CURRICULUM SERVICES AGREEMENT BETWEEN ACHIEVE3000, INC. AND POUDRE SCHOOL DISTRICT R-1

This Curriculum Services Agreement ("Agreement") is entered into this 26th day of May 2020, by and between Poudre School District R-1 ("District") and Achieve3000, Inc. ("Contractor"). The District and the Contractor are collectively referenced herein as the "parties." In consideration of the mutual covenants and promises contained in this Agreement, the sufficiency of which is hereby acknowledged, the parties agree as follows:

1. **Term of Agreement.**

1.1. This Agreement shall commence on the date first set forth above and continue through and including June 30, 2030 unless earlier terminated as provided herein.

1.2. Notwithstanding any other term or provision of this Agreement, the District's obligations hereunder are expressly subject to its budgeting and appropriation of sufficient funds for each fiscal year (July 1 - June 30) an Agreement is in effect. In no event, shall the District's obligations in an Agreement constitute a multiple-fiscal year direct or indirect debt or other financial obligation under Article X, Section 20(4)(b) of the Colorado Constitution.

1.3. Notwithstanding the planned term of an Agreement and/or any extensions thereof as provided in section 1.1 and 1.2 above, the District may terminate an Agreement at any time in its sole discretion for any reason, with or without cause, upon written notice served on the Contractor no less than thirty (30) days prior to the date of termination. In the event of such early termination by the District, the Contractor shall be paid up to the date of termination for services performed under and in accordance with this Agreement.

2. **Deliverables and Purchase Price.**

2.1. The Contractor's responsibility under this Agreement is to provide it's Achieve3000 Literacy web hosted literacy platform to provide educational software which supports instructional materials and services to be used by students grades 6-12 for secondary reading intervention assessment ("Materials"), and for related professional development and technology supports for the District's teachers. The parties agree to the following, as specified in:

2.1.1. Request for Proposal ("RFP") 20-630-002, which is part of this agreement and attached hereto as Exhibit A.

2.1.2. Contractor's Response to RFP 20-630-002, which is part of this agreement and attached hereto as Exhibit B.

2.1.3. Contractor's Response to Evaluation Committee's Questions to RFP 20-630-002, which is part of this agreement and attached hereto as Exhibit C.

2.1.4. Contractor's Pricing and Program Confirmation RFP 20-630-002, which is part of this agreement and attached hereto as Exhibit D.

All documents which are made a part of this Agreement (hereinafter the "Services") and incorporated herein by reference.

2.2. The Contractor shall offer tiered pricing for Services as set forth on the attached Exhibit D.

2.2.1. The Contractor shall provide quotes annually based on the pricing in Exhibit D.

2.2.2. Access to Services shall be available for a ten (10) year subscription.

2.2.3. Additional subscriptions may be purchased at the prices listed in Exhibit D for the length of the contract.

2.3. The Contractor shall permit the use of diagnostic testing to determine the needs of the students. Charges for full license use of other Materials and licenses shall only be charged once student has been assigned or accessed Materials and licenses. Students who are assigned a license, but are not used or have minimal use, may be reassigned to another student.

2.3.1. Cost for additional diagnostic testing exceeding nine hundred and seventy-two (972) students shall be at the cost of eleven dollars and zero cents ($11.00) per student per year.

2.4. The Contractor shall ensure the District has the most current online platform. No cost shall be associated with upgrades to any online platforms.

2.5. The Contractor shall provide direct points of contacts for tech issues, instructional planning, and data analysis supports to the contact identified in section 9 of this Agreement and update any changes within thirty (30) days of a new contact.

2.6. The Contractor shall ensure the Director of Curriculum, Instruction and Accountability or designee has District administrator account access for oversight of the Services.

2.7. The Contractor shall work with the District's Information Technology department to integrate the Contractor's online platform with the District's support systems.

2.7.1. The Contractor shall work with the District's Information Technology department to roster any online platforms through the services available within the District.

2.8. **Access to District Server.** If access to any District server is necessary for the functionality of the Contractor's services. Upon written approval by the Executive Director of Information Technology or designee, the District grants the Contractor limited access to the District server for the sole purpose of providing Services

2.8.1. The Contractor agrees to protect the confidentiality, integrity and availability of all electronic District or student information at all times.

2.8.2. The Contractor agrees to take proper steps to ensure the security of the device in which they connect to the District's systems remotely. The Contractor

agrees not to copy information accessed remotely to local devices and or portable devices. Printing information is not permitted unless specific authorization has been granted.

2.8.3. The Contractor shall not share passwords, codes, credentials or user accounts with others.

2.8.4. The Contractor shall have a valid and up-to-date antivirus agent installed to ensure protection against malware and viruses upon connection to the District network.

2.9. The Contractor acknowledges that if the District determines in its discretion that remote access has been compromised by unauthorized parties, or that remote access has been misused, the Contractor's access will be disabled or terminated immediately.

2.10. **Invoices.** Invoices for Services provided shall be submitted to the District's accounts payable department within thirty (30) days of completion of Services.

2.10.1. Invoices for such Services shall include (a) date on which Services were provided, (b) the District Location for which the Service were provided, (c) details of Products delivered, (d) approval signoff from District and purchase order number.

2.10.2. All invoices must be submitted within 45 days of fiscal year end June 30 and may not include items received by the District outside of the fiscal year July 1 – June 30.

2.10.3. Payment shall be made within forty-five (45) days from receipt of invoice.

2.11. Payment for Services not approved by the District in writing, shall not be considered valid and the District will not be responsible for covering associated costs.

2.12. **Professional Development.** Contractor shall provide professional development support of Services during the first two years of implementation, with ongoing support for the remainder of the Agreement.

2.12.1. The Contractor shall meet with the District to establish a training plan within fourteen (14) days from the execution of this Agreement.

2.12.2. Professional development shall follow the anticipated training plan below:

a. Year One
   - Five Sessions of Professional Development
   - Free On-Demand Resources, Ongoing Webinars and Online Professional Development

b. Year Two

- Four Sessions of Professional Development
- Free On-Demand Resources, Ongoing Webinars and Online Professional Development

c. Ongoing
- Support through Webinars, Virtual Support, and In-Session Trainings Upon Request

2.12.3. Cost for professional development pricing shall not exceed the prices in Exhibit B.

2.12.4. Contractor shall not schedule or provide any professional development without written approval the Director of Curriculum, Instruction and Assessment or designee.

2.13. The District understands and agrees that its students' access to and use of the Contractor's web-based system under this Agreement requires that it disclose confidential student records and information, as that term is defined below, to the Contractor. The Contractor understands and agrees that if it fails to comply with any of the requirements under sections 4, 5, 6 or 7 below at any time during or after the term of this Agreement the District may, as applicable, terminate the Agreement and/or disqualify the Contractor from future agreements with the District.

3. **Definitions.**

3.1. As used in this Agreement, "personally identifiable information" is defined as information (including metadata) that, alone or in combination, is linked or linkable to a specific student so as to allow a reasonable person in the school community, who does not have personal knowledge of the relevant circumstances, to identify the student with reasonable certainty. Personally identifiable information includes but is not limited to: (a) the student's name; (b) the name of the student's parent or other family members; (c) the address or phone number of the student or student's family; (d) personal identifiers such as the student's social security number, student number or biometric record; and (e) indirect identifiers such as the student's date of birth, place of birth or mother's maiden name.

3.2. As used in this Agreement, "education records" is defined as records, files, documents and other materials that: (a) contain information directly related to a student; and (b) are maintained by the District, or by a party acting for the District such as the Contractor.

3.3. As used in this Agreement, "confidential student records and information" is defined as education records and personally identifiable information concerning District students, including but not limited to confidential student records and information disclosed to, collected by and/or generated by the Contractor. Confidential student records and information does not include "de-identified confidential student records and information," as defined in section 3.5 below.

3.4. As used in this Agreement, "collect" is defined as the gathering of data and other information by any means, including but not limited to the use of logs, cookies, tracking pixels, etc.

3.5. As used in this Agreement, "de-identified confidential student records and information" is defined as confidential student records and information from which all personally identifiable information, and the ability to determine any personally identifiable information, is removed.

3.6. As used in this Agreement, "securely destroy" is defined as removing confidential student records and information from the Contractor's systems, paper files, hard-copy and electronic records, databases and any other media regardless of format, in accordance with the standard detailed in the National Institute of Standards and Technology ("NIST") SP 800-88 Guidelines for Media Sanitization, so that the confidential student records and information are permanently irretrievable in the Contractor's normal course of business.

3.7. As used in this Agreement, "eligible student" is defined as a student who is at least 18 years of age or who is legally emancipated.

4. **Ownership of Confidential Student Records and Information.** All confidential student records and information shall remain the exclusive property of the District and all rights, title and interest in the confidential student records and information, including but not limited to intellectual property rights in the confidential student records and information, belong to and are retained solely by the District. The District hereby grants to the Contractor a limited, nonexclusive license to access, view, collect, generate and use confidential student records and information solely for the purpose of performing its obligations under this Agreement.

5. **Security of Confidential Student Records and Information.**

5.1. The Contractor shall store and process confidential student records and information in accordance with commercial best practices, including implementing appropriate administrative, physical and technical safeguards that are no less rigorous than those outlined in SANS Top 20 Security Controls, as amended, to secure such confidential student records and information from unauthorized access, disclosure, alteration and use. The Contractor shall ensure that all such safeguards, including the manner in which confidential student records and information is collected, accessed, used, stored, processed, disposed of and disclosed, comply with all applicable federal and state data protection and privacy laws, regulations and directives, including but not limited to Colorado's Student Data Transparency and Security Act, C.R.S. §§ 22-16-101 *et seq*. Without limiting the foregoing, and unless expressly agreed to the contrary in writing, the Contractor warrants that all electronic confidential student records and information will be encrypted in transmission and at rest in accordance with NIST Special Publication 800-57, as amended.

5.2. The Contractor shall conduct periodic risk assessments and remediate any identified security vulnerabilities in a timely manner. The Contractor shall promptly notify the District in the event of: (a) any security or privacy breach concerning confidential student

records and information; and/or (b) any use or disclosure of student personally identifiable information not authorized under this Agreement.

6. **Use of Confidential Student Records and Information.**

6.1. Under the Agreement, Contractor may access, view, collect, generate and/or use confidential student records and information only under the following terms and conditions: (a) except as provided in section 6.2 below, Contractor shall not disclose confidential student records and information, in whole or in part, to any other party; (b) Contractor shall not use any confidential student records or information to advertise or market to students or their parents/guardians; (c) Contractor shall access, view, collect, generate and use confidential student records and information only to the extent necessary to perform its obligations under the Agreement; and (d) at the conclusion of the term of the Agreement the Contractor shall, as directed in writing by the District, initiate the process to either securely destroy all confidential student records and information in its possession, custody or control, or return such confidential student records and information to the District.

6.2. Contractor may to the extent necessary to perform its obligations under the Agreement disclose confidential student records and information to subcontractors as identified in Exhibit E ("Subcontractors") pursuant to written subcontracts specifying the purpose of the disclosure and providing that: (a) Subcontractors shall not disclose confidential student records and information, in whole or in part, to any other party; (b) Subcontractors shall not use any confidential student records or information to advertise or market to students or their parents/guardians; (c) Subcontractors shall access, view, collect, generate and use confidential student records and information only to the extent necessary to assist Contractor in performing its obligations under the Agreement; and (d) at the conclusion of their work under their subcontracts Subcontractors shall, as directed by the District through the Contractor, either securely destroy all confidential student records and information in their possession, custody or control, or return such confidential student records and information to the District.

6.3. Contractor and Subcontractors may use de-identified confidential student records and information for purposes of research, the improvement of its products and Services, and/or the development of new products and Services. In no event shall the Contractor or Subcontractors re-identify or attempt to re-identify any de- identified confidential student records and information.

6.4. Contractor and Subcontractors shall promptly furnish to the District upon request all confidential student records and information they have collected and/or generated and not in the District's possession. Such requests may include but shall not be limited to those made in order to respond to parent/guardian and eligible student requests to inspect and review education records as authorized under the Family Educational Rights and Privacy Act, 20 U.S.C. § 1232g ("FERPA") and/or under the Colorado Open Records Act, C.R.S. §§ 24-72-200.1 *et seq.* ("CORA"). The District, not the Contractor or Subcontractors, shall respond to all parent/guardian and eligible student requests to inspect and review records, data and other information.

7. **School Service Contract Provider.** Contractor is a "school service contract provider" under the Colorado Student Data Transparency and Security Act (the "Act"). Under

the Act, a "school service contract provider" is defined as an entity (other than the Colorado Department of Education, a K-12 public education entity or an institution of higher education) that enters into a formal, negotiated contract with the District to provide a "school service." Under the Act, a "school service" is defined as an Internet website, online service, online application or mobile application that: (a) is designed and marketed primarily for use in a preschool, elementary school or secondary school; (b) is used at the direction of District teachers or other District employees; and (c) collects, maintains or uses confidential student records and information.

7.1. As a school service contract provider under the Act, the Contractor has provided the following information attached Exhibit E: (a) the data elements of confidential student records and information that Contractor collects under the Agreement, regardless of whether the data elements are initially collected or ultimately held individually or in the aggregate using protocols that are effective for preserving the anonymity of each student included in the data; (b) the learning purpose for which Contractor collects the confidential student records and information; and (c) how the Contractor uses and shares the confidential student records and information. Contractor shall update this information as necessary to maintain accuracy.

7.2. Contractor shall facilitate the District's access to and correction of any factually inaccurate confidential student records and information as required in response to correction requests from parents/guardians and eligible students.

8. **Remedies.** If Contractor or Subcontractors fail to comply with any of the foregoing requirements in sections 4, 5, 6 or 7 at any time during or after the term of the Agreement the District may, as applicable, terminate the Agreement and/or disqualify Contractor and any one or more of Subcontractors from future contracts and subcontracts with the District. Excluding any data breach, the District may allow an opportunity to cure a breach within thirty (30) days of written notice.

9. **Notices and Communications.** All notices and communications required or permitted under this Agreement shall be in writing and shall be: (a) sent via certified mail, return receipt requested and postage prepaid, to the address of the other party set forth below; or (b) sent via e-mail to the other party via the e-mail address set forth below.

Poudre School District R-1
Attn: Tracy Stibitz
2407 LaPorte Avenue
Fort Collins, CO 80521
E-mail: tstibitz@psdschools.org

Achieve3000, Inc.
Attn: Erin Rush
331 Newman Springs Road, Suite 304
Red Bank, NJ 0771
Email: erin.rush@achieve3000.com

9.1. Communication notices for the Information Technology Department shall be sent to:

Poudre School District R-1
Attn: Software Engineers
E-mail: softwareeng@psdschools.org

10. **General Provisions.**

10.1. **No Assignment.** Except with respect to its affiliates or a successor entity that may result from corporate merger, the Contractor shall not assign this Agreement or any of its rights, interests or obligations under this Agreement without the prior written consent of the District, which consent may be withheld for any reason or no reason as determined by the District in its sole discretion.

10.2. **No Waiver.** The parties agree that no assent or waiver, express or implied, to any breach of any one or more of the covenants of this Agreement shall be construed as or deemed to be an assent to or a waiver of any subsequent breach.

10.3. **Conflict of Terms.** In the event of any conflict of terms found between this Agreement or any other terms and conditions, end user license agreements or privacy policies, the terms of this Agreement shall prevail.

10.4. **Amendment or Modification.** No amendment or modification of this Agreement shall be valid unless set forth in writing and executed by the District and the Contractor in the same manner and with the same formality as was done for this Agreement.

10.5. **Press Contacts/News Releases.** The Contractor shall not initiate any press, media, or social media, contact nor respond to press, media or social media requests regarding this Agreement and/or any related matters concerning the District without the prior written approval of the District.

10.6. **Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of Colorado.

10.7. **Insurance.** Contractor shall procure and maintain the required insurance specified below for the duration of this Agreement, which insurance shall be written for not less than the amounts specified or greater if required by law. Specified coverages and amounts may be provided by a combination of a primary policy plus an umbrella or following form excess policy. If not otherwise required by law, lower amounts may be acceptable upon review and written approval by the District's Director of Records and Risk Management. All insurance shall be with a carrier licensed in the state of Colorado and shall have a minimum A.M. Best rating of A- VII. Contractor shall furnish the District's Director of Records and Risk Management with certificates of the required insurance prior to the District's approval and signing of this Agreement, and with renewal certificates prior to the expiration of any required insurance that expires during the term of this Agreement. Certificates of Insurance and all communication regarding insurance shall be sent to:

Poudre School District
Attention: Risk Management
Email: risk@psdschools.org
2407 Laporte Ave
Ft. Collins, CO 80521

Any insurance and/or self-insurance carried by the District is excess of the coverage extended to the District by Contractor. Contractor shall provide at least thirty (30) days' advance written notice to the District prior to cancellation, change of coverage, or non-renewal. The insurance requirements specified in this section 10.7, shall not reduce the indemnification liability that Contractor has assumed in section 10.8.

Commercial General Liability

Minimum Limits

d.	Each Occurrence Bodily Injury & Property Damage	$1,000,000
e.	General Aggregate	$2,000,000
f.	Products/Completed Operations Aggregate	$1,000,000
g.	Personal/Advertising Injury	$1,000,000

h. Coverage must be written on an "occurrence" basis.
i. Poudre School District R-1 and its elected officials, employees, agents, and volunteers shall be named as an additional insured and shall be insured to the full limits of liability purchased by the Supplier even if those limits of liability are in excess of those required by this Agreement.

Technology Errors and Omissions Liability

Minimum Limits

a.	Per Loss	$1,000,000
b.	Aggregate	$1,000,000

c. Liability extends for a period of three (3) years beginning at the time work under this Agreement is completed. Supplier shall maintain continuous coverage, as required by the Agreement, for this period.
d. The policy shall provide a waiver of subrogation in favor of Poudre School District R-1.

The insurance shall provide coverage for:

a. Liability arising from theft, dissemination and/or use of confidential information (defined term including but not limited to bank account, credit card account, personal information such as name, address, social security numbers, etc. information) stored or transmitted in electronic form.
b. Network Security Liability arising from the unauthorized access to, use of or tampering with computer systems including hacker attacks, inability of an authorized third party to gain access to Supplier's services including denial of service, unless caused by a mechanical or electrical failure.
c. Liability arising from the introduction of a computer virus into, or otherwise causing damage to, a District or third person's computer, computer system, network, or similar computer related property and the data, software, and programs thereon

Crime Coverage

Minimum Limits

a. Per Loss $1,000,000

The policy shall include:

a. Coverage for all directors, officers, agents, and employees of the Supplier.
b. Employee dishonesty, forgery and alteration, monies and securities, and computer (cyber) crime.
c. Extended theft and mysterious disappearance.
d. The policy shall not contain a condition requiring an arrest and conviction.
e. Policy must be endorsed to cover Third Party Fidelity and include Poudre School District R-1 as a Loss Payee.

10.8. **Indemnification.** The Contractor shall indemnify and hold harmless the District and the District's Board members, employees, representatives and agents from and against any and all liability arising from any suit, action, grievance, charge or proceeding brought in connection with or related to: (a) the Contractor's operations; (b) the Contractor's provision of the Services; (c) the Contractor's actual or alleged infringement of any third party's patent or copyright; and/or (d) the conduct of any of the Contractor's employees, volunteers, agents or representatives. The indemnification and hold harmless obligation hereunder shall include all attorney fees, costs and expenses incurred by the District and/or the District's Board members, employees, representatives and/or agents in defense of said suits, actions, grievances, charges and/or proceedings. Nothing in this section 10.8 or otherwise in this Agreement shall be construed in any way or applied in any manner as a compromise or waiver of the District's rights and protections under the Colorado Constitution or the Colorado Governmental Immunity Act.

10.9. **No Third-Party Beneficiary.** Enforcement of the terms and conditions of this Agreement, and all rights of action relating to such enforcement, shall be strictly reserved to the District and the Contractor. Nothing contained in this Agreement shall give or allow any claim or right of action whatsoever by any third person other than the District or the Contractor. It is the express intent of the parties that any third person receiving services or benefits pursuant to this Agreement shall be deemed an incidental beneficiary only.

10.10. **Attorney Fees and Costs.** In the event it becomes necessary for either party to institute litigation or mutually agreed-upon arbitration proceedings to enforce any provision of this Agreement, the substantially prevailing party in such litigation or arbitration shall receive, as part of any judgment or award entered, its reasonable attorney fees and costs, including expert witness fees.

10.11. **Binding Effect.** This Agreement shall be binding upon and inure to the benefit of the parties and their respective heirs, legal representatives, successors and permitted assigns.

10.12. **Headings.** The headings used in this Agreement are for convenience only and shall have no effect upon the construction or interpretation of this Agreement.

10.13. **Entire Agreement.** This Agreement constitutes the entire agreement of the parties regarding the subject matter addressed herein and supersedes all prior agreements, whether oral or written, pertaining to said subject matter.

10.14. **Signatures.** This Agreement may be executed and delivered via portable document format (pdf), and the pdf signature of any party shall be considered valid, binding, effective and an original for all purposes.

10.15. **Warranty of Authority.** The individuals signing below represent and warrant that they have the authority to execute this Agreement on behalf of their respective organizations and bind their respective organizations to the terms of this Agreement.

IN WITNESS WHEREOF, the District and the Contractor have signed this Agreement as of the date first set forth above.

ACHIEVE3000, INC.

By: _____

Nicholas Bates
Chief Financial Officer

POUDRE SCHOOL DISTRICT R-1

By: ssmyser@psdschools.org ssmyser@psdschools.org (May 26, 2020 18:38 MDT)

Sandra Smyser, Ph.D.
Superintendent

By: Robert Beauchamp (Apr 27, 2020)

Robert Beauchamp
Director of Curriculum, Instruction and Assessment

Exhibit A

POUDRE SCHOOL DISTRICT R-1

Department of Curriculum, Instruction & Assessment

REQUEST FOR PROPOSAL

Secondary Reading Intervention Assessment Curriculum with Instructional Materials and Services

RFP# 20-630-002

RFP SCHEDULE

RFP Issued	**July 8, 2019**
Supplier Questions Due	**July 18, 2019 at 2:00 p.m. MST**
Q&A/Addendum Issued	**July 25, 2019**
RFP Opening Date	**August 20, 2019 at 2:00 p.m. MST**
RFP Consideration Period	**August 2019 – January 2020**
Supplier Presentations (if required)	**November 2019**
Award Announced	**January 2020**
Approval, Board of Education	**March 2020**
Delivery Deadline for Materials Ordered	**June 2020**

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REQUEST FOR PROPOSAL
Secondary Reading Intervention Assessment Curriculum
with Instructional Materials and Services
RFP# 20-630-002

Poudre School District R-1 (the "District") is issuing this request for proposals ("RFP") from Suppliers for a curriculum with instructional materials and services to be used by students grades 6-12 for secondary reading intervention assessment, and for related professional development and technology supports for the District's teachers. The District wishes to begin using the curriculum, materials, and services in the Fall semester of 2020 for a 10-year period, in accordance with its current curriculum adoption cycle.

The District shall provide copies of this RFP to Suppliers through the electronic solicitation platform www.bidnetdirect.com where registered Suppliers are required to submit their electronic RFP response along with the first and last name, telephone number and e-mail address of the employee within their organization who will be designated as the District's primary contact with respect to this RFP and their Suppliers' response thereto. The District may provide copies of this RFP to other Suppliers upon request, who are also requested to provide the first and last name, telephone number and e-mail address of the employee within their organization who will be designated as the District's primary contact with respect to this RFP and their response thereto.

Questions regarding this RFP must be in writing and may be directed to the District via the BidNet platform any time after the issuance of this RFP through and including **2:00 p.m. MST on Thursday, July 18, 2019.** Questions received after the date/time and/or not submitted electronically through the BidNet platform may not be addressed. Each question submitted, as well as the District's response thereto, shall be provided in a questions and answers document/addendum via www.bidnetdirect.com

Note: Every question must be submitted individually. Multiple questions per entry will not be answered.

At no time during the solicitation process will communication regarding this RFP be permitted with any District employee other than the Procurement Agent named below. Communication with a District employee other than the Procurement Agent named below may disqualify your response from consideration.

The District will only accept and consider electronically submitted bids from Suppliers, which must be submitted and received in the www.bidnetdirect.com electronic solicitation portal on or before 2:00 p.m. MST on Tuesday, August 20, 2019, at which time the submission portal will close and no further submissions be allowed or considered.

It is the sole responsibility of the Supplier to see that the bids are submitted through the BidNet portal by the submission deadline.

The sample instructional materials and access to online resources, software, training and professional learning materials and services, all as requested in Section 3.0 of this RFP must be physically received on or before **2:00 p.m. MST on Tuesday, August 20, 2019 and shall be in a sealed packaged and marked RFP# 20-630-002 Secondary Reading Intervention Assessment Curriculum with Instructional Materials and Services and mailed or delivered to**:

Poudre School District R-1
Curriculum, Instruction and Assessment
Attn: David Lawrence – RFP# 20-630-002 – Secondary Reading Intervention
1502 South Timberline Road
Fort Collins, CO 80524

It is the sole responsibility of the Supplier to see that all sample materials are received by the submission deadline.

Sales Prohibited/Conflict of Interest: No officer, employee, or member of the School Board, shall have a financial interest in the sale to the District of any real or personal property, equipment, material, supplies or services where such officer or employee exercises directly or indirectly any decision-making authority concerning such sale or any supervisory authority over the services to be rendered. This rule also applies to subcontracts with the District. Soliciting or accepting any gift, gratuity favor, entertainment, kickback or any items of monetary value from any person who has or is seeking to do business with the District is prohibited.

Collusive or sham proposals: Any proposal deemed to be collusive or a sham proposal will be rejected and reported to authorities as such. Your authorized signature on this proposal assures that such proposal is genuine and is not a collusive or sham proposal.

The District reserves the right to reject any and all proposals and to waive any irregularities or informalities.

Sincerely,

Kelly Wooden
Senior Procurement Agent

REQUEST FOR PROPOSAL
Secondary Reading Intervention Assessment Curriculum
with Instructional Materials and Services
RFP# 20-630-002

BACKGROUND:

Poudre School District (the District) is a high-performing District, covering more than 1,800 square miles in northern Colorado with diverse school settings. The District's instructional program is centered around District Ends, under the Policy Governance model, developed to support a comprehensive curriculum.

While more than 70% of District families choose to send their children to their neighborhood school, the District does support school choice and offers a wide spectrum of educational programs to fit any child's needs. Program options include International Baccalaureate, Core Knowledge, Bilingual/Dual Language Immersion, Hybrid/Online, Expeditionary Learning, Science, Technology, Engineering and Math (STEM) along with extra-curricular and athletics. The District has two LEED certified school buildings and over 30 Energy Star awards and supports operational sustainability in all areas of work.

Our Schools:

- 31 elementary schools
- 10 middle schools
- 4 comprehensive high schools
- 6 option (100% choice) schools
- 3 alternative high schools
- 5 charter schools
- 1 online school

The District is fully accredited by the Colorado Department of Education Accreditation and Accountability Unit and is subject to periodic monitoring to ensure continued compliance with accreditation standards.

The District is committed to being a responsible steward of our natural resources and believes that public education should provide leadership in developing an ethic of sustainability in all its practices. In the District, we have both Energy Conservation and Waste Management policies and espouse these values, making environmental stewardship and integral part of the physical plant operation.

1.0 GENERAL CONDITIONS

1.1 Supplier must provide all requested information. Proposals must meet or exceed specifications contained in this document. Failure to do so may result in rejection of the proposal at the option of the District.

1.2 The successful Supplier will be required to enter into and sign a formal Agreement with the District with reasonable adjustments acceptable to the District. The Agreement will be in effect for the duration of the Agreement term. The Agreement language will control over any language contained within this RFP that conflicts with the signed and fully executed Agreement.

1.3 The District is exempt from city, county, state and federal sales/excise taxes. Tax exempt certificates will be issued upon request.

1.4 Submission of a proposal is deemed as acceptance of all terms, conditions and specifications contained in the District's solicitation package initially provided to the Supplier. Any proposed modification must be accepted in writing by the District and prior to award of the Agreement.

1.5 The District does not assume financial responsibility for late submissions.

1.6 Each Supplier (and its employees, representatives and subcontractors) agrees to abide by all applicable federal, state and local codes, laws, rules and regulations.

1.7 The awarded Supplier shall furnish all supplies, which conform to all applicable safety codes and regulations.

1.8 Contact with District personnel regarding this RFP, other than inquiries to the specific Senior Procurement Agent may be grounds for elimination from the selection process.

1.9 Information and materials submitted in response to this Solicitation may be considered public records subject to disclosure under the Colorado Open Records Act ("CORA"), C.R.S. §§ 24-72-200.1 to -205.5. Information and materials that Supplier believes are confidential and not subject to disclosure under CORA must be submitted separately with a citation to the section of CORA and any other relevant law under which Supplier believes they are confidential. The District, not Supplier, shall determine whether information and materials so identified will be withheld as confidential, but will inform Supplier in advance of disclosure to give it an opportunity to take legal action to protect its interests vis-à-vis the party making the CORA request.

1.10 Proposals shall contain a signature of an authorized representative in the space provided on the Proposal Certification Form. Failure to properly sign proposal form may invalidate the response.

1.11 The accuracy of the RFP is the sole responsibility of the Supplier. No changes in the proposal shall be allowed after the submission deadline, except when the Supplier can show clear and convincing evidence that an unintentional factual mistake was made, including the nature of the mistake.

1.12 The awarded Supplier is not permitted to transfer any interest in the project whether by assignment or otherwise, without prior written consent of the District's Procurement Service Center.

1.13 This solicitation does not commit the District to pay any costs incurred in the preparation of a proposal, submission of sample materials or the return shipping of sample materials. There is no expressed or implied obligation for the District to reimburse responding Suppliers for any expenses incurred in the preparing proposals in response to this request.

1.14 Supplier must note in the solicitation response any intent to use subcontractors. The subcontractor's name, address, phone number and three (3) client references along with the type of work to be performed must be included. Use of subcontractors may be considered as a factor in the District's evaluation process. If the Supplier fails to notify the District of its intent to use subcontractors in the proposal submittal, the proposal may be considered a void offer. The Supplier agrees that it is fully responsible to the District for the acts or omissions of its subcontractors or any persons employed by them, in the same way as it is for the acts and omissions of persons directly employed by the Supplier. Nothing contained in the contract or any subcontract shall create any contractual relation between any subcontractor and the District.

1.15 Responses to this RFP will be independently evaluated by an evaluation committee to be established for such purpose.

1.16 Only the names of the companies submitting proposals will be disclosed prior to the completion of Agreement negotiations.

1.17 Proposals submitted will be evaluated using pre-determined objective rating criteria. Those that are clearly non-responsive to the stated requirements may be eliminated prior to the evaluation. Prior to proposal submission, Suppliers are encouraged to check the BidNet website to ensure additional requirements are incorporated into its submissions.

1.18 The District reserves the right to negotiate further with one or more Suppliers or to request additional information. Should the District determine in its sole discretion that only one Supplier is fully qualified or that one Supplier is clearly more highly qualified than the others under consideration, an Agreement may be negotiated and awarded to that Supplier.

1.19 A submission of a proposal in response to this RFP is an offer to contract with the District based upon the terms, conditions, scope of work and specifications contained in this RFP.

1.20 In the event the District has reasonable grounds to believe that any individual assigned to perform work under RFP has a criminal record, is a registered sex offender, is under the influence of alcohol or other substance, has exhibited violence or based upon other information the District deems reliable; the District may exclude such individual from any school building or grounds or impose reasonable conditions upon such individual's presence upon any school premises. In the judgment of the District, if an Agreement cannot be performed because of such action, the Agreement may be terminated.

1.21 The initial agreement between the District and the awarded Supplier is planned to commence on July 1, 2020 and is planned to continue in full force and effect through and including June 30, 2030 unless earlier terminated by the District as provided in section 1.23 below.

1.22 Notwithstanding any other term or provision of this RFP, the District's obligations hereunder are expressly subject to its budgeting and appropriation of sufficient funds for each fiscal year (July 1 - June 30) the Agreement is in effect. In no event shall the District's obligations in the Agreement constitute a multiple-fiscal year direct or indirect debt or other financial obligation under Article X, Section 20(4)(b) of the Colorado Constitution.

1.23 Notwithstanding the planned term of an Agreement and/or any extensions thereof as provided above, the District may terminate the Agreement at any time in its sole discretion for any reason, with or without cause, upon written notice served on the Supplier no less than thirty (30) days prior to the date of termination. In the event of such early termination by the District, the Supplier shall be paid up to the date of termination for services performed under and in accordance with this Agreement.

1.24 Independent Supplier

1.24.1 The Supplier shall provide the services as an independent contractor of the District. As such, the Supplier shall have the right to determine how and by whom the services will be provided, subject to and consistent with the terms and conditions of this RFP.

1.24.2 The Supplier shall be exclusively responsible for: (a) all compensation, employment tax withholdings and payments, and all fringe benefits for its employees in full compliance with all applicable federal, state and local laws; (b) all insurance coverages and benefits for its employees in full compliance with all applicable federal, state and local laws, including but not limited to pension or retirement benefits, workers' compensation, unemployment compensation, and Social Security benefits; and (c) all payments to its

contractors and subcontractors for goods and/or services directly or indirectly related to this RFP.

1.24.3 Nothing in this RFP or as a result of this RFP shall be construed as creating a single enterprise, partnership, joint venture or employer-employee relationship between a future Supplier and the District. The future Supplier will not be considered a partner, agent or representative of the District and will not represent itself to be a partner, agent or representative of the District. The District is not a partner, agent or representative of any future Supplier and shall not represent itself to be a partner, agent or representative of the Supplier.

1.25 Certification Regarding Illegal Aliens

1.25.1 Supplier certifies, represents, warrants and agrees that it will not knowingly employ or contract with an illegal alien to provide services under this Agreement, and will not enter into an Agreement with a subcontractor that fails to certify to Supplier that the subcontractor will not knowingly employ or contract with an illegal alien to provide services under this Agreement. Supplier also certifies, represents, warrants and agrees that it will confirm the employment eligibility of all its employees who are newly hired for employment to provide services under this Agreement through Supplier's participation in either: (a) the E-Verify Program created under federal law and jointly administered by the Department of Homeland Security and the Social Security Administration; or (b) the Colorado Department of Labor and Employment Program ("Department Program") established pursuant to C.R.S. § 8-17.5-102(5)(c).

1.25.2 Supplier shall not use either the E-Verify Program or the Department Program procedures to undertake pre-employment screening of job applicants while this Agreement is being performed. If Supplier obtains actual knowledge that a subcontractor providing services under this Agreement knowingly employs or contracts with an illegal alien, Supplier shall notify the subcontractor and the District within three (3) days that Supplier has such actual knowledge, and terminate the subcontract within three (3) days of providing the notice if the subcontractor has not stopped employing or contracting with the illegal alien. Supplier shall comply with any reasonable request made by the Department of Labor and Employment during an investigation undertaken pursuant to the authority of C.R.S. § 8-17.5-102(5). If Supplier participates in the Department Program, it shall: (a) notify the District and the Department of Labor and Employment of such participation as required by law; and (b) within twenty (20) days after hiring an employee to provide services under this Agreement, provide to the District a written notarized copy of an affirmation that it has examined the legal work status of such employee, retained file copies of the documents required by 8 U.S.C. § 1324a, and not altered or falsified the identification documents for such employee.

1.26 Qualifications of Supplier. The District may make such reasonable investigations as deemed proper and necessary to determine the ability of the Supplier to perform the work and the Supplier shall furnish to the District all such information and data for this purpose as may be requested. The District further reserves the right to reject any proposal if the evidence submitted by, or investigations of, such Supplier fails to satisfy the District that such Supplier is properly qualified to carry out the obligations of the Agreement and to complete the work/furnish the item(s) contemplated therein.

1.27 Warranty/Guarantee Laws and Regulations. By acceptance of an Agreement as a result of this RFP, in addition to the guarantees and warranties provided by law, Supplier expressly guarantees and warrants as follows:

1.27.1 That the articles to be delivered hereunder will be in full conformity with the specifications or with the approved sample submitted, and agreed that this warranty shall survive acceptance of delivery and payment for the articles and that the Supplier will bear the cost of inspecting and/or testing articles rejected.

1.27.2 That the articles to be delivered hereunder will not infringe on any valid patent, trademark, trade name, or copyright, and that the Supplier will, at his own expense, defend all actions or suits charging such infringement. The Supplier will save and hold harmless Poudre School District, its Board of Education, officers, employees, agents, and representatives from any and all claims, losses, liabilities and suits arising there from.

1.27.3 That the articles to be delivered hereunder will be manufactured, sold and/or installed in compliance with the provisions of all applicable Federal, State and Local laws and regulations.

1.27.4 That nothing contained herein shall exclude or affect the operation of any implied warranties otherwise arising in favor of Poudre School District.

1.28 Miscellaneous

1.28.1 Once the evaluation is complete and the Intent to Award has been issued to the recommended Supplier, the recommended Supplier will work with the District's Contract Administrator to successfully negotiate an Agreement.

1.28.2 Governing Law. An Agreement resulting from this RFP shall be governed by and construed in accordance with the laws of the State of Colorado. Venue for any and all legal action regarding or arising out of transactions covered herein shall be solely in the District Court in and for Larimer County, State of Colorado.

1.28.3 Equal Opportunity. The successful Supplier will agree not to refuse to hire, discharge, promote, demote, or to otherwise discriminate in matters of compensation against any person otherwise qualified solely because of race, creed, sex, national origin, ancestry or physical handicap.

1.28.4 Appeal of Award. Supplier may appeal the award by submitting, in writing, a request for re-consideration to the District's Procurement Services Manager within (72) hours after the receipt of the notice of award.

1.28.5 In the event the awarded Supplier defaults on its Agreement or the Agreement is terminated for cause due to performance, the District reserves the right to re-procure the products and/or services from the next highest scoring Supplier or from other sources during the remaining term of the terminated or defaulted Agreement. Under this arrangement, the District shall charge the awarded Supplier any differences between its price and the price to be paid to the next highest scoring supplier, as well as, any costs associated with the re-solicitation effort which resulted from such default or termination.

1.29 Any response which fails to conform to the material requirements of this Solicitation may be rejected as nonresponsive. Offers which impose conditions that modify material requirements or any terms and conditions of the Solicitation, no matter how slight may be rejected. Suppliers will not be given an opportunity to correct any material nonconformity. Any deficiency resulting from a minor informality may be cured or waived at the sole discretion of the Procurement Services Manager.

For the purposes of solicitation evaluation, Supplier must indicate any variances within their response to the specifications and terms and conditions, no matter how slight. If variations are not stated in the Supplier's response, it shall be construed that the proposal fully complies with the specifications and terms and conditions. Notwithstanding the above, it is hereby agreed and understood the District reserves the right to reject these variations if they individually, or as a whole, do not meet the standards established in the specifications.

Modifications to this RFP document and/or exhibit will not be considered valid and may be cause for disqualification.

2.0 SPECIAL CONDITIONS

2.1 The curriculum, instructional materials and services must be aligned to the Colorado Academic Standards.

2.2 The curriculum, instructional materials and services must produce evidence of usability and efficacy with a full range of students (i.e., advanced learners, English language learners and students with disabilities).

2.3 The curriculum, instructional materials and services must provide all students with rich learning experiences that build critical knowledge and skills fostering readiness for college and career.

2.4 The instructional materials and services may include technology and online resources calculated to enhance student learning.

2.5 Training and information must be furnished that enable the District to provide job-embedded supports (i.e., observation and feedback, coaching, technical expertise, etc.) to assist its teachers in using the instructional materials and accessing the instructional services in a manner that meets the diverse needs of the students they teach.

2.6 Professional learning opportunities and resources must be provided to support teachers at all levels of knowledge and experience in successfully implementing the curriculum and continuously improving their methods to drive student achievement throughout the 10-year period the District plans to use the curriculum, instructional materials and services.

2.7 Evaluating teachers may pilot the top scoring programs in their classrooms. The pilot period, if needed, will take place between August 2019 and January 2020. Suppliers agree to make available to teachers the grade level appropriate teacher materials and enough student materials (textbooks and digital online access) to successfully complete a pilot. Suppliers also agree to provide appropriate training on how to use the materials prior to the pilot period and will work with the District's Information Technology staff to ensure student and teacher access to digital materials.

2.8 The Supplier with whom the District contracts must ensure that the instructional materials are delivered to the District on or before June 2020, and that the District is able to acquire additional instructional materials to accommodate increases in student enrollment over the 10-year period it plans to use the materials. The Supplier with whom the District contracts must also ensure that the instructional services are accessible by the District on or before June 2020 and continuing throughout the 10-year period the District plans to use the services, with allowances for increases in student enrollment.

3.0 SCOPE OF WORK

As set forth in more detail below, the District is requesting from each Supplier in response to this RFP: (a) a written proposal for a secondary (grades 6-12) reading intervention assessment curriculum with instructional materials and services; (b) written Supplier profile; and (c) sample materials and access to online services associated with Supplier's curriculum, which will be reviewed by District staff during the proposal consideration period.

3.1 Supplier proposals shall provide the following for secondary reading intervention assessment and curriculum with instructional materials:

3.1.1 The proposal should include diagnostic/formative assessments that can be given at minimum three (3) times a year.

3.1.2 Reading assessments should provide analyses based on standards/skills and level of mastery with suggestions to teachers for next steps in lesson planning. A list of leveled readers including one (1) or more of the following measures: Fountas & Pinnell, age, Grade Level Equivalency, Lexiles, ZPD Ranges, ATOS, DRA, Reading Recovery, etc. Supplier should provide a list of level readers and measure(s) within their response.

3.1.3 Reporting and Data management - With the goal of guiding classroom instruction, curriculum development, and instructional supports, the Assessment System described in this RFP must provide educators with general and skills-specific student performance results, including standard/skill analysis reports, in a timely fashion that enables educators to adjust instruction as needed. This information must be user-friendly, flexible, modifiable, and readily and easily accessible. Immediate results for the selected response items preferred. Data management should be as user friendly or automated as possible. Suppliers shall provide documentation, print screens, and/or print outs of sample reports and data management tools within their response.

3.1.4 Types of Reports:

3.1.4.1 Proposals should include a list of the reports currently available within the proposer's application, i.e., screenshots of the various reports.

3.1.4.2 Reports will display overall assessment performance as well as strengths and weaknesses relative to the specific Colorado State Standards. Please describe costs and specialized processes, if a special data load must be included to allow assessment results reported based on Colorado State Standards.

3.1.4.3 Skill/standard or item analysis reports should be available at the student, class, building, and district levels.

3.1.4.4 A screening report, or some report showing the State of Colorado based performance level of students should be available.

3.1.4.5 Reports need to be available on individual assessments and across assessments (longitudinal/growth) throughout the school year relative to skills and performance. For example, if three (3) Benchmarks are proposed, summary reports should display student performance across the three benchmarks at the student, class, building, and district levels.

3.1.4.6 Student longitudinal reporting should be available. Student reports indicating overall performance and performance relative to skills will be maintained across grades and for each school a student attends. For example, with longitudinal reporting, a teacher planning for his/her class before school begins in September can examine the performance on the previous years' Benchmarks of students in his/ her incoming classes. Growth reports should be based on student growth percentiles, if possible.

3.1.4.7 The system must be able to archive reports each year so that educators may review historical reports based upon class and school configurations in previous years.

3.1.5 A technical manual describing the Diagnostic/Formative assessments, including research covering the frequency distributions, means, standard deviations, standard errors of measurement, reliability and validity analysis, and the relevant item statistics, should be provided within Supplier's response.

3.2 Supplier proposals shall provide the following for Secondary Reading Intervention Assessment and Curriculum with Instructional Materials and Services:

3.2.1 A title and description of the instructional materials for use by students and teachers, including student editions and teacher editions.

3.2.2 ISBN numbers (where applicable).

3.2.3 Provide pricing for the District's initial purchase of instructional materials for the number of teachers and students in the table below. The quantities listed are estimates and do not obligate the District to purchase the quantities listed. The District reserves the right to adjust or reduce the quantities ordered in conjunction with this solicitation.

Middle Schools (10 schools)	**Number of Students/Teachers**
1 Teacher per middle school	10 teachers
35 students per grade (6, 7, 8) per school	105 students per school; 1050 total middle school students on READ plans
High Schools (4 schools)	
1 Teacher per high school	4 teachers
35 students per grade (9 & 10) per school	70 students per high school; 280 total high school students

3.2.4 A description of the technology and online resources for use by students and teachers.

3.2.5 Provide price for District's initial purchase of technology and online resources for use by students and teachers.

3.2.5.1 Provide pricing structure for subsequent purchases of instructional materials, technology and online resources to accommodate increases in student enrollment during the 10-year period the District plans to use the materials. The District requires access to the materials during the 10-year period.

3.2.5.2 Provide your most competitive shipping quote for the instructional and technology materials. The District reserves the right to utilize a third-party carrier for shipment of awarded and ordered materials.

3.2.6 A detailed description of all training, resources and professional learning opportunities available to the District and its teachers to support the curriculum implementation and use of related instructional materials, technology and online resources during the 10-year period the District plans to use them.

3.2.7 Provide price for training, resources and professional learning opportunities referenced in section 3.2.6 of this RFP.

3.2.8 Statement as to whether Supplier intends to use one (1) or more subcontractors or third parties in connection with its provision of materials and/or services included in its response to this RFP. For each such subcontractor and third party, Supplier shall: (a) provide its name, address, telephone number and e-mail address; and (b) describe the work it will perform.

3.3 Supplier proposals shall include the following information:

3.3.1 Full legal name of business as it appears on IRS Form W-9, as well as any other names under which Supplier does business.

3.3.2 A description of Supplier's business and organization, including: (a) products and services offered; (b) address of headquarters and location of branch offices; (c) number of employees; and (d) number of years Supplier has been in business.

3.3.3 Supplier's website address/Internet URL.

3.3.4 First and last name, telephone number and e-mail address of the employee within Supplier's organization designated as the District's primary contact with respect to this RFP and Supplier's response thereto.

3.4 Supplier shall provide the following for review by District staff during the proposal consideration period:

3.4.1 For non-digital instructional materials, one (1) English language student edition set (per grade level) of instructional materials and one (1) English language teacher edition set of instructional materials

3.4.2 Access to online resources and/or software for use by students and teachers in connection with the instructional materials. Access will be required for (20) teacher reviewers and (100) student reviewers.

3.4.3 Access to the training, resource and professional learning materials and services that support the curriculum implementation and use of Supplier's related instructional materials, online resources and software.

4.0 AGREEMENT TERMS

4.1 Successful award is contingent upon a successfully negotiated and executed Agreement. A sample District Agreement is included in this RFP as Exhibit A.

Any response which fails to conform to the material requirements of this Solicitation may be rejected as nonresponsive. Offers which impose conditions that modify material requirements or any terms and conditions of the Solicitation, no matter how slight may be rejected. Suppliers will not be given an opportunity to correct any material nonconformity. Any deficiency resulting from a minor informality may be cured or waived at the sole discretion of the Procurement Services Manager.

For the purposes of solicitation evaluation, Supplier must indicate any variances within their response to the specifications and terms and conditions, no matter how slight. If variations are not stated in the Supplier's response, it shall be construed that the proposal fully complies with the specifications and terms and conditions. Notwithstanding the above, it is hereby agreed and understood the District reserves the right to reject these variations if they individually, or as a whole, do not meet the standards established in the specifications.

Modifications to this RFP document and/or exhibit will not be considered valid and may be cause for disqualification.

4.2 If the Supplier selected by the District offers a component which collects, maintains or uses student personally identifiably information, as defined in Colorado State Statue §§22-16-103(13), through the use of an internet website, online service, online application or mobile application, they will be required to sign District Agreement which includes language to meet compliance with Colorado State Statute §§22-16-101 *et seq.* A sample of the Agreement is attached herein attached as Exhibit A.

4.2.1 If selected, the Supplier will be required to provide at a minimum:

4.2.1.1 All data elements and the purpose for collecting the data which are generated, collected, maintained or inferred, that the Supplier collects regardless of whether it is initially collected or ultimately held individually or in the aggregate, in a format understandable to the layperson.

4.2.1.2 All third-party Suppliers and their purpose, to which the Supplier shares student personally identifiable information, including those who receive data in an encrypted format.

4.2.1.3 Agreement to comply with maintaining a comprehensive information security program that is reasonably designed to protect the security, privacy, confidentiality and integrity of student personally identifiable information, that are no less rigorous than those outlined in CIS Top 20 Security Controls, National Institute of Standards and Technology ("NIST") SP 800-88 Guidelines for Media Sanitization and NIST Special Publication 800-57, as recommended best practices by the U.S. Department of Education.

5.0 REVIEW AND ASSESSMENT

5.1 Instructional Materials will be evaluated on the following rubric. Separate criteria may be the basis for review of the written proposals and interview session.

5.1.1 The rating scale shall be from 0 to 2, with 0 – Not Evident, 1 – Partially Evident, 2 Evident and Well Supported. Proposal will be evaluated on the body of evaluation evidence that includes, but is not limited to, the cumulative point system referenced here.

Criteria	Score 0-2
1. The Reading assessment/intervention program submitted is designed for students grades 6-12 that will help them master the content outlined in the Colorado State standards; the program includes a user-friendly interface that allows students to move through the program step-by-step.	
2. The program contains grade 6-12 Reading performance assessments with normative score data, with the potential for predictive alignment to State Standards and assessments.	
3. The Assessment System allows progress monitoring for MTSS and Reading Intervention. The system provides progress reporting on individualized academic plans.	
4. The Assessment System provides educators with ongoing and timely diagnostic/formative assessment information needed to differentiate instructional support for students, better target classroom instruction, plan curriculum, and monitor student learning and progress over time.	
5. Instructional resources to help teachers in instructional planning based on student performance are available through the Assessment System. Lists of age-appropriate leveled readers and other reading resources related to reading performance and subsequent instruction are desired.	
6. Results provide actionable student-friendly/understandable feedback directly to students.	
7. Student results from selected response assessments are viewable in the system quickly/ immediately and available at all levels for data analysis (student, class, school, district). If integral to accurate data analysis, test validity information needs to be included for accurate use of valid data.	
8. The Assessment System include data analysis tools allowing District staff to query the formative, summative and customized assessment results. Demographic student/staff and assessment data can be exportable from the system in multiple formats (i.e., PDF, MS Excel, CSV, TXT, etc.).	
9. Static and live student reports are available to give school and district staffs multiple ways to view student, class/teacher, district reports to inform instruction, professional development, and curriculum. Reporting allows staff to regroup students by performance level.	
10. The Assessment System is web-based/online. Assessment is computer adaptive: i.e., as a student answers questions correctly the system adapts the types of questions presented to the ability level of the student.	
11. The proposal includes a professional development plan that supports the implementation of the assessment and instructional program. Instructional professional development is research-based.	

5.2 District staff shall review the written Supplier proposals, profiles, sample instructional materials, online resources, software, training, and professional learning materials and services submitted in response to this RFP during the proposal consideration period commencing August 2019 and continuing through and January 2020. During the proposal consideration period, questions may be asked of and additional information may be requested from individual Suppliers by the Procurement Agent or designee and select Suppliers may be asked to give presentations to District staff regarding their RFP responses.

5.3 Sample materials will be returned to Supplier after the conclusion of the proposal consideration period, at Supplier's request, upon Supplier's arrangements acceptable to the District for payment of shipping and all other return fees and costs, with no expense to the District. Include a comprehensive list of all the materials submitted for evaluation in your proposal. An electronic copy or hard copy of the sample materials must be furnished to the District for our permanent records at no expense. Requests must be made in writing to: Kelly Wooden, kwooden@psdschools.org and copy Dave Lawrence dlawrence@psdschools.org

5.4 After January 2020, the District may select one (1) or more Suppliers with which it wishes to contract for the curriculum with instructional materials and services. The selected Supplier's provision of such curriculum, instructional materials and services is subject to and conditioned on: (a) Agreement by the District and Supplier regarding the terms of a written Agreement between the parties, including but not limited to the terms specified in Exhibit A of this RFP; (b) negotiation of Agreement; and (c) execution of the written Agreement by authorized representatives of the District and Supplier.

5.5 This RFP does not commit the District to select or contract with any Supplier that provides a response, or to pay any costs incurred by Suppliers in responding to the RFP or negotiating an Agreement. The District reserves the right to reject any and all responses to this RFP at any point in the process, to waive any irregularities and/or informalities with respect to the RFP procedures and deadlines, and to select the Supplier whose response it deems in its sole discretion to be in the best interest of the District.

5.6 The District may at its discretion, elect to interview one (1) or more Suppliers that submit a proposal, but is not required to do so.

5.7 The determination of whether to conduct interviews with the finalists shall be made by the District based solely on its determination of whether interviews would be helpful in evaluating the proposals.

5.8 Any Supplier selected for an interview will be expected to make an introductory presentation followed by a question and answer period at a Poudre School District location in Fort Collins, CO 80521. The exact location will be determined and announced to selected Supplier(s). The District will not reimburse any travel related or other expenses related to an interview.

6.0 INSURANCE

Supplier shall procure and maintain the required insurance specified below for the duration of this Agreement, which insurance shall be written for not less than the amounts specified or greater if required by law. Specified coverages and amounts may be provided by a combination of a primary policy plus an umbrella or following form excess policy. If not otherwise required by law, lower amounts may be acceptable upon review and written approval by the District's Director of Records and Risk Management. All insurance shall be with a carrier licensed in the state of Colorado and shall have a minimum A.M. Best rating of A- VII. Supplier shall furnish the District's Director of Records and Risk Management with certificates of the required insurance prior to the District's approval and signing of this Agreement, and with renewal certificates prior to the expiration of any required insurance that expires during the term of this Agreement. Certificates of Insurance and all communication regarding insurance shall be sent to:

Poudre School District
Attention: Risk Management
Email: risk@psdschools.org (preferred method of communication)
2407 Laporte Ave
Ft. Collins, CO 80521

Any insurance and/or self-insurance carried by the District is excess of the coverage extended to the District by Supplier. Supplier shall provide at least thirty (30) days' advance written notice to the District prior to cancellation, change of coverage, or non-renewal. The insurance requirements specified in this section 6.0 shall not reduce the indemnification liability that Supplier has assumed in section 6.1.

Commercial General Liability

Minimum Limits

a. Each Occurrence Bodily Injury & Property Damage $1,000,000
b. General Aggregate $2,000,000
c. Products/Completed Operations Aggregate $1,000,000
d. Personal/Advertising Injury $1,000,000
e. Coverage must be written on an "occurrence" basis.
f. Poudre School District R-1 and its elected officials, employees, agents, and volunteers shall be named as an additional insured and shall be insured to the full limits of liability purchased by the Supplier even if those limits of liability are in excess of those required by this Agreement.

Technology Errors and Omissions Liability (Professional Liability, including Network Security and Privacy Liability)

Minimum Limits

a. Per Loss $1,000,000
b. Aggregate $1,000,000
c. Liability extends for a period of three (3) years beginning at the time work under this Agreement is completed. Supplier shall maintain continuous coverage, as required by the Agreement, for this period.
d. The policy shall provide a waiver of subrogation in favor of Poudre School District R-1.

The insurance shall provide coverage for:

a. Liability arising from theft, dissemination and/or use of confidential information (defined term including but not limited to bank account, credit card account, personal information such as name, address, social security numbers, etc. information) stored or transmitted in electronic form.
b. Network Security Liability arising from the unauthorized access to, use of or tampering with computer systems including hacker attacks, inability of an authorized third party to gain access to Supplier's services including denial of service, unless caused by a mechanical or electrical failure.
c. Liability arising from the introduction of a computer virus into, or otherwise causing damage to, a District or third person's computer, computer system, network, or similar computer related property and the data, software, and programs thereon.

Crime Coverage (for agreements allowing privileged access to network systems, valuable property or sensitive data)

Minimum Limits

Per Loss	$1,000,000

The policy shall include:

a. Coverage for all directors, officers, agents, and employees of the Supplier.
b. Employee dishonesty, forgery and alteration, monies and securities, and computer (cyber) crime.
c. Extended theft and mysterious disappearance.
d. The policy shall not contain a condition requiring an arrest and conviction.
e. Policy must be endorsed to cover Third Party Fidelity and include Poudre School District R-1 as a Loss Payee

6.1 Indemnification. The Supplier shall indemnify and hold harmless the District and the District's Board members, employees, representatives and agents from and against any and all liability arising from any suit, action, grievance, charge or proceeding brought in connection with or related to: (a) the Supplier's operations; (b) the Supplier's provision of the Services; (c) the Supplier's actual or alleged infringement of any third party's patent or copyright; and/or (d) the conduct of any of the Supplier's employees, volunteers, agents or representatives. The indemnification and hold harmless obligation hereunder shall include all attorney fees, costs and expenses incurred by the District and/or the District's Board members, employees, representatives and/or agents in defense of said suits, actions, grievances, charges and/or proceedings. Nothing in this section 6.1 or otherwise in this Agreement shall be construed in any way or applied in any manner as a compromise or waiver of the District's rights and protections under the Colorado Constitution or the Colorado Governmental Immunity Act.

