacy skills. Beneath the user-friendly interface, MindPlay Reading® employs a comprehensive framework of Assessment, Assignment, and Mastery Instruction, ensuring a holistic approach to meet the needs of your students.

MindPlay's all-encompassing solution presents a unified approach to assist students with state/national educational requirements in swiftly achieving grade-level proficiency and refining fluency and comprehension skills. Within the framework of MindPlay Reading, the Universal Screener plays a pivotal role, offering benchmark assessments and continuous progress tracking. This is coupled with targeted lessons and exercises that concentrate on critical aspects of language learning, including phonemic awareness, phonics, grammatical understanding for contextual meaning, vocabulary acquisition, silent reading fluency, and comprehensive comprehension. Complementary offline, scripted resources are also provided for blended learning scenarios or supplementary intervention strategies.



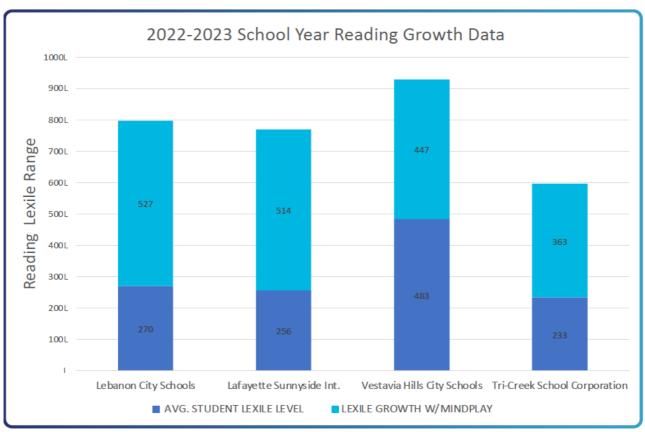
Aligned with the Orton-Gillingham approach, known for its language-based, multisensory, structured, sequential, cumulative, cognitive, and adaptable attributes, MindPlay underscores its commitment to these principles:

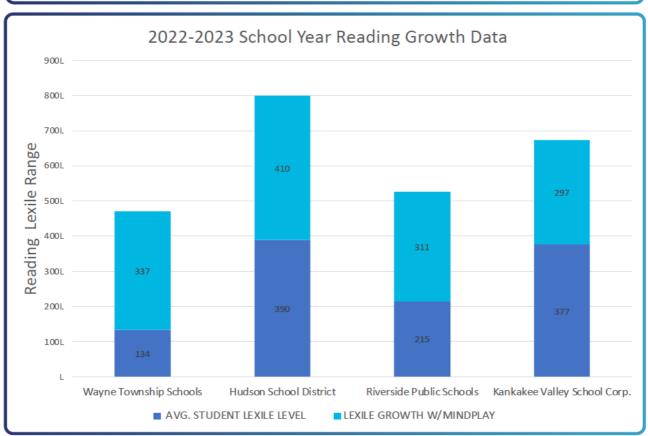
➤ Language-based: MindPlay Literacy is based on a technique of studying and teaching language. It teaches students to understand the nature of human language, including proper production of each sound. It supports the language-learning processes in individuals.

- > Multisensory: MindPlay Literacy sessions are action oriented with auditory, visual, and kinesthetic elements reinforcing each other for optimal learning. The student learns spelling (encoding) simultaneously with reading (decoding). This process aids automaticity.
- > Structured, Sequential, Cumulative: Based on ease of sound production, MindPlay Literacy systematically introduces language. Students begin by reading and writing sounds in isolation. Then they blend the sounds into words. Its unique syllabication method helps students easily encode and decode multi-syllable words easily. Students learn the elements of language in an orderly fashion, e.g. consonants, short vowels, digraphs, blends, long vowels, and diphthongs. Students proceed to advanced structural elements such as syllable types, roots, and affixes. MindPlay Literacy is mastery based. As students master lessons, previously learned material is continually reviewed to the level of automaticity. The program addresses vocabulary, sentence structure, composition, and reading comprehension in a similar structured, sequential, and cumulative manner.
- Flexible: MindPlay Literacy is diagnostic-prescriptive in nature. MindPlay pre-tests each student to understand what the individual already knows and to develop and implement appropriate lessons. The order of lessons and activity assignments are customized for individual student needs.