7.0 PROPOSAL CERTIFICATION FORM

Secondary Reading Intervention Assessment and Curriculum with Instructional Materials and Services
RFP# 20-630-002

The District will only accept and consider electronically submitted proposals from Suppliers, which must be submitted and received in the www.bidnetdirect.com electronic solicitation portal on or before **Tuesday, August 20, 2019 2:00 p.m. MST.**

The sample instructional materials and access to online resources, software, training and professional learning materials and services, all as requested in Section 3.0 of this RFP must be physically received on or before **2:00 p.m. MST on Tuesday, August 20, 2019 and shall be in a sealed packaged and marked RFP# 20-630-002 Secondary Reading Intervention Assessment Curriculum with Instructional Materials and Services** and mailed or delivered to:

Poudre School District R-1
Curriculum, Instruction and Assessment
Attn: David Lawrence – RFP# 20-630-002 – Secondary Reading Intervention
1502 South Timberline Road
Fort Collins, CO 80524

The undersigned hereby affirms that:

- Agent is a duly authorized agent of the company issuing this proposal and that all information provided in the proposal is true and accurate.
- Supplier has read the conditions and technical specifications, which were made available to the company in conjunction with this RFP, and fully understands and accepts these terms unless specific variations have been expressly listed in the proposal.
- Supplier will adhere to all terms and conditions and provide, at a minimum, all services as expressed in the RFP and/or the company's proposal responding to the RFP.
- Supplier meets or exceeds all the required criteria as specified by this RFP, or if not, has submitted a Justification for Consideration addressing any failure to meet the criteria.
- Supplier's proposal is being offered independently of any other Supplier and in full compliance with the terms specified in the RFP.
- Supplier will accept any awards made to it, contingent on Agreement negotiation, as a result of this RFP for a minimum of ninety (90) calendar days following the date and time of the RFP opening.

Supplier Name: _____

Signature of Authorized Agent: _____

Printed Name: _____

Title: _____

E-mail address: _____

Phone Number: _____

Contact Person: _____ **Phone Number:** _____

Contact Email: _____

(If different from Agent)

NOTE: Proposals submitted without the signature of an authorized agent of the Supplier may be considered non-responsive.

8.0 REFERENCES

List three (3) references for which your company has completed similar materials/services for projects of similar scope. Colorado K-12 public school references are preferred, if available.

8.1 Organization Name _____

Address _____

Contact Person _____

Telephone _____

Email _____

Describe type of work/service performed or items supplied _____

_____

8.2 Organization Name _____

Address _____

Contact Person _____

Telephone _____

Email _____

Describe type of work/service performed or items supplied _____

_____

8.3 Organization Name _____

Address _____

Contact Person _____

Telephone _____

Email _____

Describe type of work/service performed or items supplied _____

_____

9.0 MODEL FORMAT OF PROPOSAL

To simplify the review process and obtain the maximum degree of comparability, proposals should be organized in a manner specified by this RFP as follows:

9.1 Title Page

9.1.1 Show the RFP subject, the name of the proposing Supplier, local address, telephone number, name of the contact person, and the date. Show the state and address that the principal place of business resides. **Include a comprehensive list of the materials submitted for evaluation (Section 5.3).**

9.2 Table of Contents

9.2.1 Include a clear identification of the material by section and by page number

9.3 Letter of Transmittal – Limit to three (3) pages.

9.3.1 Briefly state the proposers understanding of the work to be done. Make a positive statement that deadlines specified in the RFP will be met

9.3.2 Briefly provide your company's background. The District reserves to request financial information during the evaluation

9.3.3 State the names of the persons who will be authorized to make representations for the proposer, their titles, addresses, and telephone numbers

9.4 Proposer's Approach

9.4.1 Submit a plan to accomplish the scope defined in section 3.0 Scope of Work and respond to the requirements found in section 4.0 - Agreement Terms and Exhibit A - Sample Agreement

9.5 Cost Component of Proposal

9.5.1 Submit the information requested in section 3.0 of this RFP and supplemental quote(s) for the referenced materials and shipping costs

9.6 Proposal Certification Form

9.6.1 Submit the completed form in section 7.0

9.7 Reference Form

9.7.1 Submit the completed form in section 8.0

CURRICULUM SERVICES AGREEMENT
BETWEEN {CONTRACTOR}
AND POUDRE SCHOOL DISTRICT R-1

This Curriculum Services Agreement ("Agreement") is entered into this ____ day of {DATE}, by and between Poudre School District R-1 ("District") and {CONTRACTOR NAME} ("Contractor"). The District and the Contractor are collectively referenced herein as the "parties." In consideration of the mutual covenants and promises contained in this Agreement, the sufficiency of which is hereby acknowledged, the parties agree as follows:

1. **Term of Agreement.**

1.1. This Agreement shall commence on the date first set forth above and continue through and including {DATE}, unless earlier terminated as provided herein.

1.2. Notwithstanding any other term or provision of this Agreement, the District's obligations hereunder are expressly subject to its budgeting and appropriation of sufficient funds for each fiscal year (July 1 - June 30) an Agreement is in effect. In no event, shall the District's obligations in an Agreement constitute a multiple-fiscal year direct or indirect debt or other financial obligation under Article X, Section 20(4)(b) of the Colorado Constitution.

1.3. **Termination For Cause.** Notwithstanding the provisions of section 1.2 above, if either party is in breach of an obligation or covenant under this Agreement the non-breaching party may give written notice to the breaching party describing the breach and demanding that it be cured. If the breach is not cured within seven (7) days after the breaching party's receipt of said notice, the non-breaching party may immediately terminate the Agreement and avail itself of any and all remedies available at law or in equity.

1.4. **Termination Without Cause.** Notwithstanding the provisions of sections 1.2 and 1.3 above, the District or the Contractor may terminate this Agreement at any time in its sole discretion for any reason, with or without cause, by giving the other party thirty (30) days' advance written notice of the termination.

2. **Deliverables and Purchase Price.**

2.1. {DELIVERABLES AND SERVICES}

2.2. {TOTAL COST}

2.3. Access to Services shall be available for a ten (10) year subscription.

2.4. Additional Services may be purchased at the prices listed in Exhibit {XX} for the full length of the contract.

2.5. Contractor shall ensure teacher Materials are shipped to be received no later than {DATE}.

2.5.1. Contractor shall separate and bundle Materials by District School for shipment.

2.6. Contractor shall ensure grade-level classroom Materials are shipped to be received no later than {DATE}.

2.6.1. Contractor shall separate and bundle Materials by District School for shipment.

2.7. Contractor shall provide support for implementation of Services during the first year, at no cost for the following:

2.7.1. {PROFESSIONAL DEVELOPMENT SERVICES}

2.8. The Contractor grants the District a non-exclusive, non-transferable, non-sublicenseable license to access and use, and permit authorized users to access and use the Services solely in the United States during the term of the Agreement.

2.9. The District shall access and use the Services solely for non-commercial instructional and administrative purposes within the District. Further, the District shall not, except as expressly authorized or directed by the Contractor: (a) copy, modify, translate, distribute, disclose or create derivative works based on the contents of, or sell, the Services, or any part thereof; (b) decompile, disassemble or otherwise reverse engineer Services or otherwise use the Services to develop functionally similar products or services; (c) modify, alter or delete any of the copyright, trademark, or other proprietary notices in or on the Services; (d) rent, lease or lend the Services or use the Services for the benefit of any third party; (e) avoid, circumvent or disable any security or digital rights management device, procedure, protocol or mechanism in the Services; or (f) permit any authorized user or third party to do any of the foregoing. The District also agrees that any works created in violation of this section 2.10 are derivative works, and, as such, the District agrees to assign, and hereby assigns, all right, title and interest therein to the Contractor.

2.10. The District agrees, subject to the limited rights expressly granted hereunder, that all rights, title and interest in and to all Services, including all related IP Rights, are and shall remain the sole and exclusive property of Contractor or its third-party licensors. "IP Rights" means, collectively, rights under patent, trademark, copyright and trade secret laws, and any other intellectual property or proprietary rights recognized in any country or jurisdiction worldwide. The District shall notify Contractor of any violation of Contractor's IP Rights in the Services, and shall reasonably assist Contractor as necessary to remedy any such violation. Contractor Services are protected by patents.

2.11. The District understands and agrees that its students' access to and use of the Services under this Agreement requires that it disclose confidential student records and information, as that term is defined below, to the Contractor. The Contractor understands and agrees that if it fails to comply with any of the requirements under sections 4, 5, 6 or 7 below at any time during or after the term of this Agreement the District may, as applicable, terminate the Agreement and/or disqualify the Contractor from future agreements with the District.

3. **Definitions.**

3.1. As used in this Agreement, "personally identifiable information" is defined as information (including metadata) that, alone or in combination, is linked or linkable to a specific student so as to allow a reasonable person in the school community, who does not have personal knowledge of the relevant circumstances, to identify the student with reasonable certainty. Personally identifiable information includes but is not limited to: (a) the student's name; (b) the name of the student's parent or other family members; (c) the address or phone number of the student or student's family; (d) personal identifiers such as the student's social security number, student number or biometric record; and (e) indirect identifiers such as the student's date of birth, place of birth or mother's maiden name.

3.2. As used in this Agreement, "education records" is defined as records, files, documents and other materials that: (a) contain information directly related to a student; and (b) are maintained by the District, or by a party acting for the District such as the Contractor.

3.3. As used in this Agreement, "confidential student records and information" is defined as education records and personally identifiable information concerning District students, including but not limited to confidential student records and information disclosed to, collected by and/or generated by the Contractor. Confidential student records and information does not include "de-identified confidential student records and information," as defined in section 3.5 below.

3.4. As used in this Agreement, "collect" is defined as the gathering of data and other information by any means, including but not limited to the use of logs, cookies, tracking pixels, etc.

3.5. As used in this Agreement, "de-identified confidential student records and information" is defined as confidential student records and information from which all personally identifiable information, and the ability to determine any personally identifiable information, is removed.

3.6. As used in this Agreement, "securely destroy" is defined as removing confidential student records and information from the Contractor's systems, paper files, hard-copy and electronic records, databases and any other media regardless of format, in accordance with the standard detailed in the National Institute of Standards and Technology ("NIST") SP 800-88 Guidelines for Media Sanitization, so that the confidential student records and information are permanently irretrievable in the Contractor's normal course of business.

3.7. As used in this Agreement, "eligible student" is defined as a student who is at least 18 years of age or who is legally emancipated.

4. **Ownership of Confidential Student Records and Information.** All confidential student records and information shall remain the exclusive property of the District and all rights, title and interest in the confidential student records and information, including but not limited to intellectual property rights in the confidential student records and information, belong to and are retained solely by the District. The District hereby grants to the Contractor a limited, nonexclusive license to access, view, collect, generate and use confidential student

records and information solely for the purpose of performing its obligations under this Agreement.

5. **Security of Confidential Student Records and Information.**

5.1. The Contractor shall store and process confidential student records and information in accordance with commercial best practices, including implementing appropriate administrative, physical and technical safeguards that are no less rigorous than those outlined in SANS Top 20 Security Controls, as amended, to secure such confidential student records and information from unauthorized access, disclosure, alteration and use. The Contractor shall ensure that all such safeguards, including the manner in which confidential student records and information is collected, accessed, used, stored, processed, disposed of and disclosed, comply with all applicable federal and state data protection and privacy laws, regulations and directives, including but not limited to Colorado's Student Data Transparency and Security Act, C.R.S. §§ 22-16-101 *et seq*. Without limiting the foregoing, and unless expressly agreed to the contrary in writing, the Contractor warrants that all electronic confidential student records and information will be encrypted in transmission and at rest in accordance with NIST Special Publication 800-57, as amended.

5.2. The Contractor shall conduct periodic risk assessments and remediate any identified security vulnerabilities in a timely manner. The Contractor shall promptly notify the District in the event of: (a) any security or privacy breach concerning confidential student records and information; and/or (b) any use or disclosure of student personally identifiable information not authorized under this Agreement.

6. **Use of Confidential Student Records and Information.**

6.1. Under the Agreement, Contractor may access, view, collect, generate and/or use confidential student records and information only under the following terms and conditions: (a) except as provided in section 6.2 below, Contractor shall not disclose confidential student records and information, in whole or in part, to any other party; (b) Contractor shall not use any confidential student records or information to advertise or market to students or their parents/guardians; (c) Contractor shall access, view, collect, generate and use confidential student records and information only to the extent necessary to perform its obligations under the Agreement; and (d) at the conclusion of the term of the Agreement the Contractor shall, as directed in writing by the District, initiate the process to either securely destroy all confidential student records and information in its possession, custody or control, or return such confidential student records and information to the District.

6.2. Contractor may to the extent necessary to perform its obligations under the Agreement disclose confidential student records and information to subcontractors as identified in Exhibit {XX} ("Subcontractors"), hereinafter attached and made part of this Agreement, pursuant to written subcontracts specifying the purpose of the disclosure and providing that: (a) Subcontractors shall not disclose confidential student records and information, in whole or in part, to any other party; (b) Subcontractors shall not use any confidential student records or information to advertise or market to students or their parents/guardians; (c) Subcontractors shall access, view, collect, generate and use confidential student records and information only to the extent necessary to assist Contractor in performing its obligations under the Agreement; and (d)

at the conclusion of their work under their subcontracts Subcontractors shall, as directed by the District through the Contractor, either securely destroy all confidential student records and information in their possession, custody or control, or return such confidential student records and information to the District.

6.3. Contractor and Subcontractors may use de-identified confidential student records and information for purposes of research, the improvement of its products and Services, and/or the development of new products and Services. In no event shall the Contractor or Subcontractors re-identify or attempt to re-identify any de- identified confidential student records and information.

6.4. Contractor and Subcontractors shall promptly furnish to the District upon request all confidential student records and information they have collected and/or generated and not in the District's possession. Such requests may include but shall not be limited to those made in order to respond to parent/guardian and eligible student requests to inspect and review education records as authorized under the Family Educational Rights and Privacy Act, 20 U.S.C. § 1232g ("FERPA") and/or under the Colorado Open Records Act, C.R.S. §§ 24-72-200.1 *et seq.* ("CORA"). The District, not the Contractor or Subcontractors, shall respond to all parent/guardian and eligible student requests to inspect and review records, data and other information.

7. **School Service Contract Provider.** Contractor is a "school service contract provider" under the Colorado Student Data Transparency and Security Act (the "Act"). Under the Act, a "school service contract provider" is defined as an entity (other than the Colorado Department of Education, a K-12 public education entity or an institution of higher education) that enters into a formal, negotiated contract with the District to provide a "school service." Under the Act, a "school service" is defined as an Internet website, online service, online application or mobile application that: (a) is designed and marketed primarily for use in a preschool, elementary school or secondary school; (b) is used at the direction of District teachers or other District employees; and (c) collects, maintains or uses confidential student records and information.

7.1. As a school service contract provider under the Act, the Contractor has provided the following information attached Exhibit {XX} (a) the data elements of confidential student records and information that Contractor collects under the Agreement, regardless of whether the data elements are initially collected or ultimately held individually or in the aggregate using protocols that are effective for preserving the anonymity of each student included in the data; (b) the learning purpose for which Contractor collects the confidential student records and information; and (c) how the Contractor uses and shares the confidential student records and information. Contractor shall update this information as necessary to maintain accuracy.

7.2. Contractor shall facilitate the District's access to and correction of any factually inaccurate confidential student records and information as required in response to correction requests from parents/guardians and eligible students.

8. **Remedies.** If Contractor or Subcontractors fail to comply with any of the foregoing requirements in sections 4, 5, 6 or 7 at any time during or after the term of the

Agreement the District may, as applicable, terminate the Agreement and/or disqualify Contractor and any one or more of Subcontractors from future contracts and subcontracts with the District.

9. **Notices and Communications.** All notices and communications required or permitted under this Agreement shall be in writing and shall be: (a) sent via certified mail, return receipt requested and postage prepaid, to the address of the other party set forth below; or (b) sent via e-mail to the other party via the e-mail address set forth below.

Poudre School District R-1
Attn: Tracy Stibitz
2407 LaPorte Avenue
Fort Collins, CO 80521
E-mail: tstibitz@psdschools.org

{VENDOR INFORMATION}

10. **General Provisions.**

10.1. **No Assignment.** The Contractor shall not assign this Agreement or any of its rights, interests or obligations under this Agreement without the prior written consent of the District, which consent may be withheld for any reason or no reason as determined by the District in its sole discretion.

10.2. **No Waiver.** The parties agree that no assent or waiver, express or implied, to any breach of any one or more of the covenants of this Agreement shall be construed as or deemed to be an assent to or a waiver of any subsequent breach.

10.3. **Conflict of Terms.** In the event of any conflict of terms found between this Agreement or any other terms and conditions, end user license agreements or privacy policies, the terms of this Agreement shall prevail.

10.4. **Amendment or Modification.** No amendment or modification of this Agreement shall be valid unless set forth in writing and executed by the District and the Contractor in the same manner and with the same formality as was done for this Agreement.

10.5. **Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of Colorado.

10.6. **Insurance.** Contractor shall procure and maintain the required insurance specified below for the duration of this Agreement, which insurance shall be written for not less than the amounts specified or greater if required by law. Specified coverage and amounts may be provided by a combination of a primary policy plus an umbrella or following form excess policy. If not otherwise required by law, lower amounts may be acceptable upon review and written approval by the District's Director of Records and Risk Management. All insurance shall be with a carrier licensed in the state of Colorado and shall have a minimum A.M. Best rating of A- VII. Contractor shall furnish the District's Director of Records and Risk Management with certificates of the required insurance prior to the District's approval and signing of this

Agreement, and with renewal certificates as soon as reasonably practical following the expiration of any required insurance that expires during the term of this Agreement. Any insurance and/or self-insurance carried by the District is excess of the coverage extended to the District by Contractor. Contractor shall provide at least thirty (30) days' advance written notice to the District prior to cancellation or change of coverage. The insurance requirements specified in this section 10.6, shall not reduce the indemnification liability that Contractor has assumed in section 10.7 below.

Commercial General Liability

a.	Each Occurrence Bodily Injury & Property Damage	$1,000,000
b.	Personal Injury	$1,000,000
c.	Products/Completed Operations Aggregate	$1,000,000
d.	General Aggregate	$2,000,000

e. Coverage must be written on an "occurrence" basis.

f. Poudre School District and its elected officials and employees shall be included as additional insureds; copy of policy endorsement must be attached to the Certificate of Insurance.

Technology Errors & Omissions Liability including Network Security and Privacy Liability

a.	Per Loss	$3,000,000
b.	Aggregate Limit	$3,000,000

c. If policy is written on a claims-made basis, Contractor warrants that any retroactive date under the policy shall precede the effective date of this Agreement and that either continuous coverage will be maintained, or an extended discovery period will be exercised for a period of two (2) years beginning at the time work under this Agreement is complete. Contractor shall also maintain such insurance for an additional period of three (3) years following termination of the Agreement.

d. If policy is written on an occurrence form basis, Contractor shall maintain such insurance for an additional period of one (1) year following termination of the Agreement.

Workers' Compensation and Employers' Liability*

a.	State of Colorado	Statutory
b.	Employer's Liability	$500,000 Each Accident $500,000 Disease – Policy Limit $500,000 Disease – Each Employee

c. Waiver of subrogation in favor of Poudre School District R-1; copy of policy endorsement must be attached to the Certificate of Insurance.

d. This requirement shall not apply if Contractor is exempt under the Colorado Workers' Compensation Act and if Contractor has a current Workers' Compensation Coverage

Rejection on file with the Colorado Department of Labor and Employment, Division of Worker's Compensation.

10.7. **Indemnification.** The Contractor shall indemnify and hold harmless the District and the District's Board members, employees, representatives and agents from and against any and all liability arising from any suit, action, grievance, charge or proceeding brought in connection with or related to: (a) the Contractor's operations; (b) the Contractor's provision of the Services; (c) the Contractor's actual or alleged infringement of any third party's patent or copyright; and/or (d) the conduct of any of the Contractor's employees, volunteers, agents or representatives. The indemnification and hold harmless obligation hereunder shall include all attorney fees, costs and expenses incurred by the District and/or the District's Board members, employees, representatives and/or agents in defense of said suits, actions, grievances, charges and/or proceedings. Nothing in this section 10.7 or otherwise in this Agreement shall be construed in any way or applied in any manner as a compromise or waiver of the District's rights and protections under the Colorado Constitution or the Colorado Governmental Immunity Act.

10.8. **No Third-Party Beneficiary.** Enforcement of the terms and conditions of this Agreement, and all rights of action relating to such enforcement, shall be strictly reserved to the District and the Contractor. Nothing contained in this Agreement shall give or allow any claim or right of action whatsoever by any third person other than the District or the Contractor. It is the express intent of the parties that any third person receiving services or benefits pursuant to this Agreement shall be deemed an incidental beneficiary only.

10.9. **Attorney Fees and Costs.** In the event it becomes necessary for either party to institute litigation or mutually agreed-upon arbitration proceedings to enforce any provision of this Agreement, the substantially prevailing party in such litigation or arbitration shall receive, as part of any judgment or award entered, its reasonable attorney fees and costs, including expert witness fees.

10.10. **Binding Effect.** This Agreement shall be binding upon and inure to the benefit of the parties and their respective heirs, legal representatives, successors and permitted assigns.

10.11. **Headings.** The headings used in this Agreement are for convenience only and shall have no effect upon the construction or interpretation of this Agreement.

10.12. **Entire Agreement.** This Agreement constitutes the entire agreement of the parties regarding the subject matter addressed herein and supersedes all prior agreements, whether oral or written, pertaining to said subject matter.

10.13. **Signatures.** This Agreement may be executed and delivered via portable document format (pdf), and the pdf signature of any party shall be considered valid, binding, effective and an original for all purposes.

10.14. **Warranty of Authority.** The individuals signing below represent and warrant that they have the authority to execute this Agreement on behalf of their respective organizations and bind their respective organizations to the terms of this Agreement.

THE REMAINDER OF THIS PAGE WAS INTENTIONALLY LEFT BLANK.

IN WITNESS WHEREOF, the District and the Contractor have signed this Agreement as of the date first set forth above.

{VENDOR}

By:_____

{NAME}
{TITLE}

POUDRE SCHOOL DISTRICT R-1

By:_____

Sandra Smyser, Ph.D.
Superintendent

By:_____

Robert Beauchamp
Director of Curriculum, Instruction and Assessment

Exhibit B

ACHIEVE3000

AUGUST 20, 2019

SECONDARY READING INTERVENTION ASSESSMENT CURRICULUM WITH INSTRUCTIONAL MATERIALS & SERVICES

A PROPOSAL TO POUDRE SCHOOL DISTRICT R-1

RFP# 20-630-002

1985 Cedar Bridge Avenue, Suite 3
Lakewood, NJ 08701 | +1.732.367.5505

ACHIEVE3000.COM

Title Page

RFP: Secondary Reading Intervention Assessment Curriculum with Instructional Materials & Services

Submitted by: Achieve3000, Inc.

Corporate Headquarters/ Local Address:	1985 Cedar Bridge Avenue, Suite 3, Lakewood NJ 08701
Company Contact:	Erin Rush
Phone:	732.367.5505
Email:	Proposal.services@achieve3000.com

Achieve3000 is pleased to submit Achieve3000 licenses and Professional Learning Services in response to Poudre School District R-1's RFP for *Secondary Reading Intervention Assessment Curriculum with Instructional Materials & Services.*

- **TeenBizPro®** (grades 6–8) and **EmpowerPro®** (grades 9–12)— work to improve reading and increase fluency, vocabulary, comprehension, critical-thinking abilities, and writing skills across the content areas through true differentiation (12 reading levels in English and 8 in Spanish), where all students in the same grade read about the same grade-appropriate, standards-specific topic. ***Pro*** includes Colorado State Academic Standards aligned science lessons in Earth and Space, Life, and Physical Sciences and the Colorado State Academic Standards aligned social studies lessons in the areas of Early World Studies, Modern World Studies, World Geography, World History, U.S. History and Social Sciences I and II, and Government and Electives.
- ***Boost* Colorado** programs allow for targeted and intensive intervention to accelerate the literacy gains of students who need additional supports and services. ***Boost*** includes a suite of classroom-tested scaffolds for students and supports for teachers. Our ***Boost* Colorado** programs, TeenBizBoost® (grades 6-8) and EmpowerBoost® (grades 9-12), are designed to build literacy and improve reading across the content areas.
- ***Access* Colorado** programs provide differentiated instruction and accelerated learning for the unique needs of your ELL students. Students experience success with a multitude of linguistic scaffolds available and teachers have the point-of-use instructional supports needed to enable learning in a wide variety of classroom models.
- ***Professional Learning Services –*** Achieve3000 offers a wealth of PLS module offerings are devoted to helping teachers and leaders understand and interpret student usage and performance data reporting. Regular check ins with your dedicated Achieve3000 implementation team will supplement the initial PLS days to monitor the health of the implementation and determine any adjustments to be made in instruction. *PLS days will be customized to the specific needs of Poudre School District R-1.* Blended learning and instructional models, managing the enrollment process, and accessing and understanding student performance reporting are all topics that can be covered during training.

Table of Contents

Letter of Transmittal

August 21, 2019

Kelly Wooden, Senior Procurement Agent
Poudre School District R-1
Curriculum, Instruction and Assessment Office
1502 South Timberline Road
Fort Collins, CO 80524

RE: Secondary Reading Intervention Assessment Curriculum with Instructional Materials and Services

Dear Ms. Wooden,

Achieve3000 is pleased to submit a response to your RFP for a **Secondary Intervention Assessment Curriculum with Instructional Materials and Services** for the students in Poudre School District R-1. Through our web-hosted literacy platform, Achieve3000 provides educational software that supports the Poudre School District R-1's desire to **obtain a with instructional materials and services to be used by students in grades 6-12 for reading intervention assessment, and for related professional development and technology supports for the District's teachers.** Achieve3000 is committed and able to meet the deadlines and requirements specified in the RFP. The following research-based, research-proven solutions, providing the targeted instruction to support literacy, are available to Poudre School District R-1 though Achieve3000's platform.

- **Achieve3000's *Pro* Colorado** solutions, which includes TeenBizPro® Colorado (grades 6-8), and EmpowerPro® Colorado (grades 9-12), are designed to build literacy skills across the content areas in grades 2-12. In these solutions, students work through language arts, science, and social studies lessons aligned to the **Colorado Academic Standards** to develop close-reading techniques and reading strategies.

- ***Boost* Colorado** programs allow for targeted and intensive intervention to accelerate the literacy gains of students who need additional supports and services. In addition to instruction to build literacy and improve reading across the content areas, ***Boost*** includes a suite of classroom-tested scaffolds for students and supports for teachers.

- ***Access* Colorado** programs provide differentiated instruction and accelerated learning for the unique needs of your ELL students. Students experience success with a multitude of linguistic scaffolds available and teachers have the point-of-use instructional supports needed to enable learning in a wide variety of classroom models.

Achieve3000 looks forward to being Poudre School District R-1's accelerated literacy partner in differentiated instruction. Achieve3000's services and solutions will provide added value to Poudre School District R-1 with:

- **Forecasting through reporting.** Using baseline Lexile levels from our LevelSet™ pretest and our forecasting report, educators can set clear goals for learning gains for every student.
- **Precision differentiation.** All students-ELL, intervention, enrichment, and grade-level learners-learn in the same classroom with content catered to their precise reading level and abilities. Scaffolds can be enabled at any time, providing further support and equity for all in today's blended learning environment.
- **Embedded assessment.** The embedded assessment in each lesson connects to an adaptive engine that automatically accelerates instruction for every student when he or she is ready, enabling students to double or even triple the expected Lexile gains in a year.
- **Customization for all**. Achieve3000 will work with Poudre School District R-1 to fit your specific needs whether it's aligning our content to your scope and sequence or customizing to connect to your basal textbooks. Achieve3000 will deliver a customized platform to Poudre School District R-1, delivering lessons aligned with standards and skills on the **CMAS** and in line with **Colorado Academic Standards**.

Achieve3000 has been providing schools with blended differentiated instruction solutions for over 18 years. We provide blended learning solutions in English Language Arts, Early Literacy, Special Education Intervention, English Language Learner Development, Social Studies and Science to more than 3 million students across the United States and around the world. Our solutions are provided in every state, and in more than 30 countries outside of the United States. Based on decades of scientific research, Achieve3000's patented and proven differentiated instruction for grades preK-12 and adult education reaches all students at their individual reading levels to accelerate learning, improve high stakes test performance, and drive college and career success.

Achieve 3000, Inc. is a privately held company. We are led by a team of passionate and talented executives, chosen for their experience and ability to support 21st-century education initiatives across content areas and help put all students on the road to college and career readiness. Achieve3000's leadership team is supported and guided by equally experienced and committed directors. Visit our website (http://www.achieve3000.com/about-us/) for more information about our executive leadership team, board of directors, and our educational leadership cabinet.

Achieve3000 is proven effective at accelerating literacy gains for all students. Over 18 years of data show that students using the program on average twice per week over a school year can expect to double their expected reading gains. In fact, Achieve3000 was given a "Strong" rating by **Evidence for ESSA** following the group's review of a study that found that use of Achieve3000 solutions resulted in significant positive effects for students.

Contact Information:

Authorized Representative to bind contract:
Nicholas Bates, Chief Financial Officer
Ph: 732.367.5505
Email: proposal.services@achieve3000.com
Address: 1985 Cedar Bridge Avenue, Suite 3, Lakewood, NJ 08701

Contact for RFP:
Erin Rush, Director of Proposal Services
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We invite you to contact us with any questions you may have (732-367-5505 or proposal.services@achieve3000.com).

Sincerely,

Paul Schiffman, Regional Vice President of Sales

Proposer's Approach

3.1.1 The proposal should include diagnostic/formative assessments that can be given at minimum three (3) times a year.

Achieve3000's solution includes both diagnostic and formative assessments.

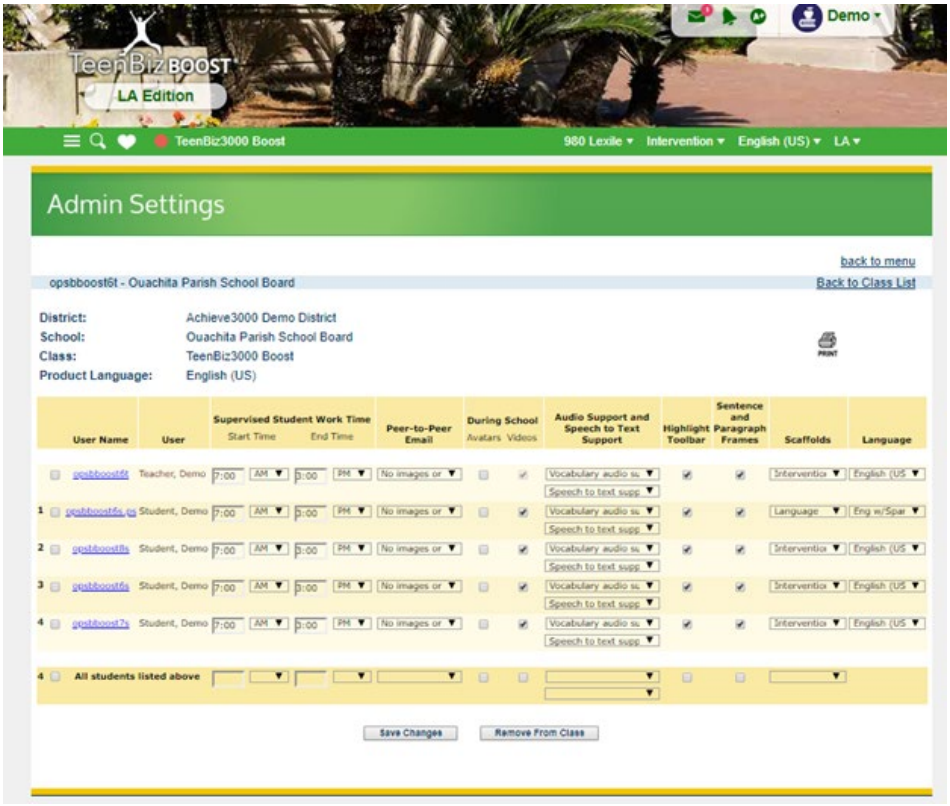
Diagnostic Assessment

Developed in collaboration with MetaMetrics®, Inc., the makers of the Lexile Framework for Reading®, the LevelSet™ academic screener establishes each student's initial Lexile reading level in English or in Spanish. LevelSet is the only assessment of its kind that measures a student's ability to comprehend informational text and provides a scale score that matches reading ability with text complexity. It can be administered up to three times per year, first as a pre-test to establish a baseline Lexile level, forecast readiness for university and career benchmarks, match students with differentiated, tailored text; and identify the best solution and implementation that will promote accelerated growth for every student. Interim and post-test administrations provide a summative measure of student growth.

Achieve3000's LevelSet assessment has been reviewed by NCII and is highly rated with "convincing evidence" as an academic screener. See the NCII Academic Screening Tools Chart for more details.

LevelSet can be used as a stand-alone assessment or in conjunction with Achieve3000 differentiated instruction. During the test, students read a series of approximately 30 paragraph-long passages and answer a cloze-style question about each one.

LevelSet is administered once at the beginning of the school year (or the first time students log in), again at mid-year, and at the end of the school year. The assessment displays automatically during the defined testing window and the administration times that can be set by the instructor under Admin Settings-otherwise known as Supervised Student Work Time.



Test dates may be adjusted based upon the school year calendar. Each student will receive the test at his or her assigned grade level, and the assessment is semi-adaptive to the level of the learner the first time they take it. After that, the system determines the appropriate level based on their prior performance. The test is only available to students during school hours or the time range teachers set in the Supervised Student Work Time field in the program. In addition, students have the ability to save their work on the assessment and return to where they left off at another time.

Formative Assessment

Within the student instructional routine is an embedded assessment (the Activity) that drives acceleration. The built-in assessment is embedded into the student routine, which means it reduces additional testing of students. Students respond to questions that tap into their knowledge of vocabulary as well as questions about summary, central ideas/details, and text structure and development. During this formative assessment activity, two things happen:

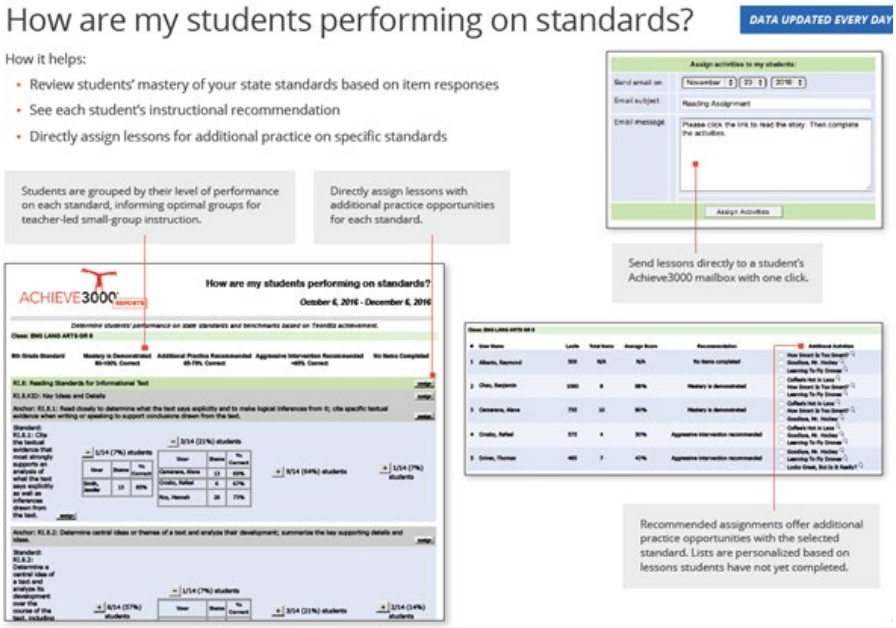
1. The system monitors to detect when students are ready for more complex text.
2. A Bayesian scoring application is used to automatically adjust the level of text students receive.

This automatic adjustment helps to accelerate students' comprehension of grade-appropriate text and above, and relieves teachers to focus on targeted instruction.

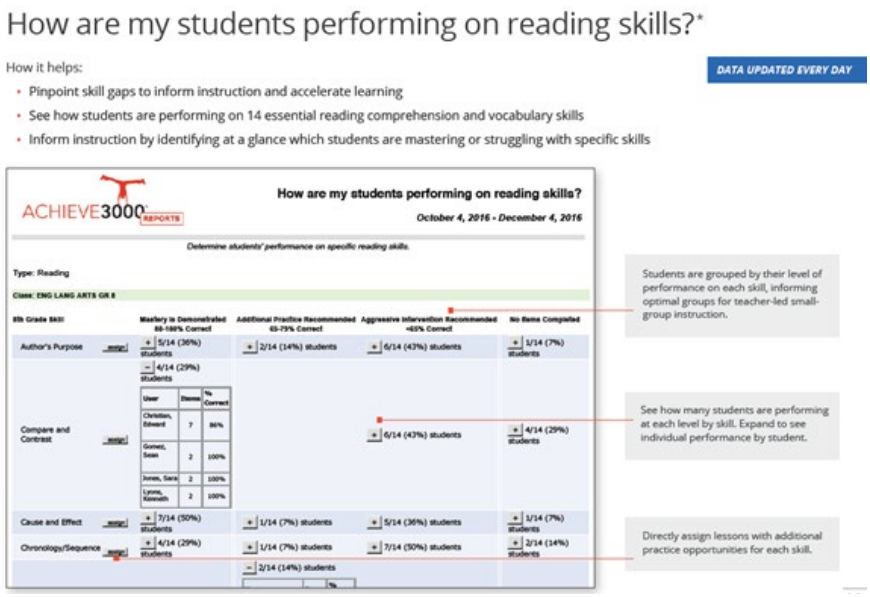
3.1.2 Reading assessments should provide analyses based on standards/skills and level of mastery with suggestions to teachers for next steps in lesson planning. A list of leveled readers including one (1) or more of the following measures: Fountas & Pinnell, age, Grade Level Equivalency, Lexiles, ZPD Ranges, ATOS, DRA, Reading Recovery, etc. Supplier should provide a list of level readers and measure(s) within their response.

Achieve3000's assessments provide analyses based on standards and skills, with lesson planning suggestions for teachers. Our robust reporting suite makes it easy to monitor key performance indicators (KPIs) along with the progress monitoring on Lexile growth, standards mastery, and reading skills mastery by student, class, grade-level and subgroup. The dynamic reports available on the Achieve3000 platform guide data-driven instructional decisions, such as which students need intervention, and which are meeting benchmark goals.

For example, the **Standards Report** allows educators to review student mastery of state standards based on ongoing progress-monitoring data from activity items. Students are grouped by performance on standards and sub-objectives, allowing teachers to target a specific standard or skill for small-group instruction and assign interventions to address those areas directly from the report.



The **Reading Skills** report provides data on students' performance on very specific skills rather than some of the more general state standards. The skills are organized by Reading Comprehension and Vocabulary. The report will group students based on their mastery, or lack of mastery, of specific skills to inform small-group, teacher-led instruction. The Skills Report will also allow teachers to assign articles (lessons) that provide students with additional practice opportunities for that skill.



In addition, for Back to School 2019, the Teacher Edition of our core literacy acceleration platform will see the addition of a new Data Center. The Data Center will offer an improved and easy-access way for teachers to view key metrics for classes and individual students. Teachers will be able to get the information they want most in just a few clicks. Existing users of the Teacher Edition will note that the Data Center consolidates and makes connections between data and analyses previously available only through multiple charts in the Reports section.

With Achieve3000, students have access to over 15,000 articles. The system automatically delivers the version of the lesson that most closely matches each student's Lexile level, with each lesson being available in 12 Lexile levels in English, 8 Lexile levels in Spanish. Because of their cross-curricular nature, the articles help to build academic vocabulary with every reading. Articles are age-appropriate and provide necessary scaffolding. In addition, teachers can use the Search function to search for articles on science or cultural topics using keywords, standards, and reading strategies. This enables teachers to assign specific articles or activities to build skills or knowledge on a particular topic.

Complete lists of middle and high school lesson collections are available on our website. Links have been provided below.

Middle School Lesson Collections
High School Lesson Collections

3.1.3 Reporting and Data management - With the goal of guiding classroom instruction, curriculum development, and instructional supports, the Assessment System described in this RFP must provide educators with general and skills-specific student performance results, including standard/skill analysis reports, in a timely fashion that enables educators to adjust instruction as needed. This information must be user-friendly,

flexible, modifiable, and readily and easily accessible. Immediate results for the selected response items preferred. Data management should be as user friendly or automated as possible. Suppliers shall provide documentation, print screens, and/or print outs of sample reports and data management tools within their response.

3.1.4.1 Proposals should include a list of the reports currently available within the proposer's application, i.e., screenshots of the various reports.

Reporting and grading features, as well as instructional planning materials, are designed to be intuitive and user-friendly for teachers and administrators.

Achieve3000 solutions are online with the ability to print materials such as lesson plans and reports. The program includes access for students, teachers, district and school and administrators.

- **Student Edition** provides access to the LevelSet exam (during set times), channel lessons, 5-Step Literacy Routine (with built-in scaffolds and supports), and the Career Center.
- **Leadership Edition** for district and school administrators to monitor 22 KPIs to evaluate their implementation goals and determine next steps to ensure accelerated student performance.
- **Teacher Edition** provides point-of-use, robust teaching supports and real-time to data to empower teachers to further differentiate instruction for their students.

Achieve3000's powerful reporting package enables teachers and administrators to select from pre-built reports to monitor student progress in real time, enabling them to make targeted, results-based academic decisions. Student performance and usage data are instantly available and can be monitored by teachers and administrators on a student, class, grade, school, and district level.

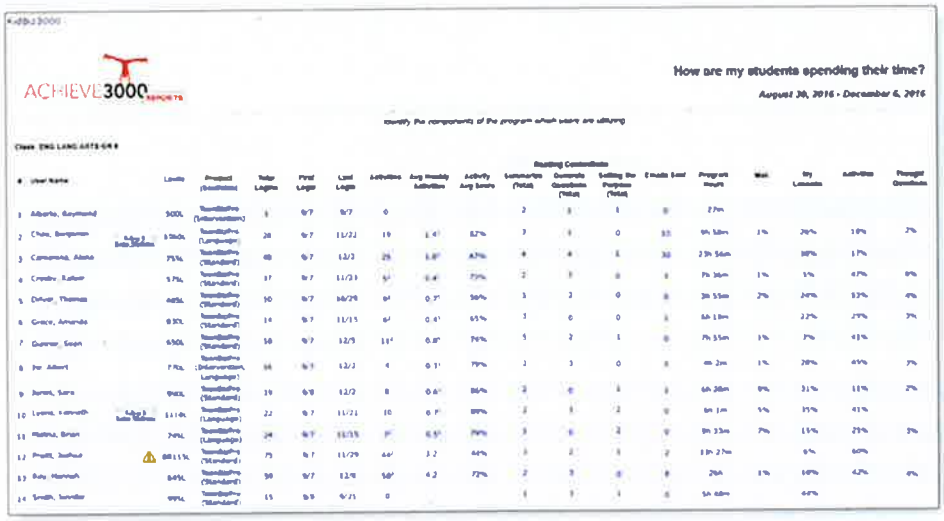
All reports can be refined by date parameters and all are exportable to Excel for easy analysis of trends. In addition, the Leadership Edition data dashboard ensures district and school administrators can quickly and easily access real-time data.

Student Usage Reports

Achieve3000 allows teachers to generate usage reports that show historical activity for each student in each solution through the Teacher Edition. We typically measure usage by the number of logins and activities. We measure primarily by activities because within the literacy solutions, our research has demonstrated, that in order to double the expected Lexile gains, students should complete 80 activities over the course of the year with scores of approximately 75% correct or higher on the first try (this averages to two independent activities per week).

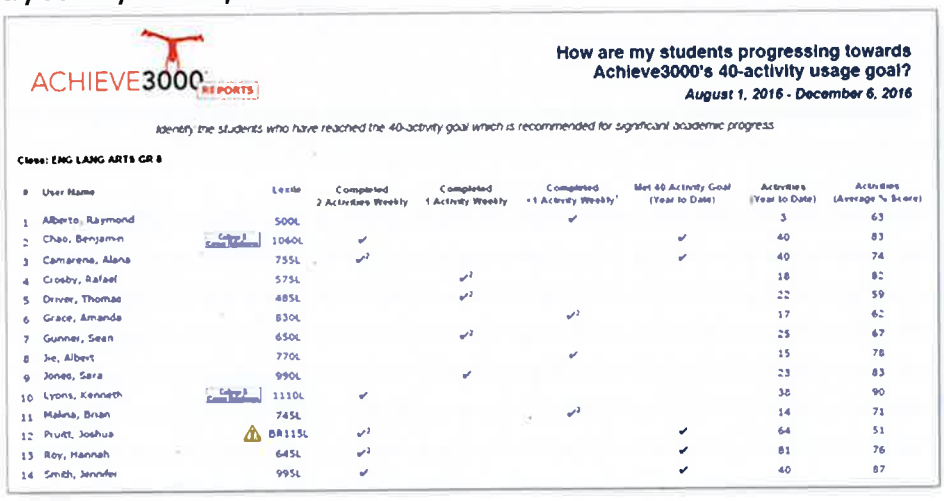
Report examples include, but are not limited to:

The ***How are my students spending their time?*** report shows total actives completed by class and by student, as well as hours on-task. You can also view the average activity performance by student.



How are my students progressing towards Acheive3000 40-activity usage goal?

This usage report is used to identify students who have reached the 40-activity goal which is recommended for significant academic progress. Students who complete a minimum of 40 activities in a semester (80 activities per school year) make double and sometimes triple the expected gains. Teachers can also see how many activities students are completing on average weekly and easily monitor the average first-try activity score by student.



#	User Name		Lexile	Completed 2 Activities Weekly	Completed 1 Activity Weekly	Completed <1 Activity Weekly	Met 40 Activity Goal (Year to Date)	Activities (Year to Date)	Activities (Average % Score)
1	Alberto, Raymond		500L			✔		3	63
2	Chao, Benjamin	College Ready Indicator	1060L	✔			✔	40	83
3	Camarena, Alana		755L	✔²			✔	40	74
4	Crosby, Rafael		575L		✔²			18	82
5	Driver, Thomas		485L		✔²			22	59
6	Grace, Amanda		830L			✔²		17	62
7	Gunner, Sean		650L		✔²			25	67
8	Joe, Albert		770L			✔		15	78
9	Jones, Sara		990L		✔			23	83
10	Lyons, Kenneth	College Ready Indicator	1110L	✔				38	90
11	Malina, Brian		745L			✔²		14	71
12	Pruitt, Joshua	⚠	BR115L	✔²			✔	64	51
13	Roy, Hannah		645L	✔²			✔	81	76
14	Smith, Jennifer		995L	✔			✔	40	87

Student Growth and Performance Reports

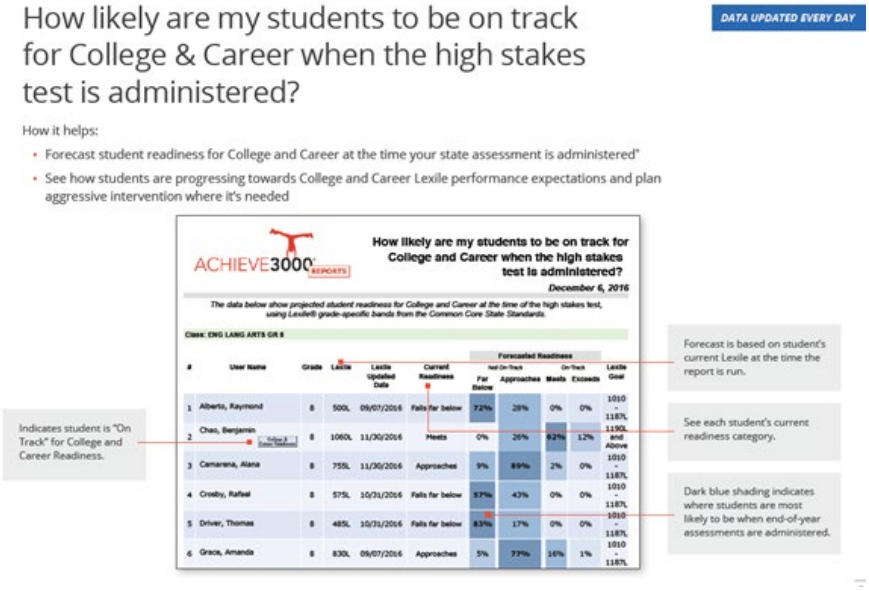
Performance Reports give teachers immediate access to student data, allowing them to forecast outcomes on high-stakes tests, and indicate changes in reading comprehension over time and how students are performing on state standards. Data from ***Pro*** solutions' embedded assessments are available in real time to teachers and administrators within Achieve3000's powerful reporting package, which provides detailed diagnostic data on usage and performance in and out of school.

These reports enable educators to view trends and patterns, making data-driven instructional decisions, grouping students as needed, and delivering differentiated instruction.

Report examples include, but are not limited to:

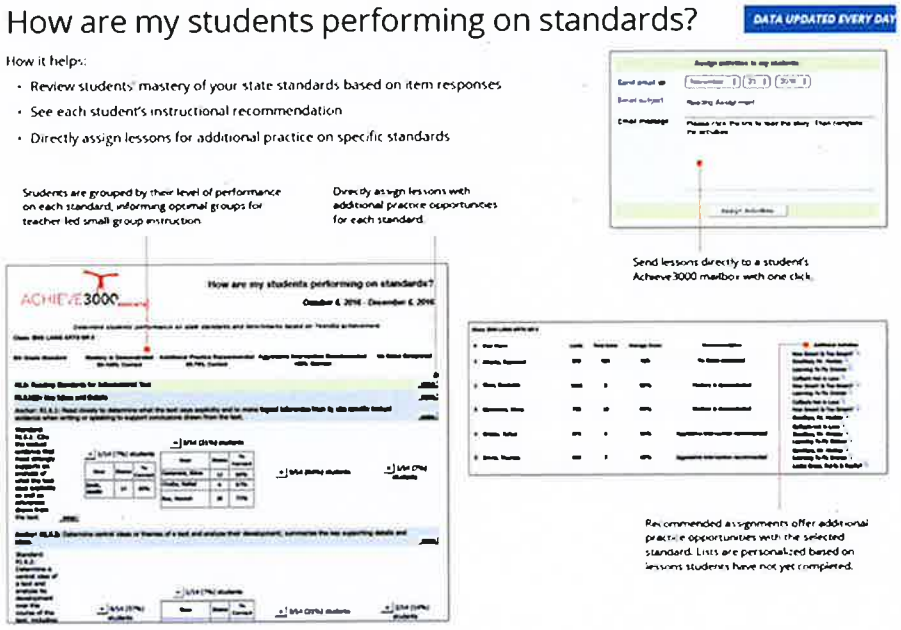
How likely are my students to be on track for College and Career when the high stakes test is administered?

The Forecasting Report helps identify students at risk of performing below proficiency on the CMAS assessment and plan strategic interventions for those students. The report can forecast how students will most likely perform on the assessment based on their current Lexile levels and what their projected Lexile levels are likely to be at the time of the test.



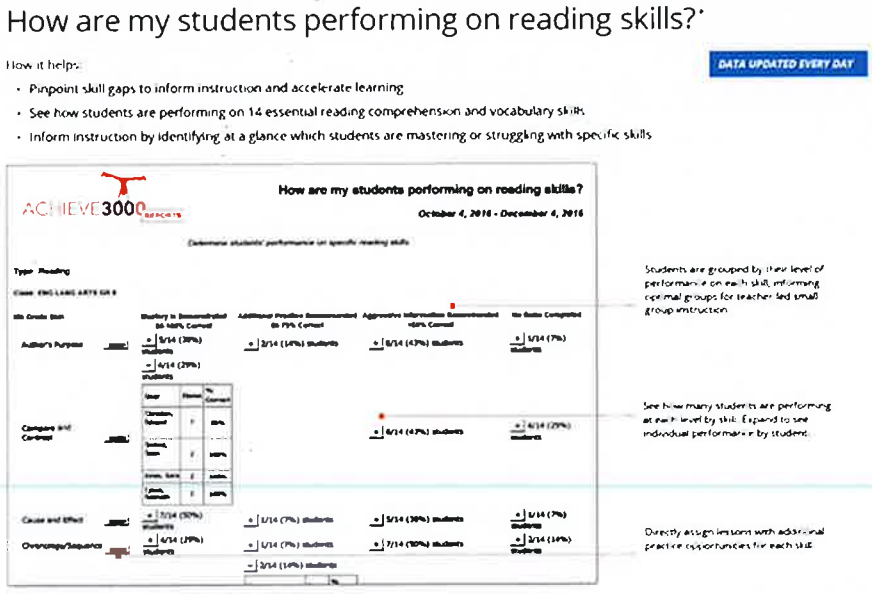
How are my students performing on standards?

The Standards Report allows educators to review student mastery of state standards based on ongoing progress-monitoring data from activity items. Students are grouped by performance (mastered, additional practice recommended, aggressive intervention recommended) on standards and sub-objectives, allowing teachers to target a specific standard or skill for small-group instruction and assign interventions to address those areas directly from the report.



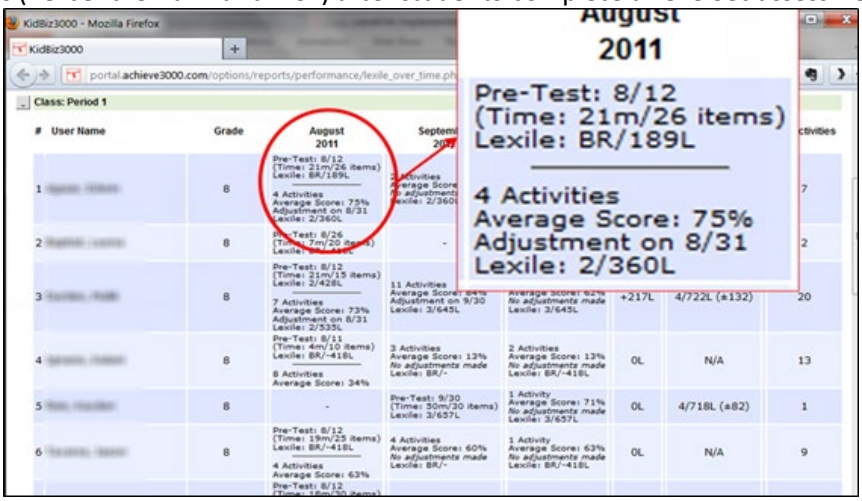
How are my students performing on reading skills?

Boost, Access, **and** ***Español*** provide a data-rich report that enables teachers to easily address student progress and practice. The Reading Skills report reports on mastery of reading comprehension skills, along with intervention suggestions for teachers to target those skills. This report provides data on students' performance on very specific skills rather than some of the more general state standards that are reported on in the report, ***How are my students performing on standards?*** The skills are organized by Reading Comprehension and Vocabulary. The report groups students based on their mastery, or lack of mastery, of specific skills to inform small-group, teacher-led instruction. The Skills Report will also allow teachers to assign articles that provide students with additional practice opportunities for that skill.



How has Lexile performance changed over time?

The Lexile Performance Report tracks changes in Lexile/reading performance based on LevelSet test scores and multiple-choice activity scores, helping teachers to know what Lexile changes have been made and whether students are on track for college and career. The Lexile Performance Report provides normative scores (Percentile Rank and NCE) after students complete a LevelSet assessment.



For Back to School 2019, the Teacher Edition of our core literacy acceleration platform will see the addition of a new Data Center. The Data Center will offer an improved and easy-access way for teachers to view key metrics for classes and individual students. Teachers will be able to get the information they want most in just a few clicks. Existing users of the Teacher Edition will note that the Data Center consolidates and makes connections between data and analyses previously available only through multiple charts in the Reports section.

Initially the Data Center will include two main views: a dashboard and a class overview (as of current planning). Information in these views focuses on the performance and usage targets shown to drive accelerated Lexile gains.

Using this data, teachers can:

- Monitor student progress
- Conduct monthly progress meetings with individual students
- Group students for differentiated instruction.

Dashboard metrics include:

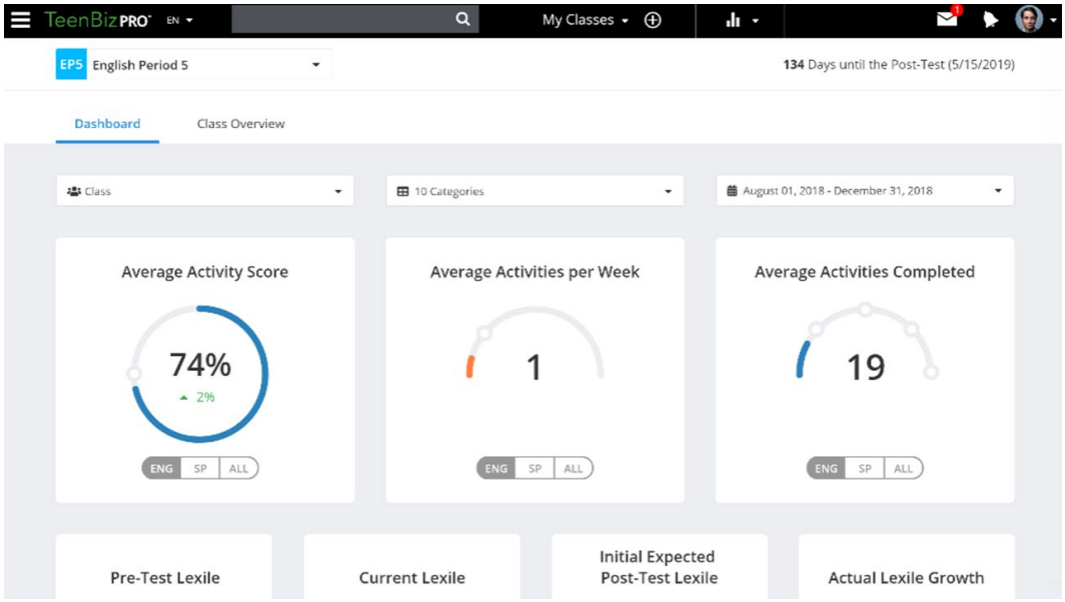
- Activity Score
- Activities per Week
- Activities Completed
- Pre-Test Lexile
- Current Lexile

- Initial Expected Post-Test Lexile
- Actual Lexile Growth

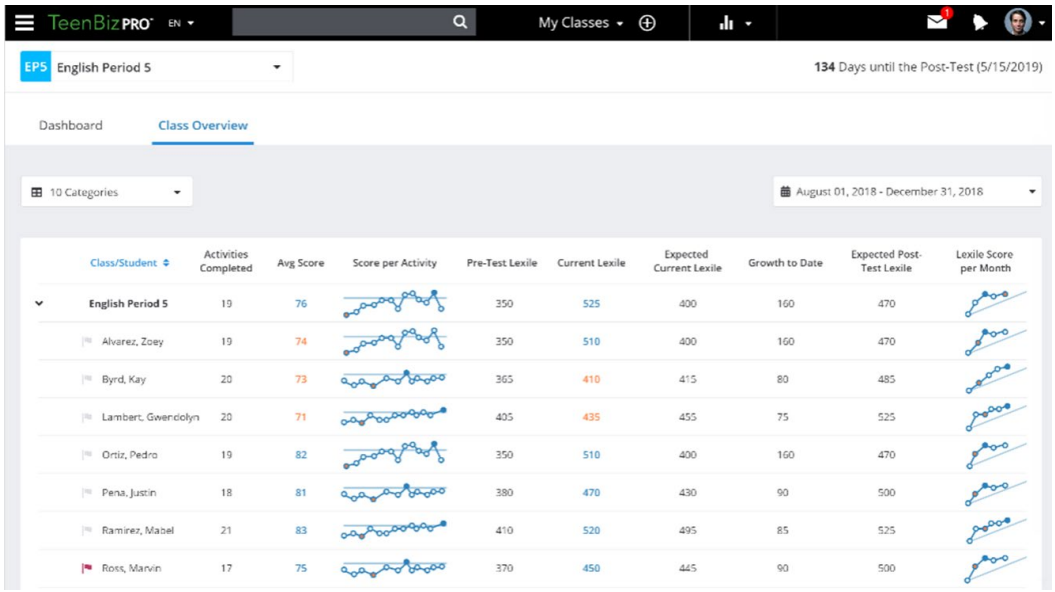
Class Overview metrics include:

- Activities Completed
- Average Score
- Score per Activity
- Pre-Test Lexile
- Current Lexile
- Expected Current Lexile
- Growth to Date
- Expected Post-Test Lexile
- Lexile Score per Month

From the Dashboard, a teacher can choose to view metrics for class average or individual student data.



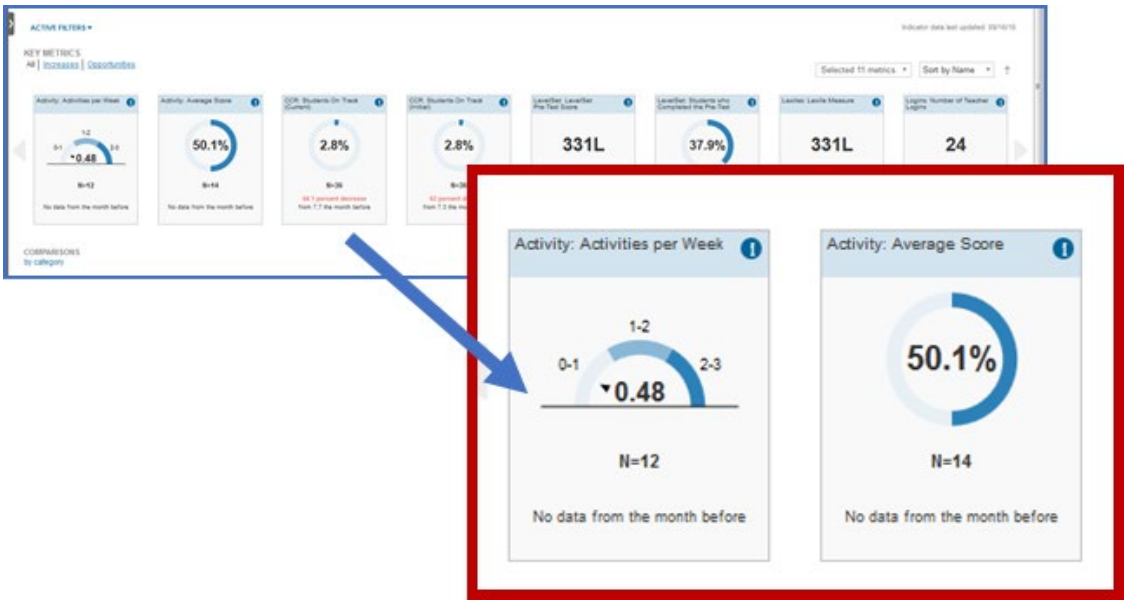
In the Class Overview, teachers can see and sort detailed information for individual students by class, which can support flexible groupings for targeted instruction. Simple visual cues help teachers recognize at-a-glance which students may need additional support.



Leadership Edition

The Leadership Edition delivers district and school administrators, literacy specialists, and teachers timely, at-a-glance information to allow each group to compare school-to-school and class-to-class and monitor the overall fidelity and effectiveness of the solution as well as any performance trends. Designed to be a data dashboard for school district leaders, the Leadership Edition strives to deliver comparison and trend data for their students who are using the program. Administrators can then utilize that information to intervene as necessary and quickly assess and communicate program effectiveness. The Leadership Edition supports four key types of activities:

1. **Identifying exceptions at-a-glance**—Reporting allows education leaders to quickly identify struggling schools where usage is down or successful schools where scores are highest.
2. **Comparing performance of similar data points**—Using the Comparisons Chart, leaders can also quickly get a categorical view of where schools rank in terms of initial LevelSet assessment completion.
3. **Exploring performance of like data points**—From a single view, users can explore student usage in a struggling school by drilling down to grades and teacher information.
4. **Sharing information**—The system allows users to share interesting information found while exploring the data or users can schedule a regular report for automatic distribution.



Leaders can determine which of 22 key performance indicators (KPIs) they want to follow over the course of the year, modifying their dashboards for immediate access to the data they want with the settings in place to facilitate the quickest data reviews. Some KPIs are:

- Average Activity Score—The average first-try score.
- Students Scoring 75% or Higher on the 1st Try—The percentage of students scoring at or above 75% on the first try (a measure of fidelity).
- Students per-Activity Range (by Number of Completed Activities)—Breaks completed activities into smaller intervals: 0, 1–9, 10–19, 20–29, 30–39, and 40 or more. In each interval, the indicator calculates the percentage of students who have completed a number of activities in that interval.
- Students on Track for College and Career Readiness per the Pre-Test Lexile—The percentage of students on track, according to the Pre-Test score.
- Students on Track for College and Career Readiness per the Current Lexile—The percentage of students on track, according to the Current Lexile.
- Date range options for viewing data including a Year to Date feature so that the earliest school start date and the second date in the range is always set to the day prior.
- School Year selector for Custom Date Range-allows leaders/administrators to set the School Year you want to view your data in.
- Additional usage filters to isolate fidelity practices-two Activity filters that break down Activities per Week and by Activity Score can be used to isolate the performance of students according to the number of activities they have completed as well as the percentage correct. Using those filters together means you can – for example – examine the Lexile growth of students practicing Quality only, Quantity only, Quality and Quantity – or any combination in between.

In addition to built-in reporting options, Achieve3000 also provides partner districts with valuable reports related to the fidelity of the implementation and designed to provide relevant and timely information. Custom reports are highly visual, allowing readers to quickly identify areas for

celebration or opportunities for improvement. Standard formats for custom reports include the following examples, though our team can provide virtually any format desired:

- **Implementation Highlights Report (IHR)**

  The Implementation Highlights Report is available upon request for any time period desired. It provides a high-level overview of the status of Achieve3000 implementation. This powerful report includes data on overall Lexile growth as well as growth for students with recommended quality and quantity of usage. Additional data include completed activities, writing assignments, program sessions, after-school usage, career choices chosen, teacher usage, and growth in College and Career Readiness. **IHR** reports are prepared upon request and can be customized to include additional data as needed.

- **Executive Summary Report (ESR)**

  The Executive Summary Report is a semi-annual report that provides key usage and performance indicators to school and district decision makers, allowing them to track progress and make changes for future improvement. The report includes actionable information about logins, activities, Lexile gains, Pre-Test completion rates, and College and Career Readiness, all using powerful, easy-to-read data visualizations.

- **Infographic**

  Achieve3000 delivers an end-of-year infographic, a powerful, visually appealing way to communicate the value and impact of Achieve3000 solutions. The infographic highlights usage and performance information including Lexile growth, the percentage of students exceeding the expected Lexile growth, the percentage of students meeting or exceeding college and career readiness benchmarks, and other key indicators of engagement and success. The infographic is easily shared on social media platforms.

- **Impact Study Reports**

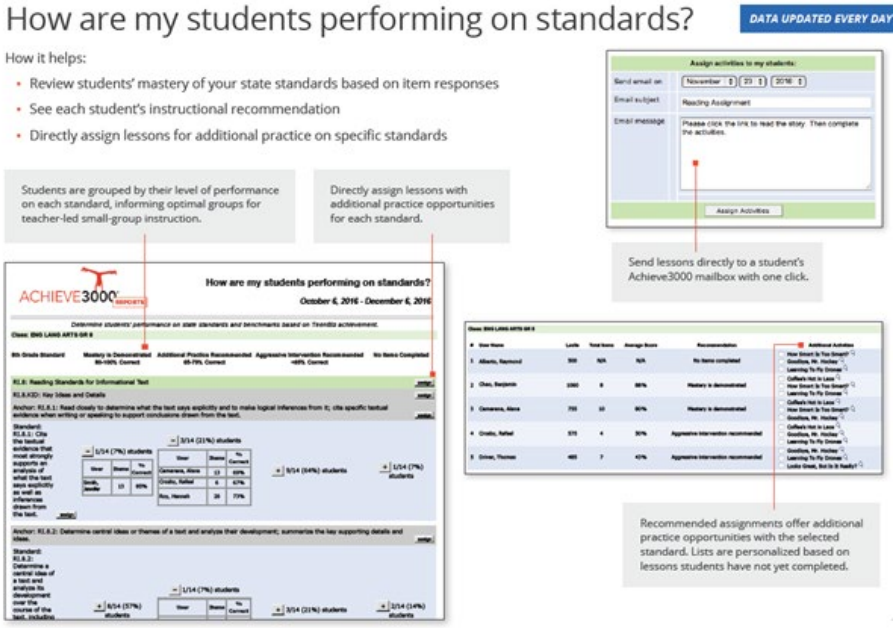
  Upon request, our analysis team can analyze high-stakes state test data to examine the relationship between Achieve3000 implementation and scores on those tests. We can work with your leadership team to specify the main research questions of interest and design a custom analysis to answer those questions. All state test data are collected, stored, analyzed, and reported in a manner consistent with FERPA guidelines and any applicable state laws or district policies.

We will establish data reviews with administrators at the district's desired timing to share the data and make adjustments to the implementation as necessary. Data reviews can also include a walkthrough of

the *Leadership Edition* data dashboard to ensure district and school administrators can quickly and easily access real-time data and KPIs whenever they need to. Refer to our Report Sampler in **Appendix B.**

3.1.4.2 Reports will display overall assessment performance as well as strengths and weaknesses relative to the specific Colorado State Standards. Please describe costs and specialized processes, if a special data load must be included to allow assessment results reported based on Colorado State Standards.

As previously stated, the **Standards Report** allows educators to review student mastery of state standards based on ongoing progress-monitoring data from activity items. Students are grouped by performance on standards and sub-objectives, allowing teachers to target a specific standard or skill for small-group instruction and assign interventions to address those areas directly from the report. This report is not an additional cost, it is included in the reporting suite.



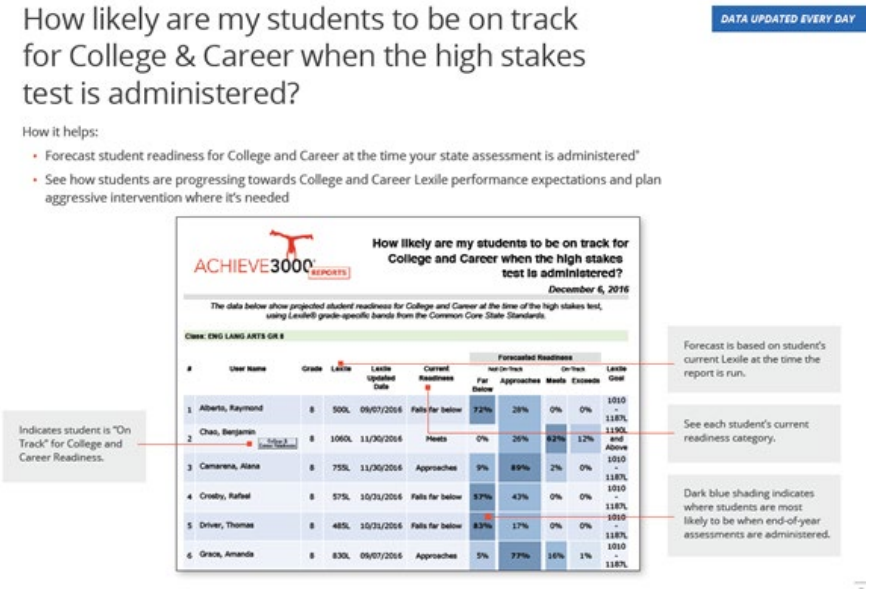
3.1.4.3 Skill/standard or item analysis reports should be available at the student, class, building, and district levels.

Student performance at the skill and standard level are instantly available and can be monitored by teachers and administrators on a student, class, grade, school, and district level. All reports can be refined by date parameters and all are exportable to Excel for easy analysis of trends. In addition, the Leadership Edition data dashboard ensures district and school administrators can quickly and easily access real-time data.

3.1.4.4 A screening report, or some report showing the State of Colorado based performance level of students should be available.

The ***Forecasting Report*** helps identify students at risk of performing below proficiency on the **CMAS** and plan strategic interventions for those students. The report can forecast how students will most likely

perform on the assessment based on their current Lexile levels and what their projected Lexile levels are likely to be at the time of the test.



3.1.4.5 Reports need to be available on individual assessments and across assessments (longitudinal/growth) throughout the school year relative to skills and performance. For example, if three (3) Benchmarks are proposed, summary reports should display student performance across the three benchmarks at the student, class, building, and district levels.

LevelSet includes a pre-, interim, and post-test that can be administered in as little as 15 minutes per assessment to provide real-time reporting for timely intervention and progress monitoring. Only LevelSet includes a College and Career Readiness report that forecasts student preparedness and adjusts those forecasts automatically when student Lexile® levels increase. Student performance and usage data are instantly available and can be monitored by teachers and administrators on a student, class, grade, school, and district level.

The **Lexile Performance Report** tracks changes in Lexile/reading performance based on LevelSet test scores and multiple-choice activity scores, helping teachers to know what Lexile changes have been made and whether students are on track for college and career. The Lexile Performance Report provides normative scores (Percentile Rank and NCE) after students complete a LevelSet assessment.

3.1.4.6 Student longitudinal reporting should be available. Student reports indicating overall performance and performance relative to skills will be maintained across grades and for each school a student attends. For example, with longitudinal reporting, a teacher planning for his/her class before school begins in September can examine the performance on the previous years' Benchmarks of students in his/ her incoming classes. Growth reports should be based on student growth percentiles, if possible.

Achieve3000 gives teachers and other stakeholders the ability to view longitudinal data on individual student performance through a robust reporting suite. Achieve3000 allows districts to store data from year to year. Stored data can be reported via the Leadership Edition and data can be exported back to the district. Achieve3000 diagnostic assessment and progress monitoring tools assess students multiple times over the course of the year. Through ongoing assessment within the platform, student data can be monitored and students' evolving needs can be met—from phonemic awareness, phonics, and fluency, to vocabulary acquisition, reading comprehension, writing, and critical thinking. Through a variety of teacher and administrator reports, Achieve3000 provides LAUSD with the ability to view trends and patterns of data in various views and formats. All reports can be refined by date parameters and all are exportable to Excel for easy analysis of trends. Additionally, the alignment drives a report on the mastery of reading skills, grouping students based on their needs and providing instructional supports for teachers.

3.1.4.7 The system must be able to archive reports each year so that educators may review historical reports based upon class and school configurations in previous years.

As a cloud-based platform, Achieve3000 solutions automatically archive student assessment data for later review. Achieve3000 solutions provide current and relative historical and geographical data. Achieve3000 allows districts to store data from year to year. Stored data can be reported via the Leadership Edition and data can be exported back to the district.

3.1.5 A technical manual describing the Diagnostic/Formative assessments, including research covering the frequency distributions, means, standard deviations, standard errors of

measurement, reliability and validity analysis, and the relevant item statistics, should be provided within Supplier's response.

Please refer to the LevelSet Technical Manual in **Appendix A.**

4.0 Agreement Terms

Achieve3000 take no exceptions to Poudre School District R-1's terms and conditions.

Cost Component of the Proposal

The Achieve3000 platform contains different solutions with each designed to meet a specific student need or grade level. Poudre School District's purchase can be customized so the desired outcomes are met for your student population.

Leveraging *Pro*'s patented model of differentiation to accelerate reading, *Boost* for use with intervention with special education students and *Access* to use the English language learners, Achieve3000 provides further supports to address the unique needs of each type of learner. Included in the license cost is access for students, teachers, district and school administrators, and parents.

- **Student Edition** provides access to the LevelSet exam (during set times), channel lessons, 5-Step Literacy Routine (with built-in scaffolds and supports), and the Career Center.
- **Leadership Edition** for district and school administrators to monitor 22 key performance indicators to evaluate their implementation goals and determine next steps to ensure accelerated student performance.
- **Teacher Edition** provides point-of-use, robust teaching supports and real-time to data to empower teachers to further differentiate instruction for their students.
- **Home Edition** extends student learning by engaging your parent population to monitor their child's progress and support their literacy growth with materials in 20 different languages and to build their family literacy with differentiated content in English and in Spanish.

A professional development description is included in the price proposal. Achieve3000 does not intend to utilize subcontractors.

Company Legal Name	Achieve3000, Inc.
Business Description	Achieve3000® is the leading literacy platform in today's blended learning programs, with cloud-based solutions that serve nearly three-million students worldwide. Based on decades of scientific research, Achieve3000's patented and proven differentiated instruction for grades preK-12 and adult

	education reaches all students at their individual reading levels to accelerate learning, improve high stakes test performance, and drive college and career success.
Address	1985 Cedar Bridge Avenue, Suite 3, Lakewood, NJ 08701
Number of Employees	Achieve3000 has approximately 70 part-time employees and 370 full-time employees.
Years in Business	18
Website	www.achieve3000.com
Primary Proposal Contact	Erin Rush, Director of Proposal Services E: erin.rush@achieve3000.com P: 614-512-5819

See the following pages for our cost proposal, reviewer guides and demonstration logins.

DISTRICT INITIAL PURCHASE

License quantities are based on the provided student enrollment estimates (RFP page 14). A 1,300 minimum license purchase is required for the extended cost per license. Purchases below the minimum will be offered at $42/license. Because Achieve3000 is web-based, shipping does not apply.

Product	Qty	Unit Cost	2020-2021 School Year
Achieve3000 Middle School Licenses 1 Teacher per Middle School (10 total) 105 Students per Middle School (1050 total)	1050	$30.00	$31,500.00
Achieve3000 High School Licenses 1 Teacher per High School (4 total) 70 Students per High School (280 total)	280	$30.00	$8,400.00
Professional Development See below for detailed PD plan, includes 1 centralized day for initial training, 5 days for Middle School site-based PD, 2 days for High School site-based PD	8	$2,695.00	$21,560.00
Total Cost			**$61,460.00**

PURCHASES OVER 10-YEAR CONTRACT

A 1,300 minimum license purchase is required for the extended cost per license. Purchases below the minimum will be subject to Achieve3000 list prices in the designated school year.

Product	2021-2022 Unit Cost	2022-2023 Unit Cost	2023-2024 Unit Cost	2024-2025 Unit Cost	2025-2026 Unit Cost	2026-2027 Unit Cost	2027-2028 Unit Cost	2028-2029 Unit Cost	2029-2030 Unit Cost
Achieve3000 Licenses Quantities to be determined annually.	$30.00	$30.00	$30.60	$30.60	$30.60	$31.21	$31.21	$31.21	$31.21
Professional Development Number of days to be determined annually.	$2,695.00	$2,695.00	$2,748.90	$2,748.90	$2,748.90	$2,803.88	$2,803.88	$2,803.88	$2,803.88

Professional Development

Achieve3000 Professional Learning Services designed to empower teachers with effective instructional strategies and activities. We work with each customer to develop a comprehensive Customer Success Plan, with professional development and implementation services aligned to your goals and needs. Following a clearly outlined plan, we will establish the path for professional development that engages all stakeholders—principals, coaches, teachers, and parents —through a series of blended sessions, including onsite, live online, and on-demand online.

Professional Learning Sessions will be customized not only for your specific needs and academic goals, but also differentiated to meet the unique needs of each group of participants, with specialized sessions for school and district leadership, multi-subject teachers, reading and English language arts teachers, content-area teachers, and other groups to ensure the greatest impact. skills in Language Arts, Science, and Social Studies.

Recommendations for initial training include:

*1 centralized training day for middle and high school teachers - session to focus on initial introduction to program and platform training
*5 days for middle school site-based professional development - focused on side-by-side coaching, consulting and classroom modeling, as well as deep dive into data and leadership reporting
*2 days for high school site-based professional development - focused on side-by-side coaching, consulting and classroom modeling, as well as deep dive into data and leadership reporting

Following initial training, ongoing professional learning opportunities will support the implementation for the life of the contract. Detailed pricing has been provided above.

Available for Grades 6-12

Poudre School District R-1

REVIEWER GUIDE

Secondary Reading Intervention Assessment Curriculum with Instructional Materials and Services

See how Achieve3000®'s patented and proven literacy platform reaches all students at their individual reading levels to build literacy skills through truly differentiated instruction.

ACHIEVE3000®

Table of Contents

INTRODUCTION TO THE

Achieve3000 Platform

Achieve3000 is the leading literacy platform in today's blended learning programs, serving nearly three million students worldwide. Based on decades of scientific research, our patented and proven solutions for PreK through grade 12 and adult education are designed to accelerate reading growth, improve high-stakes test performance, and prepare students for college and career success. Achieve3000 is the only literacy platform that delivers differentiated instruction across all content areas and uses embedded assessments monitor students' reading growth and continually adjust text complexity to match their individual Lexile® levels.

How Does It Work?

Achieve3000's proprietary LevelSet™ assessment establishes each student's initial Lexile reading level in English or in Spanish. LevelSet can be administered up to three times per year, first as a pre-test to establish a baseline Lexile level; forecast readiness for college and career benchmarks, match students with differentiated, tailored text; and identify the best solution and implementation that will promote accelerated growth for every student.

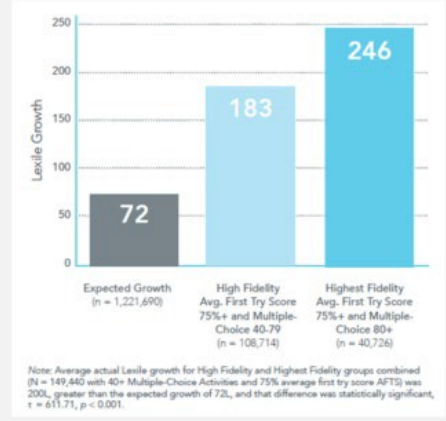
Achieve3000's adaptive text complexity system automatically matches students to grade-appropriate text, differentiating the same CCSS-aligned nonfiction lesson at 12 levels in English, 12 levels in English with native-language supports, and 8 levels in Spanish. Students complete Colorado-specific, cross-disciplinary lessons using a specialized 5-Step Literacy Routine that strengthens reading and develops key literacy skills while building content-area knowledge and vocabulary simultaneously. Built-in scaffolds support student learning at every step, ensuring students of all ability levels can access the same grade-appropriate content and meet academic standards.

Achieve3000 solutions work by providing rigorous and enriching educational content that helps all students achieve the critical literacy knowledge and skills necessary for college and career success. With our suite of solutions, students will build foundational literacy skills, develop literacy across the content areas, demonstrate mastery of specific standards and reading skills, and show success on high-stakes assessments—ultimately leading to accelerated achievement.

Proven to Accelerate Literacy Gains

Only Achieve3000 has a 18-year track record of significantly accelerating students' literacy gains and dramatically increasing college and career readiness.

Here are the results from a 2017-2018 study!



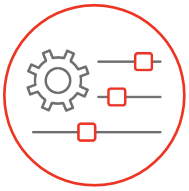
3X THE EXPECTED LITERACY GROWTH!
Students made more than triple their expected Lexile gains when using Achieve3000 with fidelity

The Achieve3000 platform's holistic approach to learning prioritizes equity for all students through:

Forecasting and Goal Setting: Using our forecasting tool, teachers not only have the ability to determine students' preparedness for college and career but can also use the data to identify individual instructional needs to inform a differentiated success plan with enabled learning scaffolds for each student. The detailed forecasting report empowers students, teachers, and parents to track students' learning goals throughout the year. To double the expected Lexile gains, research has shown that students should complete 80 activities over the course of the year (an average of two independent activities per week) with scores of approximately 75% correct or higher on the first try. This number will vary based on individual students; some students may need more, some less.

Differentiated Instruction: Achieve3000's patented model of truly differentiated instruction ensures that all students in a class read the same grade-appropriate, standards-aligned cross-curricular content (science, social studies, language arts, and more), automatically tailored to their individual reading levels and learning needs, with 12 Lexile versions of every lesson in English. With our patented methodology, we guarantee equity of access while requiring accountability. We also promote independent work along with collaboration as every student reads, writes, and communicates about the same grade-appropriate topic.

Embedded Assessments: Achieve3000 has the only patented model that strengthens reading, improves literacy across the content areas, and drives college and career readiness through embedded formative assessments. Through a unique partnership with MetaMetrics®, our proprietary technology uses data from the embedded assessment to automatically step up the text complexity when it detects that a student is ready for a greater challenge. Data from the embedded assessments fuel a wide array of real-time reports, including forecasting for college and career readiness, individual reporting on Lexile scores and Lexile growth over time, standards mastery reports, and usage/performance reports. Reports group students based on their mastery of each standard or skill, and offer instructional recommendations for teachers to provide targeted small-group, teacher-led instruction. The reports also provide students, educators, administrators, and families with ongoing progress-monitoring and data-driven decision-making anytime, anywhere, and on any device.

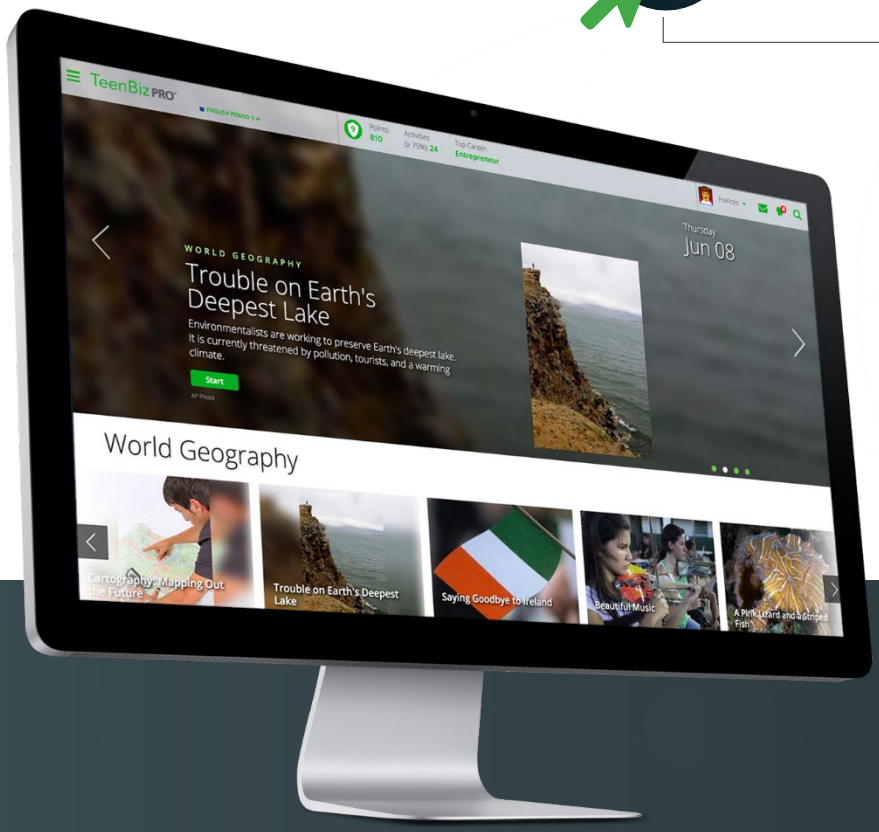


Customization: Achieve3000's literacy platform is designed to flexibly fit into your initiatives by customizing content, professional learning, and contests to meet your student goals and by integrating with your systems for a seamless experience. With the Achieve3000 platform, critical information about your teachers is identified, such as subject, grade, and high-stakes assessments administered, and then available content and messaging are customized to best support their specific teaching needs. Achieve3000 offers courses across multiple subjects and grades. With grade-specific courses, as well as courses aligned to your unique curriculum, Achieve3000 will meet the needs of any desired implementation model. In addition, we provide customization tools within the solutions, making it easy for teachers to map lessons to their scope and sequence in any content area.

A REVIEWER GUIDE TO ACHIEVE3000'S
PRO Solution

- Using the logins provided, you will experience *PRO* from the perspectives of a teacher and students in different grades and at different literacy levels. You may also review from the perspectives of a family member and an administrator.
- Starting on page 6, you will be provided with a login and guidance on how to review the Achieve3000 *PRO* solution from the perspective of a teacher.
- For logins at different grade levels, you can find a list of additional logins on p. 10.

This icon indicates important step-by-step information in this reviewer guide.

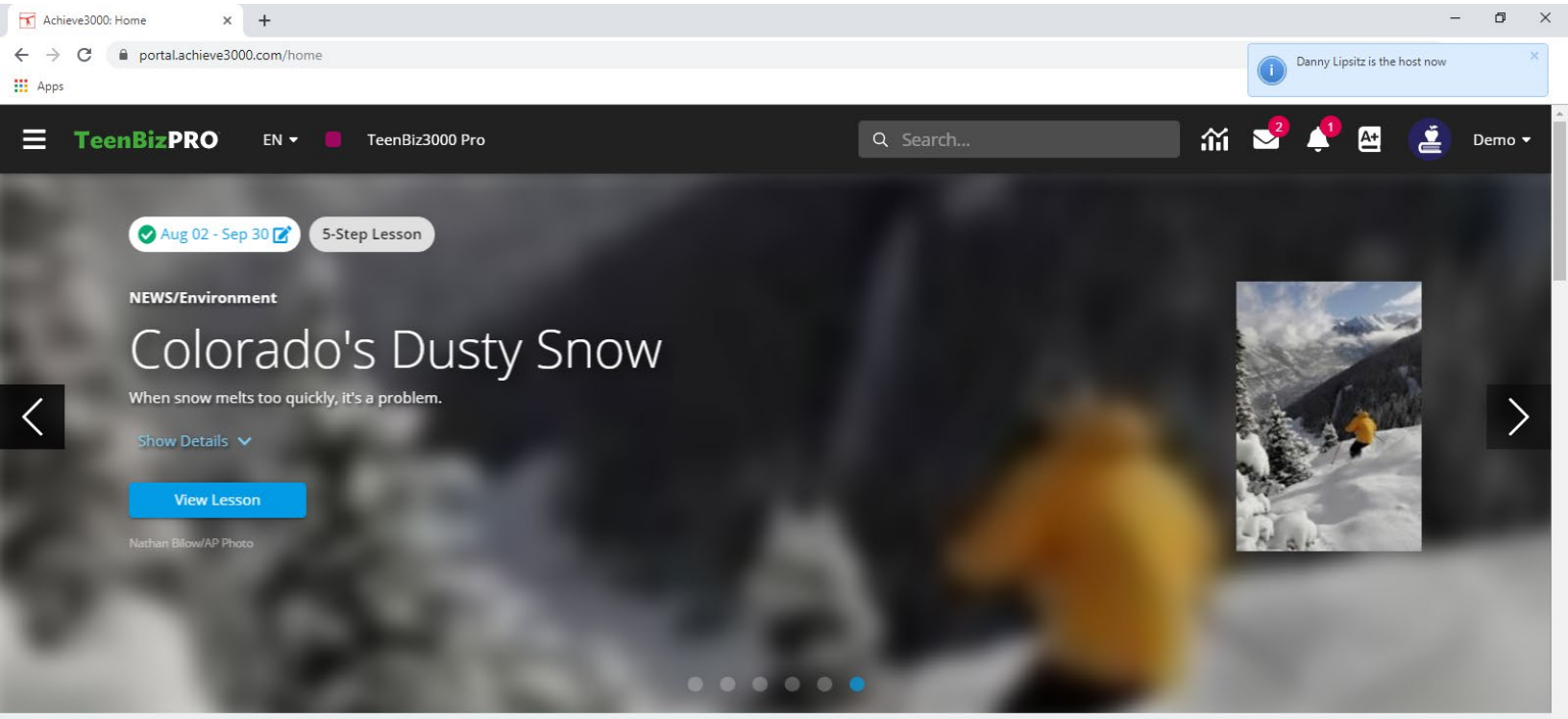


USING *PRO*
as a Teacher

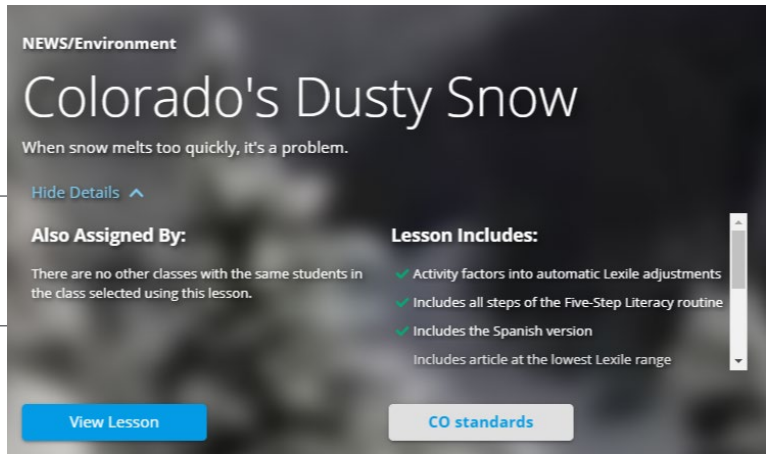
For the purpose of this reviewer guide, we will be walking you through the Teacher Edition. We recommend following the steps below to review the Teacher Edition before exploring at different student levels. If you have requested logins at different grade levels, you can find a list of additional teacher logins on p. 9.

To explore the Teacher Edition, log in with the Teacher credentials at: portal.achieve3000.com.

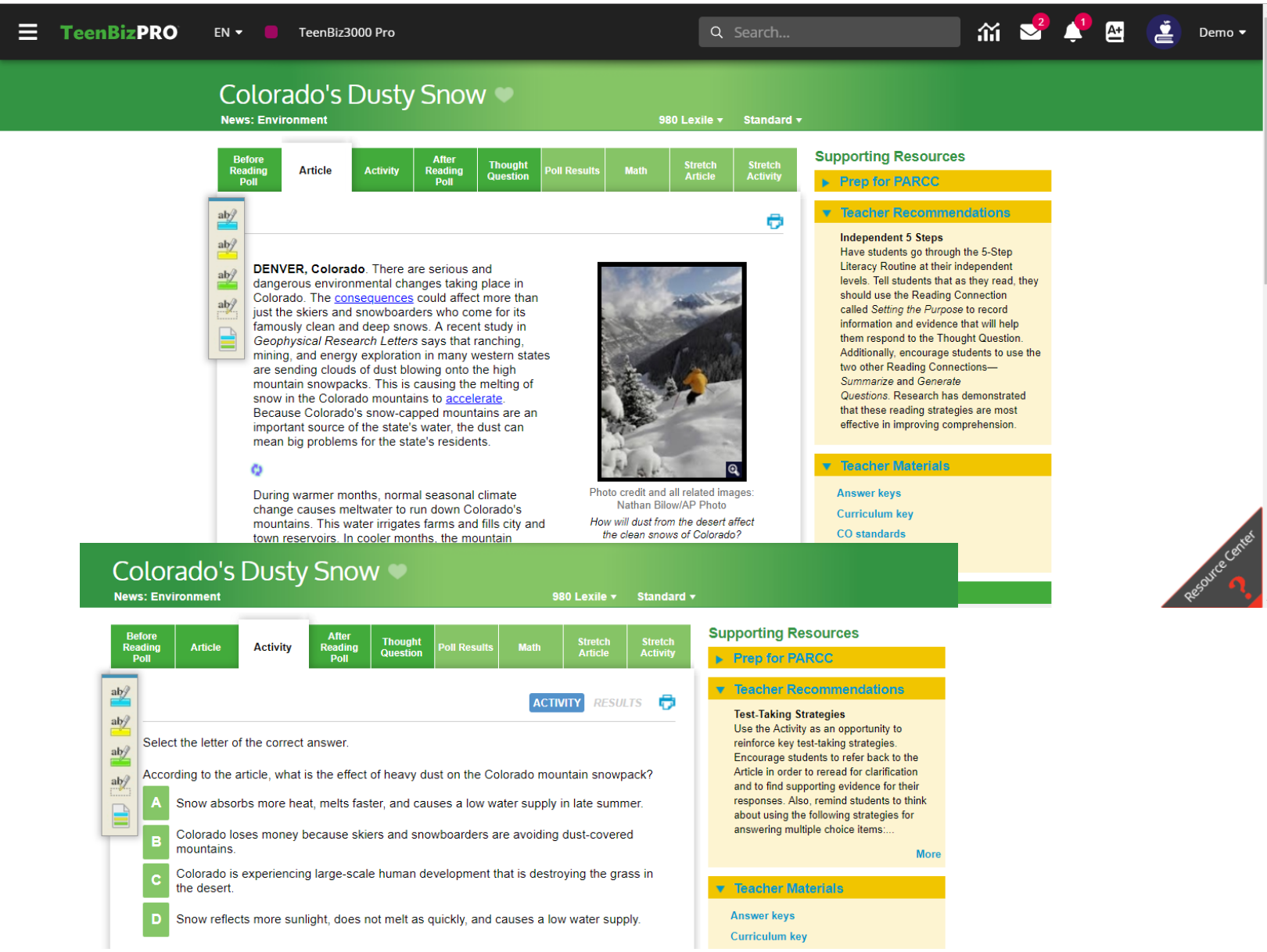
Home Edition	Username	Password
Teacher Grade 6	Psdpro6t	poudredemo



Click “Show Details” on any lesson tile to see a summary and the CO standards for that lesson.



Click View Lesson to review a lesson from the teacher's perspective. Note how the teacher recommendations change with each lesson step.



USING *PRO*
as a Student

Using the logins found on p.10, you can review additional Achieve3000 solutions from the perspectives of students in different grades and at different literacy levels with various language supports.

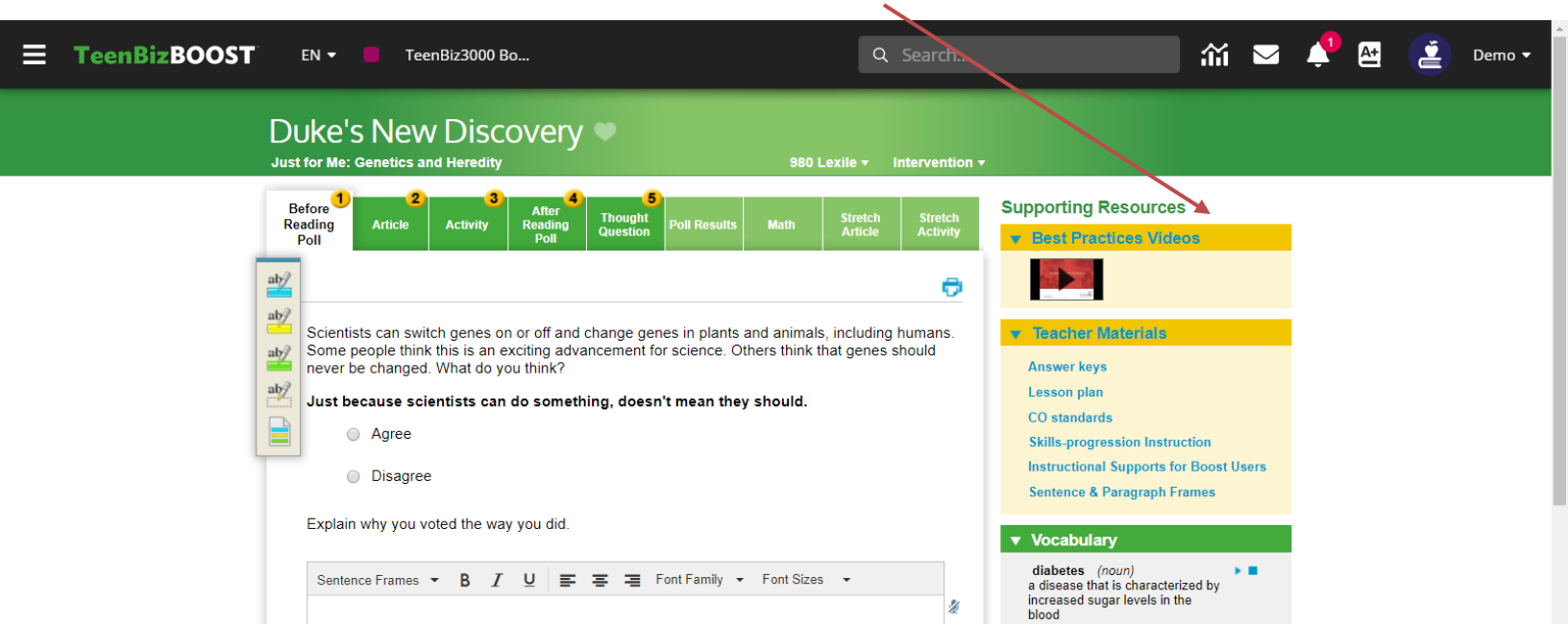
ACCELERATE LITERACY GROWTH FOR YOUR SPECIAL EDUCATION, INTERVENTION STUDENTS, AND ELLS WITH *BOOST*

Leveraging *PRO*'s patented model of differentiation to accelerate reading, *BOOST* for use with intervention and special education students includes scaffolds such as the Just for Me lessons in *BOOST* build language and phonics skills with unit overviews, vocabulary flashcards, and songs The Achieve3000 platform includes resources used to close skill gaps, promote the strong reading techniques needed to meet your state's standards, and prepare students for college and career success. *BOOST* provides all educators with the critical data they need to ensure that their intervention, special education, and English language learning programs are successful. Fueled by real-time student data, powerful reports in the Teacher Edition of both programs, including the Skills Report, empower educators to track the progress of every student and drive instruction through informed decision-making. *BOOST* offers teachers general and lesson-specific resources for skills practice, research-based, teacher-directed strategies, and instructional routines customized for their RtI, SPED, and EL students to support successful implementation.

To view all scaffolds, supports, and teacher recommendations, log in with the teacher credentials at portal.achieve3000.com. To log in at a different grade level, please refer to the additional logins on p. 10.

Teacher	Username	Password
Boost-Grade 6	psdboost6t	poudredemo

Explore, noticing the extra scaffolds such as numbered steps in the literacy routine and sentence starters. Explore all Supporting Resources at the right side of any lesson. Be sure to watch the Best Practices video and click on the Skills-Progression instruction located under Teacher Materials.



USING *PRO*
as a Family Member

Achieve3000 is focused on increasing family involvement, expanding students' reading experiences beyond the school day, and nurturing three-way communication among parents/guardians, educators, and students. Families using the Achieve3000 platform automatically receive our Home Edition so they can stay informed about daily instruction, monitor progress, and communicate with their child, classroom teachers, and building leaders.

To explore the Home Edition, log in with the Home Edition credentials at: portal.achieve3000.com.

Note that the Home Edition will not display your state in this demo account.

Home Edition	Username	Password
Parent Grade 6	psdparent	poudredemo

USING *PRO*
as an Administrator

The Leadership Edition for school and district leaders is provided at no extra cost with your subscription to the Achieve3000 platform and solutions. The Leadership Edition provides a clear overview of the district and includes filters to customize reports and data via 21 interactive key metrics and comparison and trends charts for pinpointed analysis.

To explore the Leadership Edition, log in with the Leadership Edition credentials at portal.achieve3000.com.

On the second login screen, you will be prompted to select "Leadership Edition" under the Choose Your Program dropdown menu. Click Login to enter the Leadership Edition dashboard.

Note that the Leadership Edition will not display your state in this demo account.

Administrator	Username	Password
School Administrator	psdadmin	poudredemo

Additional Reviewer Logins

For your convenience, we have provided a list of all logins available to you and mentioned throughout this guide, as well as additional logins to review Achieve3000's solutions at different grade levels. Logins may be used by more than one reviewer at a time.

PRO & BOOST

All logins below can be used to review Achieve3000's *PRO* & *BOOST* solutions.
Go to portal.achieve3000.com.

Grade	Username	Password	Language
Student Logins-Pro			
6	psdpro6s	poudredemo	English
6	psdpro6s.s	poudredemo	Full Spanish
7	psdpro7s	poudredemo	English
8	psdpro8s	poudredemo	English
8	psdpro8s.ps	poudredemo	Partial Spanish
9	psdpro9s	poudredemo	English
9	psdpro9s.s	poudredemo	Full Spanish
10	psdpro10s	poudredemo	English
11	psdpro11s	poudredemo	English
12	psdpro12s	poudredemo	English
12	psdpro12s.ps	poudredemo	Partial Spanish
Student Logins-Boost			
6	psdboost6s	poudredemo	English
6	psdboost6s.s	poudredemo	Full Spanish
7	psdboost7s	poudredemo	English
8	psdboost8s	poudredemo	English
8	psdboost8s.ps	poudredemo	Partial Spanish
9	psdboost9s	poudredemo	English
9	psdboost9s.s	poudredemo	Full Spanish
10	psdboost10s	poudredemo	English
11	psdboost11s	poudredemo	English
12	psdboost12s	poudredemo	English
12	psdboosts.ps	poudredemo	Partial Spanish
Teacher Logins-Pro			
6	psdpro6t	poudredemo	English

9	psdpro9t	poudredemo	English
Teacher Logins-Boost			
6	psdboost6t	poudredemo	English
9	psdboost9t	poudredemo	English
Parent Login			
6	psdparent	poudredemo	English
Leadership Login			
6	psdadmin	poudredemo	English

We hope you found the 2019 Poudre School District R-1

Reviewer Guide to Achieve3000's solutions useful.
If you have any questions about this guide, your logins,
or the Achieve3000 platform, please contact:

Jaclyn Miller
Regional Director
jaclyn.miller@achieve3000.com

ACHIEVE3000
1985 Cedar Bridge Ave., Suite 3
Lakewood, NJ 08701
Tel: 614.512.5819
Fax: 732.367.2313

The Leader in Differentiated Instruction®

Achieve3000 is the leading literacy platform in blended learning programs today, with differentiated solutions for grades PreK-12 that serve nearly three million students worldwide. Based on decades of scientific research, Achieve3000's solutions reach all students at their precise reading levels to accelerate their learning, improve high-stakes test performance, and prepare them for college and career success.

To learn more about Achieve3000's solutions,
visit achieve3000.com.

ACHIEVE3000®

Proposal Certification Form

7.0 PROPOSAL CERTIFICATION FORM

Secondary Reading Intervention Assessment and Curriculum with Instructional Materials and Services
RFP# 20-630-002

The District will only accept and consider electronically submitted proposals from Suppliers, which must be submitted and received in the www.bidnetdirect.com electronic solicitation portal on or before **Tuesday, August 20, 2019 2:00 p.m. MST.**

The sample instructional materials and access to online resources, software, training and professional learning materials and services, all as requested in Section 3.0 of this RFP must be physically received on or before **2:00 p.m. MST on Tuesday, August 20, 2019 and shall be in a sealed packaged and marked RFP# 20-630-002 Secondary Reading Intervention Assessment Curriculum with Instructional Materials and Services** and mailed or delivered to:

Poudre School District R-1
Curriculum, Instruction and Assessment
Attn: David Lawrence – RFP# 20-630-002 – Secondary Reading Intervention
1502 South Timberline Road
Fort Collins, CO 80524

The undersigned hereby affirms that:

- Agent is a duly authorized agent of the company issuing this proposal and that all information provided in the proposal is true and accurate.
- Supplier has read the conditions and technical specifications, which were made available to the company in conjunction with this RFP, and fully understands and accepts these terms unless specific variations have been expressly listed in the proposal.
- Supplier will adhere to all terms and conditions and provide, at a minimum, all services as expressed in the RFP and/or the company's proposal responding to the RFP.
- Supplier meets or exceeds all the required criteria as specified by this RFP, or if not, has submitted a Justification for Consideration addressing any failure to meet the criteria.
- Supplier's proposal is being offered independently of any other Supplier and in full compliance with the terms specified in the RFP.
- Supplier will accept any awards made to it, contingent on Agreement negotiation, as a result of this RFP for a minimum of ninety (90) calendar days following the date and time of the RFP opening.

Supplier Name: Achieve3000, Inc.

Signature of Authorized Agent: 

Printed Name: Nicholas Bates

Title: Chief Financial Officer

E-mail address: proposal.services@achieve3000.com

Phone Number: 732.367.5505

Contact Person: Erin Rush **Phone Number:** 732.367.5505

Contact Email: proposal.services@achieve3000.com

(If different from Agent)

NOTE: Proposals submitted without the signature of an authorized agent of the Supplier may be considered non-responsive.

Reference Form

8.0 REFERENCES

List three (3) references for which your company has completed similar materials/services for projects of similar scope. Colorado K-12 public school references are preferred, if available.

8.1 Organization Name Harrison School District

Address 121 E. 1st Street, Cortez, CO 81321

Contact Person Zach Craddock

Telephone 719.579.2090

Email zcraddock@hsd2.org

Describe type of work/service performed or items supplied Harrison School District has used Achieve3000's Smarty Ants, *Pro, Boost, Access,* and Español literacy solutions and associated Professional Learning Services since July 2009.

8.2 Organization Name Colorado Spring School District 11

Address 1115 N. El Paso St., Colorado Springs, CO 80903

Contact Person Mykel Donnelly

Telephone 719.520.2000

Email mykel.donnelly@d11.org

Describe type of work/service performed or items supplied Colorado Springs School District 11 has used Achieve3000's Smarty Ants, *Pro, Boost, Access,* and Español literacy solutions and associated Professional Learning Services since August 2012.

8.3 Organization Name Greely-Evans Weld County School District 6

Address 1025 9th Avenue, Greely, CO 80631

Contact Person Deagan Andrews

Telephone 970.348.6000

Email dandrews@greelyschools.org

Describe type of work/service performed or items supplied Greely-Evans Weld County School District 6 has used Achieve3000's *Pro* and eScience literacy solutions and associated Professional Learning Services since August 2014.

Appendix
A. Technical Guide

Achieve3000® LevelSet™ (version 2):

Development and Technical Guide

July 2014
Updated May 2016

Prepared by MetaMetrics for:

Achieve3000
1985 Cedar Bridge Ave, Suite 3
Lakewood, NJ 08701

MetaMetrics. *Linking Assessment with Instruction*

LEXILE® QUANTILE®

www.MetaMetricsInc.com | www.Lexile.com | www.Quantiles.com

MetaMetrics • 1000 Park Forty Plaza Drive, Suite 120 • Durham, North Carolina 27713

Achieve3000® LevelSet™ (version 2)

Development and Technical Guide

Fourth Edition

Prepared by MetaMetrics, Inc. for Achieve3000 (www.achieve3000.com) under Contract to Achieve3000 (Contract dated May 27, 2008, Amendment No. 5 dated November 7, 2012).

MetaMetrics, Inc.
1000 Park Forty Plaza Drive, Suite 120
Durham, North Carolina 27713
www.Lexile.com

Update May 2016

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Introduction

Achieve3000® operates on the fundamental premises that literacy unlocks achievement and differentiated instruction is the key to improving literacy (Achieve3000, Inc., 2013a). Today, Achieve3000 provides the only web-based, differentiated, instructional solutions designed to reach a school's entire student population as well as adult learners. For students using Achieve3000, reading ability is enhanced through a series of literacy solutions, each designed for a particular portion of the developmental continuum. KidBiz3000® is designed for students in grades 2-5; TeenBiz3000® is for students in grades 6-8; Empower3000™ focuses on grades 9-12; and Spark3000™ is for adult learners. These solutions have been designed to closely align with key objectives of the Common Core State Standards (National Governors Association Center for Best Practices, Council of Chief State School Officers, 2010) to give students the content area literacy skills they need to succeed in school and prepare for college and career. Details about each of the products are available at http://www.achieve3000.com/.

Achieve3000's literacy solutions are powered by the LevelSet™ assessment tool and proprietary software engine, which distributes lessons to an entire class, yet tailors them according to each individual student's reading level. The two main purposes of the Achieve3000 reading assessments are to initially measure student reading comprehension so reading materials can be appropriately targeted (i.e., matched with the student's reading ability) and to iteratively measure growth in reading comprehension throughout the school year. In order to meet these goals, a developmental scale must be used to report the results. The Achieve3000 assessments are reported on the Lexile® scale, a scientifically based scale of reading ability. The Lexile scale is applied to both readers and texts, making it possible to match readers with texts of appropriate difficulty to facilitate reading improvement. Importantly, the Lexile scale provides accurate feedback on a students' developing reading ability, helping measure progress and forecast future performance. All measures within the Achivee3000 assessment system – LevelSet scores and Multiple-Choice Activity scores -- are calculated using the Lexile Analyzer and the Lexile scale developed by MetaMetrics.

Completion of activities upon reading the differentiated nonfiction articles produces repeated measures of students' reading abilities as they learn. For students showing sufficient reading abilities, Achieve3000 uses a Bayesian scoring algorithm to provide continually updated measures that monitor progress in reading development. The Bayesian approach uses prior scores to refine each new estimate of achievement to improve the accuracy of measurement as students learn. In this way, Achieve3000 uses multiple measures over time to improve the assessment of reading ability, which in turn improves the ability to match students with appropriate texts and forecast student development.

The Achieve3000 programs consist of having students read daily news articles and responding to activities. The program has 6 components:

1. Students take a reading pre-test to establish a baseline reading level.
2. Students logon to the program (e.g., KidBiz3000 or TeenBiz3000) Web site to check their e-mail. A daily message delivers a new reading assignment.

3. Each student reads a news article that is matched to his or her individual reading level. A customized dictionary and reference materials are included.
4. Follow-up assignments reinforce vocabulary, comprehension, and other reading skills.
5. Teachers access detailed reports on student progress.
6. A reading post-test assesses performance and adjusts students' reading level.

Initially, schools determine the students' initial reading level based on information from LevelSet reading assessments, classroom instruction, and grade level. During the summer of 2004, Achieve3000 met with MetaMetrics to discuss ways that an assessment could be developed for use within the Achieve3000 programs to assess initial reading level and to monitor reading ability development. The result was the development by MetaMetrics, Inc. of the LevelSet reading assessments for use in grades 2 through 12. The assessments measure reading to gain information. The passages are selected from current news articles, which convey information or are of general human interest and are primarily selected from content-rich areas such as social studies, science, history, technology, and general interest. During fall 2008, Achieve3000 and MetaMetrics developed a third set of forms of the LevelSet tests. During 2013 Achieve3000 and MetaMetrics collaborated on the development of version 2 of the LevelSet assessments – Forms, D, E, and F. During fall 2014, a field study was conducted to examine the validity and reliability of the LevelSet tests. In addition, a small number of additional items were developed and field-tested. The result was the revision of Forms D, E, and F as Forms G, H, and I.

The foundation upon which the Achieve3000 assessment system rests is The Lexile® Framework for Reading, a scientifically based scale of reading ability. All measures within the Achivee3000 assessment system – LevelSet scores and article activity scores -- are calculated using the Lexile Analyzer and the Lexile scale developed by MetaMetrics. A Bayesian scoring algorithm is used to provide continually updated measures that monitor progress in reading development. With these tools, the Achieve3000 assessment system provides accurate information to help students and teachers measure progress and forecast student development.

This technical guide should provide users with a broad research foundation of the features of the Achieve3000 assessment system. Such a base is essential when deciding if and how the Achieve3000 assessment results should be used and what kinds of inferences about readers are permissible.

Background

On September 16, 2002, Dr. G. Reid Lyon of the National Institutes of Child Health and Human Development, a branch of the National Institutes of Health, spoke to a group of teachers and educators in Carroll County, Maryland. He noted that "37 percent of the nation's fourth-graders read below basic level and the number climbs to 60 percent among minorities. About 75 percent of those who don't learn to read by age 9 never learn" (Hare, 2002). Partially in response to startling statistics like these, Congress passed the No Child Left Behind (NCLB) Act of 2001, a reauthorization of the Elementary and Secondary Education Act. This act required states to administer annual assessments to all students in grades 3 through 8 by the end of the 2005-2006 school year. Under the legislation, states may select and design tests of their choosing, but the tests must be aligned with the respective state's reading and language arts standards. This legislation requires states to:

- Create statewide proficiency standards for student achievement in reading and mathematics in grades 3-8.
- Define these standards according to student performance on statewide outcome assessments.
- Measure and monitor student progress (aggregated at the school level) toward achieving these proficiency goals, i.e., toward achieving Adequate Yearly Progress (AYP). Student performance is aggregated at the school level and then disaggregated into 11 specific demographic categories specified in the legislation. In order to demonstrate AYP, schools must show that all students are on a trajectory to achieve grade-level proficiency by the end of grade 12.