MindPlay Reading® leverages the Science of Reading to offer a sophisticated and adaptable online intervention software that serves as a powerful tool for enhancing reading and language arts skills. With its meticulously designed program structure, interactive coaching, and adherence to evidence-based approaches, MindPlay empowers students across diverse profiles to realize substantial progress in their literacy journey.

Evidence of Efficacy





Field Studies

Indiana's South Bend Community School Corporation

District Profile and Demographics

A large urban, diverse, high-poverty district of 18,000 students, South Bend serves a student population representing more than 90 languages. In the fall of 2017, new Assistant Superintendent of Curriculum and Instruction, Dr. Kay Antonelli, identified three student populations with which to pilot the MindPlay: non-proficient EL students in grades one through eight; nine district middle schools; and an elementary school that had received a failing grade from the state for the sixth year in a row. In all, the district contracted for 5,000 student licenses.

Evidence of Effectiveness

The results from the 12-week pilot program conducted by December 2017 are truly remarkable and demonstrate the effectiveness of our efforts. Among the students involved, an astounding 107 students achieved a remarkable gain of three or more grade levels in reading. Additionally, 438 students experienced significant progress, reaching two or more grade levels, while 1,225 students made commendable gains of one grade level. Even the remaining learners demonstrated substantial growth, achieving a noteworthy increase of 0.75 grade levels in reading.

Notably, the English Learning (EL) student population showcased the most remarkable advancements, with an impressive 86 percent of students meeting or surpassing their projected growth based on the Northwest Evaluation Association (NWEA) fall test. Across all grade levels, EL students achieved an average reading level gain of 1.87, truly illustrating the transformative impact of our program. Furthermore, other targeted student populations exhibited notable growth, with 66 percent of elementary students and 64 percent of middle school students meeting or exceeding their projected growth.

Henry County Schools, GA

District Profile and Demographics

Henry County Schools, a district with 44,000 students, faced the challenge of improving reading skills in schools rated D or F based on the 2018 state data. They chose MindPlay Education's software to focus on students in Tiers 1, 2, and 3 across grades 3rd through 5th.

Student Population: 44,000 Students | 54.4% at-risk; diverse, with large percentage of EL learners | socio-economic: wide range, from high to low.

Evidence of Effectiveness

In just a few months, MindPlay Education's software played a pivotal role in boosting the reading skills of students in Henry County Schools. The district's dedication to implementing the program with fidelity and its focus on students in Tiers 1, 2, and 3 helped to address the critical need for improvement in reading abilities. As a result, Henry County Schools experienced a remarkable turnaround, demonstrating the power of technology and perseverance in fostering student success.

From January to April 2019, the results were astounding. The district saw nearly every student in the targeted tiers and grades experience an average of 0.75 years of growth in their reading abilities. More impressively, 50% of these students advanced by one grade level or more. This success was due in part to the district's commitment to implementing the program with a 95% fidelity rate, ensuring that educators were well-trained and dedicated to the software's success.

Peer Reviewed Studies

Studies conducted on the MindPlay Reading program show statistically significant positive effects of the intervention. Below are scholastic, peer reviewed studies delineating the effectiveness of MindPlay.