Schools, districts and states that fail to demonstrate AYP face serious consequences, ranging from school reorganizations and takeovers to a loss of federal funding.

Although many states have made gains in reading achievement since the NCLB Act was passed, nationally, students still have much room for progress, as seen in the 2011 National Assessment of Educational Progress (NAEP) results for reading. At the fourth grade, about two-thirds (67%) of the students performed at or above the *Basic* level, and one-third (34%) performed at or above *Proficient*. Only eight percent performed at the *Advanced* level. At the eighth grade, about 76% of the students performed at or above the *Basic* level, about one third (34%) performed at or above *Proficient*, and just 3% performed at the *Advanced* level (National Center for Education Statistics, 2011).

In June of 2010, the National Governors Association Center for Best Practices and the Council of Chief State School Officers (CCSSO) released the Common Core State Standards (CCSS). These standards, developed for K-12 in English language arts and mathematics, establish clear goals for learning intended to prepare students for success in college and work. The English language arts standards outline challenging goals for student reading and provide guidance regarding the proportions of literary and informational texts students should read. These standards explicitly describe literacy as part of students' educational programs across the content areas, including history/social studies, science, and technical subjects. The CCSS also challenge educators to provide reading materials at a level of complexity necessary to prepare adequately students for college and career success (Standard 10). The Lexile measure is provided as a measure of text difficulty, and Appendix A of the CCSS provides Lexile measures for reading ability targets in Grades 2-12. The Achieve3000 assessment system was designed to complement the CCSS.

Research has shown clearly that there is a positive correlation between reading proficiency and the amount of reading students engage in throughout their schooling years (Cunningham & Stanovich, 1998; O'Connor, Swanson & Geraghty, 2010; O'Connor, Bell, Harty, Larkin, Sackor & Zigmond, 2002; Cain, Oakhill & Lemmon, 2004; Jenkins, Stein & Wysocki, 1984). When students are provided with materials that are appropriate for their reading proficiency level, they exhibit higher levels of understanding of what they read, and when they comprehend what they read, students may learn more. Thus, the more students read, the more likely they are to develop into strong readers. Studies investigating summer reading loss have shown that when students are provided with books at their reading level and interest areas, their gains in reading were comparable to gains one would expect in summer school (Kim, 2006). Since motivation is key to voluntary reading, two critical features of book selection are interest and reading level, and both were addressed in Kim's study. Kim demonstrated in a randomized field study that low-income students are not destined to summer loss; but rather, showed that low-income students' skills could, in fact, grow over the summer if they were able to select books at their interest level and reading level. Kim used The Lexile Framework for Reading – a tool that many states use to make sure that students are appropriately challenge – to match students with books at an appropriate complexity (difficulty) level.

Achieve3000 has developed this assessment system to address the need for students to read often and read material at the right complexity level. The assessment components of the Achieve3000 assessment system help to personalize the reading experience for students and provide valid and reliable indicators of student reading ability. With up-to-date information about their students' reading ability, instructors can better prepare students to be successful readers. Achieve3000 also provides educators with tools with which to forecast student-reading growth. As a result, educators can better prepare students for success with the CCSS.

Features of Achieve3000 LevelSet

Achieve3000 LevelSet reading assessments are research-based, scientifically valid, and reliable. Several specific features of Achieve3000 LevelSet reading assessments are noteworthy.

- Passages are authentic: they are sampled and adapted from news articles recently published by leading news agencies.

- The native-Lexile and two-sentence item formats used on all Achieve3000 LevelSet reading assessments is an extension of the "embedded completion" item format that has been shown to measure the same core reading competency that is measured by norm-referenced, criterion-referenced, and individually administered reading tests (Stenner, Smith, Horiban, and Smith, 1987a).

- Achieve3000 LevelSet reading assessments are linked with the Lexile scale and, as such, the item calibrations used to convert a raw score (number correct) into the Lexile metric are provided by the Lexile Theory. The calibration equation used to calibrate Achieve3000 assessment passages and test items is the same equation that is used to measure books/texts. Thus, readers and texts are placed on the same metric.

- More than a decade of research went into defining the rules for sampling text and writing embedded completion items. These rules were precisely followed in developing the Achieve3000 LevelSet reading assessment items. A multi-stage review process was used to ensure conformance with the item writing specifications and appropriateness for use with students in Grades 2 through 12.

- The Achieve3000 LevelSet tests and Multiple-Choice Activities are administered individually online, scored immediately and objectively, and results are used to help guide reading selections for future instruction.

- The online test administration format supports quick administration in an untimed, low-pressure format.

- No extensive or specialized preparation is needed to administer assessment system, although proper interpretation and use of the results requires an understanding of The Lexile Framework for Reading.

- The Achieve3000 assessment system uses a Bayesian scoring algorithm, which incorporates past performance to predict future performance. Bayesian methodology provides a paradigm for combining prior information with current data, both subject to uncertainty, to calculate an estimate of current status, which is again subject to uncertainty. This methodology connects the administration of each assessment, regardless of type (LevelSet or Multiple-Choice Activities), and thus produces more precise measurements when compared with independent assessments.

Using The Lexile Framework for Reading

Teachers, parents, administrators, and students can use the tools provided by the Lexile Framework to plan instruction. When students' Lexile measures are known, teachers, parents and students can work together to choose appropriately challenging texts that also match the students' interests and background knowledge. The Lexile Framework does not prescribe a reading program; it is a tool that gives educators more control over the variables involved when they design reading instruction. The Lexile Framework yields multiple opportunities for use in a variety of instructional activities. After becoming familiar with the Lexile Framework, teachers are likely to think of a variety of additional creative ways to use this tool to match students with books that they will find challenging but not frustrating.

The Lexile Framework is a system that helps match readers with literature appropriate for their reading skills. When reading a book within his or her Lexile range (50L above his or her Lexile measure to 100L below), the reader should comprehend enough of the text to make sense of it, while still being challenged enough to maintain interest and learning.

There are many factors that affect the relationship between a reader and a text. These factors include content, age of the reader, interests of the reader, suitability of the text, and text difficulty. The Lexile measure of a text, a measure of text complexity (difficulty), is a good starting point in the selection process with other factors then being considered. The Lexile measure should never be the only factor considered when selecting a text.

Purposes and Uses of the Achieve3000 Assessment System

Achieve3000 assessment system is designed to measure a reader's ability to comprehend informational texts of increasing difficulty. The results of the Achieve3000 assessments can be used to target students' reading materials at an appropriate level of complexity and to serve as a tool for measuring reading growth.

One outcome of the Achieve3000 assessment system is the location of the reader on the Lexile Map (Appendix A). Once a reader is measured, it is possible to forecast how well the reader will likely comprehend thousands of books and articles that have been measured in the Lexile metric. Readers and texts are similarly measured in the same Lexile metric, making it possible to compare directly a reader and text. When reader and text measures match, the Lexile Framework forecasts 75% comprehension for independent reading. When the text has a Lexile measure 250L higher than the reader measure, the Lexile Framework forecasts 50% comprehension. When the reader measure exceeds the text measure by 250L, the forecasted comprehension is 90%.

In addition to helping to personalize the reading experience for students, the data provided by the Achieve3000 assessment system can help educators make better-informed decisions about materials selection, particularly in cases where differentiated instruction is the goal. Furthermore, Achieve3000 assessment system results provide valuable information for teachers whose students who require extra attention in reading, such as students requiring an Individualized Educational Program (IEP) or students who are classified as English as a Second Language (ESL).

Development Groups

Achieve3000 provided the vision of the assessment system and collaborated with MetaMetrics on the development of the content specifications of the tests.

MetaMetrics managed the overall development of the program's assessments. MetaMetrics designed the LevelSet assessments, selected the passages and developed the test items, coordinated the test development, and designed the scoring and reporting algorithms. MetaMetrics licensed to Achieve3000 the Lexile Analyzer (a computer program that analyzes the difficulty of text), a Bayesian scoring application to score the tests, and a forecasting application to add in the identification of students most in need of reading intervention and who may be at risk of performing below proficiency on the state summative assessment. MetaMetrics analyzed all field-test data and the data from the validity and reliability studies.

Achieve3000 developed the original informational articles used as source text for passages and the Multiple-Choice Activities and associated questions. Achieve3000 approved final passage selection for the tests, managed sensitivity reviews of the passages and items, approved final item sets, and implemented the scoring and reporting algorithms. Finally, Achieve3000 conducted all of the field studies.

Limitations of the Acheive3000 Assessment System

A well-targeted assessment can provide useful information for matching texts and readers. As with any other assessments, results from the Achieve3000 assessment system are just one source of evidence about a reader's level of comprehension. Obviously, decisions are best made when using multiple sources of evidence about a reader. Other sources include other reading test data, reading group placement, lists of books read, and, most importantly, teacher judgment. *One measure of reader performance, taken on one day, is not sufficient to make high-stakes student-level decisions such as summer school placement or retention.*

The Lexile Framework for Reading provides a common metric for combining different sources of information about a reader into a best overall judgment of the reader's ability expressed in the Lexile metric. Achieve3000 encourages users to employ multiple measures when deciding where to locate a reader on the Lexile scale.

The Lexile Framework for Reading

A reader's comprehension of text is dependent on many factors – the purpose for reading, the ability of the reader, and the text that is being read. The reader can be asked to read a text for many purposes including entertainment (literary experience), to gain information, or to perform a task. Each reader brings to the reading experience a variety of important factors: reading ability, prior knowledge, interest level, and developmental readiness. For any text, there are three factors associated with the readability of the text: complexity, support, and quality. All of these reader and text factors are important considerations when evaluating the appropriateness of a text for a reader. The Lexile Framework focuses primarily on two features: reader ability and text complexity.

All symbol systems share two features: a semantic component and a syntactic component. In language, the semantic units are words. Words are organized according to rules of syntax into thought units and sentences (Carver, 1974). In all cases, the semantic units vary in familiarity and the syntactic structures vary in complexity. The comprehensibility or difficulty of a message is dominated by the familiarity of the semantic units and by the complexity of the syntactic structures used in constructing the message. The Lexile Framework utilizes these two dominant features of language in measuring text complexity by examining the characteristics of word frequency and sentence length. Lexile text measures typically range from above 200L to below 1600L but measures can be below 0L for emergent reading texts ("BR" for "Beginning Reader") and above 1800L for advanced texts. Within any one classroom, there will be a range of reading materials to reflect the student range of reading ability and interest in different topics and types of text.

The Semantic Component

Most operationalizations of semantic complexity are proxies for the probability that an individual will encounter a word in a familiar context and thus be able to infer its meaning (Bormuth, 1966). This is the basis of exposure theory, which explains the way receptive or hearing vocabulary develops (Miller and Gildea, 1987; Stenner, Smith, and Burdick, 1983). Klare (1963) hypothesized that the semantic component varied along a familiarity-to-rarity continuum. This concept was further developed by Carroll, Davies, and Richman (1971), whose word-frequency study examined the reoccurrence of words in a five-million-word corpus of running text. Knowing the frequency of words as they are used in written and oral communication provided the best means of inferring the likelihood that a word would be encountered by a reader and thus become a part of that individual's receptive vocabulary.

Variables such as the average number of letters or syllables per word have been observed to be proxies for word frequency. There is a high negative correlation between the length of words and the frequency of word usage. Polysyllabic words are used less frequently than monosyllabic words, making word length a good proxy for the likelihood that an individual will be exposed to a word.

In a study examining receptive vocabulary, Stenner, Smith, and Burdick (1983) analyzed more than 50 semantic variables in order to identify those elements that contributed to the difficulty of the 350 vocabulary items on Forms L and M of the *Peabody Picture Vocabulary Test*—Revised (Dunn and Dunn, 1981). Variables included part of speech, number of letters, number of syllables, the modal grade at which the word appeared in school materials, content classification of the word, the frequency of the word from two different word counts, and various algebraic transformations of these measures.

The word frequency measure used was the raw count of how often a given word appeared in a corpus of 5,088,721 words sampled from a broad range of school materials (Carroll, Davies, and Richman, 1971). A "word family" included. (1) the stimulus word; (2) all plurals (adding "-s" or changing "-y" to "-ies"); (3) adverbial forms; (4) comparatives and superlatives; (5) verb forms ("-s," "-d," "-ed," and "-ing"); (6) past participles; and (7) adjective forms. Correlations were computed between algebraic transformations of these means and the rank order of the test items. Since the items were ordered according to increasing difficulty, the rank order was used as the observed item difficulty. The mean log word frequency provided the highest correlation with item rank order ($r = –0.779$) for the items on the combined form.

The Lexile Framework currently employs a 600-million-word corpus when examining the semantic component of text. This corpus was assembled from the more than 15,000 texts that were measured by MetaMetrics for publishers from 1998 through 2002. When text is analyzed by MetaMetrics, all electronic files are initially edited according to established guidelines used with the Lexile Analyzer software. These guidelines include the removal of all incomplete sentences, chapter titles, and paragraph headings; running of a spell check; and re-punctuating where necessary to correspond to how the book would be read by a child (for example, at the end of a page). The text is then submitted to the Lexile Analyzer that examines the lengths of the sentences and the frequencies of the words and reports a Lexile measure for the book. When enough additional texts have been analyzed to make an adjustment to the corpus necessary and desirable, a linking study will be conducted to adjust the calibration equation such that the Lexile measure of a text based on the current corpus will be equivalent to the Lexile measure based on the new corpus.

The Syntactic Component

Klare (1963) provided a possible interpretation for how sentence length works in predicting passage difficulty. He speculated that the syntactic component varied with the load placed on short-term memory. Crain and Shankweiler (1988), Shankweiler and Crain (1986), and Liberman, Mann, Shankweiler, and Westelman (1982) have also supported this explanation. The work of these individuals has provided evidence that sentence length is a good proxy for the demand that structural complexity places upon verbal short-term memory.

While sentence length has been shown to be a powerful proxy for the syntactic complexity of a passage, an important caveat is that sentence length is not the underlying causal influence (Chall, 1988). Researchers sometimes incorrectly assume that manipulation of sentence length will have a predictable effect on passage difficulty. Davidson and Kantor (1982), for example, illustrated rather clearly that sentence length can be reduced and difficulty increased and vice versa.

Based on previous research, sentence length was selected as a proxy for the syntactic component of reading complexity in the Lexile Framework.

Calibration of Text Complexity

A research study on semantic units conducted by Stenner, Smith, and Burdick (1983) was extended to examine the relationship of word frequency and sentence length to reading comprehension. In 1987(a), Stenner, Smith, Horabin, and Smith performed exploratory regression analyses to test the explanatory power of these variables. This analysis involved calculating the mean word frequency and the log of the mean sentence length for each of the 66 reading comprehension passages on the *Peabody Individual Achievement Test*. The observed difficulty of each passage was the mean difficulty of the items associated with the passage (provided by the publisher) converted to the logit scale. A regression analysis based on the word-frequency and sentence-length measures produced a regression equation that explained most of the variance found in the set of reading comprehension tasks. The resulting correlation between the observed logit difficulties and the theoretical calibrations was 0.97 after correction for range restriction and measurement error. The regression equation was further refined based on its use in predicting the observed difficulty of the reading comprehension passages on eight other standardized tests. The resulting correlation between the observed logit difficulties and the theoretical calibrations when the nine tests were combined into one was 0.93 after correction for range restriction and measurement error.

Once a regression equation was established linking the syntactic and semantic features of text to the complexity of text, the equation was used to calibrate test items and text.

The Lexile Scale

In developing the Lexile scale, the Rasch item response theory model (Wright and Stone, 1979) was used to estimate the difficulties of items and the abilities of persons on the logit scale. The calibrations of the items from the Rasch model are objective in the sense that the relative difficulties of the items will remain the same across different samples of persons (specific objectivity). When two items are administered to the same person, it can be determined which item is harder and which one is easier. This ordering is likely to hold when the same two items are administered to a second person. If two different items are administered to the second person, there is no way to know which set of items is harder and which set is easier. The problem is that the location of the scale is not known. General objectivity requires that scores obtained from different test administrations be tied to a common zero—absolute location must be sample

independent (Stenner, 1990). To achieve general objectivity, the theoretical logit difficulties must be transformed to a scale where the ambiguity regarding the location of zero is resolved.

The first step in developing a scale with a fixed zero was to identify two anchor points for the scale. The following criteria were used to select the two anchor points: they should be intuitive, easily reproduced, and widely recognized. For example, most thermometers have anchor points at the freezing and boiling points of water. For the Lexile scale, the anchor points are text from seven basal primers for the low end and text from *The Electronic Encyclopedia* (Grolier, Inc., 1986) for the high end. These points correspond to the middle of first grade text and the midpoint of workplace text.

The next step was to determine the unit size for the scale. For the Celsius thermometer, the unit size (a degree) is $1/100^{th}$ of the difference between freezing (0 degrees) and boiling (100 degrees) water. For the Lexile scale the unit size was defined as $1/1000^{th}$ of the difference between the mean difficulty of the primer material and the mean difficulty of the encyclopedia samples. Therefore, a Lexile unit by definition equals $1/1000^{th}$ of the difference between the comprehensibility of the primers and the comprehensibility of the encyclopedia.

The third step was to assign a value to the lower anchor point. The low-end anchor on the Lexile scale was assigned a value of 200.

Finally, a linear equation of the form

$$[(\text{Logit} + \text{constant}) \times \text{CF}] + 200 = \text{Lexile text measure} \qquad \text{(Equation 1)}$$

was developed to convert logit difficulties to Lexile calibrations. The values of the conversion factor (CF) and the constant were determined by substituting in the anchor points and then solving the system of equations.

The Lexile Scale ranges from below 200L to above 1600L. There is a not an explicit bottom or top to the scale, but rather two anchor points on the scale (described above) that describe different levels of reading comprehension. The Lexile Map, a graphic representation of the Lexile Scale from 200L to 1600L, provides a context for understanding reading comprehension.

Validity Evidence for the Lexile Framework for Reading

The 2014 Standards for Educational and Psychological Testing (America Educational Research Association, American Psychological Association, and National Council on Measurement in Education) state that "validity refers to the degree to which evidence and theory support the interpretations of test scores for proposed uses of tests" (p. 11). In applying this definition to The Lexile Framework for Reading, the question that should be asked is "What evidence supports the use of the Lexile Framework to describe text complexity and reader ability?" Because the Lexile Framework addresses reading comprehension, an important aspect of validity evidence that should be brought to bear is evidence showing that the construct being addressed is indeed reading comprehension. This type of validity evidence has traditionally been called construct

validity. One source of construct validity evidence for The Lexile Framework for Reading can be evaluated by examining how well Lexile measures relate to other measures of reading and reading comprehension.

Lexile Framework Linked to other Measures of Reading Comprehension. The Lexile Framework for Reading has been linked to numerous standardized tests of reading comprehension. When assessment scales are linked, a common frame of reference can be used to interpret the test results. This frame of reference can be "used to convey additional normative information, test-content information, and information that is jointly normative and content-based. For many test uses, … [this frame of reference] conveys information that is more crucial than the information conveyed by the primary score scale" (Petersen, Kolen, and Hoover, 1989, p. 222). Linking the Lexile Framework to other measures of reading comprehension produces a common frame of reference: the Lexile measure.

Table 1 presents the results from linking studies conducted with The Lexile Framework for Reading. For each of the tests listed, student reading comprehension scores can also be reported as Lexile measures. This dual reporting provides a rich, criterion-related frame of reference for interpreting the standardized test scores. When a student takes one of the standardized tests, in addition to receiving his norm-referenced test results, he can receive a reading list consisting of texts targeted to his specific reading level.

Table 1. Results from linking studies conducted with The Lexile Framework for Reading.

Test	Grades in Study	N	Correlation Between Test Score and Lexile measure
TerraNova Assessment Series (CTBS/5)	2, 4, 6, 8	2,713	0.92
Gates-MacGinitie Reading Test	2, 4, 6, 8, 10	4,644	0.90
Texas Assessment of Knowledge and Skills (TAKS)	3, 5, 8	1,960	0.60 to 0.73*
The Iowa Tests (Iowa Tests of Basic Skills and Iowa Tests of Educational Development)	3, 5, 7, 9, and 11	4,666	0.88
Stanford Achievement Test (Tenth Edition)	2, 4, 6, 8, and 10	3,064	0.93
Oregon Reading/Literature Knowledge and Skills Test	3, 5, 8, and 10	3,180	0.89
Mississippi Curriculum Test	2, 4, 6, and 8	7,045	0.90
Georgia Criterion Referenced Competency Test (CRCT and GHSGT)	1 – 8, and 11	16,363	0.72 to 0.88*
Wyoming Performance Assessment for Wyoming Students (PAWS)	3, 5, 7, and 11	3,871	0.91
Arizona Instrument to Measure Progress (AIMS)	3, 5, 7, and 10	7,735	0.89
South Carolina Palmetto Achievement Challenge Tests (PACT)	3 – 8	15,559	0.87 to 0.88*
Comprehensive Testing Program (CPT 4 – ERB)	2, 4, 6, and 8	924	0.83 to 0.88
Oklahoma Core Competency Tests (OCCT)	3 – 8	10,691	0.71 to 0.75*
TOEFL iBT	NA	2,906	0.63 to 0.67
TOEIC	NA	2,799	0.73 to 0.74
Kentucky Performance Rating for Educational Progress (K-PREP)	3 – 8	6,480	0.71 to 0.79*
North Carolina ACT	11	3,472	0.84
North Carolina READY End-of-Grades/End-of-Course Tests (NC READY EOG/EOC)	3, 5, 7, 8, and E2	12,356	0.88 to 0.89

Notes: Results are based on final samples used with each linking study.
*Not vertically equated; separate linking equations were derived for each grade.

Lexile Framework and the Difficulty of Basal Readers. Lexile measures are organized in a sequential manner, so a lower Lexile measure for a text means that the text is less complex than text with higher Lexile measures. Validity evidence for the internal structure (the sequential structure) of the Lexile Framework was obtained through a study that examined the relationship of basal reader sequencing to Lexile measures. In a study conducted by Stenner, Smith, Horabin, and Smith (1987b), Lexile calibrations were obtained for units in 11 basal series. It was presumed that each basal series was sequenced by complexity. So, for example, the latter portion of a third-grade reader is presumably more complex than the first portion of the same book. Likewise, a fourth-grade reader is presumed to be more complex than a third-grade reader is. Observed difficulties for each unit in a basal series were estimated by the rank order of the unit in the series. Thus, the first unit in the first book of the first-grade was assigned a rank order of one and the last unit of the eighth-grade reader was assigned the highest rank order number.

Correlations were computed between the rank order and the Lexile calibration of each unit in each series. After correction for range restriction and measurement error, the average disattenuated correlation between the Lexile calibration of text comprehensibility and the rank order of the basal units was 0.995 (see *Table 2*).

Based on the consistency of the results in *Table 2*, the Lexile Theory was able to account for the unit rank ordering of the 11 basal series even with numerous differences in the series—prose selections, developmental range addressed, types of prose introduced (i.e., narrative versus expository), and purported skills and objectives emphasized.

Table 2. Correlations between theory-based calibrations produced by the Lexile equation and rank order of unit in basal readers.

Basal Series	Number of Units	r_{OT}	R_{OT}	R'_{OT}
Ginn Rainbow Series (1985)	53	.93	.98	1.00
HBJ Eagle Series (1983)	70	.93	.98	1.00
Scott Foresman Focus Series (1985)	92	.84	.99	1.00
Riverside Reading Series (1986)	67	.87	.97	1.00
Houghton-Mifflin Reading Series (1983)	33	.88	.96	.99
Economy Reading Series (1986)	67	.86	.96	.99
Scott Foresman American Tradition (1987)	88	.85	.97	.99
HBJ Odyssey Series (1986)	38	.79	.97	.99
Holt Basic Reading Series (1986)	54	.87	.96	.98
Houghton-Mifflin Reading Series (1986)	46	.81	.95	.98
Open Court Headway Program (1985)	52	.54	.94	.97
Total/Means*	660	.839	.965	.995

r_{OT} = raw correlation between observed difficulties (*O*) and theory-based calibrations (*T*).
R_{OT} = correlation between observed difficulties (*O*) and theory-based calibrations (*T*) corrected for range restriction.
R'_{OT} =correlation between observed difficulties (*O*) and theory-based calibrations (*T*) corrected for range restriction and measurement error.
*****Mean correlations are the weighted averages of the respective correlations.

Lexile Framework and the Difficulty of Reading Test Items. Additional construct validity evidence was obtained by exploring the relationship between Lexile calibrations of item

difficulties and actual item difficulties of reading comprehension tests. In a study conducted by Stenner, Smith, Horabin, and Smith (1987a), 1,780 reading comprehension test items appearing on nine nationally-normed tests were analyzed. The study correlated empirical item difficulties provided by the publisher with the Lexile calibrations specified by the computer analysis of the text of each item. The empirical difficulties were obtained in one of three ways. Three of the tests included observed logit difficulties from either a Rasch or three-parameter analysis (e.g., NAEP). For four of the tests, logit difficulties were estimated from item p-values and raw score means and standard deviations (Poznanski, 1990; Stenner, Wright, and Linacre, 1994). Two of the tests provided no item parameters, but in each case items were ordered on the test in terms of difficulty (e.g., PIAT). For these two tests, the empirical difficulties were approximated by the difficulty rank order of the items. In those cases where multiple questions were asked about a single passage, empirical item difficulties were averaged to yield a single observed difficulty for the passage.

Once theory-specified calibrations and empirical item difficulties were computed, the two arrays were correlated and plotted separately for each test. The plots were checked for unusual residual distributions and curvature, and it was discovered that the equation did not fit poetry items and non-continuous prose items (e.g., recipes, menus, or shopping lists). This indicated that the universe to which the Lexile equation could be generalized was limited to continuous prose. The poetry and non-continuous prose items were removed and correlations were recalculated. *Table 3* contains the results of this analysis.

Table 3. Correlations between theory-based calibrations produced by the Lexile equation and empirical item difficulties.

Test	Number of Question	Number of Passage	Mean	SD	Range	Min	Max	r_{OT}	R_{OT}	R'_{OT}
SRA	235	46	644	353	1303	33	1336	.95	.97	1.00
CAT-E	418	74	789	258	1339	212	1551	.91	.95	.98
Lexile	262	262	771	463	1910	−304	1606	.93	.95	.97
PIAT	66	66	939	451	1515	242	1757	.93	.94	.97
CAT-C	253	43	744	238	810	314	1124	.83	.93	.96
CTBS	246	50	703	271	1133	173	1306	.74	.92	.95
NAEP	189	70	833	263	1162	169	1331	.65	.92	.94
Battery	26	26	491	560	2186	−702	1484	.88	.84	.87
Mastery	85	85	593	488	2135	−586	1549	.74	.75	.77
Total/ Mean*	1780	722	767	343	1441	50	1491	.84	.91	.93

r_{OT} = raw correlation between observed difficulties (O) and theory-based calibrations (T).
R_{OT} = correlation between observed difficulties (O) and theory-based calibrations (T) corrected for range restriction.
R'_{OT} = correlation between observed difficulties (O) and theory-based calibrations (T) corrected for range restriction and measurement error.
*Means are computed on Fisher *Z*-transformed correlations.

The last three columns in *Table 3* show the raw correlations between observed (O) item difficulties and theoretical (T) item calibrations, with the correlations corrected for restriction in range and measurement error. The Fisher *Z* mean of the raw correlations (r_{OT}) is 0.84. When

corrections are made for range restriction and measurement error, the Fisher $\bar{Z}$ mean disattenuated correlation between theory-based calibration and empirical difficulty in an unrestricted group of reading comprehension items (R'_{OT}) is 0.93.

These results suggest that most attempts to measure reading comprehension, no matter what the item form, type of skill objectives assessed, or response requirement used, measure a common comprehension factor specified by the Lexile Theory.

Forecasting Comprehension with the Lexile Framework

A reader with a measure of 600L who is given a text measured at 600L is expected to have a 75-percent comprehension rate. This 75-percent comprehension rate is the basis for selecting text that is targeted to a reader's reading ability, but what exactly does it mean? And what would the comprehension rate be if this same reader were given a text measured at 350L or one at 850L?

The 75-percent comprehension rate for a reader-text pairing can be given an operational meaning by imagining the text to be carved into item-sized slices of approximately 125-140 words with a question embedded in each slice. A reader who answers three-fourths of the questions correctly has a 75-percent comprehension rate.

Suppose instead that the text and reader measures are not the same. It is the difference in Lexile measures between reader and text that governs comprehension. If the text measure is less than the reader measure, the comprehension rate will exceed 75 percent. If not, it will be less. The question is "By how much?" What is the expected comprehension rate when a 600L reader reads a 350L text?

If all the item-sized slices in the 350L text had the same calibration, the 250L difference between the 600L reader and the 350L text could be determined using the Rasch item response theory (IRT) model equation. This equation describes the relationship between the measure of a student's level of reading comprehension and the calibration of the items. Unfortunately, comprehension rates calculated by this procedure would be biased because the calibrations of the slices in ordinary prose are not all the same. The average difficulty level of the slices and their variability both affect the comprehension rate.

Although the exact relationship between comprehension rate and the pattern of slice calibrations is complicated, Equation 2 is an unbiased approximation.

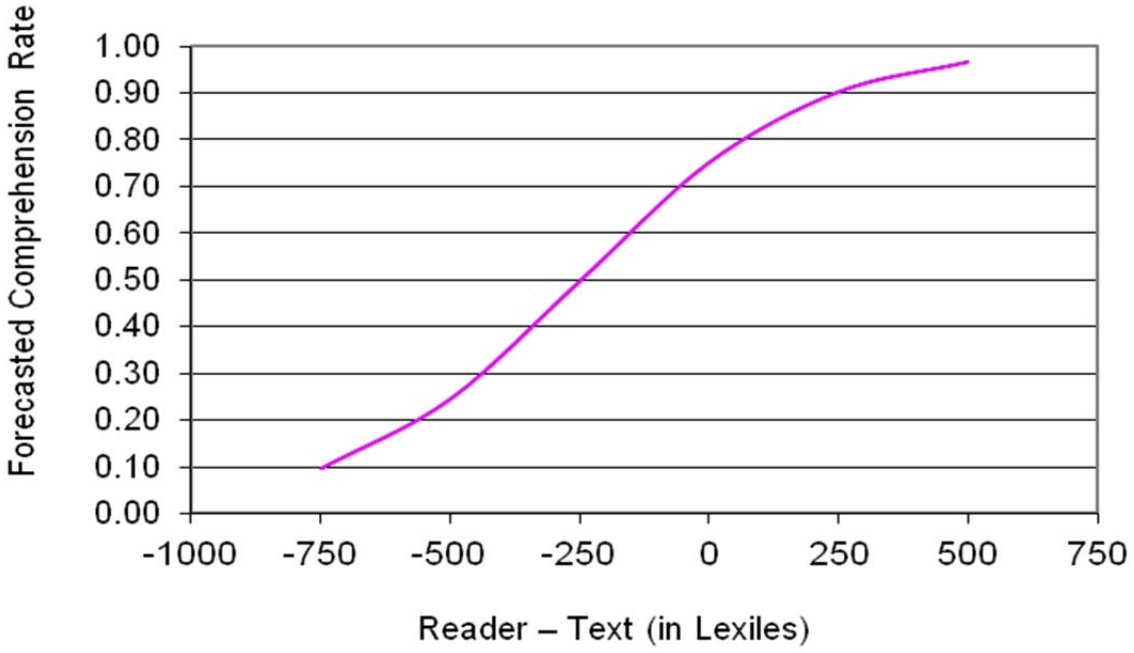
$$Rate = \frac{e^{ELD+1.1}}{1+e^{ELD+1.1}} \qquad \text{(Equation 2)}$$

where ELD is the "effective logit difference" given by

$$\text{ELD} = (\text{Reader Lexile measure} - \text{Text Lexile measure}) \div 225. \qquad \text{(Equation 3)}$$

Figure 1 shows the general relationship between reader-text discrepancy and forecasted comprehension rate. When the reader measure and the text measure are the same (difference of 0L on the *x*-axis), then the forecasted comprehension rate is 75%. In the example in the preceding paragraph, the difference between the reader measure of 600L and the text measure of 350L is 250L. Referring to *Figure 1* and using +250L (reader minus text), the forecasted comprehension rate for this reader-text combination would be 90%.

Figure 1. Relationship between reader-text discrepancy and forecasted reading comprehension rate.



Tables 4 and *5* show comprehension rates calculated for various combinations of reader measures and text measures.

Table 4. Comprehension rates for the same individual with materials of varying comprehension difficulty.

Person Measure	Text Calibration	Sample Titles	Forecast Comprehension
1000L	500L	Tornado (Byars)	96%
1000L	750L	The Martian Chronicles (Bradbury)	90%
1000L	1000L	Reader's Digest	75%
1000L	1250L	The Call of the Wild *(London)*	50%
1000L	1500L	On the Equality Among Mankind (Rousseau)	25%

Table 5. Comprehension rates of different ability persons with the same material.

Person Measure	Calibration for Sports Illustrated	Forecast Comprehension
500L	1000L	25%
750L	1000L	50%
1000L	1000L	75%
1250L	1000L	90%
1500L	1000L	96%

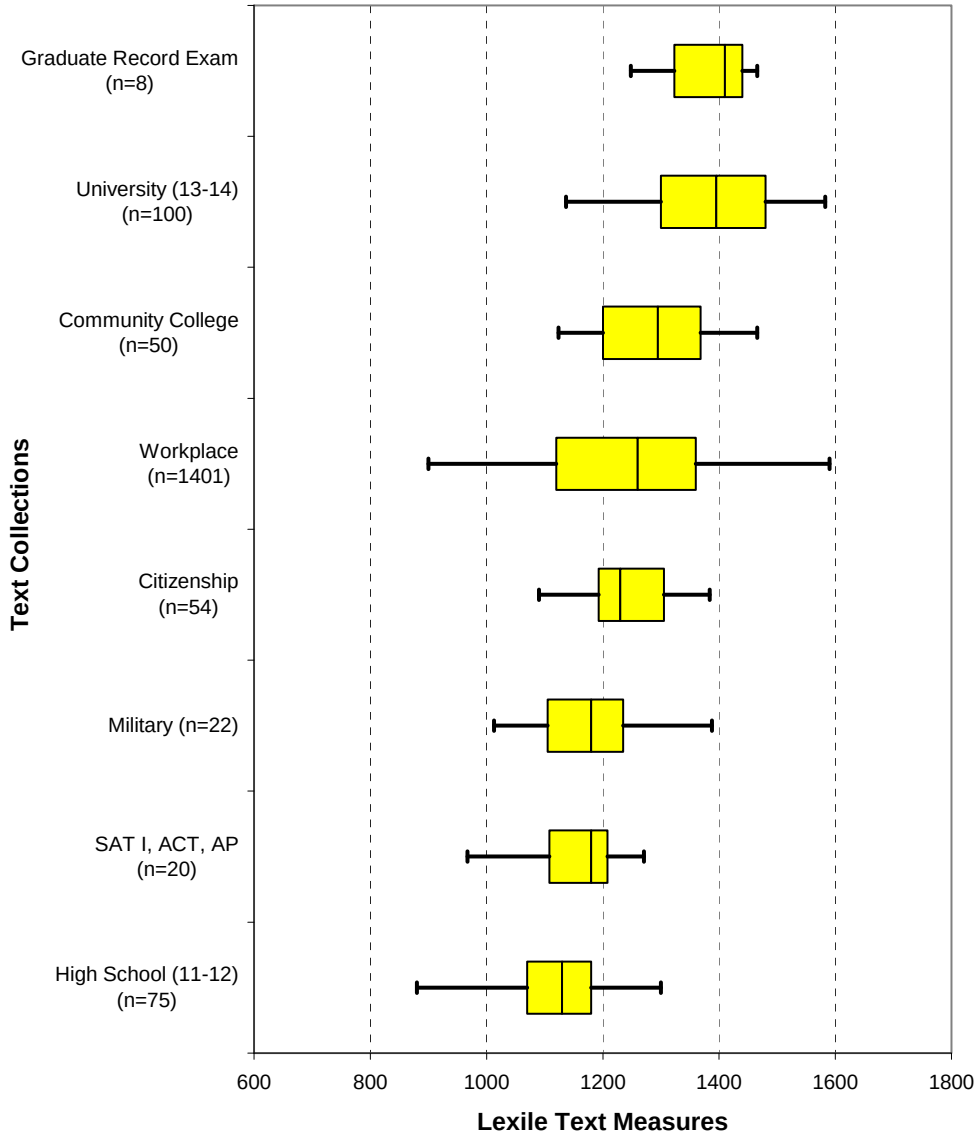
The subjective experience of 50%, 75%, and 90% comprehension as reported by readers varies greatly. A 1000L reader reading 1000L text (75% comprehension) reports confidence and competence. Teachers listening to such a reader report that the reader can sustain the meaning thread of the text and can read with motivation and appropriate emotion and emphasis. In short, such readers sound like they comprehend what they are reading. A 1000L reader reading 1250L text (50% comprehension) encounters so much unfamiliar vocabulary and difficult syntactic structures that the meaning thread is frequently lost. Such readers report frustration and seldom choose to read independently at this level of comprehension difficulty. Finally, a 1000L reader reading 750L text (90% comprehension) reports total control of the text, reads with speed, and experiences automaticity during the reading process.

The primary utility of the Lexile Framework is its ability to forecast what happens when readers confront text. With every application by teacher, student, librarian, or parent there is a test of the framework's accuracy. The Lexile Framework makes a point prediction every time a text is chosen for a reader. Anecdotal evidence suggests that the Lexile Framework predicts as intended. That is not to say that there is an absence of error in forecasted comprehension. There is error in text measures, reader measures, and their difference modeled as forecasted comprehension. However, the error is sufficiently small that the judgments about readers, texts, and comprehension rates are useful.

College and Career Readiness and Text Complexity

There is increasing recognition of the importance of bridging the gap that exists between K-12 and higher education and other postsecondary endeavors. Many state and policy leaders have formed task forces and policy committees such as P-20 councils. In the *Journal of Advanced Academics* (2008), Williamson investigated the gap between high school textbooks and various reading materials across several postsecondary domains. The resources Williamson used were organized into four domains that correspond to the three major postsecondary endeavors that students can choose—further education, the workplace or the military, and, the broad area of citizenship, which cuts across all postsecondary endeavors. Williamson discovered a substantial increase in reading expectations and text complexity from high school to postsecondary domains—"a gap large enough to help account for high remediation rates and disheartening graduation statistics" (Smith, 2011). *Figure 2* illustrates this continuum of text difficulty.

Figure 2. A continuum of text difficulty for the transition from high school to postsecondary experiences (box plot percentiles. 5th, 25th, 50th, 75th, and 95th).[1]



Expanding on Williamson's work, Stenner, Sanford-Moore, and Williamson (2012) aggregated readability information across the various postsecondary options available to a high school graduate to arrive at a standard of reading needed by individuals to be considered "college and career ready." In their study, they included additional citizenship materials beyond those examined by Williamson (e.g., national and international newspapers and other adult reading materials such as Wikipedia articles). Using a weighted mean of the medians for each of the postsecondary options (education, military, work place, and citizenship), a measure of 1300L was defined as the general reading demand for postsecondary options and could be used to judge a student's "college and career readiness."

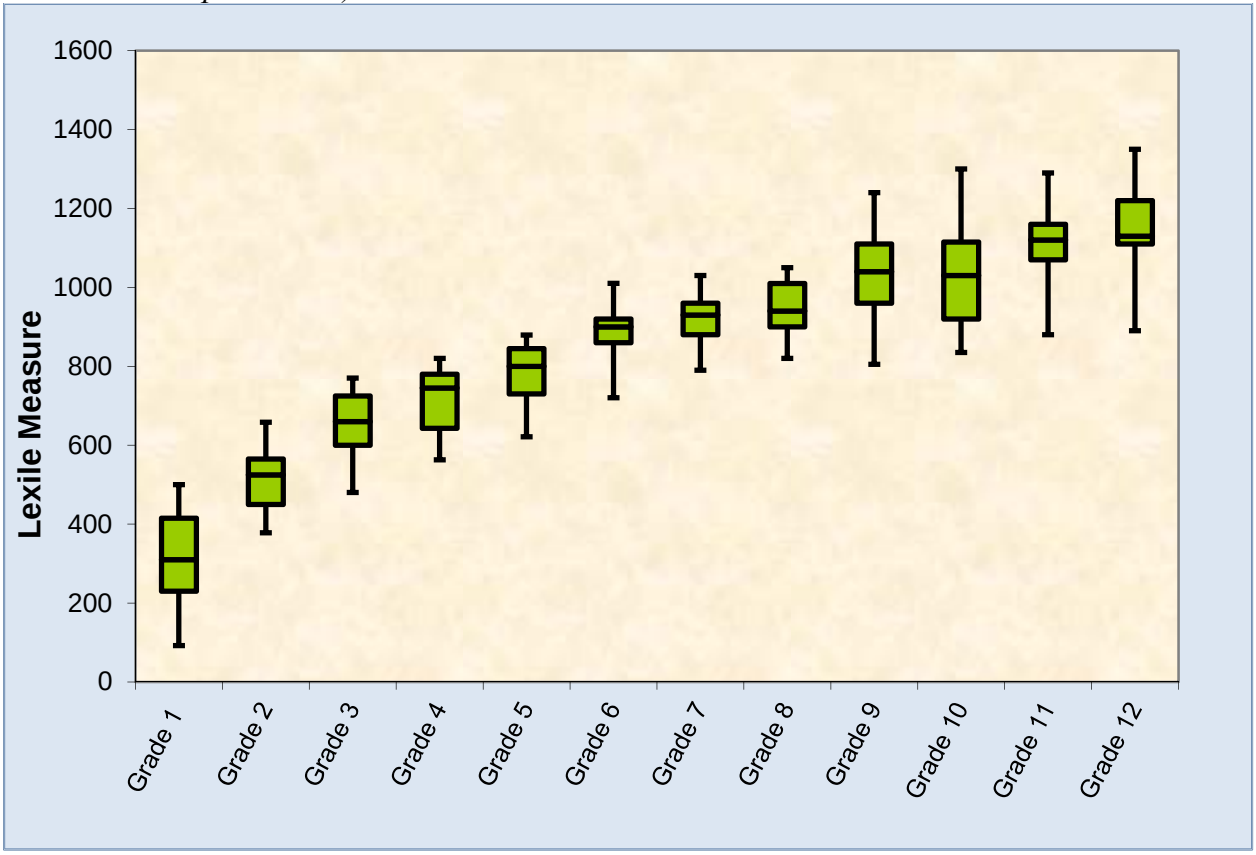
[1] Reprinted from Williamson, G. L. (2008). A text readability continuum for postsecondary readiness. *Journal of Advanced Academics, 19*(4), 602-632.

In Texas, two studies were conducted to examine the reading demands in various postsecondary options – technical college, community college, and 4-year university programs. Under Commissioner Raymond Paredes, the Texas Higher Education Coordinating Board (THECB) conducted a research study in 2007 (and extended in 2008) which addressed the focal question of "how well does a student need to read to be successful in community colleges, technical colleges, and universities in Texas?" THECB staff collected a sample of books that first year students in Texas would be required to read in each setting. These books were measured in terms of their text complexity using The Lexile Framework for Reading. Since the TAKS had already been linked with Lexile measures for several years, the THECB study was able to overlay the TAKS cut scores onto the post high school reading requirements (MetaMetrics, 2008a).

After the THECB study was completed, other states have followed the Texas example and used the same approach in examining the gap from high school to the postsecondary world. In 2009, a similar study was conducted for the Georgia Department of Education; and in 2010, a study was conducted for the Tennessee Department of Education. In terms of mean text demand, the results across the three states produced similar estimates of the reading ability needed in higher-education institutions: Texas, 1230L; Georgia, 1220L; and Tennessee, 1260L. When these results are incorporated with the reading demands of other postsecondary endeavors (military, citizenship, workplace, and adult reading materials [national and international newspapers] and Wikipedia articles) used by Stenner, Koons, and Swartz (2010), the college and career readiness standard for reading is 1293L. These results are based on more than 105,000,000 words from approximately 3,100 sources from the adult text space.

Between 2004 and 2008, MetaMetrics (Williamson, Koons, Sandvik, and Sanford-Moore, 2012) collected and measured textbooks across the K-12 educational continuum. The box-and-whisker plot in *Figure 3* shows the Lexile measures (*y*-axis) across grades as defined in the US. For each grade, the box refers to the interquartile range. The line within the box indicates the median. The end of each whisker shows the 5th and 95th percentile text complexity measures in the Lexile metric for each grade. This information can provide a basis for defining at what level students need to be able to read to be ready for various postsecondary endeavors such as further education beyond high school and entering the work force.

Figure 3. Text complexity distributions, in Lexile units, by grade (whiskers represent 5th and 95th percentiles).



This continuum can be "stretched" to describe the reading demands expected of students in Grades 1-12 who are "on track" for college and career (Sanford-Moore and Williamson, 2012). The quantitative aspect of defining text complexity consists of a stair-step progression of increasingly difficult text by grade levels (Common Core State Standards for English Language Arts, Appendix A, NGA Center and CCSSO, 2010, p. 8).

The question for educators becomes how to determine if a student is "on track" for college and career as previously defined in the Common Core State Standards and described above. "As state departments of education, and the districts and schools within those respective states, transition from adopting the new Common Core State Standards to the more difficult task of implementing them, the challenge now becomes how to translate these higher standards into tangible, practical and cost-effective curricula" (Smith, 2012). Implementing the Common Core will require districts and schools to develop new instructional strategies and complementary resources that are not only aligned with these national college- and career-readiness standards, but also utilize and incorporate proven and cost-effective tools that are universally accessible to all stakeholders. The Standards for English Language Arts focus on the importance of text complexity. As stated in Standard 10, students must be able to "read and comprehend complex literary and informational texts independently and proficiently" (Common Core State Standards for English

Language Arts, College and Career Readiness Anchor Standards for Reading, NGA Center and CCSSO, 2010, p.10).

The Common Core State Standards recommend a three-part model for evaluating the complexity of a text that takes into account its qualitative dimensions, quantitative measure, and reader and task considerations. It describes text complexity as "the inherent difficulty of reading and comprehending a text combined with consideration of reader and task variables … a three-part assessment of text [complexity] that pairs qualitative and quantitative measures with reader-task considerations" (NGA Center and CCSSO, 2010, p. 43). In simpler terms, text complexity is a transaction between text, reader, and task. The quantitative aspect of defining text complexity consists of a stair-step progression of increasingly difficult text by grade levels (Common Core State Standards for English Language Arts, Appendix A, NGA Center and CCSSO, 2010, p. 8). MetaMetrics' research on the typical reading demands of college and careers contributed to the Common Core State Standards as a whole and, more specifically, to the Lexile-based grade bands in *Table 6*.

Table 6. Text complexity standards describing "on track" for college and career reading levels (expansion of CCSS grade).

Grade	Lexile Text Ranges to Guide Reading for College and Career Readiness
2	420L to 650L
3	520L to 820L
4	740L to 940L
5	830L to 1010L
6	925L to 1070L
7	970L to 1120L
8	1010L to 1185L
9	1050L to 1260L
10	1080L to 1335L
11-12	1185L to 1385L

Description of the Achieve3000 Assessment System

The Achieve3000 assessment system is built upon research showing that when students read text at their reading levels, they experience optimal reading comprehension for learning (Crawford, 1978; Guthrie and Davis, 2003; Jalongo, 2007). In addition, students who are better readers are also higher achievers and engage in life-long learning in relation to careers (Crawford, 1978; Kirsch, I., de Jong, J., LaFontaine, D., McQueen, J., Mendelovits, J., and Monseur, C, 2002). In a review of prior studies, Squires and his colleagues (1983) found 75% to be the optimal student success rate for learning. They noted that a reanalysis of the Fischer (Denham and Lieberman, 1980) data by Rim showed that reading achievement by grade 2 students increased up to a 75% success rate and then began to decrease. O'Connor, Swanson, and Geraghty (2010) randomly assigned 123 students in grades 2 and 4 to three different conditions for the difficulty level of reading materials: the grade-appropriate condition, the 'difficult' condition, and a control group. Participants were assessed using a pre-test to measure comprehension and fluency, then given a 20-week intervention course to evaluate comprehension growth over time based on passage difficulty level. Finally, a post-test was administered to determine growth differences between the groups. With respect to both the pre-test and post-test performance, the differences between level and comprehension were found to be significant, where performance was highest for the grade-appropriate condition and lowest for the 'difficult' condition. The results also indicated that there were also significant gains over time for students reading material at their appropriate reading level. The research suggests that students should be given reading level materials that match their comprehension goals.

Similarly, research by O'Connor, Bell, Harty, Larkin, Sackor, and Zigmond (2002) investigated the role of text difficulty on reading ability for students who experienced difficulty with reading. The researchers compared the influence of text difficulty on reading ability growth over an 18-week period for 46 struggling readers who were engaged in one-on-one tutoring. Students were randomly assigned to either receive texts matched to their reading level or matched to their grade level. Three reading tests were used to estimate reading proficiency: the *Peabody Picture Vocabulary Test- 3rd Edition* (PPVT3), the *Woodcock Reading Mastery Tests-Revised (WRMT-R*), and the *Analytic Reading Inventory (ARI)*. These tests were used in a pre-post research design. When groups were compared, students who received texts matched to their reading level made greater learning gains (evidenced by performance on several measures including three subtests of the *Woodcock Reading Mastery Tests-Revised*) as compared to those who received grade-level matched texts.

The Achieve3000 assessment system consists of three LevelSet test forms for each grade, 2 through 12. Additionally, Achieve3000 includes daily Multiple-Choice Activities linked to the Lexile scale that can be used to monitor reading ability and update the students' Lexile measures.

Upon entry into the program, a new user will be administered a LevelSet test at the appropriate grade level and will receive a Lexile measure based on the test results; Multiple-Choice Activities for the student can then be targeted based on the student's Lexile measure. One or two more times during the school year, the student will be administered LevelSet tests also targeted to his or her Lexile measure.

Achieve3000 LevelSet Tests

LevelSet (version 2) includes a total of 33 test forms, three for each grade level (2 through 12). The tests are untimed, but each is designed to take about 30 to 35 minutes for a student to complete. The items on the placement tests are composed of informational (nonfiction) passages. Each LevelSet test consists of 30 multiple-choice, native-Lexile and 2-sentence items as shown in *Table 7*. (A description of item types is provided later in this technical manual in the section entitled *Development of Achieve3000 LevelSet Assessments*.)

Table 7. LevelSet (version 2) test item types by grade.

	Grade 2	Grade 3	Grades 4-12
Two-Sentence Items	10 - 12	4	0
Regular Native Items	18 - 20	26	30
Total Number of Items	30	30	30

Student results are reported as a Lexile measure. There are many reasons to use scale scores, in this case Lexile measures, rather than raw scores to report test results. Scale scores overcome the disadvantage of many other types of scores (e.g., percentiles and raw scores), in that equal differences between scale score points represent equal differences in ability. Each question on a test has a unique level of difficulty; therefore, answering 23 questions correctly on one form of a test may require a slightly different level of ability than answering 23 items correctly on another form of the test. In contrast, receiving a scale score (Lexile measure) of 875 on one form of a test represents a similar level of reading ability as receiving a scale score (Lexile measure) of 875 on another form of the test.

The typical range of the Lexile Scale is from below 200L to above 1600L. There is a not an explicit bottom or top to the scale, but rather two anchor points on the scale that describe different levels of reading comprehension. The Lexile Map, a graphic representation of the Lexile Scale from 200L to 1500L+, provides a context for understanding reading comprehension (see Appendix A). Lexile reader measures are reported in 5-unit intervals. Scores at or below 0L are reported as BRxxL (Beginning Reader).

Achieve3000 Multiple-Choice Activities

For students using Achieve3000, reading ability is enhanced through a series of literacy solutions, each designed for a particular portion of the developmental continuum. KidBiz3000 is designed for students in grades 2-5; TeenBiz3000 is for students in grades 6-8; Empower3000 focuses on grades 9-12; and Spark3000 is for adult learners. These solutions have been designed to closely align with key objectives of the Common Core State Standards (National Governors Association Center for Best Practices, Council of Chief State School Officers, 2010) to give students the content area literacy skills they need to succeed in school and prepare for college and career. Powered by the LevelSet assessment, assignments are distributed to the entire class, but tailored according to each student's reading level. By doing so, the Achieve3000 assessment

system enables all students to make continual progress and improvement. Key features (Achieve3000, Inc., 2013a) of the assessment system are:

- Encompasses the entire classroom — providing the same topics and lessons to all students while teaching students one-on-one at their individual levels.
- Delivers differentiated assignments at 12 different reading levels based upon Lexile measures, along with formative assessments linked to state and Common Core standards.
- Uses a Five-Step Literacy Routine that enables students to acquire knowledge from informational texts, develop strong content knowledge, use higher order thinking skills, argue effectively with supporting evidence, and communicate effectively when writing and speaking — all key Common Core requirements.
- Also provides bonus Anchor Lessons featuring grade-specific content that addresses the progression of skills of the Common Core anchors.
- Continually assesses students' reading levels on the Lexile scale and provides results immediately so teachers can address weaknesses and gaps, and further build on strengths.
- Automatically adapts content as Lexile levels change, providing content that is more challenging in order to drive steady improvement.
- Engages students with interactive, motivating current-events articles and assignments — and extends learning beyond the classroom (70% of students use outside of normal school hours).

Step 3 of the Five-Step Literacy Routine consists of an Activity that includes eight multiple-choice questions. Students demonstrate successful close reading of text by responding to text-dependent questions that require higher-order thinking skills. The results from the Activity have been linked with the Lexile scale. Student results are reported as a Lexile measure and are used to monitor progress in the development of reading ability.

Achieve3000 Assessment Sequence

Achieve3000 LevelSet assessments and Multiple-Choice Activities are incorporated into a progressive reading and assessment system (Five-Step Literacy Routine) that is designed to target the reading ability of each student (Achieve3000, Inc., 2013b).

1. Respond to the **Before Reading Poll**. Bring students' prior knowledge into the classroom as they make connections to and express opinions about the topic of the day through the poll.
2. Read the **Article**. Students derive information from non-fiction articles differentiated to their level. Repeated exposure to vocabulary and embedded strategy support enables all students to participate in classroom discussions. Access to grade-level text and activities ensure that students have frequent interactions with grade-appropriate complex text.
3. Do the **Activity Questions**. Students demonstrate successful close reading of text by responding to text-dependent questions that require higher-order thinking skills.
4. Respond to the **After Reading Poll**. All students express their opinions again, based on the reading they did that day, with teachers requiring students to provide evidence for their opinion. Teachers then facilitate discussion and debates in the classroom.

5. Answer the **Thought Question**. A critical thinking activity leads students to write in more formal scenarios with the intent to either argue or inform about a situation or narrate an event.

When students log in to Achieve3000 differentiated instruction program for the first time, they are administered a grade-specific LevelSet test that determines their initial program Lexile measure. As part of the administration, "step-down" logic is employed when a student misses a significant number of items at the beginning of the test (i.e., in first five items and in first ten items). This logic directs the student to a lower-level LevelSet test that is more targeted to his or her ability. "Scaffold" logic is also used to determine the specific level of LevelSet to administer when a student is enrolled in the Intervention, Language, or Enrichment Solutions. The resulting Lexile measure determines the Lexile level of the texts selected for the student and determines the level of the next test that will be administered to the student. Throughout the year, students may be administered additional LevelSet tests based on their Lexile measure using "level administration" logic to administer a LevelSet test at the appropriate level.

When the student is administered a LevelSet test or a Multiple-Choice Activity, the student's prior information (i.e., previous test results) is incorporated into the Lexile Scoring (Bayesian scoring) algorithm and a new Lexile measure and a new estimate of uncertainty for the student is produced. This data is entered into the Achieve3000 assessment system to allow the program to continue to offer targeted text selections to the student.

Interpreting and Using Achieve3000 Assessment System Results

The Lexile Framework for Reading provides teachers and educators with tools to help them link assessment results with subsequent instruction. Assessments such as the ones in Achieve3000's assessment system that are linked to the Lexile scale provide tools for monitoring the progress of students at any time during the course of instruction.

When a reader takes the Achieve3000 LevelSet test or completes the multiple-choice questions in the Activity phase of the Five-Step Literacy Routine, his or her results are reported as a Lexile measure. This means, for example, that a student whose reading ability has been measured at 500L is expected to read with 75-percent comprehension a book that is also measured at 500L. When the reader and text are matched (same Lexile measures), the reader is "targeted." A targeted reader reports confidence, competence, and control over the text. When a text measure is 250L above the reader's measure, comprehension is predicted to drop to 50 percent and the reader experiences frustration and inadequacy. Conversely, when a text measure is 250L below the reader's measure, comprehension is predicted to go up to 90% and the reader experiences control and fluency. When reading a book within his or her Lexile range (50L above his or her Lexile measure to 100L below), the reader should comprehend enough of the text to make sense of it, while still being challenged enough to maintain interest and learning.

There are two methods for calculating a LevelSet score for a student: (1) a student can receive a LevelSet score that represents his or her reading ability from a stand-alone test using a correspondence table to convert the raw score to a Lexile measure (as described on page 63 in

this Development and Technical Guide) or (2) a student can receive a LevelSet score that represents his or her reading ability from a "body of work" comprised of LevelSet tests and Multiple-Choice Activities that the student has completed during this and/or prior school years using a Bayesian paradigm that aggregates the results into a "current" Lexile measure (as described on pages 64-66 in this Development and Technical Guide).

Lexile Framework. The Lexile Framework for Reading is a tool that can help determine the reading level of written material—from a book, to a test passage, to a magazine article, to a textbook. After test results are converted into Lexile measures, readers can be matched with materials at their own level.

The Lexile Framework reporting scale is not bounded by grade level, although typical Lexile measure ranges have been identified for students in specific grades. Because the Lexile Framework reporting scale is not bounded by grade level, it makes provisions for students who read below or beyond their grade level. See the Lexile Framework Map for literary and informational titles, leveled reading samples, and approximate grade ranges (Appendix A).

A Lexile measure is the specific number assigned to any text. A computer program called the Lexile Analyzer® computes the Lexile measure for a text. The Analyzer carefully examines the complete text to measure such characteristics as sentence length and word frequency—characteristics that are highly related to overall reading comprehension. The Analyzer then reports a Lexile measure for the text. More than 135,000 books, 60 million periodical articles, and many newspapers have been given Lexile measures using this tool. Noting the Lexile measure of a text can assist in choosing reading materials that present an appropriate level of challenge for a reader.

A Lexile measure can also be used to identify the reading ability of a particular reader. Tests that are linked to the Lexile Framework or assessment systems such as the Achieve3000 LevelSet that are specifically developed to match the Lexile Framework levels can provide a Lexile measure for a reader. By using the Lexile measure for both reader and text as a tool to help target reading at the optimal, 75-percent comprehension range, reading development can be maximized.

Suggestions for Using The Lexile Framework for Reading

Use the Lexile Framework to Select Books. Teachers, parents, and students can use the tools provided by the Lexile Framework to select materials to plan instruction. When teachers provide parents and students with lists of titles that match the students' Lexile measures, they can then work together to choose appropriate titles that also match the students' interests and background knowledge. *The Lexile Framework does not prescribe a reading program, but it gives educators more knowledge of the variables involved when they design reading instruction.* The Lexile Framework facilitates multiple opportunities for use in a variety of instructional activities. After becoming familiar with the Lexile Framework, teachers are likely to think of a variety of additional creative ways to use this tool to match students with books that students find challenging, but not frustrating.

Many factors affect the relationship between a reader and a book. These factors include text content, age of the reader, interests of the reader, suitability of the text, and text difficulty. The Lexile measure of a text, a measure of text complexity, is a good starting point in the selection process, but other factors also must be considered. The Lexile measure should never be the only piece of information used when selecting a text for a reader.

Help Students Set Appropriate Learning Goals. Students' Lexile measures can be used to identify reading materials that students are likely to comprehend with 75% accuracy. Students can set goals of improving their reading comprehension and plan clear strategies for reaching those goals using literature from the appropriate Lexile ranges. Progress tests throughout the year can help to monitor students' progress toward their goals.

Monitor Reading Program Goals. As a student's Lexile measure increases, the set of reading materials he can likely comprehend at 75% accuracy changes. Schools often write grant applications in which they are required to state how they will monitor progress of the intervention or program funded by the grant. Schools that receive funds targeted to assist students improve their reading skills can use the Lexile Framework for evaluation purposes. Schools can use student-level and school-level Lexile information to monitor and evaluate interventions designed to improve reading skills.

Measurable goals can be clearly stated in terms of Lexile measures. Examples of measurable goals and clearly related strategies for reading intervention programs might include.

Goal: At least half of the students will improve reading comprehension abilities by 100L after one year of use of an intervention.

Goal: *S*tudents' attitudes about reading will improve after reading 10 books at their 75% comprehension level.

These examples of goals emphasize the fact that the Lexile Framework is not an intervention, but a tool to help educators plan instruction and measure the success of the reading program.

Communicate With Parents Meaningfully to Include Them in the Educational Process. Teachers can make statements to parents such as, "Your child should be ready to read with at least 75% comprehension these kinds of materials which are at the next grade level." Or, "Your child will need to increase his/her Lexile measure by 400L-500L in the next few years to be prepared for college reading demands. Here is a list of appropriate titles your child can choose from for reading this summer."

Improve Students' Reading Fluency. Fluency is highly correlated to comprehension (Fuchs, Fuchs, Hops, & Jenkins, 2001; Rasinski, 2009). Educational researchers have found that students who spend a minimum of three hours a week reading at their own level for their own purposes develop reading fluency that leads to improved mastery. Not surprisingly, researchers have found that students who read age-appropriate materials with a high level of comprehension also learn to enjoy reading.

Teach Learning Strategies by Controlling Comprehension Match. The Lexile Framework permits the teacher to target readers with challenging text and to systematically adjust text targeting when the teacher wants fluency and automaticity (i.e. reader measure is well above text measure) or wants to teach strategies for attacking "hard" text (i.e. reader measure is well below text measure). For example, metacognitive ability has been well documented to play an important role in reading comprehension performance. Once teachers know the kinds of texts that would likely be challenging for a group of readers, they can systematically plan instruction that will allow students to encounter difficult text in a controlled fashion and make use of instructional scaffolding to build student success and confidence with more challenging text. The teacher can model appropriate learning strategies for students, such as rereading or rephrasing text in one's own words, so that students can then learn what to do when comprehension breaks down. Students can then practice these metacognitive strategies on selected text while the teacher monitors their progress.
Teachers can use Lexile measures to guide a struggling student toward texts at the lower end of the student's Lexile range (100L above to 50L below his or her Lexile measure). Similarly, advanced students can be adequately challenged by reading texts at the midpoint of their Lexile range, or slightly above. Challenging new topics or genres may be approached in the same way.

Differentiating instruction for the reading experience also involves the student's motivation and purpose. If a student is highly motivated for a particular reading task (e.g., self-selected free reading), the teacher may suggest books higher in the student's Lexile range. If the student is less motivated or intimidated by a reading task, material at the lower end of his or her Lexile range can provide the basic comprehension support to keep the student from feeling overwhelmed.

Targeting Instruction to Students' Abilities. To encourage optimal progress with the use of any reading materials, teachers need to be aware of the complexity level of the text relative to a student's reading level. A text that is too difficult may serve to undermine a student's confidence and diminish learning. Frequent use of text that is too easy may foster poor work habits and unrealistic expectations that will undermine the later success of the best students.

When students confront new kinds of texts and texts containing new content, the introduction can be softened and made less intimidating by guiding the student to easier reading. On the other hand, students who are comfortable with a particular genre or format or the content of such texts can be challenged with more difficult reading levels, which will reduce boredom and promote the greatest rate of development of vocabulary and comprehension skills.

To become better readers, students need to be challenged continually—they need to be exposed to less frequent and more difficult vocabulary in meaningful contexts. A 75% comprehension level provides an appropriate level of challenge, but is not too challenging.

Apply Lexile measures Across the Curriculum. Over 450 publishers provide Lexile measures for their trade books and textbooks, enabling educators to make connections among all of the different components of the curriculum to plan instruction more effectively. With a student's Lexile measure, teachers can connect him or her to hundreds of thousands of books. Using periodical databases, teachers and students can also find appropriately challenging newspaper and magazine articles that have Lexile measures.

Using the Lexile Framework in the Classroom

- Develop individualized reading lists that are tailored to provide appropriately challenging reading while still reflecting student interest and motivations.
- Build text sets that include texts at varying levels to enhance thematic teaching. These texts might not only support the theme, but also provide a way for all students to successfully learn about and participate in discussions about the theme, building knowledge of common content for the class while building the reading skills of individual students. Such discussions can provide important collaborative brainstorming opportunities to fuel student writing and synthesize the curriculum.
- Sequence materials in a reading program to encourage growth in reading ability. For example, an educator might choose one article a week for use as a read-aloud. In addition to considering the topic, the educator could increase the complexity of the articles throughout the course. This approach is also useful when utilizing a core program or textbook that is set up in anthology format. (The order in which the readings in anthologies are presented to the students may need to be rearranged to best meet student needs.)
- Develop a reading folder that goes home with students and comes back for weekly review. The folder can contain a reading list of texts within the student's Lexile range, reports of recent assessments, and a form to record reading that occurs at home. This is an important opportunity to encourage individualized goal setting and engage families in monitoring the progress of students in reaching those goals.
- Choose texts lower in the student's Lexile range when factors make the reading situation more challenging or unfamiliar. Select texts at or above the student's range to stimulate growth when a topic is of extreme interest to a student, or when adding additional support such as background teaching or discussion.
- Use to provide all students with exposure to differentiated, challenging text at least once every two to three weeks as suggested by the lead authors of the Common Core State Standards.
- Use the free Find a Book website (at www.lexile.com/fab) to support book selection and create booklists within a student's Lexile range to help the student make more informed choices when selecting texts.
- Use database resources to infuse research into the curricula while tailoring reading selections to specific Lexile levels. In this way, students can explore new content at an appropriate reading level and then demonstrate their assimilation of that content through writing and/or presentations. A list of the database service providers that have their collections measured can be found at www.lexile.com/using-lexile/lexile-at-library.

Using the Lexile Framework in the Library

- Make the Lexile measures of books available to students to better enable them to find books of interest at their appropriate reading level.
- Compare student Lexile levels with the Lexile levels of the books and periodicals in the library to analyze and develop the collection to more fully meet the needs of all students.

- Use the database resources to search for articles at specific Lexile levels to support classroom instruction and independent student research. A list of the database service providers that have had their collections measured can be found at www.lexile.com/using-lexile/lexile-at-library/)
- Use the free Find a Book website (at www.lexile.com/fab) to support book selection and help students make informed choices when selecting texts.

Using the Lexile Framework at Home

- Ensure that your child gets plenty of reading practice, concentrating on material within his or her Lexile range. Ask your child's teacher or school librarian to print a list of books in your child's range, or search the Find a Book website (at www.lexile.com/fab).
- Communicate with your child's teacher and school librarian about his or her reading needs and accomplishments. They can use the Lexile scale to let you know their assessment of your child's reading ability.
- When a reading assignment proves too challenging for your child, use activities to help. For example, review the words and definitions from the glossary and the review questions at the end of a chapter before your child reads the text. Afterward, be sure to return to the glossary and review questions to make certain your child understood the material.
- Celebrate your child's reading accomplishments. One of the great things about the Lexile Framework is that it provides an easy way for readers to keep track of their own growth and progress. You and your child can set goals for reading—sticking to a reading schedule, reading a book at a higher Lexile measure, trying new kinds of books and articles, or reading a certain number of pages per week. When your child hits the goal, make an occasion out of it!

Limitations of the Lexile Framework. Just as variables other than temperature affect comfort, variables other than semantic and syntactic complexity affect reading comprehension. A student's personal interests and background knowledge are known to affect comprehension. However, although temperature alone does not fully identify the comfort level of an environment, we do not dismiss the importance of the information communicated by temperature. Similarly, the information communicated by the Lexile Framework is valuable, even though other information also enhances instructional decisions. In fact, the meaningful communication that is possible when test results are linked to instruction provides the opportunity for parents and students to give input regarding interests and background knowledge.

Results of the Achieve3000 Assessment System and Grade Levels. Lexile measures do not translate specifically to grade levels. Within any grade, there will be a range of readers and a range of materials to be read. In a fifth-grade classroom there will be some readers who are far ahead of the others and there will be some readers who are behind the others in terms of reading ability. To say that some books are "just right" for fifth graders assumes that all fifth graders are reading at the same level. The Lexile Framework can be used to match readers with texts at whatever level the reader is reading.

Simply because a student is an excellent reader, it should not be assumed that the student would necessarily comprehend a text typically found at a higher grade level. Without adequate background knowledge, the words may not have sufficient meaning to the student. A high Lexile measure for a grade indicates that the student can read grade-appropriate materials at a higher comprehension level (90%, for example).

The real power of the Lexile Framework is in examining the growth of readers—wherever the reader may be in the development of his or her reading skills. Readers can be matched with texts that they are forecasted to read with 75% comprehension. As a reader grows, he or she can be matched with more demanding texts. And, as the texts become more demanding, the reader grows.

Development of Achieve3000 LevelSet Assessments

The Achieve3000 LevelSet reading assessments were designed to measure initial reading ability. Achieve3000 identified criteria for the development of the assessment:

- Simplified test administration that could be accomplished through a web-based environment.
- Minimum number of items per test form and minimum administration time while still ensuring minimal measurement error when determining each student's reading ability.
- Development of multiple test forms for pre- and post-testing to examine student growth in reading.

Test specification for the Achiveve3000 reading assessments began during February 2005 with item development and review following closely behind during March. Finally, test development, final test evaluation, and operational materials were completed during late spring and summer 2005. A second wave of test development was undertaken during fall 2008 to develop Form C for each grade range of LevelSet. In 2012, Achieve3000 and MetaMetrics began development of Forms D, E, and F for each grade. Item development was completed in Spring 2013. During Fall 2013, items were embedded into LevelSet (version 1) tests for field testing. Forms D, E, and F were created in 2014 after analysis and review of the item field-test data. During fall 2014, a small number of additional items were developed and field-tested. The result was the revision of Forms D, E, and F as Forms G, H, and I.

Achieve3000 LevelSet Specifications

Version 1 of LevelSet consisted of Forms A, B, and C and the specifications consisted of an assessment that covered grades 2 through 12 with 30 native-Lexile items per passage (MetaMetrics, 2012). It was determined that test forms would be developed specifically for the following levels: Grade 2, Grades 3-4, Grades 5-6, Grades 7-8, and Grades 9-12. Each test covers student reading measures from the 10th to 90th percentiles of the lowest grade level in the range and be appropriate for administration during the fall and spring. Reading measures were established by Lexile level according to the Lexile measures presented in *Table 8.*

Table 8. Lexile targets by reading level for Achieve3000 LevelSet (version 1) reading assessment.

Grade/Level	Target Reading Level	LevelSet (version 1) Range
2	450L	200L to 800L
3-4	620L	210L to 990L
5-6	820L	475L to 1150L
7-8	900L	620L to 1200L
9-12	1000L	730L to 1300L

Each LevelSet (version 1) test consisted of 30 native-Lexile items. The passages on each form were distributed with one-third of the passages centered in the Lexile zone (100L) of the Lexile target in *Table 8* and the remaining passages distributed equally above and below the target. A 200L floor was established for passage selection.

Administration guidelines for LevelSet Forms A, B, and C allow a student to move down LevelSet test levels, regardless of student grade level, until the student achieves some success on the test form. Communications with Achieve3000 staff indicated that many students were moving to lower level forms because their assigned grade level form was too challenging. In response, the assigned grade level for the LevelSet (version 1) forms were adjusted by Achieve3000 as shown in *Table 9*. Descriptive statistics for the three forms are also shown, including mean, minimum, and maximum Lexile measure across Forms A, B, and C

Table 9. Grade level information for LevelSet (version 1) forms.

Developed Grade Level(s)	**2**	**3-4**	**5-6**	**7-8**	**9-12**
LevelSet Level	1-4	5-6	7-8	9-10	11-12
Average Mean Lexile	450L	618L	818L	894L	997L
Average Minimum Lexile	173L	220L	420L	613L	740L
Average Maximum Lexile	737L	977L	1177L	1170L	1263L

Additional item analysis showed that students assigned to test forms originally designed for the grade span below their actual grade (e.g., students in Grades 7-8 assigned to a test form designed for Grades 5-6), were achieving the desirable success rate of approximately 75% correct.

Specifications for LevelSet (version 2) Forms D, E, and F were developed for each grade based on LevelSet (version 1) specifications, review of item performance data, and feedback from Achieve3000. LevelSet (version 2) ranges were established to match the adjusted ranges shown in
Table 9.

The LevelSet (version 2) target mean was set at approximately the 25th percentile of each grade. The minimum value for each Lexile range corresponds to approximately the 1st percentile and the maximum value corresponds to approximately the 75th percentile Lexile measure of the grade level. In an effort to ensure that students have an opportunity to be challenged at a level that extends into the college and career ready text complexity bands developed as part of the Common Core State Standards, the maximum Lexile measures were adjusted upward beyond the 75th percentile for Grades 6 through 12. *Table 10 s*hows more detailed specifications for each of the LevelSet (version 2) test forms.

Table 10. Specifications for LevelSet (version 2) test forms.

Level	Number of Items per Form	Number of Forms	Target Mean	Target Minimum	Target Maximum
2	30	3	275L	(-155)BR	650L
3	30	3	400L	(-20)BR	750L
4	30	3	500L	110L	870L
5	30	3	620L	235L	980L
6	30	3	700L	325L	1050L
7	30	3	795L	400L	1125L
8	30	3	835L	430L	1180L
9	30	3	890L	535L	1215L
10	30	3	935L	570L	1240L
11	30	3	950L	610L	1270L
12	30	3	960L	615L	1300L

All items developed for the LevelSet (version 2) test forms are native-Lexile items, with the exception of a small proportion of items developed for Grades 2 and 3. Because some readers at this level are not ready for the challenge of a test consisting only of native-Lexile items, these forms include the more accessible two-sentence items. By including these items in addition to native-Lexile items, early and developing readers can be measured appropriately and placed on the Lexile scale with a Lexile measure. *Table 11* includes information about item types in Grades 2 and 3.

Table 11. Item types for the Grade 2 and 3 LevelSet (version 2) tests.

Level	Number of Items per Form	Number of Forms	Two-sentence Items per Form	Native-Lexile Items per Form
2	30	3	10	20
3	30	3	5	25

In addition to the 90 items per grade needed for three forms, 10 to 13 extra items were developed for each grade-level field test. These items have Lexile measures dispersed throughout the range of the grade-level field test set. In total, 1,100 items were developed for the LevelSet (version 2) field tests and were used to develop the 990 items required for the LevelSet (version 2) forms. Additionally, the field test design required each grade-level field test set have some items in common with adjacent grades. Based on Lexile measure dispersion across the range, 10 items in each grade were identified as common items with the grade above and 10 items in each grade were identified as common items with the grade below. In Grades 3 and 11, 20 items were identified as common items for the Grades 2 and 12 grade-level sets. Each grade level set included 120 – 123 items for field testing.

Achieve3000 LevelSet Passage Development

The Common Core State Standards (CCSS) for English Language Arts, College and Career Readiness Anchor Standards for Reading focus on the importance of text complexity. As stated in Standard 10, students must be able to "read and comprehend complex literary and informational texts independently and proficiently" (NGA Center and CCSSO, 2010a, p.10).

Consistent with the CCSS definition of text complexity as the transaction between reader, text, and task, the underlying mathematical equation used to generate a Lexile measure (a quantitative measure of text complexity) is based on the relationship between an examinee's actual reading comprehension level (for a given task) and the features of a specific text. In short, the Lexile measure directly reflects the CCSS definition of a quantitative measure of text complexity.

Building upon this foundation of text complexity as measured by the Lexile Framework, the passages for the Achieve3000 LevelSet reading assessments were supplied to MetaMetrics, Inc. by Achieve3000. The passages were selected from articles written for KidBiz3000 and TeenBiz3000 by Achieve3000 and were appropriate for students in Grades 2 through 12. For the development of LevelSet (version 1) Forms A and B, a total of 190 articles were provided by Achieve3000 according to the following specifications: 200L zone, 10; 300L zone, 10; 400L zone, 15; 500L zone, 15; 600L zone, 20; 700L zone, 30; 800L zone, 25; 900L zone, 25; 1000L zone, 20; 1100L zone, 15; and 1200L zone, 5.

To build a foundation for college and career readiness, students must read widely and deeply from among a broad range of high-quality, increasingly challenging literary and informational texts (CCSSO, 2010a). By reading texts in history/social studies, science, and other disciplines, students build a foundation of knowledge in these fields that will also give them the background to be better readers in all content areas. Achieve3000 has worked with Reuters, one the "world's leading and most trusted news sources" (Achieve3000 website, 2005). The news articles are revised and/or rewritten by a team of professional editors, all of whom have experience writing for school-age readers, to be appropriate for readers at diverse grade levels. The editors use standard reading-level measures, such as the Lexile scale and the Flesh-Kincaid scale, to assess readability.

For the development of LevelSet (version 1) Form C, passages were developed by MetaMetrics, Inc. to match the passages supplied by Achieve3000 for the first phase of development. All of the passages required for development of Form C were either written by staff at MetaMetrics, Inc. or commissioned by MetaMetrics, Inc. The passages were developed in conjunction with their associated items. The passages and items together were sent to Achieve3000 for review.

For the development of LevelSet (version 2) items, MetaMetrics first analyzed the 450 items from LevelSet (version 1). Seventy LevelSet (version 1) items that performed well were retained as is or with minimal edits for current style guidelines for LevelSet (version 2). Another 182 items were revised more extensively based on student performance data as well as current content and style guidelines. Items were also edited when possible to update content that seemed likely to become out-of-date without such changes. These 252 items were reviewed by MetaMetrics and Achieve3000 following the same protocol as newly written items and were

retained for use on the LevelSet (version 2) field tests. The remaining 198 items were not retained for various reasons, the most common being content that was out-of-date.

To complete the required item development for LevelSet (version 2), 1,326 Achieve3000 article sets were sent to MetaMetrics for passage selection. Article sets contained multiple versions of the same content adapted for different Lexile levels.

The following criteria were established for the identification and development of passages for the Achieve3000 LevelSet reading assessments:

- Grade-level appropriate reading passages should be age-appropriate for the grade the passage is intended to be used with, according to typical reading levels.

- Reading passages should use standard English conventions appropriate for students at the targeted grade level.

- All passages and items should be free from bias based on race, gender, age, ethnicity, religion, disability, sexual orientation, or socioeconomic status. No group should have an advantage over another because of values, vocabulary, phrasing, or assumptions in a passage. Avoid stereotypes of ethnic or gender groups in passages and items.

- To the degree possible, prior knowledge should not be required for the examinee to understand or appreciate the passage. References to events, people, and places should be explained within the passage unless considered common knowledge. Figurative language should be explained within the passage or be defined through context.

- All passages should avoid topics that may be offensive to, or induce an emotional reaction from, an examinee, parent, or citizen group (e.g., violence, abuse, terminal illness, poverty).

Although the content of the texts used in the passages could be altered if necessary, it was important to select text for items that was void of sensitive issues. The following guidelines were used to help ensure the creation of non-offensive and bias-free assessments. These guidelines were assembled from the results of MetaMetrics' collaboration with various partners in textbook and test publishing.

1. Violence/crime: Avoid weapons, fights, arrests, illegal activities, abuse, and murders.
2. Depressing situations or death: Avoid sickness, death, and other negative situations.
3. Offensive language: Avoid use of curse words or words used to cover up a harsher curse; avoid oaths such as "Oh God!", words that belittle others, or other insulting words such as "backwards," "ugly."
4. Drugs/alcohol/tobacco: Avoid any mention of drugs, alcohol, tobacco, and anything associated with these topics such as rehab, bars, etc.
5. Sex/attraction: Avoid issues that call for a discussion of sex, sexual orientation, or relationships of either a romantic or sexual nature.

6. Race: Avoid racial slurs, belittling words, stereotypes (e.g., referring to Native Americans as Indians), and unbalanced representations of a race (e.g., mentioning African Americans only in the context of slavery).
7. Class: Avoid mentioning economic and social differences and avoid stereotypes.
8. Gender: Use gender free language (e.g., firefighter instead of fireman); avoid using male pronouns to refer to both sexes; show both genders in a variety of roles; avoid stereotypical portrayals of men or women.
9. Religion: Avoid selections that promote or demean a religious belief; avoid the assumption that people share a common belief; avoid mention of a reference to any holidays of a religious nature (e.g., Christmas, Halloween).
10. Supernatural/magic: Avoid mention of witches, goblins, wizards, and other supernatural beings; avoid magic in general.
11. Parents/family: Avoid selections that question parents, authority, or judgment; avoid negative relationships within the family; avoid raising the issue of alternative families.
12. Politics: Avoid controversial issues (e.g., unions, strikes) and selections, which portray political bias.
13. Animals/environment: Avoid hunting and cruelty to animals (e.g., fur coats, trapping animals) and be sensitive to environmental issues and animal rights.
14. Brand names/junk food: Avoid mentioning either.

For LevelSet (version 1), each passage was source targeted prior to selection. Source targeting is the process of using information from the entire source of a reading passage to ensure that the estimated syntactic complexity and semantic demand of the passage is consistent with the "true" reading demand of the passage. Source targeting is done by measuring an entire source text to learn its Lexile measure, then screening out all passages that do not measure within 100L of that source. The passages that pass through this filter are acceptable for further development. The Lexile measure for each passage should fall within ±100L of the Lexile measure assigned to its source. Of the 190 articles submitted by Achieve3000 for LevelSet (version 1), a total of 220 passages were identified for Form A. Passages were reviewed for alignment with the specifications and for potential developmental inappropriateness. A second set of articles were submitted by Achieve3000 for the second set of test forms (Form B). For Form C, a total of 150 passages were developed.

For LevelSet (version 2), MetaMetrics received 1,326 article sets. The article sets were reviewed by MetaMetrics staff for sensitivity and grade-appropriateness before being matched to specific grade levels (primary, intermediate, secondary) and Lexile measure zone (100L span) for the item. Article sets were trimmed by deleting versions that measured 200L above or 200L below the item Lexile measure zone for the item. For example, an article set might contain 7 versions of an article about willow trees. The Lexile measures of these versions could range from 150L to 1490L. Based on its content appropriateness, the article set was matched to intermediate grades, 600L zone. Any versions of the article in the set that were below 400L or above 800L were deleted from the set before further processing. In some cases, article sets were used at two different zones (at least 400L apart) and processed for two different items.

Next, relative targeting was performed based on the Lexile measure zone for the item. Relative targeting is done by specifying a target Lexile zone and then creating a zone of 100L above and

below that zone. With the aid of a computer program, item writers examined blocks of text (minimum of three sentences) that are calibrated to be within that 300L range. From these blocks of text, item writers are asked to select four to five that could be developed as items. Passages were further development based on the following criteria:

- the passage must develop one main idea or contain one complete piece of information;
- understanding of the passage is independent of the information that comes before or after the passage in the source text; and
- understanding of the passage is independent of prior knowledge not contained in the passage.

If it is necessary to shorten or lengthen the passage in order to meet the criteria for passage selection, the item writer can immediately recalibrate the text.

Achieve3000 LevelSet Item Development

The Achieve3000 LevelSet reading assessments measure reading comprehension by focusing on skills readers use when studying written materials sampled from various content areas. These skills include referring to details in the passage, drawing conclusions, and making comparisons and generalizations. These LevelSet reading assessments do not require prior knowledge of ideas outside of the passage, vocabulary taken out of context, or formal logic.

There is evidence to support that the cloze procedure reveals both text comprehension and language mastery levels. Some of the research done with metacognition shows that better readers use more strategies (and the appropriate strategy) when they read. The cloze procedure has been shown to require more re-reading of the passage and an increase in the use of context clues. The traditional cloze procedure is based on the deletion of every 5^{th} to 7^{th} word (or some variation) regardless of part of speech. It can also consist of selectively deleting certain categories of words (Bormuth, 1967, 1968, 1970). Selective deletions have shown greater instructional effects than random deletions.

The item format used with the Achieve3000 LevelSet reading assessment can be described as a variant of the selection deletion cloze format—the native-Lexile item format. This item format is similar to the fill-in-the-blank format. When properly written, this format directly assesses the reader's ability to draw inferences and establish logical connections between the ideas in the passage. From the four presented options, the reader is asked to select the "best" option that completes the statement. With this format, all options are semantically and syntactically appropriate completions of the sentence, but one option is unambiguously the "best" option when considered in the context of the passage. This format is "well-suited for testing a student's ability to evaluate" (Haladyna, 1994, p. 62). In addition, this format is also useful as an instructional tool.

There are two main advantages to using this item format. The first is that the level of reading of the statement and the four options is controlled to insure that their difficulty level is easier than the most difficult word in the passage. The second advantage of this format is that authentic

passages are used. The statement is as short as or shorter than the briefest sentence in the passage. These two advantages help insure that the statement is easier than the accompanying passage.

The statement portion of the item can assess a variety of skills related to reading comprehension: paraphrase information in the passage, draw a logical conclusion based on the information in the passage, make an inference, provide a supporting detail, or make a generalization based on the information in the passage. The statement is written to ensure that by reading and comprehending the passage the reader is able to select the correct option. When the statement is read by itself, any of the four options could be plausible.

The following criteria were used to develop passage native-Lexile items. The statement should:

- Require the student to draw an unambiguous conclusion or inference from the passage.
- Be clear as to what or whom the statement question is about.
- Not use the exact or nearly the same wording as what appears anywhere in the passage.
- Attempt to avoid the use of negatives.

The answer choices should:

1. Be reasonably grade level/Lexile targeted (300L below to 100L above as a general guideline).
2. Each logically complete the statement to force passage dependence for answering correctly. (All foils should make sense in context of the statement, but only the correct choice should make sense in context of the paragraph.)
3. Be one word or a short phrase.
4. Not be homonyms, as this may merely confuse the reader. Avoid using antonyms; if two choices are opposite there is a high probability that one is correct.
5. Contain words from the passage only if all of the answer choices do as well.
6. Be balanced; if correct choice is a word or phrase containing a positive connotation, at least one other choice should be positive so the correct choice does not stand out. Although, with higher-level texts it is best to try and make all of the words positive or negative.
7. Vary in form as the Lexile level of the item increases, for example, the answers should not all be written including the same phrasing.
8. Be selected in accordance to sensitivity restrictions.

Item Writer Training. Item writers were experienced item-development specialists who had experience with the everyday reading ability of students at various levels. The use of individuals with these types of experiences helped to ensure that the items are valid measures of reading ability. Item writers were provided with training materials describing the native-Lexile and two-sentence-Lexile item formats and guidelines for selecting passages, developing statements, and selecting options. The item writing materials also contained incorrect items that illustrate the criteria used to evaluate items and corrections based on those criteria. The final phase of item writer training was a short practice session with three items.

Item writers were provided with vocabulary lists to use during statement and option development. The vocabulary lists were compiled from word lists compiled by MetaMetrics based on vocabulary research related to determining the Lexile measures (difficulty) of words (MetaMetrics, Inc. 2006). The rationale was that these words should be part of a reader's "working" vocabulary since they had been learned the previous year.

Item writers were provided with additional training related to "sensitivity" issues. Part of the item writing materials address these issues and identify areas to avoid when selecting passages and developing items. These materials were developed based on material published by CTB/McGraw-Hill (Guidelines for Bias-Free Publishing) universal design and fair-access—equal treatment of the sexes, fair representation of minority groups, and the fair representation of disabled individuals. As part of training, item writers were first asked to independently develop items for two passages. The items were then reviewed by the development group for item format, grammar, and sensitivity. Based on this review, item writers received feedback and more training if necessary.

All items go through a two-stage internal review process prior to completion. First, items are reviewed and edited by an editor according to the item development criteria and for sensitivity issues (see below). Items are then reviewed and edited by a group of specialists that represent various perspectives, including, test developers, EFL educators, and editors. These individuals examine each item for sensitivity issues and for the quality of the item and response options. During this second stage of the item review process, additional edits may be incorporated. During the second stage of the item review process, items were either "approved as presented," "approved with edits," or "deleted."

Following the internal review process, items were sent to Achieve3000 staff for review. Achieve3000 staff classified each item as "approved as presented," "approved with edits," or "deleted." Additional MetaMetrics editing and reviews were conducted on items not approved as presented, with item revisions sent to Achieve3000 for review. After all items were approved by Achieve3000 and delivered in field test ready form, Achieve3000 staff performed an additional content style review. MetaMetrics staff edited the items as requested and returned the delivery to Achieve3000. Achieve3000 staff reviewed all final items for content consistency and for sensitivity. Item edits were made throughout the process in response to Achieve3000 requests.

In total, 229 items were developed for Form A and a similar number was developed for Form B. A total of 150 items were developed for Form C.

In 2013, 1,100 items were developed and approved by Achieve3000 for the field-testing of LevelSet (version 2) items (see *Table 12*). Throughout the development process, Achieve 3000 reviewed items for sensitivity. Additionally, in July 2013 before the field-test administration, Achieve3000 had an external expert review of all items for potential use with students outside the U.S. Because of this review, four items were revised and four items were replaced.

Table 12. LevelSet (version 2) item bank distributions, by level.

Level	Number of Items per Level	Number of Items per Level for Field Testing	Target Mean	Final Mean (SD)
2	100	120	275L	281.5 (214.6)
3	100	120	400L	399.8 (200.6)
4	100	120	500L	510.4 (190.3)
5	100	120	620L	618.8 (186.9)
6	100	120	700L	703.4 (180.1)
7	100	120	795L	785.8 (177.8)
8	100	120	835L	838.9 (179.8)
9	100	120	890L	895.7 (171.6)
10	100	120	935L	933.3 (162.9)
11	100	120	950L	957.6 (163.3)
12	100	120	960L	969.9 (173.2)

Supplemental LevelSet (version 2) Item Development

In 2014, 91 items were developed and field-tested to supplement the Level Set (version 2) item bank. Item specifications were designed to parallel the items A3K had identified for replacement in sensitivity reviews two and three. Each item was assigned a target grade level and field tested in that grade and the adjacent grades. This test design ensured that all items were administered to students in at least two grades. The distribution of items by Lexile measure and target grade level is displayed in *Table 13.*

Table 13(a). 2014 Supplemental item distribution by grade and Lexile zone, Grades 2-6.

Lexile Zone	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Below 0L	2	1			
0L to 90L	2				
100L to 190L		1	1		
200L to 290L	1	1	2		
300L to 390L		2		1	
400L to 490L	2			1	1
500L to 590L		3	2	1	2
600L to 690L	1	1	2	1	1
700L to 790L				1	
800L to 890L			2	2	
900L to 990L				1	2
1000L to 1090L					2
Total	8	9	8	8	8

Table 13(b). 2014 Supplemental item distribution by grade and Lexile zone, Grades 7-12.

Lexile Zone	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
400L to 490L	1	2				
500L to 590L		1				
600L to 690L	1	1				1
700L to 790L			1		5	
800L to 890L	1	1	2		1	4
900L to 990L	2	2	1	3		
1000L to 1090L	2	2	2	2	1	
1100L to 1190L	2	2	2	2		
Above 1190L				1	2	3
Total	9	8	8	8	9	8

Achieve3000 LevelSet (version 2) Field Testing

Field test items were embedded into current LevelSet (version 1) assessments being administered during the 2013-2014 school year (between August 1 and November 12). Six individual items were selected randomly from the grade-level item pool and administered as part of the student's initial reading assessment. A total of 990 items (or 90 items per grade) were required for the development of LevelSet (version 2) Forms D, E, and F. The distribution of items by Lexile measure and grade level is displayed in *Table 14.*

Table 14(a). Field test item distribution by grade and Lexile zone, Grades 2 -6.

Lexile Zone	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
-200L to -110L	4				
-100L to -10L	11	3			
0L to 90L	9	5			
100L to 190L	10	9	6		
200L to 290L	20	10	10	7	
300L to 390L	21	18	15	7	8
400L to 490L	12	24	15	11	7
500L to 590L	8	13	22	19	13
600L to 690L	5	11	14	22	20
700L to 790L		7	11	16	23
800L to 890L			7	11	16
900L to 990L				7	8
1000L to 1090L					8
Total	100	100	100	100	103

Table 14(b). Field test item distribution by grade and Lexile zone, Grades 7-12.

Lexile Zone	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
400L to 490L	8	6				
500L to 590L	7	8	7	4	1	
600L to 690L	14	7	6	6	5	7
700L to 790L	24	16	16	10	13	12
800L to 890L	23	23	24	19	17	17
900L to 990L	12	20	18	23	23	22
1000L to 1090L	10	13	14	21	20	16
1100L to 1190L	4	7	11	12	13	14
1200L to 1290L			4	5	8	7
1300 to 1390						6
Total	102	100	100	100	100	101

A total of 803,686 students in Kindergarten (Grade 0), Grades 1 through 12, and Adult (Grade 13) were administered a LevelSet assessment (Form B) and six field-test items. Of this sample,

students who completed a LevelSet test "on grade level" (grade of test matched nominal grade level) were retained for the field-test analyses (N = 446,321). For example, of the 84,213 students in Grade 5 and the 112,547 students in Grade 6 (112,547), 46.4% of the Grade 5 students (N = 39,105) and 57.0% of the Grade 6 students (N = 64,199) also completed LevelSet, Form B Level 5-6. *Table 15* presents the sample demographics for both the complete sample and the final sample. The final sample is very similar to the complete sample of students.

Table 15. Sample demographics for the complete and final samples.

Variable	Category	Complete Sample (N = 803,686)	Final Sample (N = 446,321)
Grade	0	0.00	-
	1	0.01	-
	2	3.99	7.13
	3	9.02	15.57
	4	9.89	14.61
	5	10.48	8.76
	6	14.00	14.38
	7	13.72	9.10
	8	13.33	8.80
	9	10.85	9.69
	10	7.24	5.28
	11	4.35	4.05
	12	2.97	2.63
	13 (Adult)	0.14	-
Gender	Male	48.99	46.54
	Female	43.50	43.73
	Missing	7.70	9.73
Race	Not White	4.64	4.66
	White	4.06	3.80
	Missing	91.30	91.54
Ethnicity	Hispanic or Latino	7.21	7.22
	Not Hispanic of Latino	1.39	1.33
	Unknown	91.40	91.45
Parent Language	English	3.71	4.40
	French	0.00	0.00
	Haitian-Creole	0.02	0.01
	Other	0.23	0.19
	Portuguese	0.01	0.00
	Spanish	1.43	1.32
	Missing	94.60	94.07
ɪial sification	Has Special Classification	56.42	58.70
	No Special Classification	3.15	3.49
	Missing	40.43	37.81
SES	Is eligible for free lunch	2.70	2.73
	Is eligible for reduced-price lunch	0.44	0.45
	Is NOT eligible for free lunch	1.69	1.90
	Missing	95.18	94.93

Field-Test Analyses. The field-test data were analyzed using both the classical measurement model and the Rasch (one-parameter logistic item response theory) model. Item statistics and descriptive information (item number, field test form and item number, and answer key) were compiled for each item.

Field-Test Analyses—Classical Measurement. For each item, the *p*-value (percent correct) and the point-biserial correlation between the item score (correct response) and the total test score were computed. Point-biserial correlations were also computed between each of the incorrect responses and the total score. In addition, frequency distributions of the response choices (including omits) were tabulated (both actual counts and percents). Since the same 30 operational items were being administered to all students taking a particular LevelSet level along with six field-study items, the decision was made to calculate a point-biserial statistic for each item rather than a point-measure statistic. The calculation of the point-biserial statistic excluded the item from the raw score in order to eliminate any auto-correlation effect. *Table 16* displays the summary item statistics.

Field-Test Analyses—Rasch Item Response Theory. Classical test theory has two basic shortcomings: (1) the use of item indices whose values depend on the particular group of examinees from which they were obtained, and (2) the use of examinee ability estimates that depend on the particular choice of items selected for a test. The basic premises of item response theory (IRT) overcome these shortcomings by predicting the performance of an examinee on a test item based on a set of underlying abilities (Hambleton and Swaminathan, 1985). The relationship between an examinee's item performance and the set of traits underlying item performance can be described by a monotonically increasing function called an item characteristic curve (ICC). This function specifies that as the level of the trait increases, the probability of a correct response to an item increases.

The conversion of observations into measures can be accomplished using the Rasch (1980) model, which states a requirement for the way that item calibrations and observations (count of correct items) interact in a probability model to produce measures. The Rasch IRT model expresses the probability that a person (n) answers a certain item (i) correctly by the following relationship:

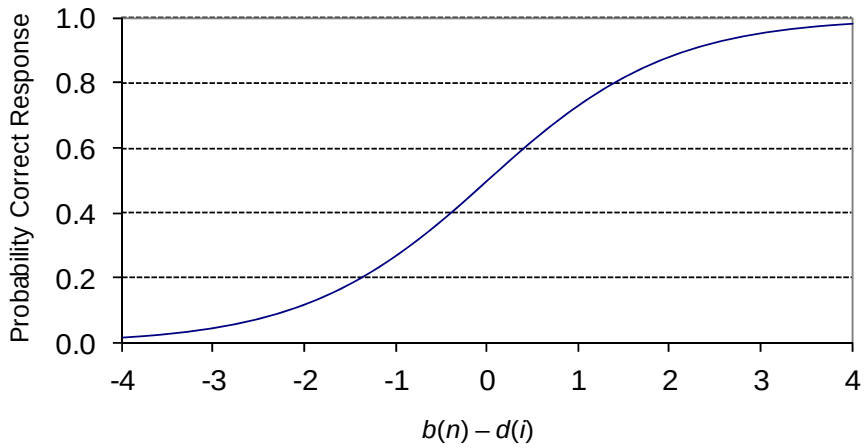
$$P_{ni} = \frac{e^{b_n - d_i}}{1 + e^{b_n - d_i}} \qquad \text{(Equation 4)}$$

where d_i is the difficulty of item i (i = 1, 2, …, number of items);
b_n is the ability of person n (n = 1, 2, …, number of persons);
$b_n - d_i$ is the difference between the ability of person n and the difficulty of item i; and
P_{ni} is the probability that examinee n responds correctly to item i
(Hambleton and Swaminathan, 1985; Wright and Linacre, 1994).

This measurement model assumes that item difficulty is the only item characteristic that influences the examinee's performance such that all items are equally discriminating in their ability to identify low-achieving persons and high achieving persons (Bond and Fox, 2001; and Hambleton, Swaminathan, and Rogers, 1991). In addition, the lower asymptote is zero, which

specifies that examinees of very low ability have zero probability of correctly answering the item. The Rasch model has the following assumptions: (1) unidimensionality—only one ability is assessed by the set of items; and (2) local independence—when abilities influencing test performance are held constant, an examinee's responses to any pair of items are statistically independent (conditional independence, i.e., the only reason an examinee scores similarly on several items is because of his or her ability, not because the items are correlated). The Rasch model is based on fairly restrictive assumptions, but it is appropriate for criterion-referenced assessments. *Figure 4* graphically shows the probability that a person will respond correctly to an item as a function of the difference between a person's ability and an item's difficulty.

Figure 4. The Rasch Model—the probability person n responds correctly to item i.



An assumption of the Rasch model is that the probability of a response to an item is governed by the difference between the item calibration (d_i) and the person's measure (b_n). From an examination of the graph in *Figure 4*, when the ability of the person matches the difficulty of the item ($b_n - d_i = 0$), then the person has a 50% probability of responding to the item correctly.

The number of correct responses for a person is the probability of a correct response summed over the number of items. When the measure of a person greatly exceeds the calibration (difficulties) of the items ($b_n - d_i > 0$), then the expected probabilities will be high and the sum of these probabilities will yield an expectation of a high "number correct." Conversely, when the item calibrations generally exceed the person measure ($b_n - d_i < 0$), the modeled probabilities of a correct response will be low and the expectation will be a low "number correct."

Thus, Equation 5 can be rewritten in terms of the number of correct responses of a person on a test

$$O_p = \sum_{i=1}^{L} \frac{e^{b_n - d_i}}{1 + e^{b_n - d_i}} \qquad \text{(Equation 5)}$$

where O_p is the number of correct responses of person p and L is the number of items on the test.

When the sum of the correct responses and the item calibrations (d_i) is known, an iterative procedure can be used to find the person measure (b_n) that will make the sum of the modeled probabilities most similar to the number of correct responses. One of the key features of the Rasch IRT model is its ability to place both persons and items on the same scale. It is possible to predict the odds of two individuals being successful on an item based on knowledge of the relationship between the abilities of the two individuals. If one person has an ability measure that is twice as high as that of another person (as measured by *b*—the ability scale), then he or she has twice the odds of successfully answering the item.

Equation 4 possesses several distinguishing characteristics:

- The key terms from the definition of measurement are placed in a precise relationship to one another.

- The individual responses of a person to each item on an instrument are absent from the equation. The only information that appears is the "count correct" (O_p), thus confirming that the raw score (i.e., number of correct responses) is "sufficient" for estimating the measure.

For any set of items the possible raw scores are known. When it is possible to know the item calibrations (either theoretically or empirically from field studies), the only parameter that must be estimated in Equation 4 is the person measure that corresponds to each observable count correct. Thus, when the calibrations (d_i) are known, a correspondence table linking observation and measure can be constructed without reference to data on other individuals.

Winsteps (Linacre, 2011) analyses were completed on the final sample of 446,321 students whose final LevelSet test was at a level appropriate for their grade. All 1,130 items (30 operational, 110 field study items per grade level) were included in each Winsteps analysis, but due to an absence of data, Winsteps ignored all but 150 items -- the 30 operational Form B items and the 120 field study items designated for the specific grade. The 120 field study items for each grade level were specified to be 20 common items (10 from the grade level below and 10 from the grade level above) and 100 grade-level items (90 items for the final operational forms and 10 items for overage). However, one of the field study items for Level 12 was never administered, so the Grade 12 analysis only included 149 items. Version 3.75.0 of Winsteps was used and the convergence criterion was that the maximum logit change size had to be less than 0.0001 and the maximum residual size had to be less than 0.003.

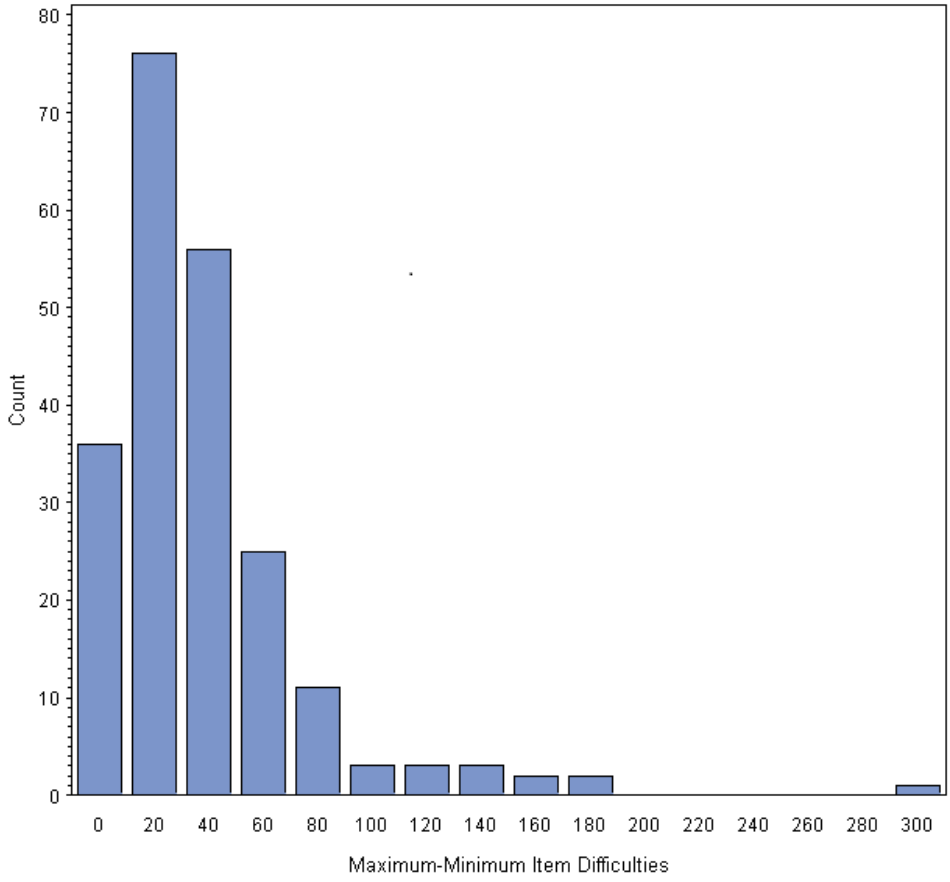
The observed difficulty of the field study items was computed by multiplying the difficulty logit estimates from Winsteps by 180, and then adding a constant such that the observed and theoretical difficulties of the 30 operational items would have the same mean (mean-anchored item calibration by grade level). *Table 15* presents the item-level descriptive statistics by grade.

Table 16. Item-level descriptive statistics from the LevelSet (version 2) field study, by grade.

Grade Level	*N* (mean students per item)	P-value Mean (SD)	Point-biserial Mean (Range)	Lexile measure mean (SD)
2	1,572.4	0.57 (0.16)	0.34 (0.06-0.53)	228.7 (202.0)
3	3,449.9	0.60 (0.17)	0.36 (-0.08-0.57)	363.7 (250.1)
4	2,969.6	0.60 (0.17)	0.34 (-0.73-0.64)	478.3 (233.0)
5	1,948.9	0.71 (0.18)	0.26 (0.06-0.44)	622.9 (219.1)
6	3,193.7	0.67 (0.20)	0.28 (-0.26-0.47)	702.9 (244.4)
7	2,022.6	0.66 (0.20)	0.26 (-0.02-0.45)	791.1 (229.9)
8	1,947.2	0.69 (0.19)	0.26 (-0.10-0.47)	836.8 (224.7)
9	2,142.6	0.70 (0.17)	0.27 (-0.21-0.44)	908.8 (200.9)
10	1,147.9	0.70 (0.19)	0.24 (-0.02-0.46)	943.8 (227.9)
11	890.5	0.70 (0.18)	0.28 (-0.18-0.47)	983.3 (227.6)
12	578.1	0.71 (0.18)	0.31 (-0.17-0.56)	992.3 (217.1)

Of the 1,100 field study items, 217 appeared in two levels (19.73%) and one item appeared in three levels (0.09%). For the items that appeared in multiple levels, the consistency of the observed difficulty estimates was assessed by computing the difference between the maximum and minimum estimates. The mean difference between the observed item difficulty and the theoretical item difficulty for the common items was 38.06L with a standard deviation of 38.03L. *Figure 5* shows the distribution of theory-observed differences for the common items. Given the consistency of observed item difficulties across multiple student samples, it was determined that common items could be used at the most appropriate grade level for operational test development.

Figure 5. Distribution of theory-observed differences for common items (N = 218).



For most levels, every item was presented at least 500 times; the lone exceptions were a Level 2 item that was only presented seven times and a Level 4 item that was only presented seven times. While these items were retained in the Winsteps analyses, they were flagged to be excluded in the selection of items for use in LevelSet (version 2) operational forms D, E, and F. In addition, item with negative point-biserial correlations were flagged to be excluded in the selection of items for use in LevelSet (version 2) operational forms D, E, and F. Finally, 23 items that were previously identified for possible sensitivity issues were flagged to be excluded in the selection of items for use in LevelSet (version 2) operational forms D, E, and F.

Field-Test Analyses—Differential Item Functioning. Differential item functioning (DIF) examines the relationship between the score on an item and group membership while controlling for ability. "An item does not display DIF if people from different groups have a different probability to give a certain response; it displays DIF if people from different groups *of the same underlying true ability* have a different probability to give a certain response" (Wikipedia Foundation, 2012). The Mantel-Haenszel procedure (1959) was introduced to psychometrics by Holland and Thayer in 1988 to study group differences on dichotomously scored items (Camilli, 2006). This procedure has become "the most widely used methodology [to examine differential item functioning] and is recognized as the testing industry standard" (Roussos, Schnipke, and Pashley, 1999, p. 293).

The Mantel-Haenszel procedure examines DIF by examining j 2×2 contingency tables, where j is the number of different levels of ability actually achieved by the examinees (actual total scores received on the test). The focal group is the group of interest and the reference group serves as a basis for comparison for the focal group (Dorans and Holland, 1993; Camilli and Shepherd, 1994).

The Mantel-Haenszel chi-square statistic tests the alternative hypothesis that there is a linear association between the row variable (score on the item) and the column variable (group membership). The χ^2 distribution has 1 degree of freedom and is determined as

$$Q_{MH} = (n-1)r^2 \qquad \text{(Equation 6)}$$

where r is the Pearson correlation between the row variable and the column variable (SAS Institute, 1985).

The Mantel-Haenszel (MH) Log Odds Ratio statistic, or estimated effect size, is used to determine the direction of differential item functioning (SAS Institute Inc., 1985). This measure is obtained by combining the odds ratios, α_j, across levels with the formula for weighted averages (Camilli and Shepherd, 1994, p. 110):

$$\alpha_j = \frac{p_{Rj} / q_{Rj}}{p_{Fj} / q_{Fj}} = \frac{\Omega_{Rj}}{\Omega_{Fj}} \qquad \text{(Equation 7)}$$

For this statistic, the null hypothesis of no relationship between score and group membership, or that the odds of getting the item correct are equal for the two groups, is not rejected when the odds ratio equals 1. For odds ratios greater than 1, the interpretation is that an individual at score level j of the Reference Group has a greater chance of answering the item correctly than an individual at score level j of the Focal Group. Conversely, for odds ratios less than 1, the interpretation is that an individual at score level j of the Focal Group has a greater chance of answering the item correctly than an individual at score level j of the Reference Group.

Educational Testing Service (ETS) classifies DIF based on the MH D-DIF statistic (Zwick, 2012), developed by Holland and Thayer, which is defined as

$$MH\ D\text{-}DIF = -2.35\ln(\alpha_j) \qquad \text{(Equation 8)}$$

Within Winsteps (Linacre, 2011), items are classified according to the ETS DIF Categories in *Table 17* below. This classification system has been in place for more than 25 years.

Table 17. ETS DIF Categories.

ETS DIF Category	MH D-DIF Statistic	DIF Interpretation
A	|DIF| < 1 and not significant at .05 level	negligible or nonsignificant DIF
B	1 ≤ |DIF| < 1.5	slight to moderate DIF
C	|DIF| ≥ 1.5 and significant at .05 level	moderate to large DIF

Tables 18 through *21* present the results from examining the differential functioning of items (DIF) during the LevelSet (version 2) field study. A total of 1,360 items were examined – the 30 items on Form B for Levels 1-4, 5-6, 7-8, 9-10, and 11-13 and 1,210 of the field test items. To be included in the DIF analyses, a minimum of 51 administrations across the various subgroups. The following student demographic classifications were examined:

- *Gender* – 1,310 items (96.3%): Male (*N* = 207,716) and Female (*N* = 195,174);
- *Race* – 1,070 items (78.7%): Non-white (*N* = 20,778) and White (*N* = 16.977) – optional reporting field;
- *Ethnicity* – 506 items (37.2%): Non-Hispanic (*N* = 5,954) and Hispanic (*N* = 32,227) – optional reporting field; and
- *SES Status* (Free and Reduced-Price Lunch) – 893 items (66.0%): No (*N* = 8,474) and Yes (*N* = 14,162) – optional reporting field.

Table 18. Differential item functioning -- male-female comparisons.

Level	Number of Items Exhibiting Category A or B DIF	Number of Items Exhibiting Category C DIF
2	117	2
3	119	1
4	106	5
5	119	1
6	118	2
7	119	1
8	119	1
9	115	5
10	117	3
11	111	9
12	108	12
Total	1,268	42

Table 19. Differential item functioning – white-non-white comparisons.

Level	Number of Items Exhibiting Category A or B DIF	Number of Items Exhibiting Category C DIF
2	101	18
3	103	17
4	95	16
5	110	10
6	112	8
7	114	6
8	114	6
9	116	4
10	110	10
Total	975	95

Table 20. Differential item functioning – Hispanic-non-Hispanic comparisons.

Level	Number of Items Exhibiting Category A or B DIF	Number of Items Exhibiting Category C DIF
2	19	3
3	52	4
6	112	8
7	24	2
8	61	6
9	114	6
10	90	3
11	2	0
Total	474	32

Table 21. Differential item functioning –SES-nonSES comparisons.

Level	Number of Items Exhibiting Category A or B DIF	Number of Items Exhibiting Category C DIF
3	87	33
4	93	18
5	116	2
6	109	11
7	112	8
8	82	4
9	118	2
10	94	4
Total	811	82

Across the 1,360 LevelSet (version 2) items and Form B items in the field study, 42 items (3.28%) showed Class C DIF in relation to gender, 95 items (8.88%) showed Class C DIF in relation to race, 32 items (6.32%) showed Class C DIF in relation to ethnicity (Hispanic-non-Hispanic) status, and 82 items (9.18%) showed DIF in relation to socio economic status Class C DIF.

After the field-test administration, in February 2014, Achieve3000 conducted a more thorough review of all items for sensitivity for international audiences. Because of this review, 59 items were identified with potential sensitivity concerns. Minor changes were made to 34 of the items, and three items were removed from the operational item pool. For the remaining items, where possible, passages were slightly modified to address the issues.

Supplemental LevelSet (version 2) Item Field Testing

In 2014, 91 items were field-tested to supplement the Level Set (version 2) item bank. A sample of 341,236 students in Grades 1 through 12 were administered a LevelSet assessment (Form D, E, or F) and six field-test items. *Table 22* presents the demographic information for the sample.

Table 22. Sample demographics for the 2014 field-test.

Variable	Category	Sample Percent (*N*=341,236)
Grade	1	0.04
	2	3.55
	3	11.12
	4	10.57
	5	10.76
	6	14.03
	7	13.43
	8	12.68
	9	10.61
	10	6.17
	11	4.19
	12	2.85
Gender	M	46.05
	F	40.99
	Missing	12.96
Race	Not White	0.97
	White	1.20
	Missing	97.82
Ethnicity	Not White	2.75
	Missing	97.25
Parent Language	English	0.36
	French	0.00
	Haitian-Creole	0.01
	Other	0.08
	Portuguese	0.00
	Spanish	0.16
	Missing	99.38
Special Classification	Has Special Classification	29.88
	No Special Classification	0.21
	Missing	69.90
SES	Is eligible for free lunch	0.30
	Is eligible for reduced-priced lunch	0.03
	Is NOT eligible for free or reduced-Priced Lunch	0.13
	Missing	99.54

Field-Test Analyses. The field-test data were analyzed using both the classical measurement model and the Rasch (one-parameter logistic item response theory) model as described previously. The field-test design of the supplemental item pool provided sufficient connectivity to analyze and evaluate the items as a single group (across all grade levels). *Table 23* presents the item-level descriptive statistics by target grade.