Study 1. Published in the Journal of Reading Psychology®

The Effects of an ICT-Based Reading Intervention on Students' Achievement in Grade Two; Deborah Schneider. Reading Psychology 37(5):1-34 · December 2015

A controlled quasi-experimental design was used to evaluate the effects of the use of MindPlay Virtual Reading Coach on participants' reading and spelling achievement. Participants included 170 students enrolled in eight second-grade classrooms (four classrooms in each school) in two public elementary schools in the southwestern United States. MANCOVA analyses revealed a significant main effect (λ =.668, F [5, 161] = 16.014, p < 0.001, multivariate η 2 = 0.332) of the intervention favoring treatment group participants, a result that was confirmed across three of the study's five dependent variables. https://eric.ed.gov/?q=experimental+design&ff1=subInterven200006

Study 2. Published: Community College Journal of Research and Practice ®

Use of an Online Reading Intervention to Enhance the Basic Reading Skills of Community College Students; Meredyth Bauer-Kealey & Nancy Mather: Community College Journal of Research and Practice. 11 Oct 2018

The purpose of this study was to determine the efficacy of a computer-based reading intervention, MindPlay Virtual Reading Coach, on the reading and spelling achievement of community college students, and to explore whether students' perceptions and attitudes changed after participation in this program. Findings demonstrated statistically significant results in both reading and spelling, as well as an increase in reading enjoyment. https://www.tandfonline.com/doi/full/10.1080/10668926.2018.1524335

Study 3. Peer Reviewed: Dissertation submitted to University of South Carolina.

Mann, K. (2017). Effects of The Mindplay Computer Program on Student Reading Achievement: An Action Research Study. (Doctoral dissertation). Retrieved from https://scholarcommons.sc.edu/cgi/viewcontent.cgi?ar?cle=5096&context=etd

A repeated measures t-test analysis was used to determine the growth in student performance. The results indicated there was an increase in reading student achievement in fluency, phonemic awareness, and comprehension following the nine weeks of treatment. The AIMSWeb CBM descriptive table indicated that the December mean (70.49) was higher than September (47.49) indicating higher levels of fluency. In addition, the AIMS Web descriptive table indicated that the December mean (54.07) was higher than the September mean (30.90), indicating higher phonemic awareness. The MAP descriptive table showed the December mean (172.16) was higher than the September mean (165.02), indicating higher levels of comprehension. Therefore, we can conclude that the second-grade students participating in the action research study improved their reading.

System Requirements—Details

MindPlay supports single sign-on (SSO) through Clever® and Classlink®. Data can be exported for consumption by other systems (Synergy). MindPlay is hosted on remote servers and accessed via the Internet. The MindPlay program can be accessed on desktop, laptop, or tablets that are Internet-enabled, and the intervention may be used at home, at school, in the library or in any other low-distraction environment in which reliable high-speed Internet access is available.

To access the MindPlay Reading[™], students simply log in to the website using an Internet-connected computer and web browser. They are immediately directed in individualized assessment or instruction consistent with their progress through the program. To access the MindPlay reports and program management system, teachers simply log in to the website using an Internet-connected computer and web browser-- only an email and password are required.

Below are the technological requirements associated with MindPlay's Universal Screener and Literacy Program:

Recommended Bandwidth

- 10 concurrent logins: 2.5 Mbps
 Download, 1.5 Mbps Upload
- 30 concurrent logins: 8 Mbps
 Download, 1.5 Mbps Upload

2. PC: Minimum Requirements:

- Windows XP (or newer)
- o 1 GB RAM (512 MB RAM for XP)
- Internet Explorer 9+
- o Firefox 28+
- Chrome 33+

3. Mac: Minimum Requirements:

- o OS X 10.6 "Leopard" (or newer)
- 1 GHz processor
- 1 GB RAM; Safari 5.1.7+
- o Firefox 20+; Chrome 33+

4. Android Tablet:

- Latest firmware update installed
- Tablet should have been purchased no earlier than 2011
- Screen Size: 9" or larger
- Supported browser: Google Chrome

iPad:

- Latest iOS version installed
- o iPad2 or later
- Supported browser: Safari

For additional questions concerning MindPlay's technological requirements, please contact our support department:

> Email: support@mindplay.com Toll-Free: (800) 221-7911 (option 2) MindPlay Support Center

Security

- Utilize Symantec, the world's most trusted source for SSL
- Norton SECURED powered by VeriSign
- Clients know they can trust the site
- Provides automatic security scans and evaluations
- Encrypt user passwords and logins on the database
- Enterprise class physical security at hosting center
 - Multiple layers of security including physical barriers, closed circuit cameras, alarm systems, and biometric scans
 - Mandatory background check before facility access is granted

The Family Educational Rights and Privacy Act (FERPA)

MindPlay agrees to comply with the Family Educational Rights and Privacy Act ("FERPA") and will not disclose any personally identifiable information about any student without explicit permission from the student's parent and school.

The Children's Online Privacy Protection Act (COPPA)

MindPlay does not collect, use, or disclose personal information from children.

MindPlay does not request any student information. Only student name, login, and a password are required for access the MindPlay Virtual Reading Coach™ and that information is uploaded by the local school or district (verified on Manager® login page

Schools, students, teachers, and classes can be imported with a csv spreadsheet or added manually. If done before the training, teachers will be able to log-in and see their classes during the on-site training. They will be able to see the course management tools, student lessons and teacher resources. Additionally, staff will be trained on how to interpret data so that they may further assist students when needed. Pre-built progress reports and error reports pinpoint exact difficulties.

All User roles are assigned by the designated CPS MindPlay Program Manager/Customer. The District/School Administrator (or Program Manager) is the top level in the management system. Administrators, teachers, and students have their own log-in and password. For students, MindPlay recommends the log-in be the students' school ID numbers so that it is unique to each student.

MindPlay uses role-based security to restrict the view and modification of any data. The Program Manager's changes to any user role are immediate. Documentation that outlines security and permissions is available in MindPlay Manuals and on the Knowledge Base which is accessible from the MindPlay.com website.

The primary responsibility of the School Administrator is to add teachers and classes. The Administrator has full access to all management functions for all the classes at the school. The Program Manager sets the password when the school is created, or it is set by MindPlay if the account includes only one school.

System Capabilities, Backup, and Recovery Processes

MindPlay's self-hosted system supports Microsoft Windows Server 2012R2 64-bit or later, Microsoft SQL Server 20212 64-bit or later and is compatible with Microsoft NET and Internet Information Services (IIS). MindPlay provides a robust infrastructure for serving customers across North America. Application Servers are securely hosted in Tucson, Arizona. These servers handle all the application processing logic for MindPlay Universal Reading Screener.

MindPlay uses a Web Application Continuous Integration (CI) process to incorporate application changes. No action is required by the customer. Redundant systems allow for maintenance tasks to be performed during times of low usage without service interruptions. Customers are informed of any maintenance activities that will require service interruption.

Security in MindPlay is based on roles and need-to-know of the user. For example, teachers can only view and modify data as defined by the teacher role, in the classes to which they are assigned. All NCDPI User roles are assigned by the Program Manager/ Customer and the Program Manager's changes to user roles is immediate. Program managers, administrators, and teachers each have different user settings. Restrictions are determined by the program manager.

MindPlay provides exporting and importing capabilities including encryption and security of process. MindPlay allows importing and exporting data via a secure (encrypted) web interface. MindPlay is compatible with the CLEVER® interface for the automated secure transfers of student rosters. MindPlay does not integrate with Active directory but provides a web-based management component.

MindPlay provides backup and recovery processes12/12/20168/27/2019, control and security features associated with the system.

- ✓ Client data and the application environment is backed up nightly.
- √ 30 days (rolling) worth of client backups are always retained.
- ✓ Backups are stored both on and off site at secured (double locked and ID required) physical and cloud sites.
- ✓ Recovery of lost data can be performed within 24 hours

A Status page that provides historical changes and direct notifications is available to include any changes that affect security, storage, usage, or disposal of any information received or collected directly.