Table 23. Item-level descriptive statistics for the supplemental LevelSet items field-tested in 2014, by target grade.

Target Grade Level	*N* (mean students per item)	*p*-value Mean (SD)	Point-biserial Mean (Range)	Empirical Lexile Measure Mean (SD)
2	13,564.13	0.62 (0.17)	0.39 (0.26-0.48)	521.25 (177.32)
3	20,730.56	0.62 (0.15)	0.35 (0.19-0.45)	590.00 (182.21)
4	27,695.75	0.51 (0.24)	0.29 (0.15-0.37)	748.75 (265.79)
5	30,093.00	0.53 (0.23)	0.26 (0.09-0.37)	787.50 (233.04)
6	31,817.50	0.66 (0.23)	0.33 (0.19-0.38)	667.50 (249.96)
7	32,757.67	0.60 (0.14)	0.31 (0.03-0.46)	812.23 (196.65)
8	30,447.00	0.74 (0.13)	0.38 (0.25-0.43)	616.25 (156.48)
9	24,403.25	0.51 (0.23)	0.28 (0.03-0.42)	905.00 (264.04)
10	17,492.63	0.59 (0.22)	0.32 (0.11-0.44)	825.00 (238.03)
11	11,905.89	0.60 (0.17)	0.31 (0.13-0.40)	865.56 (215.36)
12	6,845.38	0.63 (0.19)	0.34 (0.16-0.49)	786.25 (227.72)

Final Status of Supplemental Items. The item performance data was reviewed and each item was classified based on its point-biserial statistic (PB) and the difference between its theoretical and observed Lexile measures (TO). Items having the weakest performance (Class D) were flagged for revision and possible additional field-testing. *Table 24* presents the final status of the supplemental items field tested in 2014, by target grade level.

Table 24 Classification by item-level descriptive statistics for the supplemental items field-tested in 2014, by target grade.

Target Grade Level	Class A PB ≥ .15 and TO ≤ 200L	Class B PB ≥ .15 and 200L < TO ≤ 400L	Class C .10 ≤ PB < .15 and TO ≤ 400L	Class D PB < .10 or TO ≤ 200L
2	1	3	1	3
3	4	4	1	
4	5	1		2
5	6		1	1
6	6	1	1	
7	4	4		1
8	5	2		1
9	5	1		2
10	1	2	4	1
11	6	2	1	
12	4	3		1
Total	**47**	**23**	**9**	**12**

Achieve3000 LevelSet Test Development

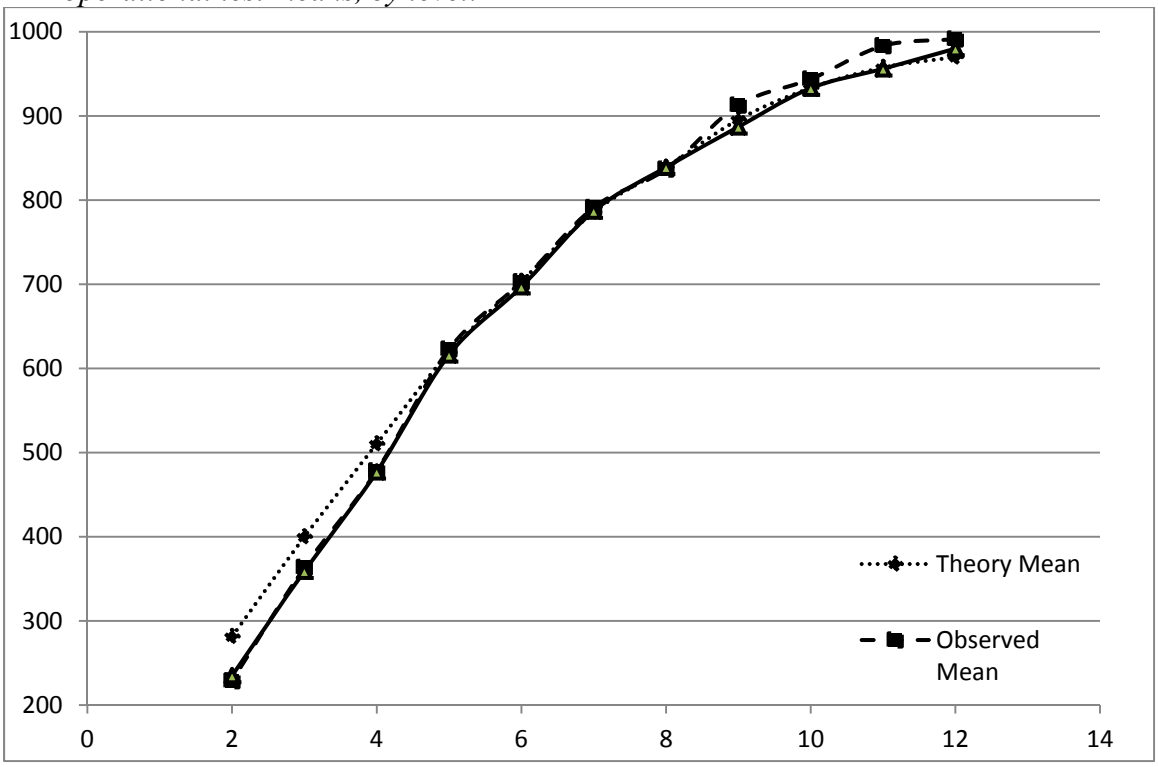
Items for the LevelSet (version 2) test forms were selected using a modified domain-sampling model, with the various forms equivalent. In the modification used here, the domain of items for each was limited to those items that had satisfactory psychometric characteristics and curricular and sensitivity approval.

Using the specifications for the LevelSet (version 2) assessments described in *Table xx* and the item bank field study results described in *Table xx*, three operational test forms – Forms D, E, and F – were created for Levels 2 through 12. The operational test means were developed using the following criteria:

- Consistent with the theoretical item mean.
- Consistent with the observed item mean from the field study.

Using these criteria, the operational forms closely reflected the observed item means for Levels 2 through 8 and the theoretical item means for Levels 5 through 12. *Figure 6* shows the relationships between the theoretical item mean, the observed item mean, and the operational test means for each of the levels.

Figure 6. Comparison of LevelSet (version 2) theoretical item means, observed item means, and operational test means, by level.



The form review process for LevelSet (version 2) was conducted in a three-stage process. First, the test and passage specifications were reviewed: Lexile measures of items and means and standard deviations of test forms, word counts across the forms, and distributions of correct responses. Next, the tests were taken to verify the answer keys and review the foils in relation to the passages and items. Finally, the overall tests were reviewed for flow and consistency. The following criteria were used to evaluate each set of tests for a grade level/span:

Curricular Perspective

- Do the topics of the passages in each form flow well?
- Is there a variety of passages on each form and no repeated content (e.g. two passages on extreme sports)?

Psychometric Perspective

- Do the final forms have the same approximate mean and range of Lexile measures as the target specifications?
- Is the distribution of the placement of correct answers within a form approximately equal (about 25% for each response position)?
- Are runs of the same correct response position avoided? (e.g. more than 3 of any response positions in a row would be undesirable.)
- Is the use of the same word as the correct response for more than one item on a form avoided?

Tables 25 through *27* show the final item parameters for LevelSet (version 2) Forms D, E, and F.

Table 25. LevelSet (version 2) mean Lexile measure by operational level and form.

Level	Form D Mean Lexile measure (SD)	Form E Mean Lexile measure (SD)	Form F Mean Lexile measure (SD)
2	235.00 (180.57)	237.00 (180.23)	233.67 (199.94)
3	358.67 (218.36)	358.33 (224.24)	361.33 (202.39)
4	475.67 (227.36)	481.33 (205.09)	475.67 (212.09)
5	617.67 (204.06)	613.00 (194.19)	618.67 (196.10)
6	697.00 (221.00)	698.00 (192.31)	695.67 (197.16)
7	785.67 (197.18)	788.00 (210.10)	788.00 (199.21)
8	842.33 (198.11)	836.67 (199.11)	841.00 (196.02)
9	885.33 (195.30)	887.33 (187.49)	887.33 (198.65)
10	932.67 (185.84)	933.00 (184.84)	933.00 (172.71)
11	957.33 (165.80)	955.33 (184.93)	957.33 (188.48)
12	979.67 (201.23)	981.00 (196.69)	979.67 (221.32)

Table 26. LevelSet (version 2) mean P-value by operational level and form.

Level	Form D Mean P-value (SD)	Form E Mean P-value (SD)	Form F Mean P-value (SD)
2	0.57 (0.14)	0.56 (0.15)	0.57 (0.16)
3	0.60 (0.16)	0.60 (0.17)	0.62 (0.15)
4	0.62 (0.17)	0.61 (0.14)	0.63 (0.14)
5	0.71 (0.18)	0.72 (0.15)	0.72 (0.18)
6	0.68 (0.20)	0.69 (0.16)	0.69 (0.16)
7	0.67 (0.19)	0.68 (0.17)	0.69 (0.17)
8	0.68 (0.16)	0.69 (0.19)	0.69 (0.16)
9	0.72 (0.16)	0.71 (0.15)	0.72 (0.16)
10	0.71 (0.15)	0.71 (0.16)	0.71 (0.16)
11	0.72 (0.16)	0.71 (0.16)	0.71 (0.16)
12	0.70 (0.16)	0.70 (0.18)	0.71 (0.18)

Table 27. LevelSet (version 2) mean point-biserial correlation by operational level and form.

Level	Form D Mean PBis (Range)	Form E Mean PBis (Range)	Form F Mean PBis (Range)
2	0.39 (0.25-0.50)	0.32 (0.09-0.46)	0.35 (0.06-0.48)
3	0.38 (0.22-0.49)	0.36 (0.12-0.53)	0.40 (0.08-0.57)
4	0.37 (0.14-0.51)	0.39 (0.16-0.53)	0.36 (0.21-0.55)
5	0.26 (0.13-0.44)	0.28 (0.13-0.47)	0.26 (0.14-0.40)
6	0.27 (0.13-0.41)	0.31 (0.16-0.42)	0.29 (0.12-0.47)
7	0.28 (0.14-0.45)	0.27 (0.10-0.43)	0.28 (0.11-0.39)
8	0.29 (0.14-0.42)	0.27 (0.12-0.47)	0.27 (0.15-0.43)
9	0.26 (0.16-0.43)	0.29 (0.14-0.44)	0.28 (0.12-0.38)
10	0.26 (0.10-0.38)	0.25 (0.10-0.46)	0.27 (0.10-0.48)
11	0.30 (0.11-0.47)	0.30 (0.16-0.43)	0.28 (0.10-0.47)
12	0.32 (0.18-0.47)	0.30 (0.09-0.48)	0.31 (0.13-0.56)

Forms G, H, and I were developed to accommodate the replacement of items in Forms D, E, and F identified as (1) including sensitive content during Spring 2014 or (2) used on another form. *Table 28* identifies the number of items in each category for LevelSet Forms D, E, and F.

Table 28. Summary of items on LevelSet Forms D, E, and F flagged for sensitivity or identified as appearing on multiple test forms.

Level	Form D		Form E		Form F	
	Sensitivity	Repeat	Sensitivity	Repeat	Sensitivity	Repeat
2	2	-	-			
3						
4						1
5		2				
6						
7		1	1	2		2
8	2	2	1	1	1	
9	1		2	1	1	
10					1	
11	2		1	1	1	
12		1	2		2	

Items field tested during Fall 2014 (results described on page 48) were used to replace the identified items in *Table 28* to produce Forms G, H, and I. *Tables 29* through *31* show the final item parameters for LevelSet (version 2) Forms G, H, and I.

Table 29. LevelSet (version 2, revised) mean Lexile measure by operational level and form.

Level	Form G Mean Lexile measure (SD)	Form H Mean Lexile measure (SD)	Form I Mean Lexile measure (SD)
2	239.93 (179.62)	237.33 (179.97)	237.07 (201.39)
3	359.47 (218.12)	358.23 (224.13)	361.07 (203.27
4	475.50 (227.49)	476.87 (210.30)	475.70 (212.29)
5	617.30 (204.42)	614.27 (193.21)	617.90 (194.82)
6	697.13 (221.25)	698.17 (191.91)	695.80 (196.96)
7	786.23 (197.49)	787.57 (209.96)	787.17 (196.36)
8	837.47 (201.19)	835.43 (198.69)	835.73 (197.54)
9	886.40 (195.99)	884.67 (180.65)	886.90 (199.39)
10	932.73 (185.46)	934.13 (183.41)	932.80 (170.95)
11	957.13 (166.41)	955.80 (175.75)	956.57 (188.47)
12	980.20 (201.68)	980.30 (196.69)	981.00 (225.92)

Table 30. LevelSet (version 2, revised) mean P-value by operational level and form.

Level	Form G Mean P-value (SD)	Form H Mean P-value (SD)	Form I Mean P-value (SD)
2	0.58 (0.15)	0.56 (0.15)	0.58 (0.16)
3	0.60 (0.16)	0.60 (0.17)	0.62 (0.15)
4	0.62 (0.17)	0.62 (0.15)	0.63 (0.14)
5	0.71 (0.18)	0.72 (0.15)	0.71 (0.19)
6	0.68 (0.19)	0.69 (0.16)	0.69 (0.16)
7	0.66 (0.19)	0.66 (0.18)	0.67 (0.18)
8	0.66 (0.16)	0.68 (0.20)	0.68 (0.16)
9	0.71 (0.17)	0.69 (0.18)	0.71 (0.16)
10	0.71 (0.15)	0.70 (0.16)	0.70 (0.18)
11	0.70 (0.18)	0.70 (0.17)	0.70 (0.17)
12	0.70 (0.18)	0.69 (0.20)	0.69 (0.22)

Table 31. LevelSet (version 2, revised) mean point-biserial correlation by operational level and form.

Level	Form G Mean PBis (Range)	Form H Mean PBis (Range)	Form I Mean PBis (Range)
2	0.39 (0.25-0.50)	0.32 (0.09-0.46)	0.34 (0.06-0.48)
3	0.38 (0.22-0.49)	0.36 (0.12-0.53)	0.40 (0.20-0.57)
4	0.37 (0.14-0.51)	0.39 (0.16-0.53)	0.36 (0.21-0.55)
5	0.27 (0.12-0.44)	0.28 (0.13-0.47)	0.25 (0.14-0.40)
6	0.28 (0.13-0.41)	0.31 (0.16-0.42)	0.30 (0.12-0.47)
7	0.29 (0.14-0.45)	0.27 (0.10-0.43)	0.28 (0.11-0.39)
8	0.30 (0.14-0.49)	0.27 (0.12-0.47)	0.27 (0.15-0.43)
9	0.27 (0.16-0.43)	0.27 (0.12-0.44)	0.28 (0.12-0.38)
10	0.26 (0.10-0.38)	0.26 (0.10-0.46)	0.25 (0.10-0.36)
11	0.30 (0.12-0.47)	0.30 (0.16-0.43)	0.28 (0.10-0.47)
12	0.31 (0.08-0.47)	0.29 (0.09-0.48)	0.30 (0.08-0.56)

Scoring and Reporting

The two main purposes of the Achieve3000 reading assessments are to initially measure student reading comprehension so reading materials can be appropriately targeted and to iteratively measure growth in reading comprehension throughout the school year. In order to meet these goals, a developmental scale must be used to report the results. The Achieve3000 assessments are reported on the Lexile scale. This section describes the procedures and the analyses used to score and report the results of Achieve3000 reading assessments.

There are two methods for calculating a LevelSet score for a student: (1) a student can receive a LevelSet score that represents his or her reading ability from a stand-alone test using a correspondence table to convert the raw score to a Lexile measure or (2) a student can receive a LevelSet score that represents his or her reading ability from a "body of work" comprised of LevelSet tests and Multiple-Choice Activities that the student has completed during this and/or prior school years using a Bayesian paradigm that aggregates the results into a "current" Lexile measure.

Achieve3000 LevelSet (version 2) Reading Test Scoring

Achieve3000 LevelSet (version 2) scores are reported on the Lexile scale. For the first administration of LevelSet (version 2), individual scores are calculated by first summing the number of correct responses (omitted items and multiple responses are counted as incorrect). The number correct is then converted to a scaled Lexile measure. For successive administrations of LevelSet (version 2), individual scores are calculated using a Bayesian scoring algorithm (described later in this section).

There are many reasons to use scale scores rather than raw scores to report test results. Scale scores overcome the disadvantage of many other types of scores (e.g., percentiles and raw scores), in that equal differences between scale score points represent equal differences in ability. Each question on a test has a unique level of difficulty; therefore, answering 23 questions correctly on one form of a test requires a slightly different level of ability from answering 23 items correctly on another form of the test. But, receiving a scale score (Lexile measure) of 675 on one form of a test represents a similar level of reading ability as receiving a scale score (Lexile measure) of 675 on another form of the test.

Correspondence tables were provided for each test form based upon the difficulties of the items on the form.

Test Use Guidelines. Students should not be administered a specific test form more than once within two years. When a student takes the same assessment form a second time, we are unsure as to how to interpret change in Lexile measures: (1) because the student's reading ability has improved/grown, or (2) because the student remembers some of the items and has experience with the testing environment.

Assessment practices should be in accordance with the generally accepted ethical standards of the education profession. Accordingly, any practice that increases students' scores should simultaneously represent an increase in students' mastery (i.e., increasing students' abilities to perform skills or demonstrate knowledge in real world situations) of the content domains tested. For more information, refer to *Standards for Educational and Psychological Testing* (AERA, APA, NCME, 2014).

Achieve3000 Multiple-Choice Activity Scores

During the 2008-2009 school year, a study was conducted to link the results from the Achieve3000 Multiple-Choice Activities with the Lexile scale. A sample of 34,885 students reading at levels from 200L to above 1200L completed both the LevelSet assessment and four activities near their reading level. Using this data, a linking function was established between the total raw score of the activity items (4 or 8 items depending on level) and the Lexile measure from LevelSet.

Scoring Achieve3000 Assessments: The Bayesian Paradigm

Bayesian methodology provides a paradigm for combining prior information with current data, both of which are subject to uncertainty, and for arriving at an estimate of current status, which is again subject to uncertainty. Uncertainty is modeled mathematically using probability.

In the Achieve3000 context, when a student is administered the placement test, the results from the test become the prior information for the following test administration—Multiple-Choice Activities of another LevelSet assessment. Each subsequent assessment uses prior information from all previous assessments.

The current data in this context is the performance on the current test (i.e., Multiple-Choice Activity score or LevelSet test), which can be summarized as the number of items answered correctly out of the total number of items attempted.

Both prior information and current data are represented via probability models reflecting uncertainty. The need for incorporating uncertainty when modeling prior information is intuitively clear. The need for incorporating uncertainty when modeling test performance is, perhaps, less intuitive. Once the test has been taken and scored, and assuming that no scoring errors were made, the performance, i.e. raw score, is known with certainty. Uncertainty arises because test performance is associated with, but not determined by, the ability of the student, and it is that ability, rather than the test performance per se, that we are endeavoring to measure. Any single performance may over- or underestimate a student’s ability, based on factors such as luck, prior knowledge, etc. Thus, although we are certain about the test performance once the results have been calculated, we remain uncertain about the ability that produced the performance.

The uncertainty associated with prior knowledge is modeled by a probability distribution for the ability parameter. This distribution is called the prior distribution and it is usually represented by a probability density function (e.g., the normal bell-shaped curve). The uncertainty arising from current data is modeled by a probability function for the data when the ability parameter is held fixed. When roles are reversed so that the data are held fixed and the ability parameter is allowed to vary, this function is called the likelihood function. In the Bayesian paradigm, the posterior probability density for the ability parameter is proportional to the product of the prior density and the likelihood, and this posterior density is used to obtain the new ability estimate along with its uncertainty.

Modeling Growth and Its Impact on the Prior. Once a posterior has been obtained from current data, that posterior can serve as the prior for an immediate repeat assessment. If a substantial amount of time has passed since the last assessment, however, then allowance should be made for an uncertain amount of growth since the last assessment. This allowance is accomplished by means of a growth model, which estimates as a function of elapsed time both student growth and the augmentation in uncertainty.

Bayesian Scoring Process: Overview of Flow

1. *Administer LevelSet Test*. The information from the LevelSet test (Lexile measure, uncertainty) becomes the prior information used by the Bayesian Scoring algorithm to calculate subsequent updated Lexile reader measures. During the administration of LevelSet, a student's performance is considered periodically to determine whether he or she is performing poorly enough to warrant ending the testing session or administering a lower test level. After 5 or 10 questions, the student's results are examined and the test administration can be stopped if warranted.

    a. If the student is scoring all of the first five items incorrectly, then the administration is stopped and the student is presented with the Level 2 test to complete.
    b. If the student is scoring more than five of the first 10 items incorrectly, then the administration is stopped and the student is presented with the Level 2 test to complete.

    Students will receive a raw score and Lexile measure based on performance on the file test level completed.

2. *Administer a Multiple-Choice Activity or another LevelSet and Compute New Values.* This step uses the information from student performance on a Multiple-Choice Activity or another administration of LevelSet to produce a posterior density. This value is used to create the new Lexile measure and associated uncertainty for the student. The new Lexile measure and uncertainty for the student will be incorporated into the prior information for the scoring of subsequent tests. For each subsequent administration of a Multiple-Choice Activity or LevelSet, all of the information on the student's reading ability from the previous test administrations is incorporated into the student's prior.

Conditions

1. Negative growth (negative differences in days since last test) is not permitted. If a student takes a test that is not scored and then takes another test, either (1) the first test should not be scored or (2) the first is scored and the second test is re-scored. If the first test is scored, the information will need to be used as the priors for the second test when re-scoring. Zero time (i.e., tests taken on the same day) will follow the standard process. Zero time means that sigma old will be automatically used as sigma update.

2. Changes in answer key and item difficulty should result in a re-score of any test affected. All tests taken after that rescore will need to have the Bayesian Score recalculated.

Conventions for Reporting

Lexile measures are reported as a number followed by a capital "L" for "Lexile." There is no space between the measure and the "L" and measures of 1,000 or greater are reported without a comma (e.g., 1050L). The Lexile scale is a developmental scale for reporting reader ability and text complexity, ranging from below 200L for beginning readers and beginning-reader materials to above 1600L for advanced readers and materials. Reader Lexile measures are reported in 5-unit intervals.

Prior to May 1, 2014, all Lexile reader measures at or below 0L were reported as BR (Beginning Reader). Starting in spring 2014, Lexile reader measures below 0L may be reported with a more specific measure. These BR measures are shown as "BRxxxL." For example, a Lexile reader measure of -150 is reported as BR150L where "BR" stands for "Beginning Reader" and replaces the negative sign in the number. The Lexile scale is like a thermometer, with numbers below zero indicating decreasing reading ability as the number moves away from zero. The smaller the number following the BR code, the more advanced the reader is. For example, a BR150L reader is more advanced than a BR200L reader. Above 0L, measures indicate increasing reading ability as the numbers increase. For example, a 200L reader si more advanced than a 150L reader.

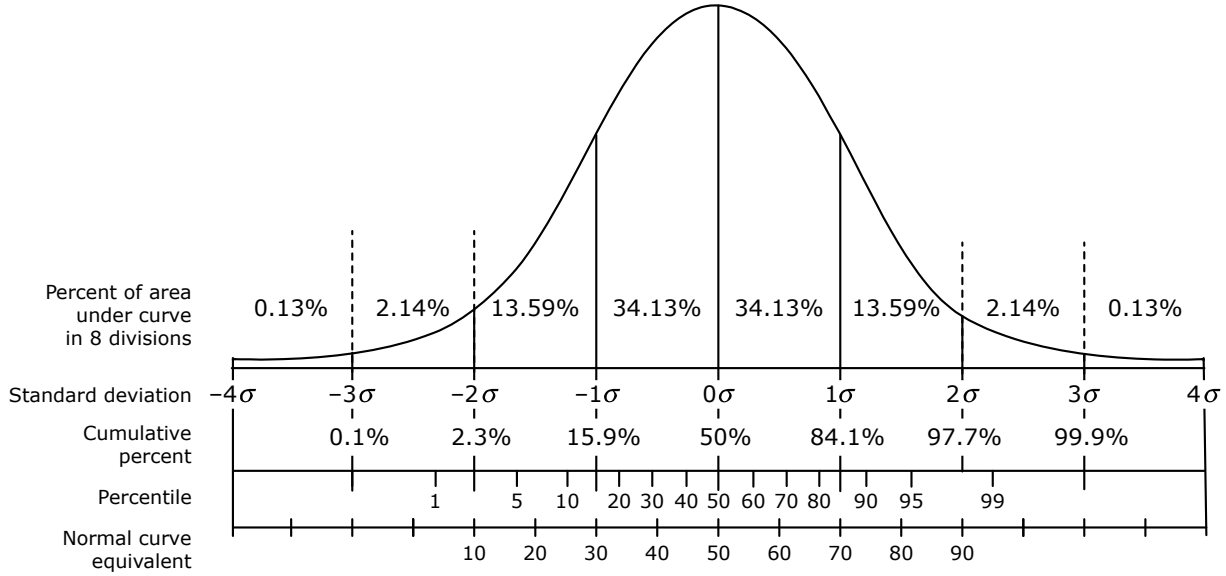
The measures that are reported for an individual student should reflect the purpose for which they will be used. If the purpose is accountability (at the student, school, or district level), then actual measures should be reported at all score points. If the purpose is instructional, then the scores should be capped at the upper bounds of measurement error (e.g., 90th percentile point based on prior research by MetaMetrics with the Lexile Framework). In instructional environments where the purpose of the Lexile measure is to appropriately match readers with texts, all scores below 0L should be reported as "BRxxxL." No student should receive a negative Lexile measure on a score report. It is suggested that the lowest reported value below 0L is BR400L.

Interpreting Achieve3000 Assessment System Results

Achieve3000's assessment system provides both criterion-referenced and norm-referenced interpretations of the Lexile measures. Criterion-referenced interpretations of test results provide a rich frame of reference that can be used to guide instruction and text selection for optimal student reading growth. While norm-referenced interpretations of test results are often required for accountability purposes, they indicate only how well the student is reading in relation to how other, similar students read.

Norm-Referenced Interpretations. A norm-referenced interpretation of a test score expresses how a student performed on the test compared to other students of the same age or grade. Norm-referenced interpretations of reading test results, however, do not provide any information about what a student can or cannot read. For accountability purposes, percentiles, normal curve equivalents (NCEs), and stanines are used to report test results when making comparisons (norm-referenced interpretations). For a comparison of these measures, refer to *Figure 7* below.

Figure 7. Normal distraction of scores described in scale scores, percentiles, stanines, and NCEs.



The percentile rank of a score indicates the percentage of scores less than or equal to that score. Percentile ranks range from 1 to 99. For example, if a student scores at the 65th percentile, it means that he or she performed as well as or better than 65% of the norm group. Real differences in performance are greater at the ends of the percentile range than in the middle. Percentile ranks of scores can be compared across two or more distributions; percentile ranks cannot be used to determine differences in relative rank due to the fact that the intervals between adjacent percentile ranks do not necessarily represent equal raw score intervals. Note that the percentile rank does not refer to the percentage of items answered correctly.

A normal curve equivalent (NCE) is a normalized student score with a mean of 50 and a standard deviation of 21.06. NCEs range from 1 to 99. NCEs allow comparisons between different tests for the same student or group of students and between different students on the same test. NCEs have many of the same characteristics as percentile ranks, but have the additional advantage of being based on an interval scale. That is, the difference between two consecutive scores on the scale has the same meaning throughout the scale. NCEs are required by many categorical funding agencies (for example, Title I).

A stanine is a standardized student score with a mean of 5 and a standard deviation of 2. Stanines range from 1 to 9. In general, stanines of 1–3 are considered below average, stanines of 4–6 are considered average, and stanines of 7–9 are considered above average. A difference of 2 between the stanines for two measures indicates that the two measures are significantly different. Stanines, like percentiles, indicate a student's relative standing in a norm group.

While not very useful at the student level, normative information can be useful (and often required) at the aggregate levels for program evaluation.

A linking study conducted with the Lexile Framework developed normative information based on a sample of 512,224 students from a medium-to-large state. The majority of the students in the norming population were White (66.3%), with 29.3% African American, 1.7% Native American, 1.2% Hispanic, 1.0% Asian, and 0.6% Other. Less than 1% (0.7%) of the students were classified as "limited English proficient," and 10.1% of the students were classified as "Students with Disabilities." Approximately 40% of the students were eligible for the free or reduced-price lunch program. Approximately half of the schools in the state had some form of Title I program (either school-wide or targeted assistance). The sample's distributions of scores on norm-referenced and other standardized measures of reading comprehension are similar to those reported for national distributions.

Criterion-Referenced Interpretations. A growing trend in education is to differentiate between content standards—curricular frameworks that specify what should be taught at each grade level—and performance standards—what students must do to demonstrate proficiency with respect to the specific content. Increasingly, educators and parents want to know more than just how a student's performance compares with that of other students: they ask, "What level of performance does a score represent?" and "How good is good enough?"

The Lexile Framework for Reading, in combination with Achieve3000 reading results, provides a context for examining performance standards from two perspectives—reader-based standards and text-based standards. Reader-based standards are determined by examining the skills and knowledge of students identified as being at the requisite level (the examinee-centered method) or by examining the test items and defining what level of skills and knowledge the student must have to be at the requisite level (the task-centered method). A cut score is established that differentiates between students who have the desired level of skills and knowledge to be considered as meeting the standard and those who do not. Text-based standards are determined by specifying those texts that students with a certain level of skills and knowledge (for example, a high school graduate) should be able to read with a specified level of comprehension. A cut

score is established that reflects this level of ability and is then annotated with benchmark texts descriptive of the standard.

To aid in describing students' reading performance on assessments that do not report in the Lexile metric, MetaMetrics developed a set of national performance standards for Achieve3000 to use. The first set of performance standards developed for grades 2 through 12 were based on four performance levels: Levels I through IV. These levels describe performance on the LevelSet assessment where Level III describes "proficient reading performance." "Proficient" was defined as performance that exhibited competent academic performance when students read grade-level-appropriate text and could be considered as reading "on Grade Level." Students performing at this level should be able to refer to details in the passage, draw conclusions, and make comparisons and generalizations when reading news articles developmentally appropriate for their nominal grade level.

The revised performance standards developed for Grades 2 through 12 are based on four performance levels: Levels I through IV. These levels describe performance on the LevelSet assessment where Level III describes "on track" reading performance. "On track" was defined as performance that exhibited competent academic performance when students read grade-level-appropriate text and could be considered as reading "on track for college and career readiness" as defined by the Common Core State Standards (CCSSO and NGA, ELA Appendix A, 2010b).

During spring 2012, the Lexile ranges associated with the Common Core grade ranges were expanded by +/-30L (Nelson, Perfetti, Liben, & Liben, 2012). Consequently, the LevelSet performance standards developed for Grades 2 through 12 were revised to reflect this change in the reading materials that a student should be reading to be considered as being "on track" for college and career (Achieve3000, 2012) and are presented in *Table 32*.

Table 32. Revised A3K 4-level performance standards in the Lexile metric, revised June 2012.

Grade	Level I	Level II	Level III (On Track)	Level IV
1	BR	BR to 185L	190L to 530L	535L and Above
2	150L and Below	155L – 415L	420L to 650L	655L and Above
3	265L and Below	270L – 515L	520L to 820L	825L and Above
4	385L and Below	390L – 735L	740L to 940L	945L and Above
5	500L and Below	505L – 825L	830L to 1010L	1015L and Above
6	555L and Below	560L – 920L	925L to 1070L	1075L and Above
7	625L and Below	630L – 965L	970L to 1120L	1125L and Above
8	660L and Below	665L – 1005L	1010L to 1185L	1190L and Above
9	775L and Below	780L – 1045L	1050L to 1260L	1265L and Above
10	830L and Below	835L – 1075L	1080L to 1335L	1340L and Above
11/12	950L and Below	955L – 1180L	1185L to 1385L	1390L and Above

Reliability

If use is to be made of some piece of information, then the information should be reliable—stable, consistent, and dependable. In reality, all test scores have some error (or level of uncertainty). This uncertainty in the measurement process is related to three factors: (1) the statistical model that was used to compute the score, (2) the items that were used to determine the score, and (3) the condition of the reader when the items used to determine the score were collected. Once the level of uncertainty in a test score is known, then it can be taken into account when using the test results.

Reliability, or the consistency of scores obtained from an assessment, is a major consideration in evaluating any assessment procedure. Two sources of uncertainty have been examined with Achieve3000 LevelSet (version 2)—text error and reader error.

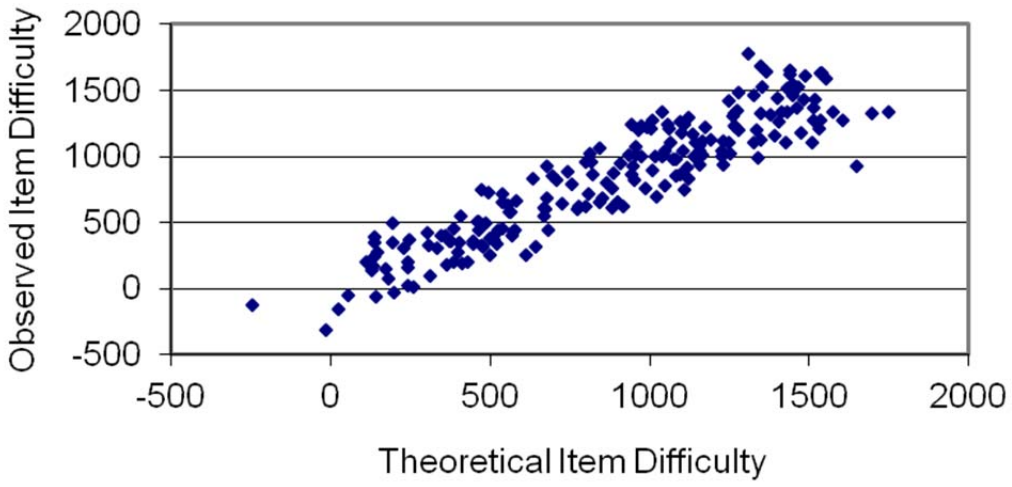
Text Measure Error Associated with The Lexile Framework for Reading

To determine a Lexile measure for a text, the standard procedure is to process the entire text. All pages in the work are concatenated into an electronic file that is processed by a software package called the Lexile Analyzer (developed by MetaMetrics, Inc.). The analyzer "slices" the text file into as many 125-word passages as possible, analyzes the set of slices, and then calibrates each slice in terms of the logit metric. That set of calibrations is then processed to determine the Lexile measure corresponding to a 75% comprehension rate. The analyzer uses the slice calibrations as test item calibrations and then solves for the measure corresponding to a raw score of 75% (e.g., 30 out of 40 correct, as if the slices were test items). Obviously, the measure corresponding to a raw score of 75% on *The Stories that Julian Tells* (520L) would be lower than the measure corresponding to a comparable raw score on *USA Today* (1200L). The Lexile Analyzer automates this process, but what "certainty" can be attached to each text measure?

Using the bootstrap procedure to examine error due to the text samples, the above analysis could be repeated. The result would be an identical text measure to the first because there is no sampling error when a complete text is calibrated. There is, however, another source of error that increases the uncertainty about where a text is located on the Lexile Map. The Lexile Theory is imperfect in its calibration of the difficulty of individual text slices.

Study 1. To examine text measurement error, 200 items that had been previously calibrated to the Lexile scale and shown to fit the Rasch model were administered to 3,026 students in grades 2 through 12 in a large urban school district. For each item, the observed item difficulty calibrated from the Rasch model was compared with the theoretical item difficulty calibrated from the regression equation used to calibrate texts. A scatter plot of the data is presented in *Figure 8*

Figure 8. Scatter plot between observed item difficulty and theoretical item difficulty.



The correlation between the observed and the theoretical calibrations for the 200 items was 0.92 and the root mean square error was 178L. Therefore, for an individual slice of text the measurement error is 178L.

The standard error of measurement associated with a text is a function of the error associated with one slice of text (178L) and the number of slices that are calibrated from a text. Very short books have larger uncertainties than longer books. A book with only four slices would have an uncertainty of 89L whereas a longer book such as *War and Peace* (4,082 slices of text) would only have an uncertainty of 3L (33).

A typical grade 3 reading test has appropriately 2,000 words in the passages. To calibrate this text, it would be sliced into sixteen 125-word passages. The error associated with this text measure would be 45L. A typical grade 7 reading test has approximately 3,000 words in the passages and the error associated with the text measure would be 36L. A typical grade 10 reading test has approximately 4,000 words in the passages and the error associated with the text measure would be 30L.

Table 33. Standard errors for selected values of the length of the text.

Title	Number of Slices	Text Measure	Standard Error of Text
The Stories Julian Tells	46	520L	26
Bunnicula	102	710L	18
The Pizza Mystery	137	620L	15
Meditations of First Philosophy	206	1720L	12
Metaphysics of Morals	209	1620L	12
Adventures of Pinocchio	294	780L	10
Red Badge of Courage	348	900L	10
Scarlet Letter	597	1420L	7
Pride and Prejudice	904	1100L	6
Decameron	2431	1510L	4
War and Peace	4082	1200L	3

Study 2. A second study was conducted by Stenner, Burdick, Sanford, and Burdick (2006) during 2002 to examine ensemble differences across items. An ensemble consists of all of the items that could be developed from a selected piece of text. The theoretical Lexile measure of a piece of text is the mean theoretical difficulty of all items associated with the text. Stenner and his colleagues state that the "Lexile Theory replaces statements about individual items with statements about ensembles. The ensemble interpretation enables the elimination of irrelevant details. The extra-theoretical details are taken into account jointly, not individually, and, via averaging, are removed from the data text explained by the theory" (p. 314). The result is that when making text-dependent generalizations, text readability can be measured with high accuracy and the uncertainty in expected comprehension is largely due to the unreliability in reader measures.

Participants. Participants in this study were students from four school districts in a large southwestern state. These students were participating in a larger study that was designed to assess reading comprehension with the Lexile scale. The total sample included 1,186 grade 3 students, 893 grade 5 students, and 1,531 grade 8 students. The mean tested abilities of the three samples were similar to the mean tested abilities of all students in each grade on the state reading assessment. Though 3,610 students participated in the linking study, the data records for only 2,867 of these students were used for determining the ensemble item difficulties presented in this paper. The students were administered one of four forms at each grade level. The reduction in sample size is because one of the four forms was the data records from this fourth form were not included in the ensemble study.

Instrument. Thirty text passages were response-illustrated by three different item writing teams resulting in three items nested within each of 30 passages for a total of 90 items. All three teams employed a similar item-writing protocol. The ensemble items were spiraled into test forms at the grade level (3, 5, or 8) that most closely corresponded with the item's theoretical calibration.

Winsteps (Wright & Linacre, 2003) was used to estimate item difficulties for the 90 ensemble study items. Of primary interest in this study was the correspondence between theoretical text calibrations and the 30 ensemble means and the consequences that theory misspecification holds for text measure standard errors.

Results. Table 34 presents the ensemble study data in which three independent teams wrote one item for each of thirty passages to make a total of ninety items. Observed ensemble means taken over the three ensemble item difficulties for each passage are given along with an estimate of the within ensemble standard deviation for each passage.

Table 34. Analysis of 30 item ensembles providing an estimate of the theory misspecification error.

Item Number	Theory (T)	Team A	Team B	Team C	Mean[a] (O)	SD[b]	Within Ensemble Variance	T-O
1	400L	456	553	303	437	126	15,909	-37
2	430L	269	632	704	535	234	54,523	-105
3	460L	306	407	483	399	88	7,832	61
4	490L	553	508	670	577	84	6,993	-87
5	540L	747	825	654	742	86	7,332	-202
6	569L	909	657	582	716	172	29,424	-147
7	580L	594	683	807	695	107	11,386	-115
8	620L	897	805	497	733	209	43,808	-113
9	720L	584	850	731	722	133	17,811	-2
10	820L	967	740	675	794	153	23,445	26
11	510L	267	602	468	446	169	28,413	64
12	720L	953	587	774	771	183	33,386	-51
13	745L	791	972	490	751	244	59,354	-6
14	770L	855	1017	958	944	82	6,717	-174
15	790L	866	557	553	659	180	32,327	131
16	770L	1077	1095	893	1022	112	12,446	-252
17	850L	747	864	674	762	96	9,257	88
18	870L	974	1197	870	1014	167	28,007	-144
19	880L	1093	733	692	839	221	48,739	41
20	1020L	888	1372	863	1041	287	82,429	-21
21	812L	902	1133	715	917	209	43,753	-105
22	866L	819	809	780	803	20	419	63
23	940L	945	1057	965	989	60	3,546	-49
24	960L	1124	1205	1170	1166	41	1,653	-206
25	1010L	926	1172	899	999	151	22,733	11
26	1020L	1260	987	881	1043	196	38,397	-23
27	1040L	1503	1361	1239	1368	132	17,536	-328
28	1060L	1109	1091	981	1061	69	4,785	-1
29	1150L	1014	1104	1055	1058	45	2,029	92
30	1210L	1275	1291	1014	1193	156	24,204	17

Total MSE = Average of $(T-O)^2$ = 12022; Pooled within variance for ensembles = 7984; Remaining between ensemble variance = 4038; Theory misspecification error = 64L.

Barlett's test for homogeneity of variance produced an approximate chi-square statistic of 24.6 with 29 degrees of freedom and sustained the null hypothesis that the variances are equal across ensembles.

Note. All data are reported in Lexile measures. Mean (O) is the observed ensemble mean. SD is the standard deviation within ensemble.

The difference between passage text calibration and observed ensemble mean is provided in the last column. The root mean square error (RMSE) from regressing observed ensemble means on

text calibrations is 110L. *Figures 9* and *10* show plots of observed ensemble means against theoretical text calibrations.

Figure 9. Plot of observed ensemble means and theoretical calibrations (RMSE = 110L).

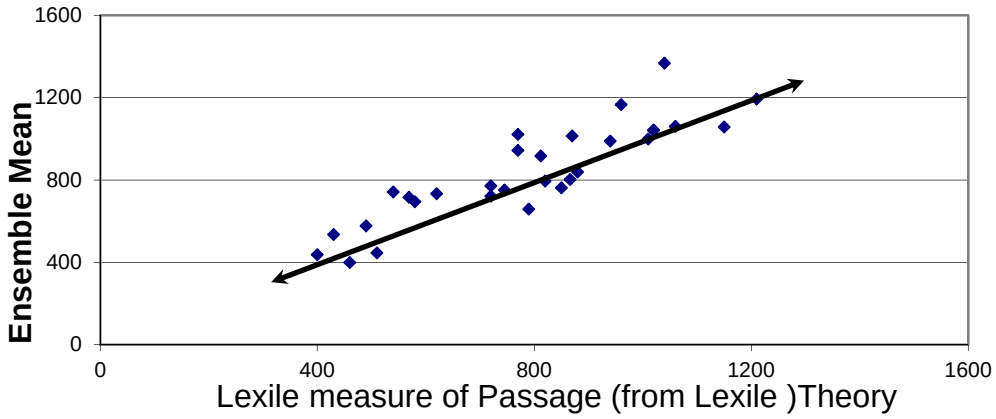
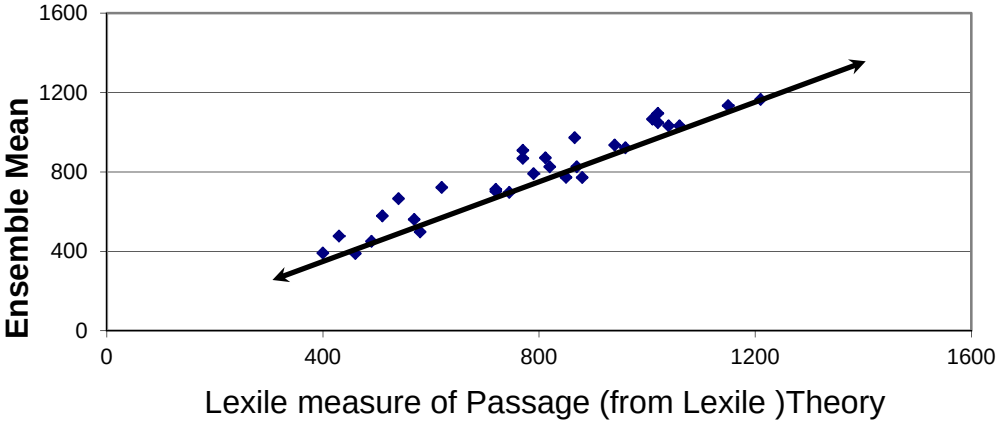


Figure 10. Plot of simulated "true" ensemble means and theoretical calibrations.



Note that some of the deviations around the identity line are because ensemble means are poorly estimated given that each mean is based on only three items. *Figure 9* depicts simulated data when an error term [distributed ~ $N(0, \sigma = 64L)$] is added to each theoretical value. Contrasting the two plots in *Figures 9* and *10* provides a visual depiction of the difference between regressing observed ensemble means on theory and regressing "true" ensemble means on theory. An estimate of the RMSE when "true" ensemble means are regressed on the Lexile Theory is 64L ($\sqrt{110^2 - 89^2} = \sqrt{4{,}038} = 63.54$). This is the average error at the passage level when predicting "true" ensemble means from the Lexile Theory.

Since the RMSE equal to 64L applies to the expected error at the passage/slice level, a text made up of n_i slices would have an expected error of $64 \div \sqrt{n_i}$ .. Thus, a short periodical article of 500 words ($n_i = 4$) would have a SEM of 32L ($64 \div \sqrt{4}$), whereas a much longer text like the novel *Harry Potter: Chamber of Secrets* (880L, Rowling, 2001) would have a SEM of 2L ($64 \div \sqrt{900}$).

Table 35 contrasts the SEMs computed using the old method with SEMs computed using the Lexile Framework for several books across a broad range of Lexile measures.

Table 35. Old method text readabilities, resampled SEMs, and new SEMs for selected books.

Book	Number of Slices	Lexile Measure	Resampled Old SEM[a]	New SEM
The Boy Who Drank Too Much	257	447L	102	4
Leroy and the Old Man	309	647L	119	4
Angela and the Broken Heart	157	555L	118	5
The Horse of Her Dreams	277	768L	126	4
Little House by Boston Bay	235	852L	126	4
Marsh Cat	235	954L	125	4
The Riddle of the Rosetta Stone	49	1063L	70	9
John Tyler	223	1151L	89	4
A Clockwork Orange	419	1260L	268	3
Geometry and the Visual Arts	481	1369L	140	3
The Patriot Chiefs	790	1446L	139	2
Traitors	895	1533L	140	2

Notes. (a) Three slices selected for each sample replicate. one slice from the first third of the book, one from the middle third and one from the last third. Resampled 1,000 times. SEM = SD of the resampled distribution.

Standard Error of Measurement

Because of the presence of measurement error associated with test unreliability, there is always some uncertainty about a student's true score. This uncertainty is known as the standard error of measurement (SEM). The magnitude of the SEM of an individual student's score depends on the following characteristics of the test:

- the number of test items—smaller standard errors are associated with longer tests,
- the quality of the test items—in general, smaller standard errors are associated with highly discriminating items for which correct answers cannot be obtained by guessing, and
- the match between item difficulty and student ability—smaller standard errors are associated with tests composed of items with difficulties approximately equal to the ability of the student (targeted tests).

Whenever a model is used to explain the relationship between parameters, some of the differences between observed and theoretical measures cannot be explained. Achieve3000's LevelSet (version 2) assessments were developed using the Rasch one-parameter item response theory model to relate a reader's ability and the difficulty of the items. There is a unique amount of measurement error due to model misspecification (violation of model assumptions) associated with each score on the assessment. *Tables* 36 and 37 describe the uncertainties due to model misspecification for LevelSet (version 2) assessments. The Lexile ranges shown in the table indicate reader measures associated with scores of approximately 25% to approximately 75% correct.

Table 36. Uncertainties for LevelSet (version 2) test forms by Lexile range (approximately 25% - 75% correct), Levels 2 through 7.

Reader Measure	Level 2	Level 3	Level 4	Grade 5	Level 6	Level 7
BR200L to BR105L	78					
BR100L to BR5L	73	80				
0 to 95L	72	76	83			
100L to 195L	75	75	79	85		
200L to 295L	79	77	77	78	83	
300L to 395L		82	77	75	78	81
400L to 495L			79	75	76	75
500L to 595L			84	77	77	74
600L to 695L				82	80	75
700L to 795L					85	78
800L to 895L						86
Median	72	75	76	75	76	74

Table 37. Uncertainties for LevelSet (version 2) test forms by Lexile range (approximately 25% - 75% correct), Levels 8 through 12.

Reader Measure	Level 8	Level 9	Level 10	Grade 11	Level 12
400L to 495L	80	83			
500L to 595L	75	77	79	80	82
600L to 695L	74	73	75	74	76
700L to 795L	75	74	73	71	74
800L to 895L	80	77	75	73	75
900L to 995L		85	81	77	78
1000L to 1095L					86
Mean	771	73	73	71	74

Internal Consistency

Internal-consistency reliability examines the extent to which a test measures a single basic concept. One procedure for determining the internal consistency of a test is coefficient alpha (α). Coefficient alpha sets an upper limit to the reliability of tests constructed in terms of the domain-sampling model.

For LevelSet (version 2), internal reliability coefficients were calculated for Forms D, E, and F at each grade level from a sample of 9,922 students from 9 districts in 7 states (CA, HI, IL, IN, LA, NJ, OK). The following districts participated in the reliability studies and a subset participated in the studies described in the validity section of this technical guide.

- Carpinteria Unified School District, CA
- Chicago Public Schools Network 06, IL
- Eatontown Public School District, NJ
- Kapaa-Kauai-Waimea Complex, HI
- Lafourche Parish School District, LA
- Long Branch School District, NJ
- Oklahoma City Public Schools, OK
- Plymouth Community School District, IL
- San Diego Unified School District, CA

Data were collected from Fall 2014 LevelSet administrations. Extreme scores (0% or 100%) were removed from the sample, which resulted in a final sample of 9,882 students. Each student was administered two test forms as part of a validity study conducted by Achieve3000 and described in the next section of the technical guide. Both tests for all students in the final sample are included in the internal reliability data; the results are shown in *Table 38*. With the exception of Grade 11, Form D, all coefficients range between 0.72 and 0.90, with the majority falling in the 0.80 to 0.87 range. A widely accepted guideline is that internal consistency coefficients between 0.7 and 0.8 are acceptable, coefficients between 0.8 are and 0.9 are good, and coefficients .0.9 and above are excellent (George & Mallery, 2003).

Table 38. Internal reliability coefficients for LevelSet (version 2), Forms D, E, and F (N =19,764).

Grade	Coefficient Alpha (*N*)		
	Form D	Form E	Form F
2	0.90 (1,586)	0.86 (1,665)	0.87 (1,498)
3	0.84 (686)	0.82 (697)	0.86 (751)
4	0.85 (775)	0.86 (783)	0.83 (716)
5	0.81 (960)	0.81 (892)	0.82 (966)
6	0.80 (605)	0.83 (629)	0.81 (644)
7	0.80 (459)	0.80 (464)	0.81 (469)
8	0.72 (180)	0.73 (229)	0.72 (200)
9	0.81 (329)	0.85 (347)	0.85 (336)
10	0.80 (321)	0.81 (333)	0.81 (322)
11	0.65 (75)	0.74 (82)	0.73 (85)
12	0.77 (562)	0.81 (560)	0.83 (558)

Test-Retest Reliability

Test-retest reliability examines the stability of test scores over time. When the same test is administered twice within a reasonable time, the correlation of the results provides evidence of test-retest reliability. The closer the results, the greater the test-retest reliability of the assessment.

For LevelSet (version 2), the test-retest reliabilities were examined for a sample of 3,384 students who were administered Forms D, E, and F in the fall of 2014 and then the same form again within a two-week window. This sample was a subset of the sample used to calculate internal reliabilities for the test forms and included students from 9 districts in 7 states (CA, HI, IL, IN, LA, NJ, OK). *Table 39* shows the resulting test-retest correlations and number of students who were administered each set of test forms. Few, if any, standards exist for judging acceptable values for test-retest reliability, but values for well-established commercially available tests have published values ranging from the .70, .80 and even low .90 ranges (Crocker & Algina, 1986).

Table 39. Test-retest correlations for LevelSet (version), Forms D, E, and F (N = 3,384).

Grade	Test-Retest Reliability Coefficients (*n*)		
	Form D	Form E	Form F
1	0.90 (9)	0.83 (13)	0.74 (13)
2	0.91 (102)	0.79 (108)	0.86 (85)
3	0.92 (118)	0.94 (148)	0.93 (132)
4	0.95 (115)	0.93 (115)	0.96 (104)
5	0.94 (177)	0.96 (177)	0.96 (169)
6	0.94 (166)	0.96 (136)	0.97 (141)
7	0.97 (120)	0.95 (119)	0.95 (121)
8	0.96 (104)	0.98 (118)	0.97 (108)
9	0.92 (109)	0.92 (117)	0.96 (98)
10	0.96 (100)	0.95 (84)	0.93 (100)
11	0.96 (9)	0.98 (11)	0.80 (20)
12	0.74 (6)	0.96 (5)	0.93 (7)

Alternate-Form Reliability

Alternate-form reliability examines the consistency of test scores sampled from the same domain of items. When two forms that are considered to be parallel, or interchangeable (i.e. LevelSet Forms D and E) are administered to the same group of students, the correlation coefficient provides information about how well the two parallel forms yield the same results for students and is often referred to as a coefficient of stability and equivalence (Haertel, 2006). LevleSet (version 2), Forms D, E, and F were developed to be parallel test forms so they could be used throughout a given school year to evaluate student reading growth. Test-retest reliability coefficients are generally regarded as the ideal reliability estimate because they reflect the uncertainty in scores arising from examinees' idiosyncratic reactions to different test forms (lack of equivalence between forms), lack of stability over time, and random error (Schmidt, Le, & Ilies, 2003). Although there are no established rules for determining a minimally acceptable value for alternate-from reliabilities, some standardized achievement tests report values in the 0.80 to low 0.90 range for alternate form reliability (Crocker & Algina).

For LevelSet (version 2), alternate-form reliabiliy was examined for a sample of 6,529 students who were administered two different forms (Forms D, E, and F) within two weeks in the fall of 2014. This sample was a subset of the sample used to calculate internal reliabilities for the test forms and included students from 9 districts in 7 states (CA, HI, IL, IN, LA, NJ, OK). *Table 40* shows the alternate-form reliabilities for all combinations of forms. The order of the test administration was varied for students. For example, some students were administered D first, and then E. Others were administered E first, and then D. Results from both groups (e.g., D-E and E-D) were combined to determine the correlations for each test pair shown in *Table 40*.

Table 40. Alternate form reliability coefficients for LevelSet (version 2), Forms D, E, and F (N = 6,529).

Grade	Alternate-Form Reliability Coefficients (*n*)		
	Forms D and E	Forms D and F	Forms E and F
1	0.71 (31)	0.78 (23)	0.79 (23)
2	0.80 (187)	0.84 (159)	0.81 (175)
3	0.89 (230)	0.90 (255)	0.93 (255)
4	0.93 (228)	0.91 (221)	0.92 (210)
5	0.93 (327)	0.92 (318)	0.94 (318)
6	0.93 (284)	0.93 (275)	0.94 (296)
7	0.94 (270)	0.92 (260)	0.93 (275)
8	0.95 (190)	0.97 (203)	0.93 (236)
9	0.92 (209)	0.94 (209)	0.93 (221)
10	0.92 (168)	0.90 (181)	0.91 (174)
11	0.95 (30)	0.94 (25)	0.99 (35)
12	0.94 (12)	0.78 (11)	0.98 (14)

Validity

The *2014 Standards for Educational and Psychological Testing* (American Educational Research Association, American Psychological Association, and National Council on Measurement in Education) state that "validity refers to the degree to which evidence and theory support the interpretations of test scores for proposed uses of tests" (p. 11). Validity evidence provides information about how well a test will fulfill its intended function. "The process of ascribing meaning to scores produced by a measurement procedure is generally recognized as the most important task in developing an educational or psychological measure, be it an achievement test, interest inventory, or personality scale" (Stenner, Smith, and Burdick, 1983). Because a test score from the Achieve3000 assessment system will be used as a measure of the reading ability of a student and will be used to target reading materials and instruction, validity evidence should primarily focus on the degree to which LevelSet (version 2) measures reading comprehension of appropriate reading material. For convenience, the various sources of validity evidence—content, criterion-related, and construct validity evidence—will be described as if they are unique, independent components rather than interrelated parts. A primary source of validity evidence comes from examination of the content of LevelSet (version 2) and the degree to which the assessments can be said to measure reading comprehension (construct validity evidence). In addition, in the spring of 2014, criterion related validity evidence was obtained by examining the relationship between the LevelSet tests and other tests of reading comprehension.

Content Validity Evidence

Validity evidence for the content of a test relates to the degree to which the test content is supportive of the intended interpretations of the test scores. Achieve3000's LevelSet (version 2) has been designed to measure comprehension of informational texts. To this end, informational texts have been included in the tests. In addition, the text difficulty of the reading passages was analyzed using the Lexile Analyzer to ensure that the difficulty of the text was appropriate for the students for whom the tests were designed. The difficulty of the item vocabulary was also matched to the difficulty of the passage. The section in this technical report entitled *Development of Achieve3000 LevelSet Assessments* describes the difficulty of the test passages and the item development process. All passages were designed to reflect material read within the Achieve3000 instructional products (KidBiz3000, TeenBiz3000, Spark3000, and Empower3000), and students are asked to respond to the text in ways that are appropriate for the genre. The passages and items were thoroughly reviewed prior to placement on a test.

In addition to reading complex text, students must use the information to answer questions about the text. The CCSS (NGA and CCSSO, 2010a) identifies three standards related to the key ideas and details in the text that define what students should understand and be able to do--

1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

PARCC describes close reading as follows:

> Close, analytic reading stresses engaging with a text of sufficient complexity directly and examining meaning thoroughly and methodically, encouraging students to read and reread deliberately. Directing student attention on the text itself empowers students to understand the central ideas and key supporting details. It also enables students to reflect on the meanings of individual words and sentences; the order in which sentences unfold; and the development of ideas over the course of the text, which ultimately leads students to arrive at an understanding of the text as a whole. (PARCC, 2011, p. 7)

With the embedded completion statement item format used with LevelSet, the student is asked to read a passage taken from an actual text and then choose the option that best fills the blank in the last statement. In order to complete the statement, the student must respond on an inferential level (determine the main idea of the passage, draw an inference from the material presented, or make a connection between sentences in the passage). This inferential level is consistent with Depth of Knowledge (DOK) Level 2 (skills and concepts) and Level 3 (strategic thinking) (Webb, 2007).

- Level 2 (skills and concepts) includes the engagement of some mental processing beyond recalling or reproducing a response. The content knowledge or process involved is more complex than in Level 1. Keywords that generally distinguish a Level 2 item include 'classify,' 'organize,' 'estimate,' 'make observations,' 'collect and display data,' and 'compare data.'

- Level 3 (strategic thinking) requires reasoning, planning, using evidence, and higher level of thinking than the previous two levels. The complexity results because the multistep task requires more demanding reasoning.

In June 2015, a study was conducted to examine the alignment of the LevelSet items with specific CCSS standards (MetaMetrics, 2015). Two English Language Arts subject matter experts (SMEs) participated in the study. The SMEs had experience in reading item and test development (number of years: 8.5 years and 1.5 years), represented diverse backgrounds (gender: female and male), and had a range of educational backgrounds related to English Language Arts (degree: Master of Fine Arts and Bachelor of Fine Arts).

The two English Language Arts SMEs were trained on CCSS Standards 1-3 (Key Ideas and Details). Each SME was provided a copy of the CCSS Standards and the grade-specific standards for Grades 3, 7, and 10. A discussion was held to examine each of the three standards (Appendix A, page 10) and what students should be able to do by the end of the grade level in relation to each standard (Appendix A, pages 14, 39, and 40). After initial training in how to

code the items using the first 10 items of the Grade 5, Form G LevelSet form, each SME independently coded the remaining 20 items. The inter-rater reliability was 79% perfect agreement. After discussion of the results, another short training session was conducted and the inter-rater reliability increased to 88% perfect agreement.

SMEs were then instructed to independently code each item on Forms G, H, and I of LevelSet Grades 3, 7, and 10 and then meet to come to consensus as to the CCSS Standard associated with each item. The results are presented in *Table 41*.

Table 41. Summary of the alignment of the LevelSet items compared to CCSS standards.

Test Form	Number Items Aligned with CCSS 1 (Proportion)	Number Items Aligned with CCSS 2 (Proportion)	Number Items Aligned with CCSS 3 (Proportion)
3G	18 (60)	6 (20)	6 (20)
3H	15 (50)	6 (20)	9 (30)
3I	17 (57)	7 (23)	6 (20)
7G	12 (40)	15 (50)	3 (10)
7H	17 (57)	11 (37)	2 (7)
7I	14 (47)	14 (47)	2 (7)
10G	13 (43)	14 (47)	3 (10)
10H	12 (40)	15 (50)	3 (10)
10I	10 (33)	15 (50)	5 (17)

Criterion-related Validity Evidence

Validity evidence for the use of Achieve 3000 LevelSet tests can also be obtained by examining the relationship between students' LevelSet scores and other criterion such as scores on other assessments of reading comprehension. When the scores from two tests that have been developed to assess the same construct (i.e. reading comprehension) are highly correlated, it supports the validity argument for the use of test scores as measures of that construct.

Study 1. Data from Fall 2014 administrations of LevelSet from five school districts from across the United States were included in this validation study. This sample was a subset of the sample collected for the reliability studies. These school districts provided Achieve3000 with data from LevelSet administrations from their KidBiz3000, TeenBiz3000 and Empower3000 programs. In addition, scores from another test of reading comprehension administered during Spring 2014 were provided to serve as a criterion measure of reading comprehension.

Chicago Public Schools – Network 6, IL
Students in Grades 2 through 8 from three schools participated in the study. All students in the schools were participating in either KidBiz3000 or Teenbiz3000 and were administered a LevelSet test in Fall 2014. Student reading scores were also provided from April through May 2014 administrations of the NWEA Measures of Academic Progress® (MAP) test.

Kapaa Kauai Waimea Complex, HI
Students in Grades 9 and 10 from one high school participated in the study. All students were enrolled in Empower3000 and were administered a LevelSet test in Fall 2014. Student results from Hawaii's statewide reading assessment, the Hawaii State Assessment (HSA), for Spring 2014 were also provided.

Lafourche Parish School District, LA
Students from 23 elementary, upper elementary, middle and high schools in Grades 3 through 9 participated in the study. Students were enrolled in KidBiz3000, TeenBiz3000, or Empower3000 and were administered a LevelSet test in Fall 2014. Student results from Louisiana's statewide reading assessments -- Integrated Louisiana Education Assessment Program (iLEAP, Grades 3, 5, 6, and 7), LEAP (Grades 4 and 8), or EOC (high school) -- were also provided from administrations in April and May 2014.

Long Branch School District, NJ
Students from three schools participated in the study. Students were enrolled in KidBiz3000, TeenBiz3000, or Empower3000 and were administered a LevelSet test in Fall 2014. In addition, student results from the NJ Assessment of Skills and Knowledge (ASK, Grades 3-8) and NJ High School Graduation Exam (HSGE, Grade 11) were provided. These tests were administered in March 2014 (Grade 9), April 2014 (Grades 6-8) or May 2014 (Grades 3-5).

Plymouth Community School District, IN
Students in Grades 5 and 6 from one school participated in the study. Students were enrolled in KidBiz3000 or TeenBiz3000 and were administered a LevelSet test in Fall 2014. In addition, student results from the Indiana Statewide Testing for Educational Progress assessment (ISTEP) from Spring 2014 were provided.

Data for all students whose LevelSet scores were provided are shown in *Table 42*. A dash (—) indicates that the grade did not participate in the study.

Table 42. Descriptive statistics for the KidBiz3000, TeenBiz3000 and Empower3000 LevelSet Lexile measures, Fall 2014 (N = 6,336).

Grade	2		3		4		5	
	n	Mean (SD)	*n*	Mean (SD)	*n*	Mean (SD)	*n*	Mean (SD)
Chicago, IL	80	431.85 (255.9)	133	616.80 (284.47)	65	806.15 (283,17)	227	758.75 (363.63)
Kapaa, HI	—	—	—	—	—	—	—	—
Lafourche, LA	—	—	823	239.20 (226.98)	770	394.82 (235.75)	—	*
Long Branch, NJ	—	—	—	—	51	252.01 (240.07)	83	456.25 (205.82)
Plymouth, IN	—	—	—	—	—	—	273	617.52 (213.90)

* Minimum of 5 students per group to be reported.

Grade	6		7		8		9	
	n	Mean (SD)	*n*	Mean (SD)	*n*	Mean (SD)	*n*	Mean (SD)
Chicago, IL	155	913.87 (278.96)	151	738.67 (275.17)	69	1130.01 (201.65)	—	—
Kapaa, HI	—	—	—	—	—	—	240	857.93 (337.53)
Lafourche, LA	750	631.85 (230.14)	876	718.79 (240.88)	794	807.02 (248.44)	—	*
Long Branch, NJ	75	594.59 (215.57)	83	648.66 (201.72)	65	709.58 (233.82)	105	775.93 (267.85)
Plymouth, IN	249	770.57 (253.67)	—	—	—	—	—	—

* Minimum of 5 students per group to be reported.

Grade	10		11		12	
	n	Mean (SD)	*n*	Mean (SD)	*n*	Mean (SD)
Chicago, IL	—	—	—	—	—	—
Kapaa, HI	81	1032.15 (341.04)	—	—	—	—
Lafourche, LA	—	—	—	—	—	—
Long Branch, NJ	71	763.85 (233.71)	35	577.74 (300.50)	32	890.38 (365.28)
Plymouth, IN	—	—	—	—	—	—

In addition to the LevelSet Lexile measures from Fall 2014, the following data were requested for each student:

1. Additional reading test scale scores from the state summative assessment or other large-scale test for Spring 2014.
2. Student demographics (e.g., gender, grade, race/ethnicity, ELL status, free/reduced-price lunch status).

Table 43 shows the number of students with LevelSet scores from *Table 42* with corresponding test scores from a statewide or nationally normed assessment.

Table 43. Students with LevelSet scores and complete data.

	Initial Sample of Students with LevelSet Scores	Students With Complete Data	Percentage of Initial Sample with Complete Data
Chicago, IL	880	639	0.73
Kapaa, HI	321	93	0.29
Lafourche, LA	4013	2907	0.72
Long Branch, NJ	600	360	0.60
Plymouth, IN	522	475	0.91

Relationship between LevelSet Lexile measures and Other Measures of Reading Comprehension

Correlation coefficients showing the relationship between the LevelSet test scores and state or nationally normed reading tests provide evidence of criterion-related validity for the Achieve3000 LevelSet tests. The correlations shown indicate that the two tests are measuring the same construct – reading comprehension. Descriptive data and correlation coefficients for all participating districts and grades are shown in *Tables 44 – 48*.

Table 44. Chicago Public Schools, Network 6—descriptive statistics for LevelSet Lexile measures and NWEA MAP RIT scores, by grade.

Grade Spring 2014	NWEA MAP RIT Score Mean (SD)	Grade Fall 2014	LevelSet Lexile Measure Mean (SD)	*N*	*r*
1	201.69 (14.46)	2	479.35 (230.93)	65	0.90
2	214.07 (13.50)	3	655.55 (265.37)	115	0.90
3	224.15 (10.31)	4	871.72 (197.54)	53	0.93
4	223.41 (15.30)	5	879.67 (280.52)	165	0.89
5	225.92 (14.27)	6	906.26 (308.61)	99	0.89
6	219.59 (11.16)	7	755.79 (279.25)	87	0.78
7	239.18 (7.74)	8	1154 (174.65)	55	0.73
Total	220.81 (16.00)		808.85 (312.91)	639	0.91

Table 45. Kapaa-Kauai Waimea Complex—descriptive statistics for LevelSet Lexile measures and HSA scale scores, by grade.

Grade Spring 2014	HSA Scale Score Mean (SD)	Grade Fall 2014	LevelSet Lexile Measure Mean (SD)	*N*	*r*
8	317.85 (31.86)	9	856.70 (313.90)	71	0.79
9	314.18 (35.28)	10	875.09 (368.75)	22	0.91

Table 46. Lafourche Parish School District—descriptive statistics for LevelSet Lexile measures and iLEAP or LEAP scale scores, by grade.

Grade Spring 2014	iLEAP or LEAP Scale Score Mean (SD)	Grade Fall 2014	LevelSet Lexile Measure Mean (SD)	*N*	*r*
2	235.43 (39.28)	3	124.57 (139.68)	28	0.30
3	308.02 (53.66)	4	409.68 (235.11)	655	0.74
4	309.23 (51.73)	6	661.60 (213.51)	661	0.68
5	309.79 (57.67)	7	724.23 (236.60)	817	0.76
6	312.64 (56.82)	8	814.29 (238.95)	746	0.75

Table 47. Long Branch School District—descriptive statistics for LevelSet Lexile measures and NJ ASK/NJ HSGE scale scores, by grade.

Grade Spring 2014	NJ ASK Scale Score Mean (SD)	Grade Fall 2014	LevelSet Lexile Measure Mean (SD)	*N*	*r*
3	185.81 (20.89)	4	252.19 (203.70)	31	0.66
4	181.19 (20.54)	5	462.81 (205.33)	58	0.76
5	192.44 (22.10)	6	607.03 (201.60)	62	0.78
6	193.77 (20.91)	7	650.66 (202.00)	64	0.78
7	186.00 (24.44)	8	742.82 (198.27)	39	0.69
8	206.59 (22.45)	9	782.57 (253.89)	88	0.74
11	231.22 (17.86)	12	927.50 (339.79)	18	0.75

Table 48. Plymouth Community School District—descriptive statistics for LevelSet Lexile measures and 2014 ISTEP 5 scale scores, by grade.

Grade Spring 2014	ISTEP 5 LA Scale Score Mean (SD)	Grade Fall 2014	LevelSet Lexile Measure Mean (SD)	*N*	*r*
4	488.17	5	623.68 (209.53)	257	0.77
5	512.05 (49.50)	6	792.43 (229.49)	235	0.85

Study 2. During the 2014-2015 school year, an external evaluation of the Achieve3000 program was conducted using a randomized control model with Grade 3, 6, and 9 classrooms (Shannon and Grant, 2015).

The sample for the study was selected from four school districts located in three regions of the United States (the West South region, the East North Central Region, and the Pacific region). Two districts were classified large suburb and two districts were classified as large city. Within each grade in the study, teachers were randomly assigned to the treatment or control groups. Only treatment teachers implemented the Achieve3000 program, while both groups implemented their usual ELA materials. A total of 512 students were in the treatment group with 127 (24.8%) in Grade 3, 263 (51.4%) in Grade 6, and 122 23.8%) in Grade 9. The treatment group consisted of: 222 (43.4%) females and 290 (56.6%) males; 178 (34.8%) students classified as Hispanic and 334 (65.2%) not classified as Hispanic; and 329 (64.3%) students classified as white, 116 (22.7%) classified as black of African American, 26 (5.1%) classified as Asian, 5 (1.0%) classified as American Indian or Alaska Native, and 36 (7.0%) others. Of the students in the treatment group, 41 (8.0%) were classified as needing special education services, 183 (35.7%) received free- and reduced-price lunch, and 59 (11.5%) were classified as English language learners (ELL).

Each student in the treatment group was administered the Gates MacGinitie Reading Test, fourth edition (GMRT-4) and the LevelSet Test. Both assessments were administrated at the beginning of the school year as a pretest and at the end of the school year as a posttest. The GMRT-4 is a "group-administered, norm-referenced assessment that yields scores for Vocabulary, Reading Comprehension, and Total Reading" (Shannon and Grant, p. ii-iii). The GMRT-4 scores were reported as Extended Scale Scores. There are two methods for calculating a LevelSet score for a student: (1) a student can receive a LevelSet score that represents his or her reading ability from a stand-alone test using a correspondence table to convert the raw score to a Lexile measure (as described on page 63 in this Development and Technical Guide) or (2) a student can receive a LevelSet score that represents his or her reading ability from a "body of work" comprised of LevelSet tests and Multiple-Choice Activities that the student has completed during this and/or prior school years using a Bayesian paradigm that aggregates the results into a "current" Lexile measure (as described on pages 64-66 in this Development and Technical Guide). In this study, Grade 3 students generally received a pre-test Lexile measure using the first method (fixed-form test and correspondence table); while, Grades 6 and 9 students generally received a pre-test Lexile measure using the second method (Bayesian). All students received a post-test Lexile measure using the second method.

Descriptive data and correlation coefficients shown in *Tables 49* through *51* describe the relationship between the GMRT-4 results and the student LevelSet Lexile measures. All of the correlation coefficients are significant at the $p < .0001$ level indicating that there is a strong relationship between the GMRT-4 scores and the LevelSet Lexile measures for the total sample (correlation coefficients range from 0.68 for pretest administration/GMRT-4 Reading Comprehension to 0.86 for posttest administration/GMRT-4 Total Reading).

Table 49. Relationship between GMRT-4 Vocabulary and LevelSet Lexile measure.

		Pretest Administration			Posttest Administration		
Grade	*N*	LevelSet Mean (SD	GMRT-4 Mean (SD)	*r*	LevelSet Mean (SD)	GMRT-4 Mean (SD)	*r*
3	127	214.3 (264.4)	440.0 (40.3)	0.67	383.7 (248.0)	472.9 (44.9)	0.81
6	263	610.0 (252.4)	503.8 (30.2)	0.68	730.3 (258.4)	521.4 (37.4)	0.76
9	122	831.5 (174.3)	522.8 (28.7)	0.75	864.5 (195.8)	532.9 (29.1)	0.68
Total	512	564. 6 (325.0)	492.5 (45.1)	0.82	676.3 (299.5)	512.1 (44.1)	0.83

Table 50. Relationship between GMRT-4 Reading Comprehension and LevelSet Lexile measure.

		Pretest Administration			Posttest Administration		
Grade	*N*	LevelSet Mean (SD	GMRT-4 Mean (SD)	*r*	LevelSet Mean (SD)	GMRT-4 Mean (SD)	*r*
3	127	214.3 (264.4)	438.6 (42.7)	0.37	383.7 (248.0)	473.2 (42.6)	0.68
6	263	610.0 (252.4)	498.1 (31.3)	0.61	730.3 (258.4)	511.3 (38.3)	0.72
9	122	831.5 (174.3)	508.6 (33.7)	0.35	864.5 (195.8)	536.2 (30.6)	0.66
Total	512	564. 6 (325.0)	485.9 (44.5)	0.68	676.3 (299.5)	507.8 (43.8)	0.78

Table 51. Relationship between GMRT-4 Total Reading and LevelSet Lexile measure.

		Pretest Administration			Posttest Administration		
Grade	*N*	LevelSet Mean (SD	GMRT-4 Mean (SD)	*r*	LevelSet Mean (SD)	GMRT-4 Mean (SD)	*r*
3	127	214.3 (264.4)	438.8 (33.0)	0.61	383.7 (248.0)	471.8 (38.8)	0.82
6	263	610.0 (252.4)	501.4 (26.6)	0.72	730.3 (258.4)	516.7 (33.2)	0.80
9	122	831.5 (174.3)	518.3 (26.2)	0.62	864.5 (195.8)	537.2 (27.1)	0.74
Total	512	564. 6 (325.0)	489.9 (41.3)	0.82	676.3 (299.5)	510.4 (40.9)	0.86

Validity Evidence based on Relationship to Other Variables

Categorical variables, including group membership variables, can provide information about whether a test's scores differentiate students with differing levels of ability in a meaningful or expected way.

Study 1. For the LevelSet validity study conducted in Fall 2014, districts provided demographic data on a number of variables that can be examined with respect to performance on LevelSet tests. The following tables provide a demographic summary and the associated means and standard deviations of Lexile measures for the students in the complete sample where the demographic data were available. An analysis of variance (ANOVA) was conducted for the data from each site for available demographic characteristics.

Special Education Status

Special education status was determined by a student's current enrollment in a special education program in the district. Three districts provided data on special education status and an ANOVA

was conducted for the data from each site. As shown in *Table 52*, a significant difference due to special education status was found for all sites, though Kappa, HI and Plymouth, IN had much larger effects than Long Branch, NJ. The differences between the mean Lexile measures are as expected.

Table 52. Means and standard deviations for the LevelSet Lexile measures, by enrollment in a special education program and results of ANOVAs.

	Enrolled in a Special Education Program		Not Enrolled in a Special Education Program		
	n	**Mean (SD)**	***n***	**Mean (SD)**	***p***
Kapaa, HI	12	511.67 (379.42)	82	910.99 (283.61)	<.001
Long Branch, NJ	25	510.24 (228.01)	314	628.51 (269.71)	.03
Plymouth, IN	67	470.75 (251.90)	453	726.34 (220.24)	<.001

Economic Status

Economic status of students was determined by participation in the free/reduced-price lunch (FRPL) program. Students who participated in the FRLP program were classified as economically disadvantaged.

Three sites provided FRPL status information for their students (Kappa, Long Branch, and Riverside). An ANOVA was conducted for the data from each site and a significant difference due to FRPL was observed for all of the sites. The differences between the mean Lexile measures are as expected with students classified as economically disadvantaged scoring significantly lower than students not classified as economically disadvantaged.

Table 53. Means and standard deviations for the LevelSet Lexile measures, by free- and reduced-price lunch status, and results of ANOVAs.

	Eligible for Free/Reduced Lunch		Not Eligible for Free/Reduced Lunch		
	n	**Mean(SD)**	***n***	**Mean (SD)**	***p***
Kapaa, HI	46	773.57 (320.33)	48	942.85 (308.64)	< .01
Long Branch, NJ	279	592.34 (269.34)	56	738.86 (227.25)	<.001
Plymouth, IN	321	642.31 (230.63)	199	775.83 (232.62)	<.001

Gender

All of the participating districts provided gender information with student test scores. An ANOVA was conducted for the data from each site and in three districts, a significant difference due to gender was not observed. For Kapaa, HI and Lafourche, LA, a significant difference due to gender was found. For these two districts, female students scored higher on the LevelSet assessment than male students (higher Lexile measures).

Table 54. Means and standard deviations for the LevelSet Lexile measures, by gender, and results of ANOVAs.

	Female		Male		
	n	**Mean (SD)**	***n***	**Mean (SD)**	***p***
Chicago, IL	304	814.12 (292.91)	335	804.10 (330.38)	.69
Kapaa, HI	145	964 (296.10)	131	799.63 (386.53)	< .01
Lafourche, LA	1,384	671.57 (268.36)	1448	648.90 (281.86)	.03
Long Branch, NJ	156	609.25 (258.32)	183	625.83 (275.77)	.57
Plymouth, IN	236	725.93 (226.70)	239	687.28 (250.36)	.08

Race and Ethnicity

Race and ethnicity of students was identified by specific district coding practices and varied across the districts that provided data on race and/or ethnicity. *Tables 55*, *57*, and *59* provide descriptive statistics for the race groups for each district. To provide a consistent framework for reporting ANOVA results, the data were also organized into two groups: Asian/White and not Asian/White. *Tables 56*, *58*, and *60* provide descriptive statistics and ANOVA results for the districts that provided data on race. In Chicago, IL and Kapaa, HI, students identified as White or Asian scored significantly higher than those not identified as White or Asian. In Long Branch, NJ no significant difference was found.

Table 55. Means and standard deviations for the LevelSet Lexile measures by race, Chicago, IL.

African-American		American Indian/Alaska Native		Asian		White		Other	
n	**Mean (SD)**	***n***	**Mean (SD)**	***n***	**Mean (SD)**	***n***	**Mean (SD)**	***n***	**Mean (SD)**
262	723.95 (307.84)	4	624.75 (443.30)	92	942.84 (275.50)	111	901.676 (326.17)	158	818.71 (282.55)

Table 56. Means and standard deviations for the LevelSet Lexile measures by racial grouping and results of ANOVA, Chicago, IL.

Asian or White		Not Asian or White		
n	**Mean (SD)**	***n***	**Mean (SD)**	***p***
203	920.33 (304.22)	424	758.33 (302.92)	< .001

Table 57. Means and standard deviations for the LevelSet Lexile measures by race, Kapaa, HI.

Hawaiian Native		White		Other	
n	**Mean (SD)**	***n***	**Mean (SD)**	***n***	**Mean (SD)**
25	647.28 (297.30)	20	1099.20 (220.64)	49	870.92 (304.15)

Table 58. Means and standard deviations for the LevelSet Lexile measures by racial grouping and results of ANOVA, Kapaa, HI.

Asian or White		Not Asian or White		
n	**Mean (SD)**	***n***	**Mean (SD)**	***p***
25	1070.40 (243.14)	69	783.78 (317.19)	< .001

Table 59. Means and standard deviations for the LevelSet Lexile measures by race, Long Branch,NJ.

African-American		Hispanic		White	
n	**Mean (SD)**	***n***	**Mean (SD)**	***n***	**Mean (SD)**
72	638.82 (239.97)	177	596.92 (261.92)	84	666.64 (289.65)

Table 60. Means and standard deviations for the LevelSet Lexile measure by racial grouping and results of ANOVA, Long Branch,NJ.

Asian or White		Not Asian or White		
n	**Mean (SD)**	***n***	**Mean (SD)**	***p***
92	651.79 (293.25)	250	607.24 (257.05)	.17

Two districts provided data on ethnicity for students: Chicago, IL and Plymouth, IN. No consistent pattern of reading performance was found between results for students classified as Hispanic or Latino and results for students classified as not Hispanic or Latino. A significant difference was found for the sample from Plymouth, IN with students classified as not Hispanic or Latino scoring significantly higher than those identified as Hispanic or Latino. No significant difference between the two groups was found for the sample from Chicago, IL.

Table 61. Means and standard deviations for the LevelSet Lexile measures by ethnicity and results of ANOVAs.

	Hispanic or Latino		Not Hispanic or Latino		
	n	**Mean (SD)**	***n***	**Mean (SD)**	***p***
Chicago, IL	133	805.37 (279.21)	494	812.24 (321.06)	.82
Plymouth, IN	138	645.77 (203.36)	382	710.62 (250.11)	<.01

Language Proficiency

Language proficiency as defined by identification as an English language learner (ELL) was provided by two districts: Kapaa, HI and Plymouth, IN. In both districts, there was a significant difference between the mean Lexile measures of students identified as ELL and those who were not identified (Kapaa, $p < .01$; Riverside, $p < .001$). The differences between the mean LevelSet Lexile measures are as expected.

Table 62. Means and standard deviations for the LevelSet Lexile measures, by ELL status, and results of ANOVAs.

	ELL		Not ELL		
	n	**Mean (SD)**	***n***	**Mean (SD)**	***p***
Kapaa, HI	19	678.84 (368.34)	75	905.91 (297.38)	<.01
Plymouth, IN	59	544.85 (155.64)	461	712.42 (242.50)	<.001

Study 2. For the Achieve3000 evaluation study conducted in Fall 2015 (Shannon and Grant, 2015), districts provided demographic data on a number of variables that can be examined with respect to Lexile measures reported from LevelSet. The following tables provide a demographic summary and the associated means and standard deviations of Lexile measures for the students in the treatment sample. An analysis of variance (ANOVA) was conducted for the data for the demographic characteristics.

Special Education Status

Special education status was determined by a student's current enrollment in a special education program in the district and an ANOVA was conducted for the data. As shown in *Table 63*, a significant difference due to special education status was found and the difference between the mean Lexile measures are as expected.

Table 63. Means and standard deviations for the LevelSet Lexile measures, by enrollment in a special education program and results of ANOVA.

Enrolled in a Special Education Program		Not Enrolled in a Special Education Program		
n	**Mean (SD)**	***n***	**Mean (SD)**	***p***
41	604.20 (349.13)	255	774.04 (294.49)	.001

Economic Status

Economic status of students was determined by participation in the free- and reduced-price lunch (FRL) program. Students who participated in the FRL program were classified as economically disadvantaged. An ANOVA was conducted for the data and a significant difference due to participation in a FRL program was observed. The difference between the mean Lexile measures are as expected with students classified as economically disadvantaged scoring significantly lower than students not classified as economically disadvantaged.

Table 64. Means and standard deviations for the LevelSet Lexile measures, by free- and reduced-price lunch status, and results of ANOVA.

Eligible for Free/Reduced Lunch		Not Eligible for Free/Reduced Lunch		
n	**Mean(SD)**	***n***	**Mean (SD)**	***p***
183	651.05 (311.31)	113	911.58 (222.46)	.0001

Gender

An ANOVA was conducted to examine the difference in LevelSet scores by gender an, as expected, a significant difference due to gender was not observed.

Table 65. Means and standard deviations for the LevelSet Lexile measure, by gender, and results of the ANOVA.

Female		Male		
n	**Mean (SD)**	***n***	**Mean (SD)**	***p***
222	676.14 (280.33)	290	676.44 (313.92)	.99

Race and Ethnicity

Race and ethnicity of students was identified for each student in the LevelSet evaluation study. Based on an ANOVA analysis with Bonferroni (Dunn *t*) tests, significant differences were observed between the following subgroups:

- Asian and Black or African American, difference of means = 194.82, $p < .05$; and
- White and Black or African American, difference of means = 130.39, $p < .05$.

Data was also collected on ethnicity for the students in the study. The results from the ANOVA are presented in *Table 66*. A significant difference in reading performance was observed between LevelSet Lexile measures for students classified as Hispanic and results for students classified as non-Hispanic.

Table 66. Means and standard deviations for the LevelSet Lexile measure, by ethnicity, and results of the ANOVA.

Non-Hispanic		Hispanic		
n	**Mean (SD)**	***n***	**Mean (SD)**	***p***
334	710.14 (290.14)	178	612.83 (307.31)	.0004

Language Proficiency

Language proficiency as defined by identification as an English language learner (ELL) was provided. From the ANOVA results, there was a significant difference between the mean Lexile measures of students identified as ELL and those who were not identified. The differences between the mean LevelSet Lexile measures are as expected.

Table 67. Means and standard deviations for the LevelSet Lexile measures, by ELL status, and results of ANOVA.

ELL		Not ELL		
n	**Mean (SD)**	***n***	**Mean (SD)**	***p***
59	395.12 (262.71)	453	712.93 (284.45)	.0001

Construct Validity Evidence

Evidence for construct validity of LevelSet (version 2) is provided by the extensive body of research supporting The Lexile Framework for Reading. The development of Achieve3000 assessment system utilized tools for text measurement such as the Lexile Analyzer and procedures for item development that have been shown to result in effective measures of reading comprehension. All of the items on LevelSet (version 2) assessments are items in the family of items upon which the research on the Lexile Framework was based. The section in this technical report entitled The Lexile Framework for Reading provides a detailed description of the framework and evidence to support that tests based upon the framework measure reading comprehension.

Development of Reading Ability

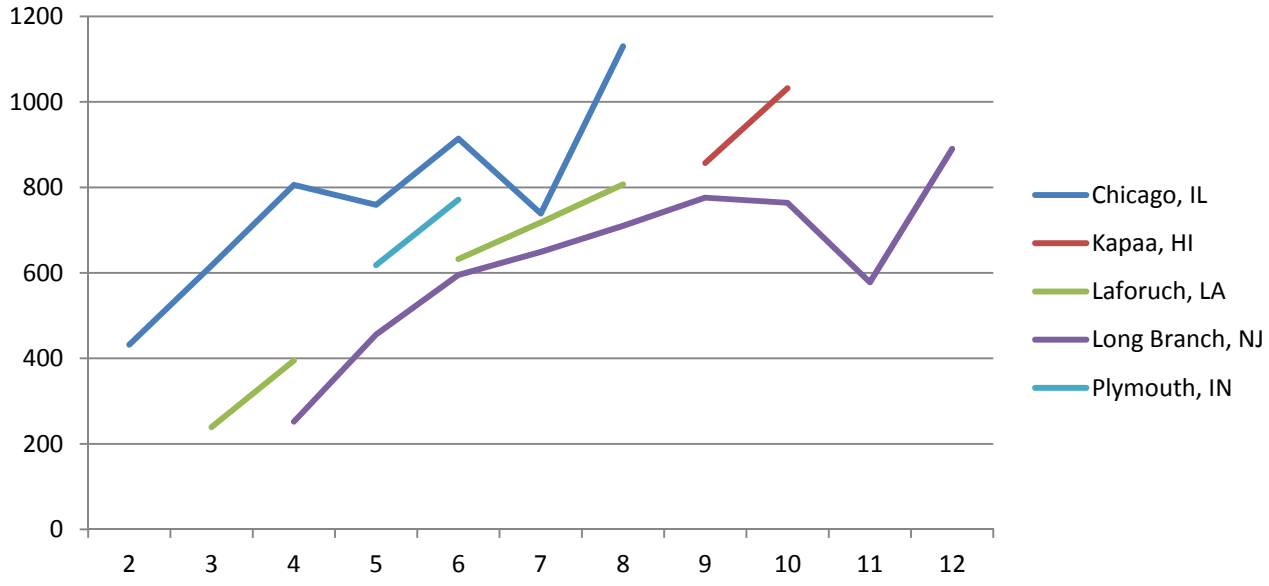
Reading ability generally increases as a student progresses through school. It typically increases more rapidly during elementary school when students are learning to read and are being given explicit instruction in how to read. In later grades, students often receive less explicit instruction on the process of reading and utilize reading as a way to gain knowledge. Reading growth may slow after the early elementary years, but is still expected to continue to increase throughout a student's years of schooling. Score patterns for LevelSet that adhere to this developmental progression provide evidence of construct validity for the assessments.

Study 1. Using the LevelSet data from *Table 42*, the median Lexile measures by grade can show a pattern of growth across the grades. The data from Kapaa, HI, Lafourch, LA, and Plymouth, IN exhibit the expected pattern of increasing monotonically as students move from grade to grade. In contrast, the data from Chicago, IL and Long Branch NJ, do not show increasing Lexile measures across all grades in the sample. In Chicago, scores for students in Grades 5 (758.75L) are lower than scores for Grade 4 (806.15L) and scores in Grade 7 (738.67L) are lower than scores in Grade 6 (913.87L). This pattern is also shown in the NWEA MAP test scores for the complete data sample shown in *Table 44*. Student scores drop slightly on the NWEA MAP test in Grades 5 and 7 and then rise again in the following grades. The similarity in results across the two reading tests suggests that the sample of students in Grades 5 and 7 in Chicago includes lower ability students than the samples represented by the other grades in the Chicago sample.

The LevelSet results for students in Grade 10 and 11 from Long Branch also depart from the expected pattern of increasing scores at higher grade levels. The LevelSet Lexile measures for students in Grade 10 (763.85L) are slightly lower than scores in Grade 9 (775.93L). The Grade 11 scores (577.74L) are substantially lower than Grade 10 scores (763.85L). No corresponding state test data were available to compare to the LevelSet scores for these students. However, the

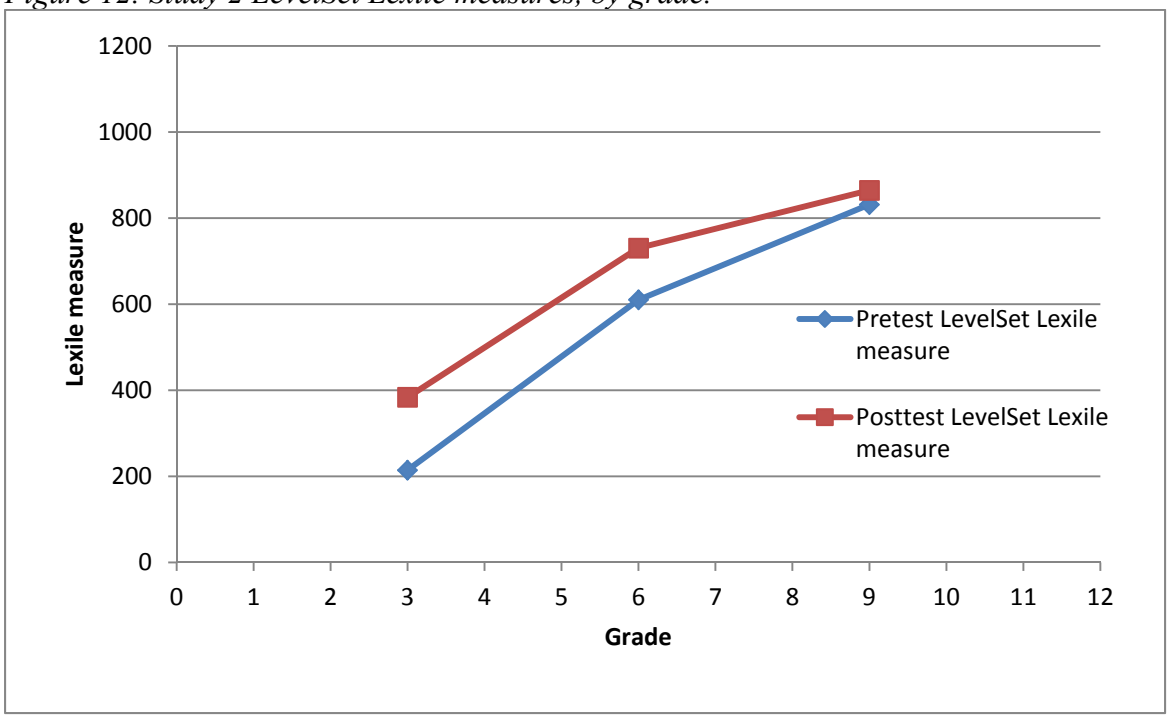
relatively small sample size for Grade 11 suggests that this group may not contain a widely representative sample of students and thus the lower ability students for the grade may comprise the bulk of the Grade 11 sample.

Figure 11. Study 1 LevelSet Lexile measures, by location and grade.



Study 2. Using the data presented in *Tables 49* through *51* from the Achieve3000 evaluation study conducted by Hannon and Grant (2015), the pattern of growth in terms of Lexile measures can be examined. *Figure 12* presents the pretest and posttest results across grades, showing the cross-sectional growth patterns for each administration time. Similar to the results from Study 1, there is a monotonically increasing trend in LevelSet Lexile measures across grades and within grade across time period (pretest to posttest).

Figure 12. Study 2 LevelSet Lexile measures, by grade.



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Appendix

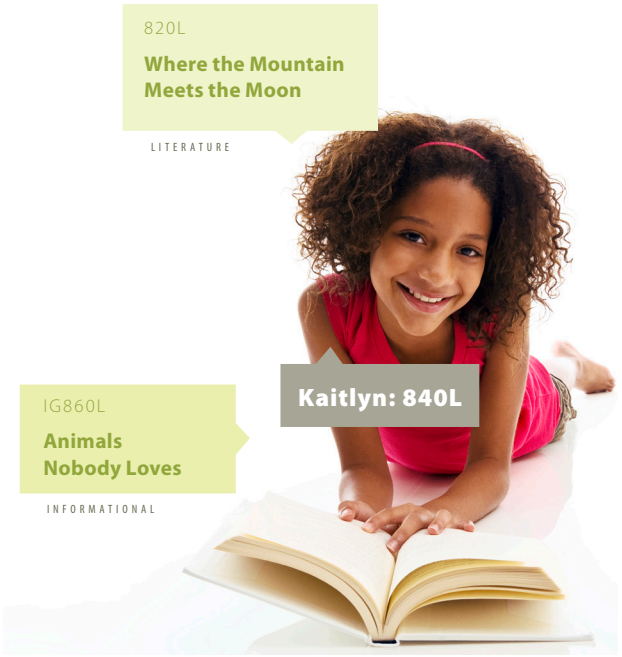
The Lexile Framework for Reading Map

THE LEXILE® FRAMEWORK FOR READING

Matching Readers with Text

Imagine getting students excited about reading while also improving their reading abilities. With the Lexile® Map, students have a chance to match books with their reading levels, and celebrate as they are able to read increasingly complex texts!

Let your students find books that fit them! Build custom book lists for your students by accessing our "Find a Book" tool at Lexile.com/fab.



HOW IT WORKS

The Lexile® Map provides examples of popular books and sample texts that are matched to various points on the Lexile® scale, from 200L for early reading books to 1600L for more advanced texts. The examples on the map help to define text complexity and help readers identify books of various levels of text complexity. Both literary and informational texts are presented on the Lexile Map.

HOW TO USE IT

Lexile reader and text measures can be used together to forecast how well a reader will likely comprehend a text at a specific Lexile level. A Lexile reader measure is usually obtained by having the reader take a reading comprehension test. Numerous tests report Lexile reader measures including many state end-of-year assessments, national norm-referenced assessments, and reading program assessments. A Lexile reader measure places students on the same Lexile scale as the texts. This scale ranges from below 200L to above 1600L. The Lexile web site also provides a way to estimate a reader measure by using information about the reader's grade level and self-reported reading ability.

Individuals reading within their Lexile ranges (100L below to 50L above their Lexile reader measures) are likely to comprehend approximately 75 percent of the text when reading independently. This "targeted reading" rate is the point at which a reader will comprehend enough to understand the text but will also face some reading challenge. The result is growth in reading ability and a rewarding reading experience.

For more guidance concerning targeting readers with books, visit www.Lexile.com/fab to access the "Find a Book" tool. "Find a Book" enables users to search from over 130,000 books to build custom reading lists based on Lexile range and personal interests and to check the availability of books at the local library.

The Lexile Framework for Reading

1300 L ‣ 1500L+
LEXILE RANGE

1500L+

1500L ***Don Quixote**** CERVANTES SAAVEDRA

The Words were to me so many Pearls of Eloquence, and his Voice sweeter to my Ears than Sugar to the Taste. The Reflection on the Misfortune which these Verses brought on me, has often made me applaud Plato's Design of banishing all Poets from a good and well governed Commonwealth, especially those who write wantonly or lasciviously. For, instead of composing lamentable Verses, like those of the Marquiss of Mantua, that make Women and Children cry by the Fireside, they try their utmost Skill on such soft Strokes as enter the Soul, and wound it, like that Thunder which hurts and consumes all within, yet leaves the Garment sound. Another Time he entertained me with the following Song.

SAMPLE TITLES

LITERATURE	1640L	**The Plot Against America** (ROTH)
	1560L	**Rob Roy** (SCOTT)
	1530L	**The Good Earth** (BUCK)
	1520L	**A Fable** (FAULKNER)
	1500L	**The Decameron** (BOCCACCIO)
INFORMATIONAL	1600L	**Sustaining Life: How Human Health Depends on Biodiversity** (CHIVIAN & BERNSTEIN)
	1550L	**The Art of War** (TZU)
	1560L	**The United States' Constitution**
	1520L	**Fair Play: The Ethics of Sport** (SIMON)
	1500L	**Critique of Pure Reason** (KANT)

1400L ‣ 1495L

1400L ***Nathaniel's Nutmeg*** MILTON

Setting sail once again they kept a sharp look-out for Busse Island, discovered thirty years previously by Martin Frobisher, but the rolling sea mists had grown too thick. Storms and gale—force winds plagued them for days on end and at one point grew so ferocious that the foremast cracked, splintered and was hurled into the sea. It was with considerable relief that the crew sighted through the mist the coast of Newfoundland—a vague geographical term in Hudson's day—at the beginning of July. They dropped anchor in Penobscot Bay, some one hundred miles west of Nova Scotia.

SAMPLE TITLES

LITERATURE	1460L	**The Legend of Sleepy Hollow** (IRVING)
	1450L	**Billy Budd**** (MELVILLE)
	1430L	**The Story of King Arthur and His Knights** (PYLE)
	1420L	**Life All Around Me by Ellen Foster** (GIBBONS)
	1420L	**The Scarlet Letter**** (HAWTHORNE)
INFORMATIONAL	1480L	**America's Constitution: A Biography**** (AMAR)
	1430L	**The Declaration of Independence**
	1420L	**Gettysburg Address** (LINCOLN)
	1410L	**Profiles in Courage** (KENNEDY)
	1400L	**The Life and Times of Frederick Douglass** (DOUGLASS)

1300L ‣ 1395L

1300L ***1776: America and Britain at War**** MCCULLOUGH

But from this point on, the citizen-soldiers of Washington's army were no longer to be fighting only for the defense of their country, or for their rightful liberties as freeborn Englishmen, as they had at Lexington and Concord, Bunker Hill and through the long siege at Boston. It was now a proudly proclaimed, all-out war for an independent America, a new America, and thus a new day of freedom and equality. At his home in Newport, Nathanael Greene's mentor, the Reverend Ezra Stiles, wrote in his diary almost in disbelief: Thus the Congress has tied a Gordian knot, which the Parl [iament] will find they can neither cut, nor untie. The thirteen united colonies now rise into an Independent Republic among the kingdoms, states, and empires on earth...And have I lived to see such an important and astonishing revolution?

SAMPLE TITLES

LITERATURE	1360L	**Robinson Crusoe** (DEFOE)
	1350L	**The Secret Sharer** (CONRAD)
	1340L	**The Hunchback of Notre Dame** (HUGO)
	1340L	**The Metamorphosis**** (KAFKA)
	1340L	**Fever Pitch** (HORNBY)
INFORMATIONAL	1390L	**In Defense of Food: An Eater's Manifesto** (POLLAN)
	1380L	**Politics and the English Language**** (ORWELL)
	1370L	**Jane Austen's Pride and Prejudice** (BLOOM)
	1340L	**Walden**** (THOREAU)
	1300L	**Arctic Dreams: Imagination and Desire in a Northern Landscape** (LOPEZ)

**Common Core State Standards Text Exemplar

The Lexile Framework for Reading

1000 L ‣ 1295L
LEXILE RANGE

1200L ‣ 1295L

1200L ***Why We Can't Wait*** KING

We sing the freedom songs today for the same reason the slaves sang them, because we too are in bondage and the songs add hope to our determination that "We shall overcome, Black and white together, We shall overcome someday." I have stood in a meeting with hundreds of youngsters and joined in while they sang "Ain't Gonna Let Nobody Turn Me 'Round." It is not just a song; it is a resolve. A few minutes later, I have seen those same youngsters refuse to turn around from the onrush of a police We sing the freedom songs today for the same reason the slaves sang them, because we too are in bondage and the songs add hope to our determination that "We shall overcome, Black and white together, We shall overcome someday."

SAMPLE TITLES

LITERATURE	1280L	**The House of the Spirits** (ALLENDE)
	1270L	**Tarzan of the Apes** (BURROUGHS)
	1270L	**Chronicle of a Death Foretold** (GARCIA MARQUEZ)
	1220L	**Annie John** (KINCAID)
	1210L	**The Namesake**** (LAHIRI)
INFORMATIONAL	1290L	**A Brief History of Time** (HAWKING)
	1280L	**Black, Blue, and Gray: African Americans in the Civil War**** (HASKINS)
	1240L	**Blood Done Sign My Name** (TYSON)
	1230L	**Stiff: The Curious Lives of Human Cadavers** (ROACH)
	1200L	**The Dark Game: True Spy Stories** (JANECZKO)

1100L ‣ 1195L

1100L ***Pride and Prejudice**** AUSTEN

Lydia was a stout, well-grown girl of fifteen, with a fine complexion and good-humoured countenance; a favourite with her mother, whose affection had brought her into public at an early age. She had high animal spirits, and a sort of natural self-consequence, which the attentions of the officers, to whom her uncle's good dinners and her own easy manners recommended her, had increased into assurance. She was very equal therefore to address Mr. Bingley on the subject of the ball, and abruptly reminded him of his promise; adding, that it would be the most shameful thing in the world if he did not keep it. His answer to this sudden attack was delightful to their mother's ear.

SAMPLE TITLES

LITERATURE	1180L	**The Curious Incident of the Dog in the Night-time** (HADDON)
	1170L	**The Amazing Adventures of Kavalier & Clay** (CHABON)
	1150L	**A Wizard of Earthsea** (LE GUIN)
	1130L	**All the King's Men** (WARREN)
	1110L	**A Separate Peace** (KNOWLES)
INFORMATIONAL	1160L	**The Longitude Prize**** (DASH)
	1160L	**In Search of Our Mothers' Gardens** (WALKER)
	1140L	**Winterdance: The Fine Madness of Running the Iditarod** (PAULSEN)
	1130L	**The Great Fire**** (MURPHY)
	1100L	**Vincent Van Gogh: Portrait of an Artist**** (GREENBERG & JORDAN)

1000L ‣ 1095L

1000L ***Mythbusters Science Fair Book*** MARGLES

There may be less bacteria on the food that's picked up quickly, but playing it safe is the best idea. If it hits the floor, the next thing it should hit is the trash. If putting together petri dishes and dealing with incubation seems like a bigger project than you're ready to take on, there's a simpler way to observe bacterial growth. Practically all you need is some bread and your own two hands. Cut the edges off each slice of bread so that they'll fit into the plastic containers. Put one slice of bread into each container. Measure one tablespoon of water and splash it into the first piece of bread. Put the lid on the container and use your pen and tape to label this your control.

SAMPLE TITLES

LITERATURE	1080L	**I Heard the Owl Call My Name** (CRAVEN)
	1070L	**Savvy** (LAW)
	1070L	**Around the World in 80 Days** (VERNE)
	1010L	**The Pearl** (STEINBECK)
	1000L	**Hobbit or There and Back Again** (TOLKIEN)
INFORMATIONAL	1070L	**Geeks: How Two Lost Boys Rode the Internet Out of Idaho**** (KATZ)
	1030L	**Phineas Gage** (FLEISCHMAN)
	1020L	**This Land Was Made for You and Me: The Life and Songs of Woody Guthrie** (PARTRIDGE)
	1010L	**Travels With Charley: In Search of America**** (STEINBECK)
	1000L	**Claudette Colvin: Twice Toward Justice** (HOOSE)

**Common Core State Standards Text Exemplar

The Lexile Framework for Reading

700L ▸ 995L
LEXILE RANGE

900L ▸ 995L

900L ***We are the Ship: The Story of Negro League Baseball*** NELSON

Rube ran his ball club like it was a major league team. Most Negro teams back then weren't very well organized. Didn't always have enough equipment or even matching uniforms. Most times they went from game to game scattered among different cars, or sometimes they'd even have to "hobo"—which means hitch a ride on the back of someone's truck to get to the next town for a game. But not Rube's team. They were always well equipped, with clean, new uniforms, bats, and balls. They rode to the games in fancy Pullman cars Rube rented and hitched to the back of the train. It was something to see that group of Negroes stepping out of the train, dressed in suits and hats. They were big-leaguers.

SAMPLE TITLES

LITERATURE	980L	**Dovey Coe** (DOWELL)
	950L	**Bud, Not Buddy** (CURTIS)
	940L	**Harry Potter and the Chamber of Secrets** (ROWLING)
	940L	**Heat** (LUPICA)
	900L	**City of Fire** (YEP)
INFORMATIONAL	990L	**Seabiscuit** (HILLENBRAND)
	970L	**The Kid's Guide to Money: Earning It, Saving It, Spending It, Growing It, Sharing It**** (OTFINOSKI)
	950L	**Jim Thorpe, Original All-American** (BRUCHAC)
	930L	**Colin Powell A & E Biography** (FINLAYSON)
	920L	**Talking with Artists** (CUMMINGS)

800L ▸ 895L

800L ***Moon Over Manifest*** VANDERPOOL

There wasn't much left in the tree fort from previous dwellers. Just an old hammer and a few rusted tin cans holding some even rustier nails. A couple of wood crates with the salt girl holding her umbrella painted on top. And a shabby plaque dangling sideways on one nail, FORT TREECONDEROGA. Probably named after the famous fort from Revolutionary War days. Anything else that might have been left behind had probably been weathered to bits and fallen through the cracks. No matter. I'd have this place whipped into shape lickety-split. First off, I picked out the straightest nail I could find and fixed that sign up right. Fort Treeconderoga was open for business.

SAMPLE TITLES

LITERATURE	GN840L*	**The Odyssey** (HINDS)
	830L	**Baseball in April and Other Stories** (SOTO)
	820L	**Maniac Magee** (SPINELLI)
	820L	**Where the Mountain Meets the Moon**** (LIN)
	800L	**Homeless Bird** (WHELEN)
INFORMATIONAL	880L	**The Circuit** (JIMENEZ)
	870L	**The 7 Habits of Highly Effective Teens** (COVEY)
	IG860L*	**Animals Nobody Loves** (SEYMOUR)
	860L	**Through My Eyes: Ruby Bridges** (BRIDGES)
	830L	**Quest for the Tree Kangaroo: An Expedition to the Cloud Forest of New Guinea**** (MONTGOMERY)

700L ▸ 795L

700L ***The Miraculous Journey of Edward Tulane*** DICAMILLO

Edward, for lack of anything better to do, began to think. He thought about the stars. He remembered what they looked like from his bedroom window. What made them shine so brightly, he wondered, and were they still shining somewhere even though he could not see them? Never in my life, he thought, have I been farther away from the stars than I am now. He considered, too, the fate of the beautiful princess who had become a warthog. Why had she become a warthog? Because the ugly witch turned her into one-that was why. And then the rabbit thought about Pellegrina. He felt, in some way that he could not explain to himself, that she was responsible for what had happened to him. It was almost as if it was she, and not the boys, who had thrown Edward overboard.

SAMPLE TITLES

LITERATURE	770L	**Walk Two Moons** (CREECH)
	760L	**Hoot** (HIAASEN)
	750L	**Esperanza Rising** (RYAN)
	720L	**Nancy's Mysterious Letter** (KEENE)
	GN720L*	**Sherlock Holmes and the Adventure at the Copper Beeches** (DOYLE)
INFORMATIONAL	790L	**Be Water, My Friend: The Early Years of Bruce Lee** (MOCHIZUKI)
	760L	**Stay: The True Story of Ten Dogs** (MUNTEAN)
	IG760L*	**Mapping Shipwrecks with Coordinate Planes** (WALL)
	720L	**Pretty in Print: Questioning Magazines** (BOTZAKIS)
	720L	**Spiders in the Hairdo: Modern Urban Legends** (HOLT & MOONEY)

*GN denotes Graphic Novel, IG denotes Illustrated Guide
**Common Core State Standards Text Exemplar

The Lexile Framework for Reading

400L ▸ 695L
LEXILE RANGE

600L ▸ 695L

600L ***You're on Your Way, Teddy Roosevelt*** ST. GEORGE & FAULKNER

But from his first workout in Wood's Gymnasium he had been determined to control his asthma and illnesses rather than letting his asthma and illnesses control him. And he had. On that hot summer day in August he had proved to himself—and everyone else—that he had taken charge of his own life. In 1876 Teedie—now known as Teddy—entered Harvard College. He was on his own ...without Papa. That was all right. "I am to do everything for myself," he wrote in his diary. Why not? He was stronger and in better health than he had ever been. And ready and eager for the adventures and opportunities that lay ahead.

SAMPLE TITLES

LITERATURE	680L	**Charlotte's Web** (WHITE)
	660L	**Holes** (SACHAR)
	620L	**M.C. Higgins, the Great**** (HAMILTON)
	610L	**Mountain Bike Mania** (CHRISTOPHER)
	610L	**A Year Down Yonder** (PECK)
INFORMATIONAL	690L	**Where Do Polar Bears Live?**** (THOMSON)
	680L	**An Eye for Color: The Story of Josef Albers** (WING)
	660L	**Remember: The Journey to School Integration** (MORRISON)
	660L	**From Seed to Plant**** (GIBBONS)
	630L	**Sadako and the Thousand Paper Cranes** (COERR)

500L ▸ 595L

500L ***A Germ's Journey*** ROOKE

Excuse me! Let's blow out of this place! In real life, germs are very small. They can't be seen without a microscope. Rudy forgot to use a tissue. His cold germs fly across the room at more than 100 miles an hour. Whee! I can fly! Best ride ever! A few germs land on Ernie. But skin acts like a suit of armor. It protects against harm. The germs won't find a new home there. Healthy skin keeps germs out. But germs can sneak into the body through cuts, scrapes, or cracks in the skin. Most germs enter through a person's mouth or nose. Rudy's germs continue to fall on nearly everything in the room—including Brenda's candy.

SAMPLE TITLES

LITERATURE	560L	**Sarah, Plain and Tall** (MACLACHLAN)
	530L	**It's All Greek to Me** (SCIESZKA)
	520L	**John Henry: An American Legend** (KEATS)
	500L	**Judy Moody Saves the World** (MCDONALD)
	500L	**The Curse of the Cheese Pyramid** (STILTON)
INFORMATIONAL	IG590L*	**Claude Monet** (CONNOLLY)
	560L	**Lemons and Lemonade: A Book about Supply and Demand** (LOEWEN)
	560L	**Molly the Pony** (KASTER)
	530L	**Langston Hughes: Great American Poet** (MCKISSACK)
	510L	**A Picture for Marc** (KIMMEL)

400L ▸ 495L

400L ***How Not to Babysit Your Brother*** HAPKA

I continued to search. I checked under Steve's bed. Then I checked under my bed. I searched the basement, the garage, and my closet. There was no sign of Steve. This was going to be harder than I thought. Where was Steve hiding? CRASH! Uh-oh, I thought. I heard Buster barking in the kitchen. I ran to see what was going on. When I got there, the dog food bin was tipped over. Steve's head and shoulders were sticking out of the top. Dog food was stuck in his hair, on his clothes, and up his nose. He looked like an alien from the planet Yuck. He giggled as Buster licked some crumbs off his ear.

SAMPLE TITLES

LITERATURE	460L	**Chrysanthemum** (HENKES)
	410L	**The Enormous Crocodile** (DAHL)
	GN400L*	**Pilot And Huxley** (MCGUINESS)
	400L	**The Fire Cat**** (AVERILL)
	400L	**Cowgirl Kate and Cocoa**** (SILVERMAN)
INFORMATIONAL	480L	**Martin Luther King, Jr. and the March on Washington**** (RUFFIN)
	460L	**True Life Treasure Hunts** (DONNELLY)
	460L	**Half You Heard of Fractions?** (ADAMSON)
	420L	**Rally for Recycling** (BULLARD)
	400L	**Animals in Winter** (RUSTAD)

*GN denotes Graphic Novel, IG denotes Illustrated Guide
**Common Core State Standards Text Exemplar

The Lexile Framework for Reading

200L ▸ 400L LEXILE RANGE

300L ▸ 395L

300L ***Princess Posey and the Next-Door Dog*** GREENE

"We have to stop now," said Miss Lee. "It's time for reading." "Ohhh..." A disappointed sound went up around the circle. "Here's what we'll do." Miss Lee stood up. "You are all very interested in dogs. So this week, you can write a story about your own dog or pet. Then you can read it to the class." Everyone got excited again. Except Posey. She didn't have a pet. Not a dog. Not a cat. Not a hamster. "Those of you who don't have a pet," Miss Lee said, "can write about the pet you hope to own someday." Miss Lee had saved the day! Now Posey had something to write about, too. Posey told her mom about Luca's puppy on the way home.

SAMPLE TITLES

LITERATURE	380L	**Martha Bakes a Cake** (BARSS)
	380L	**Junie B. Jones is (Almost) a Flower Girl** (PARK)
	360L	**Poppleton in Winter**** (RYLANT)
	340L	**Never Swipe a Bully's Bear** (APPLEGATE)
	330L	**Frog and Toad Together**** (LOBEL)
INFORMATIONAL	GN380L*	**BMX Blitz** (CIENCIN)
	380L	**Lemonade for Sale** (MURPHY)
	350L	**A Snowy Day** (SCHAEFER)
	330L	**Freedom River** (RAPPAPORT)
	300L	**From Tree to Paper** (MARSHALL)

200L ▸ 295L

200L ***Ronald Morgan Goes to Bat*** GIFF

He smacked the ball with the bat. The ball flew across the field. "Good;' said Mr. Spano. "Great, Slugger!" I yelled. ''We'll win every game. It was my turn next. I put on the helmet, and stood at home plate. "Ronald Morgan," said Rosemary. "You're holding the wrong end of the bat." Quickly I turned it around. I clutched it close to the end. Whoosh went the first ball. Whoosh went the second one. Wham went the third. It hit me in the knee. "Are you all right?" asked Michael. But I heard Tom say, "I knew it. Ronald Morgan's the worst." At snack time, we told Miss Tyler about the team.

SAMPLE TITLES

LITERATURE	280L	**Hi! Fly Guy**** (ARNOLD)
	260L	**The Cat in the Hat** (SEUSS)
	GN240L*	**Lunch Lady and the Cyborg Substitute** (KROSOCZKA)
	200L	**Dixie** (GILMAN)
	200L	**The Best Bug Parade** (MURPHY)
INFORMATIONAL	290L	**The Story of Pocahantas** (JENNER)
	250L	**Math in the Kitchen** (AMATO)
	230L	**What makes Day and Night** (BRANLEY)
	220L	**I Love Trains!** (STURGES)
	210L	**Sharks!** (CLARKE)

*GN denotes Graphic Novel

**Common Core State Standards Text Exemplar

Please note:

The Lexile measure of a book (the book's text complexity level) is an excellent starting point for a student's book selection. It's important to understand that the book's Lexile measure should not be the only factor in a student's book selection process. Lexile measures do not consider factors such as age-appropriateness, interest, and prior knowledge. These are also key factors when matching children and adolescents with books they might like and are able to read.

Lexile codes provide more information about developmental appropriateness, reading difficulty, and common or intended usage of books. For more information on Lexile codes, please visit **Lexile.com.**

MetaMetrics®
LINKING ASSESSMENT WITH INSTRUCTION

TEXT LEXILE RANGES TO GUIDE READING FOR COLLEGE AND CAREER READINESS

GRADES	CCSS LEXILE TEXT RANGE
11–12	1185L–1385L
9–10	1050L–1335L
6–8	925L–1185L
4–5	740L–1010L
2–3	420L–820L
1	190L–530L

COMMON CORE STATE STANDARDS FOR ENGLISH, LANGUAGE ARTS, REVISED APPENDIX A, NGA AND CCSSO, 2012

B. Report Sampler

REPORT SAMPLER

Powerful reporting tools for teachers and leaders to drive instruction and maximize success.

ACHIEVE3000®

ACHIEVE3000.COM

Achieve3000® is the leading literacy platform in blended learning programs today, with differentiated solutions that serve nearly three million students worldwide. Based on decades of scientific research, Achieve3000's solutions for grades PreK-12 reach all students with grade-appropriate content delivered at 12 levels in English and 8 in Spanish. Achieve3000's patented model of online differentiated instruction is proven to accelerate literacy gains for all students and prepare them for college and career success.

All Achieve3000 solutions include an initial assessment to identify students' reading levels at the beginning of the program, as well as embedded assessments that continually measure student achievement throughout the school year. These formative assessments are built right into the instructional routine, ensuring ongoing progress monitoring and data-driven decision-making without taking away from instructional time.

The Achieve3000 Report Sampler provides an overview of the reports available for administrators, teachers and families. Actionable data is updated every day to help educators monitor the health of their implementation, leverage data to drive instruction and enlist families in their student's success. All reports shown are available to both teachers and administrators with an Achieve3000 subscription. Additionally, administrators have access to Leadership Edition, an at-a-glance dashboard that provides key metrics to support a successful implementation.

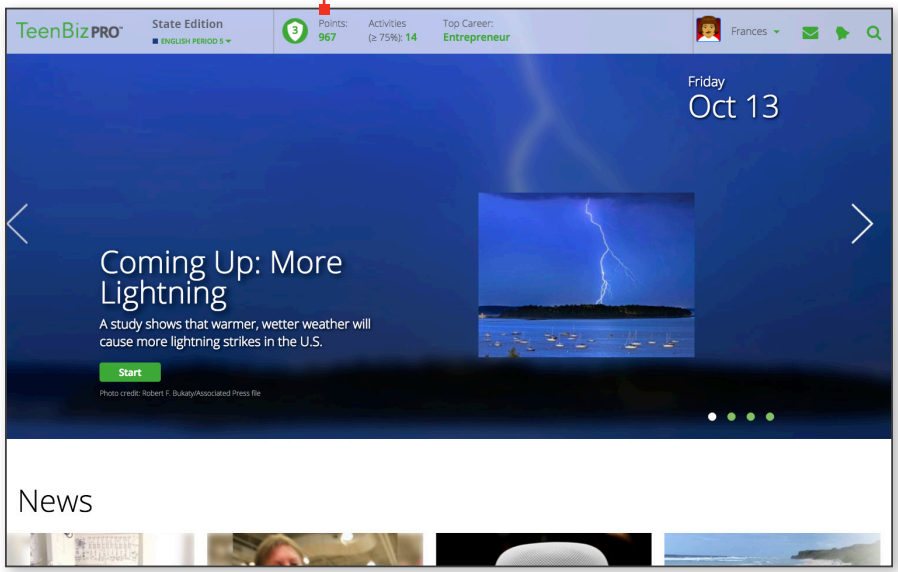
Making Data Actionable for Students, Teachers, Administrators and Families

For more information or a personalized Achieve3000 demonstration, contact info@achieve3000.com

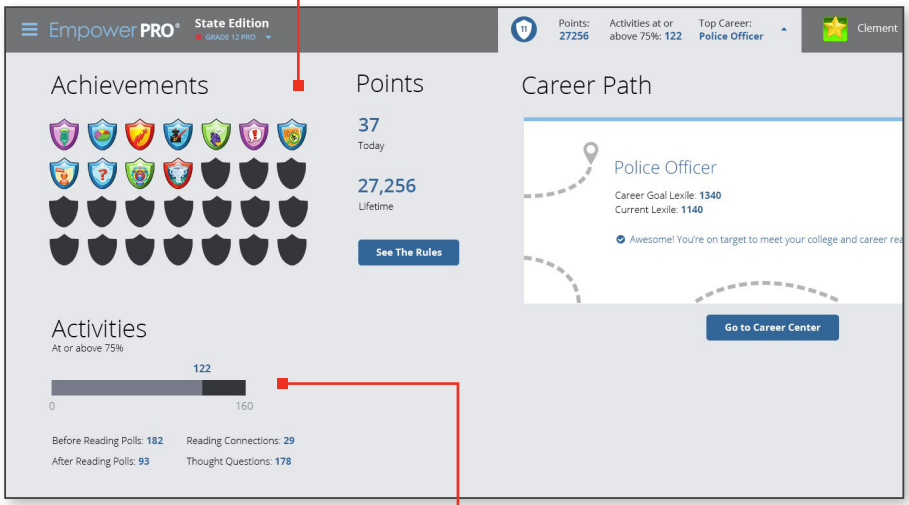
Motivate and Engage Students

- Motivate positive student behaviors by setting goals
- With equity for all students, ensure that readers at every level have the opportunity to earn point and achievements

Points are earned for achievements within the 5-Step Literacy Routine or awarded by a teacher. Students always keep track of total lifetime points.



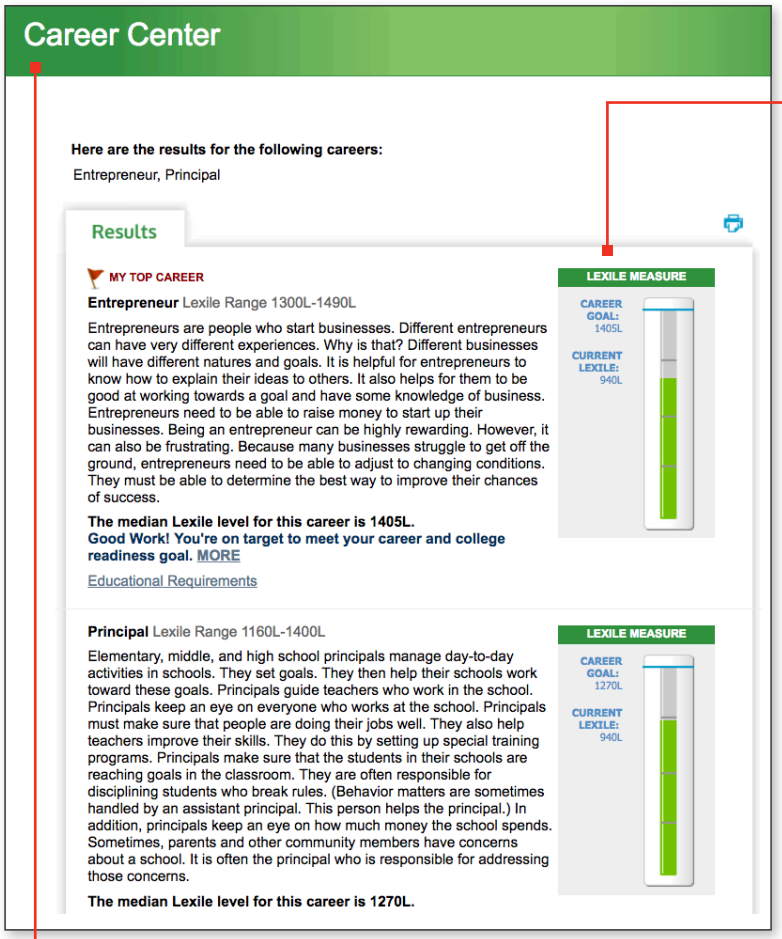
Students are recognized for quality work by earning achievements.



Students can monitor progress towards the 40-activity goal and performance within each step of the 5-Step Literacy Routine.

Student Ownership & Accountability

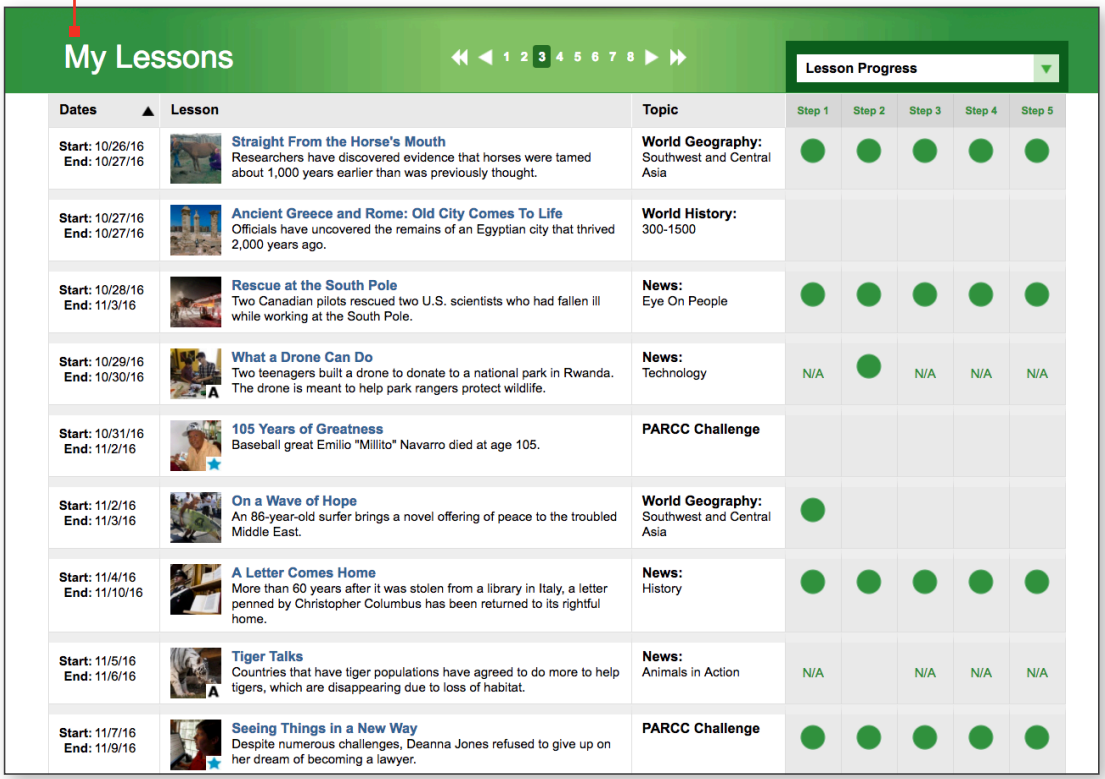
- Encourage independence by setting goals and allowing students to monitor their own progress



Through the Career Center, students can choose a career, set goals and track their Lexile growth.

Students can make meaning of their Lexile® level by keeping track of their progress towards a career goal.

On the My Lessons page, students can monitor progress of all assigned lessons and complete any missing lesson components.



Actionable Data at Your Fingertips

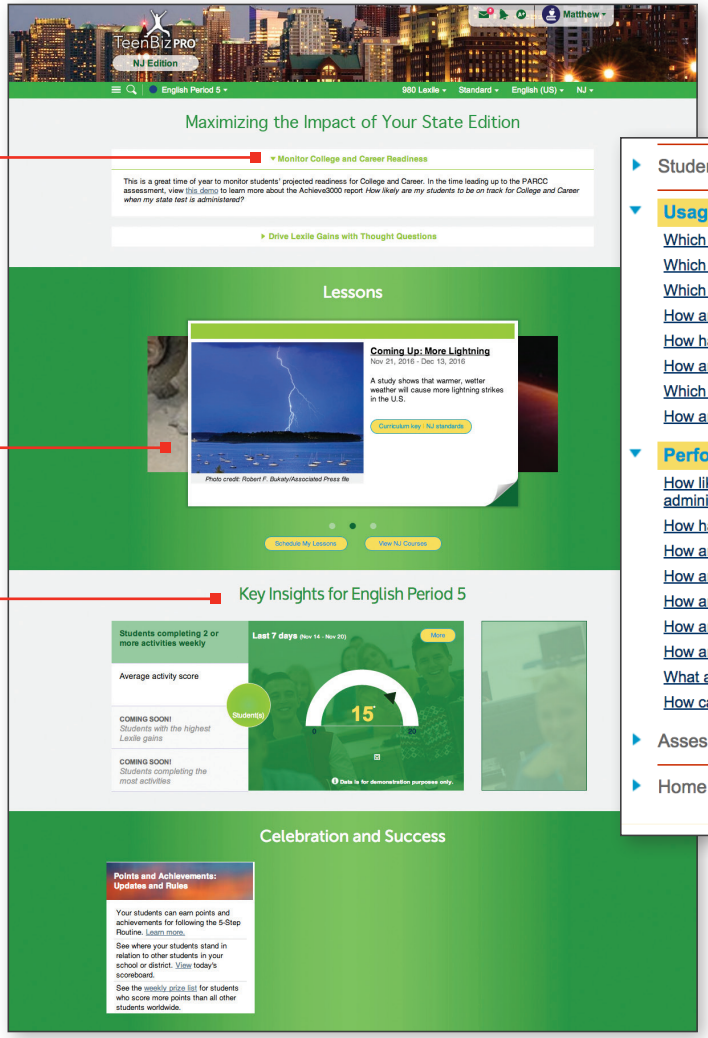
Robust tools to support all teachers:

- Powerful reporting tools empower teachers to leverage Achieve3000 data to drive instruction
- Access to real-time student data makes it quick and easy to monitor student progress
- Teacher resources make planning easier and ensure best practices are infused in every lesson

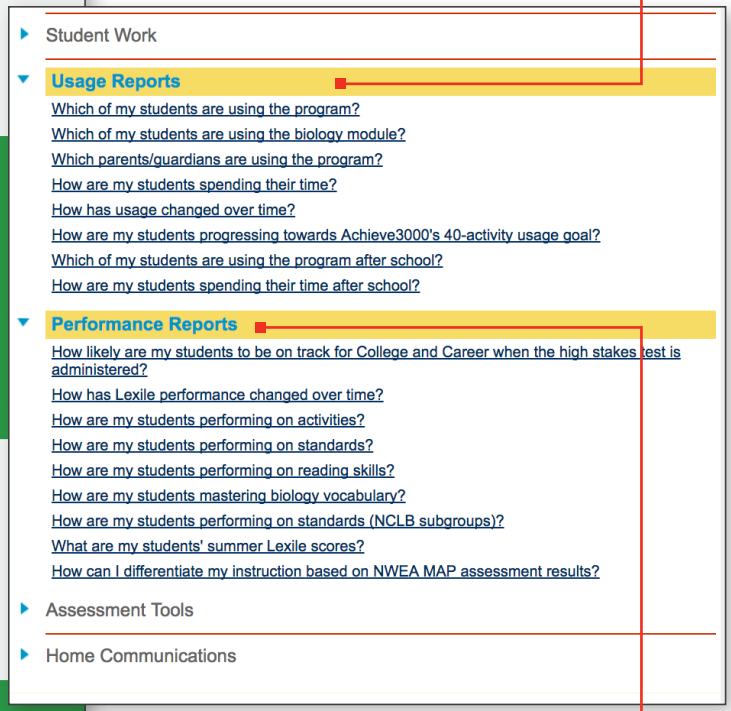
Extend the effectiveness of your implementation with easy-to-access announcements and best-practice tips for utilizing reports and boosting student performance.

Scroll through assigned lessons, edit choices, utilize lesson plans and easily view standards alignments.

Monitor data regularly to ensure your students are meeting performance metrics and making accelerated progress.



Dig deeper into individual student usage data to monitor which students are completing lessons in-school and outside of the classroom.



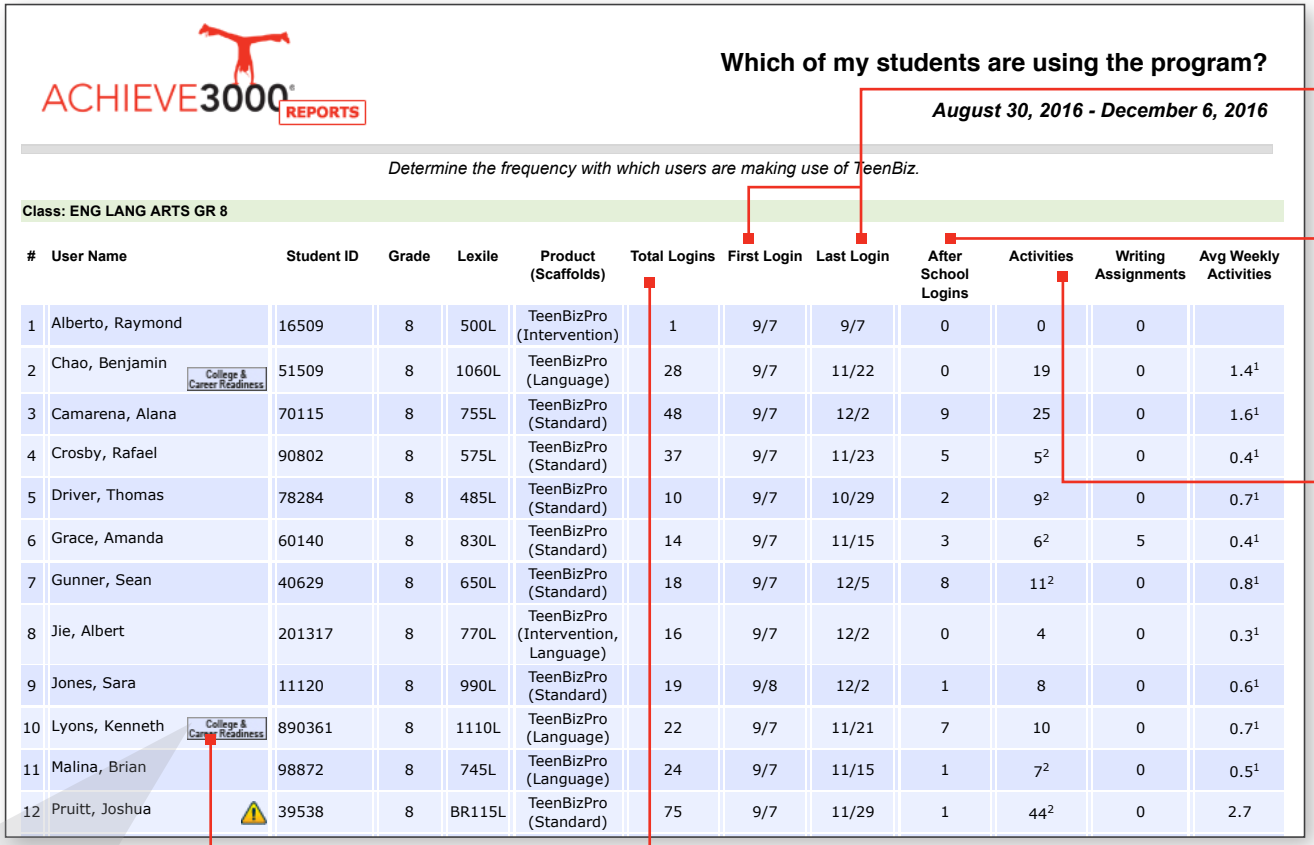
See student progress, track performance on standards and monitor changes in Lexile scores.

Which of my students are using the program?

DATA UPDATED DAILY

How it helps:

- Find out which classes and students are using the program
- View usage by grade or school, then drill down even further to see progress for each individual student
- Track progress towards the 40-activity goal: Students who complete 40 activities per semester (80 per school year) can achieve 2X the expected reading gains



ACHIEVE3000 REPORTS

Which of my students are using the program?

August 30, 2016 - December 6, 2016

Determine the frequency with which users are making use of TeenBiz.

Class: ENG LANG ARTS GR 8

#	User Name	Student ID	Grade	Lexile	Product (Scaffolds)	Total Logins	First Login	Last Login	After School Logins	Activities	Writing Assignments	Avg Weekly Activities
1	Alberto, Raymond	16509	8	500L	TeenBizPro (Intervention)	1	9/7	9/7	0	0	0	
2	Chao, Benjamin College & Career Readiness	51509	8	1060L	TeenBizPro (Language)	28	9/7	11/22	0	19	0	1.4[1]
3	Camarena, Alana	70115	8	755L	TeenBizPro (Standard)	48	9/7	12/2	9	25	0	1.6[1]
4	Crosby, Rafael	90802	8	575L	TeenBizPro (Standard)	37	9/7	11/23	5	5[2]	0	0.4[1]
5	Driver, Thomas	78284	8	485L	TeenBizPro (Standard)	10	9/7	10/29	2	9[2]	0	0.7[1]
6	Grace, Amanda	60140	8	830L	TeenBizPro (Standard)	14	9/7	11/15	3	6[2]	5	0.4[1]
7	Gunner, Sean	40629	8	650L	TeenBizPro (Standard)	18	9/7	12/5	8	11[2]	0	0.8[1]
8	Jie, Albert	201317	8	770L	TeenBizPro (Intervention, Language)	16	9/7	12/2	0	4	0	0.3[1]
9	Jones, Sara	11120	8	990L	TeenBizPro (Standard)	19	9/8	12/2	1	8	0	0.6[1]
10	Lyons, Kenneth College & Career Readiness	890361	8	1110L	TeenBizPro (Language)	22	9/7	11/21	7	10	0	0.7[1]
11	Malina, Brian	98872	8	745L	TeenBizPro (Language)	24	9/7	11/15	1	7[2]	0	0.5[1]
12	Pruitt, Joshua ⚠	39538	8	BR115L	TeenBizPro (Standard)	75	9/7	11/29	1	44[2]	0	2.7

College & Career Readiness

Indicates student is "On Track" for College and Career Readiness.

See the total logins completed within the specified date range.

Monitor first and last login for each student.

View logins by student outside of school hours. After-school logins are included in the total logins.

See how many activities have been completed within the specified date range.

How are my students spending their time?

DATA UPDATED DAILY

How it helps:

- Identify the components of the program students are using and the time they are spending on each component
- See total activities completed by class and by student, as well as hours on task
- View average activity performance by student

Monitor use of key program components such as the integrated reading strategy tools to accelerate Lexile gains.

Ensure students are maximizing their time on task by monitoring the percent of time spent in key program components.

Data is summarized by class; expand to see each individual student.

Indicates student is a Developing Reader and may require additional teacher support. Developing Readers remain at their current Lexile level until another LevelSet™ is administered.

KidBiz3000

ACHIEVE3000 REPORTS

How are my students spending their time?

August 30, 2016 - December 6, 2016

Identify the components of the program which users are utilizing.

Class: ENG LANG ARTS GR 8

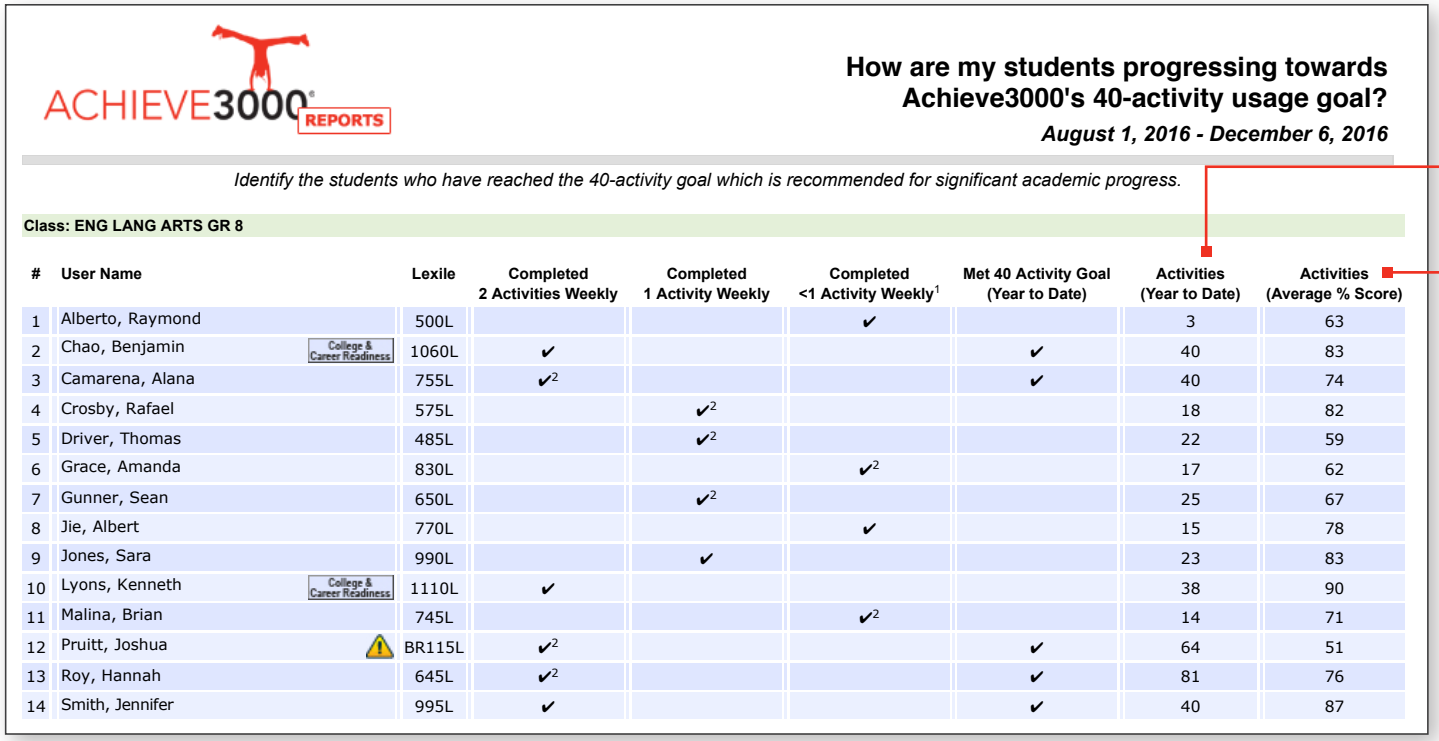
#	User Name	Lexile	Product (Scaffolds)	Total Logins	First Login	Last Login	Activities	Avg Weekly Activities	Activity Avg Score	Reading Connections: Summarize (Total)	Reading Connections: Generate Questions (Total)	Reading Connections: Setting the Purpose (Total)	Emails Sent	Program Hours	Mail	My Lessons	Activities	Thought Questions
1	Alberto, Raymond	500L	TeenBizPro (Intervention)	1	9/7	9/7	0			2	1	1	0	27m				
2	Chao, Benjamin College & Career Readiness	1060L	TeenBizPro (Language)	28	9/7	11/22	19	1.4[1]	82%	3	1	0	10	9h 58m	1%	26%	18%	2%
3	Camarena, Alana	755L	TeenBizPro (Standard)	48	9/7	12/2	25	1.8[1]	67%	4	4	1	30	23h 56m		38%	17%	
4	Crosby, Rafael	575L	TeenBizPro (Standard)	37	9/7	11/23	5[2]	0.4[1]	73%	2	3	0	3	7h 36m	1%	5%	47%	6%
5	Driver, Thomas	485L	TeenBizPro (Standard)	10	9/7	10/29	9[2]	0.7[1]	56%	1	2	0	0	3h 55m	2%	24%	53%	4%
6	Grace, Amanda	830L	TeenBizPro (Standard)	14	9/7	11/15	6[2]	0.4[1]	65%	3	0	0	1	6h 18m		22%	25%	3%
7	Gunner, Sean	650L	TeenBizPro (Standard)	18	9/7	12/5	11[2]	0.8[1]	74%	5	2	1	0	7h 55m	1%	7%	41%	
8	Jie, Albert	770L	TeenBizPro (Intervention, Language)	16	9/7	12/2	4	0.3[1]	79%	2	3	0	0	4h 2m	1%	28%	45%	3%
9	Jones, Sara	990L	TeenBizPro (Standard)	19	9/8	12/2	8	0.6[1]	86%	2	0	1	1	6h 28m	9%	31%	11%	2%
10	Lyons, Kenneth College & Career Readiness	1110L	TeenBizPro (Language)	22	9/7	11/21	10	0.7[1]	89%	2	3	2	0	6h 1m	5%	35%	41%	
11	Malina, Brian	745L	TeenBizPro (Language)	24	9/7	11/15	7[2]	0.5[1]	79%	1	0	2	0	9h 33m	7%	15%	25%	3%
12	Pruitt, Joshua ⚠	BR115L	TeenBizPro (Standard)	75	9/7	11/29	44[2]	3.2	44%	3	2	1	2	33h 27m		6%	60%	
13	Roy, Hannah	645L	TeenBizPro (Standard)	59	9/7	12/6	58[2]	4.2	72%	2	3	0	8	26h	1%	10%	42%	4%
14	Smith, Jennifer	995L	TeenBizPro (Standard)	15	9/8	9/21	0			1	3	1	0	5h 48m		44%		

How are my students progressing towards Achieve3000's 40-activity usage goal?

DATA UPDATED DAILY

How it helps:

- Track progress towards the 40-activity goal: Students who complete 40 activities per semester (80 per school year) can achieve 2X the expected reading gains
- Identify students who have reached the recommended 40-activity goal
- See how many activities students are completing on average weekly
- Monitor best-practice recommendations for first-try activity scores



ACHIEVE3000 REPORTS

How are my students progressing towards Achieve3000's 40-activity usage goal?

August 1, 2016 - December 6, 2016

Identify the students who have reached the 40-activity goal which is recommended for significant academic progress.

Class: ENG LANG ARTS GR 8

#	User Name	Lexile	Completed 2 Activities Weekly	Completed 1 Activity Weekly	Completed <1 Activity Weekly[1]	Met 40 Activity Goal (Year to Date)	Activities (Year to Date)	Activities (Average % Score)
1	Alberto, Raymond	500L			✔		3	63
2	Chao, Benjamin College & Career Readiness	1060L	✔			✔	40	83
3	Camarena, Alana	755L	✔[2]			✔	40	74
4	Crosby, Rafael	575L		✔[2]			18	82
5	Driver, Thomas	485L		✔[2]			22	59
6	Grace, Amanda	830L			✔[2]		17	62
7	Gunner, Sean	650L		✔[2]			25	67
8	Jie, Albert	770L			✔		15	78
9	Jones, Sara	990L		✔			23	83
10	Lyons, Kenneth College & Career Readiness	1110L	✔				38	90
11	Malina, Brian	745L			✔[2]		14	71
12	Pruitt, Joshua ⚠	BR115L	✔[2]			✔	64	51
13	Roy, Hannah	645L	✔[2]			✔	81	76
14	Smith, Jennifer	995L	✔			✔	40	87

See how many activities each student has completed.

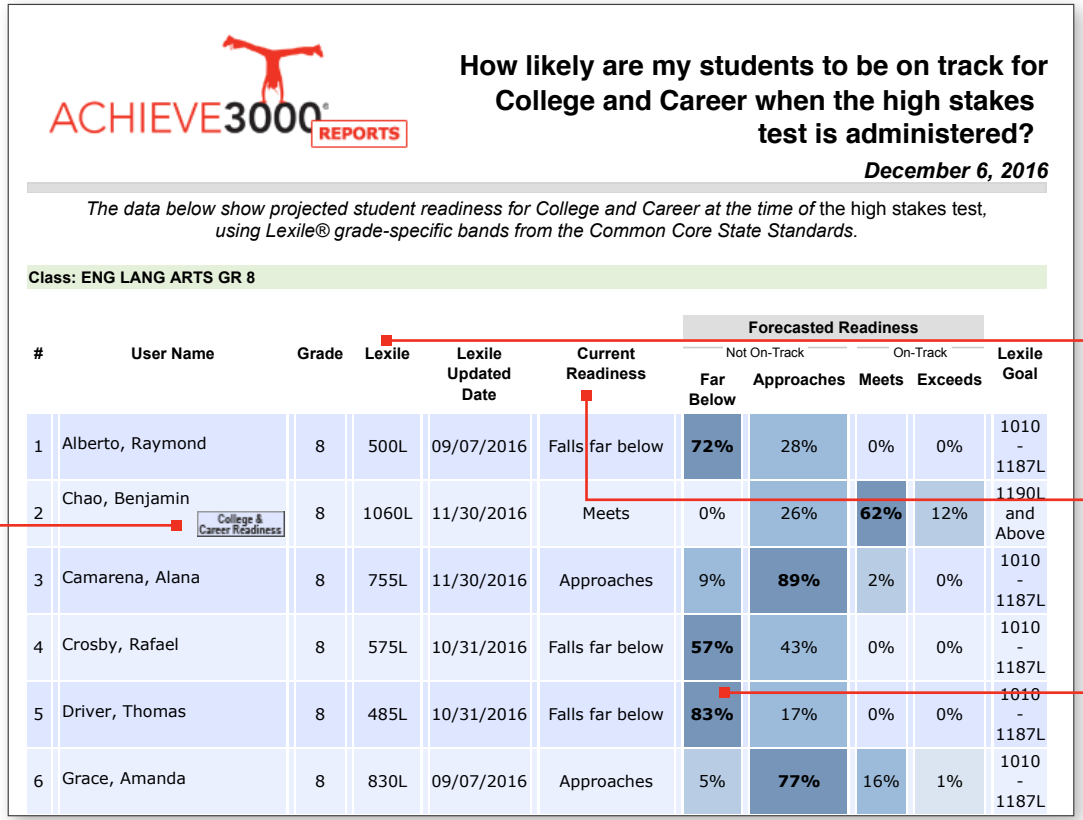
Easily monitor the average first-try activity score by student. Research shows that students who who score 75% or higher on the first try see the greatest Lexile growth.

How likely are my students to be on track for College & Career when the high stakes test is administered?

DATA UPDATED DAILY

How it helps:

- Forecast student readiness for College and Career at the time your state assessment is administered*
- See how students are progressing towards College and Career Lexile performance expectations and plan aggressive intervention where it's needed



ACHIEVE3000 REPORTS

How likely are my students to be on track for College and Career when the high stakes test is administered?

December 6, 2016

The data below show projected student readiness for College and Career at the time of the high stakes test, *using Lexile® grade-specific bands from the Common Core State Standards.*

Class: ENG LANG ARTS GR 8

#	User Name	Grade	Lexile	Lexile Updated Date	Current Readiness	Forecasted Readiness				Lexile Goal
						Not On-Track		On-Track		
						Far Below	Approaches	Meets	Exceeds	
1	Alberto, Raymond	8	500L	09/07/2016	Falls far below	**72%**	28%	0%	0%	1010 - 1187L
2	Chao, Benjamin College & Career Readiness	8	1060L	11/30/2016	Meets	0%	26%	**62%**	12%	1190L and Above
3	Camarena, Alana	8	755L	11/30/2016	Approaches	9%	**89%**	2%	0%	1010 - 1187L
4	Crosby, Rafael	8	575L	10/31/2016	Falls far below	**57%**	43%	0%	0%	1010 - 1187L
5	Driver, Thomas	8	485L	10/31/2016	Falls far below	**83%**	17%	0%	0%	1010 - 1187L
6	Grace, Amanda	8	830L	09/07/2016	Approaches	5%	**77%**	16%	1%	1010 - 1187L

Indicates student is "On Track" for College and Career Readiness.

Forecast is based on student's current Lexile at the time the report is run.

See each student's current readiness category.

Dark blue shading indicates where students are most likely to be when end-of-year assessments are administered.

*Based on College and Career Readiness benchmarks provided by MetaMetrics®

How are my students performing on standards?

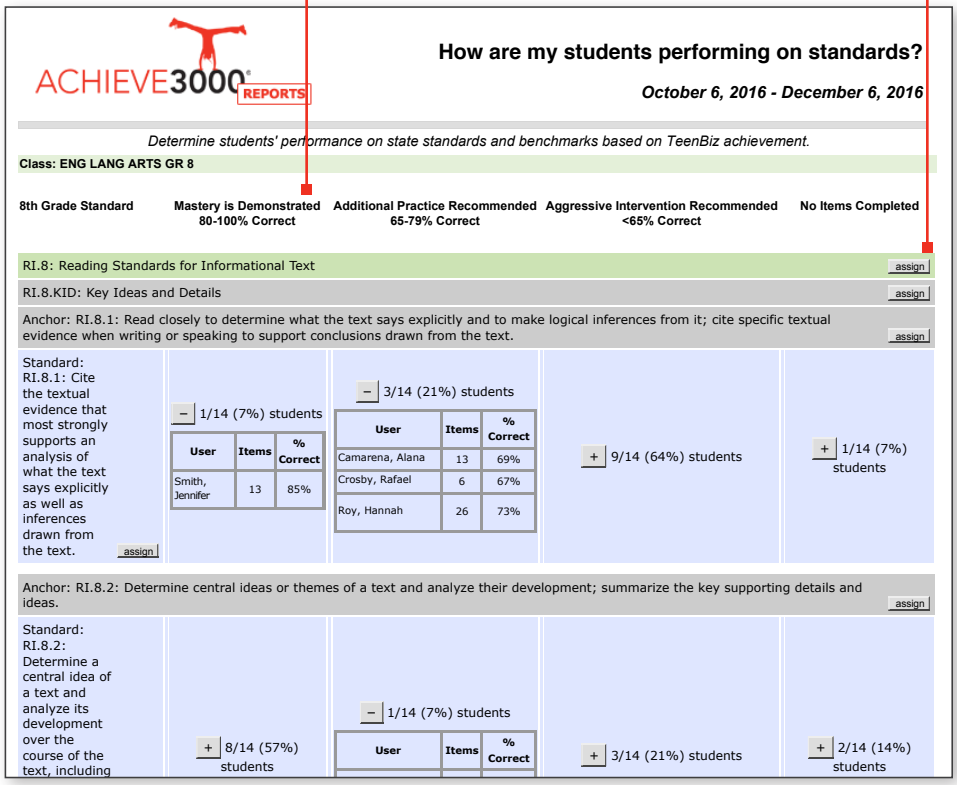
DATA UPDATED DAILY

How it helps:

- Review students' mastery of your state standards based on item responses
- See each student's instructional recommendation
- Directly assign lessons for additional practice on specific standards

Students are grouped by their level of performance on each standard, informing optimal groups for teacher-led small-group instruction.

Directly assign lessons with additional practice opportunities for each standard.



ACHIEVE3000 REPORTS

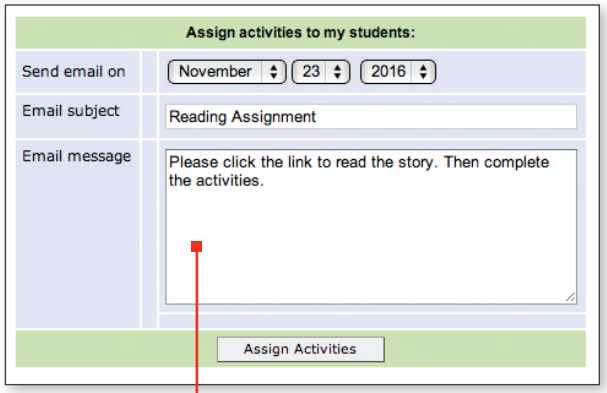
How are my students performing on standards?

October 6, 2016 - December 6, 2016

Determine students' performance on state standards and benchmarks based on TeenBiz achievement.

Class: ENG LANG ARTS GR 8

8th Grade Standard	Mastery is Demonstrated 80-100% Correct	Additional Practice Recommended 65-79% Correct	Aggressive Intervention Recommended <65% Correct	No Items Completed
RI.8: Reading Standards for Informational Text				
RI.8.KID: Key Ideas and Details				
Anchor: RI.8.1: Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.				
Standard: RI.8.1: Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.	− 1/14 (7%) students User / Items / % Correct Smith, Jennifer / 13 / 85%	− 3/14 (21%) students User / Items / % Correct Camarena, Alana / 13 / 69% Crosby, Rafael / 6 / 67% Roy, Hannah / 26 / 73%	+ 9/14 (64%) students	+ 1/14 (7%) students
Anchor: RI.8.2: Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.				
Standard: RI.8.2: Determine a central idea of a text and analyze its development over the course of the text, including	+ 8/14 (57%) students	− 1/14 (7%) students User / Items / % Correct	+ 3/14 (21%) students	+ 2/14 (14%) students



Assign activities to my students:

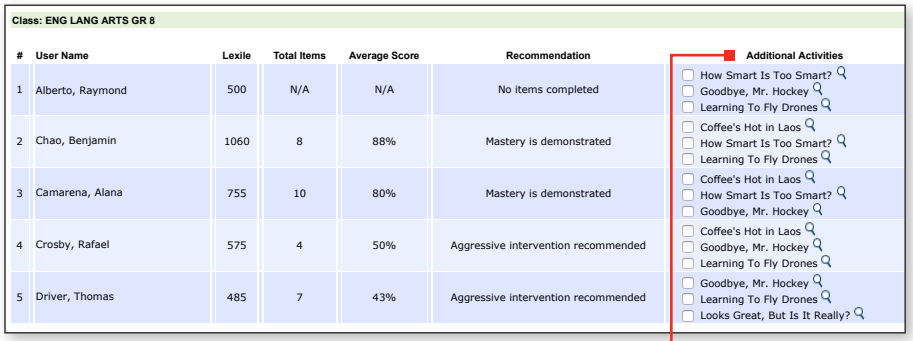
Send email on: November 23 2016

Email subject: Reading Assignment

Email message: Please click the link to read the story. Then complete the activities.

Assign Activities

Send lessons directly to a student's Achieve3000 mailbox with one click.



Class: ENG LANG ARTS GR 8

#	User Name	Lexile	Total Items	Average Score	Recommendation	Additional Activities
1	Alberto, Raymond	500	N/A	N/A	No items completed	How Smart Is Too Smart? Goodbye, Mr. Hockey Learning To Fly Drones
2	Chao, Benjamin	1060	8	88%	Mastery is demonstrated	Coffee's Hot in Laos How Smart Is Too Smart? Learning To Fly Drones
3	Camarena, Alana	755	10	80%	Mastery is demonstrated	Coffee's Hot in Laos How Smart Is Too Smart? Goodbye, Mr. Hockey
4	Crosby, Rafael	575	4	50%	Aggressive intervention recommended	Coffee's Hot in Laos Goodbye, Mr. Hockey Learning To Fly Drones
5	Driver, Thomas	485	7	43%	Aggressive intervention recommended	Goodbye, Mr. Hockey Learning To Fly Drones Looks Great, But Is It Really?

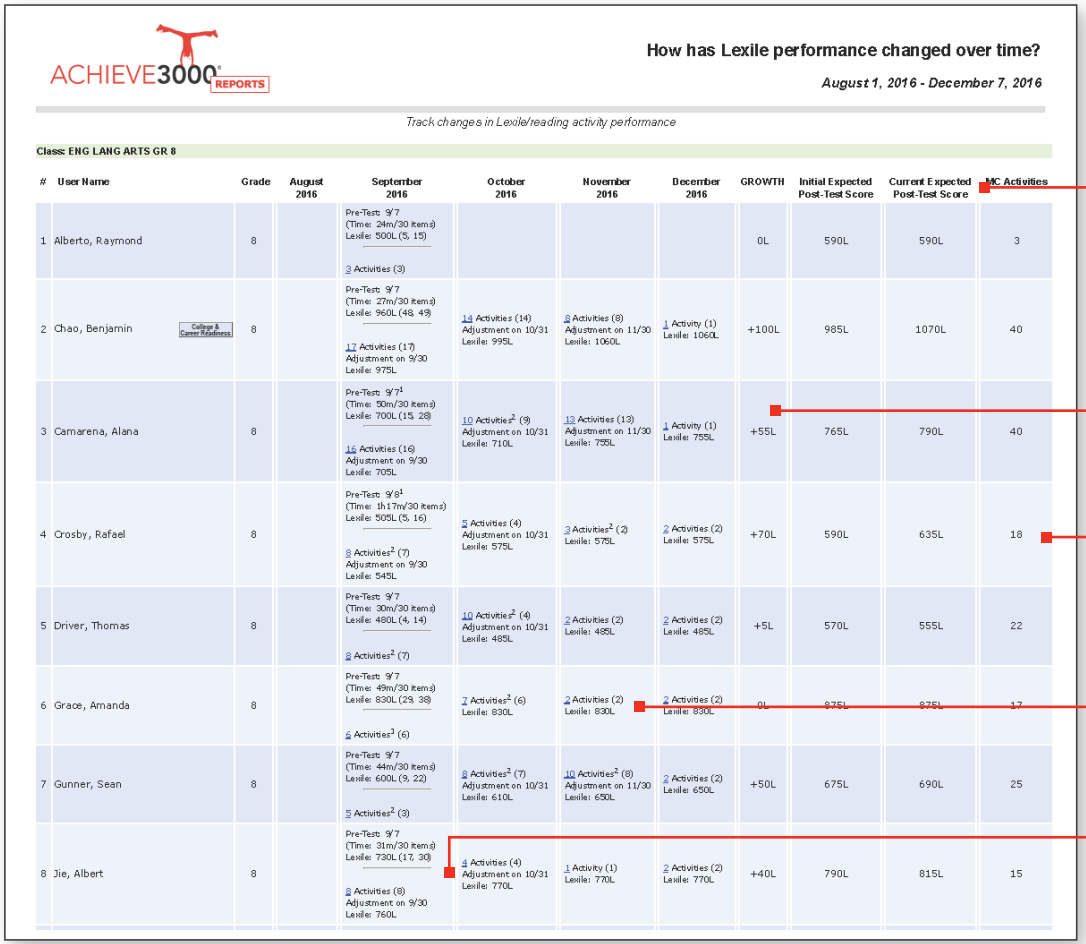
Recommended assignments offer additional practice opportunities with the selected standard. Lists are personalized based on lessons students have not yet completed.

How has Lexile performance changed over time?

DATA UPDATED DAILY

How it helps:

- Track monthly changes in Lexile level based on LevelSet scores and performance on multiple-choice activities
- Reduces additional testing of students; embedded assessments allow for ongoing progress monitoring without taking away from instructional time
- See completed activities by month and date of Lexile level adjustment



ACHIEVE3000 REPORTS

How has Lexile performance changed over time?

August 1, 2016 - December 7, 2016

Track changes in Lexile/reading activity performance

Class: ENG LANG ARTS GR 8

#	User Name	Grade	August 2016	September 2016	October 2016	November 2016	December 2016	GROWTH	Initial Expected Post-Test Score	Current Expected Post-Test Score	MC Activities
1	Alberto, Raymond	8		Pre-Test: 9/7 (Time: 24m/30 items) Lexile: 500L (5, 15) — 3 Activities (3)				0L	590L	590L	3
2	Chao, Benjamin	8		Pre-Test: 9/7 (Time: 27m/30 items) Lexile: 960L (48, 49) — 17 Activities (17) Adjustment on 9/30 Lexile: 975L	14 Activities (14) Adjustment on 10/31 Lexile: 995L	8 Activities (8) Adjustment on 11/30 Lexile: 1060L	1 Activity (1) Lexile: 1060L	+100L	985L	1070L	40
3	Camarena, Alana	8		Pre-Test: 9/7[1] (Time: 50m/30 items) Lexile: 700L (15, 28) — 16 Activities (16) Adjustment on 9/30 Lexile: 705L	10 Activities[2] (9) Adjustment on 10/31 Lexile: 710L	13 Activities (13) Adjustment on 11/30 Lexile: 755L	1 Activity (1) Lexile: 755L	+55L	765L	790L	40
4	Crosby, Rafael	8		Pre-Test: 9/8[1] (Time: 1h17m/30 items) Lexile: 505L (5, 16) — 8 Activities[2] (7) Adjustment on 9/30 Lexile: 545L	5 Activities (4) Adjustment on 10/31 Lexile: 575L	3 Activities[2] (2) Lexile: 575L	2 Activities (2) Lexile: 575L	+70L	590L	635L	18
5	Driver, Thomas	8		Pre-Test: 9/7 (Time: 30m/30 items) Lexile: 480L (4, 14) — 8 Activities[2] (7)	10 Activities[2] (4) Adjustment on 10/31 Lexile: 485L	2 Activities (2) Lexile: 485L	2 Activities (2) Lexile: 485L	+5L	570L	555L	22
6	Grace, Amanda	8		Pre-Test: 9/7 (Time: 49m/30 items) Lexile: 830L (23, 38) — 6 Activities[2] (6)	7 Activities[2] (6) Lexile: 830L	2 Activities (2) Lexile: 830L	2 Activities (2) Lexile: 830L	0L	875L	875L	17
7	Gunner, Sean	8		Pre-Test: 9/7 (Time: 44m/30 items) Lexile: 600L (9, 22) — 5 Activities[2] (3)	8 Activities[2] (7) Adjustment on 10/31 Lexile: 610L	10 Activities[2] (8) Adjustment on 11/30 Lexile: 650L	2 Activities (2) Lexile: 650L	+50L	675L	690L	25
8	Jie, Albert	8		Pre-Test: 9/7 (Time: 31m/30 items) Lexile: 730L (17, 30) — 8 Activities (8) Adjustment on 9/30 Lexile: 760L	4 Activities (4) Adjustment on 10/31 Lexile: 770L	1 Activity (1) Lexile: 770L	2 Activities (2) Lexile: 770L	+40L	790L	815L	15

View what student's predicted Lexile level will be at the time the LevelSet post-test is administered (typically in May).

See Lexile growth to date, updated monthly.

See how many multiple-choice activities each student has completed.

The number of completed activities each month links directly from the report to a detailed breakdown by student.

See student's last Lexile adjustment.

How are my students performing on activities?

DATA UPDATED DAILY

How it helps:

- Monitor students' performance on activities relative to the target score of 75% or higher on average
- Identify students working in their instructional zone: Students who are applying themselves should receive first-try scores of 75% or higher on their first attempt

See how many activities each student has completed with an average score above or below 75% during the report time frame.

ACHIEVE3000 REPORTS

How are my students performing on activities?

October 6, 2016 - December 6, 2016

Monitor student performance on activities.

Class: ENG LANG ARTS GR 8

#	User Name	Lexile	Total Number of Activities Below 75%	Total Number of Activities at 75% and Above	Average Activity Score
1	Chao, Benjamin College & Career Readiness	1060L	1	6	86
2	Camarena, Alana	755L	3	7	69
3	Driver, Thomas	485L	5[1]	1[1]	42
4	Grace, Amanda	830L	2[1]		57
5	Gunner, Sean	650L	4[1]	5[1]	72
6	Jie, Albert	770L	1		63
7	Jones, Sara	990L		4	88
8	Lyons, Kenneth College & Career Readiness	1110L		3	92
9	Malina, Brian	745L	1[1]		38
10	Pruitt, Joshua ⚠	BR115L	17[1]	6[1]	49
11	Roy, Hannah	645L	15[1]	29[1]	74

Reflects students' average score across activities completed during the report time frame.

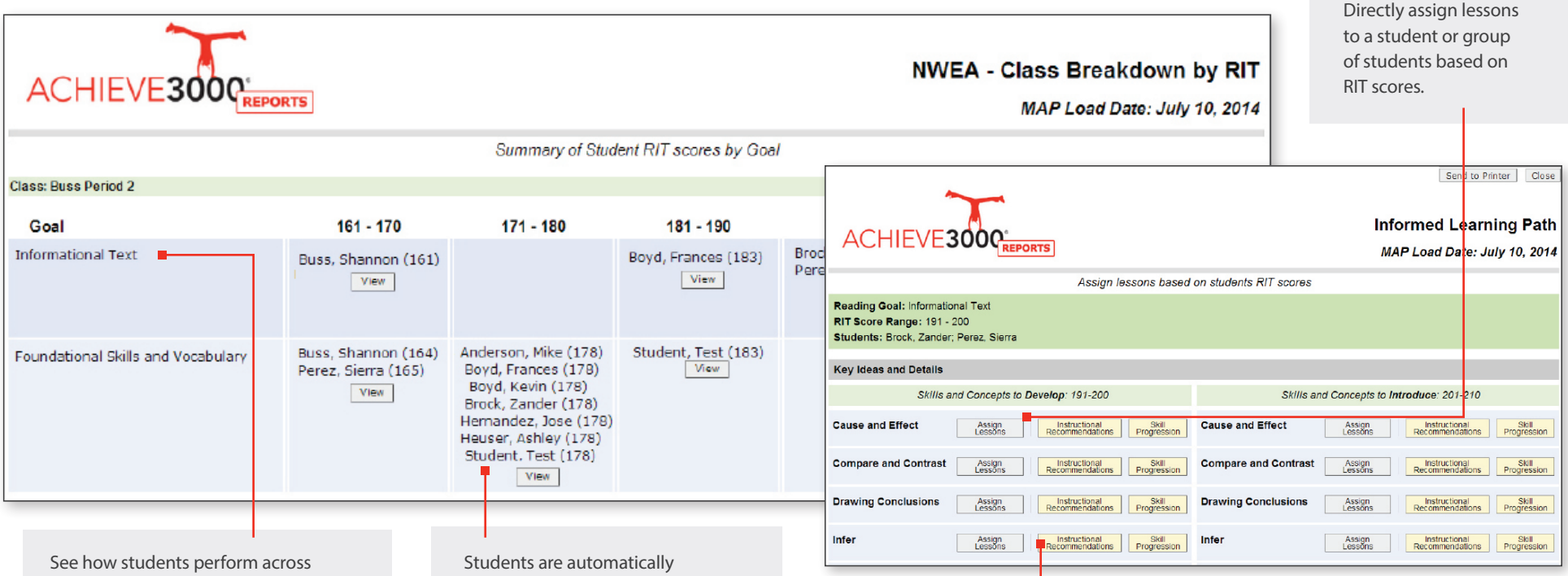
Indicates one or more multiple-choice activities may be invalid. More information is provided for each student in the activity details.

How can I differentiate my instruction based on NWEA MAP assessment results?*

DATA UPDATED DAILY

How it helps:

- Easily import each school's NWEA™ MAP® comprehensive data file (CDF) to generate an Achieve3000 MAP Informed Learning Path for each student
- See a summary of student RIT scores by goal and assign lessons based on RIT scores
- Use grouping for an easy way to work with students based on skill and concept performance within each goal



Directly assign lessons to a student or group of students based on RIT scores.

See how students perform across the RIT bands for each of the goals of Informational Text, Foundational Skills and Vocabulary.

Students are automatically grouped based on their performance on each goal for targeted small-group instruction.

Targeted instructional recommendations are provided for each skill and concept in each RIT band.

*NWEA integration is available to purchase as an add-on to your Achieve3000 solution.

How are my students performing on reading skills?*

DATA UPDATED DAILY

How it helps:

- Pinpoint skill gaps to inform instruction and accelerate learning
- See how students are performing on essential reading comprehension and vocabulary skills
- Inform instruction by identifying at a glance which students are mastering or struggling with specific skills

ACHIEVE3000 REPORTS

How are my students performing on reading skills?

October 4, 2017 - December 4, 2017

Determine students' performance on specific reading skills.

Type: Reading

Class: GR 8

8th Grade Skill	Mastery is Demonstrated 80-100% Correct	Additional Practice Recommended 65-79% Correct	Aggressive Intervention Recommended <65% Correct	No Items Completed
Compare and Contrast assign	− 4/14 (29%) students User / Items / % Correct Christian, Edward — 7 — 86% Gertler Sean, — 2 — 100% Jones, Sara — 2 — 100% Lyons, Ken — 2 — 100%		− 6/14 (43%) students User / Items / % Correct Camarena, Alana — 5 — 20% Crosby, Rafael — 1 — 0% Jie, Albert — 1 — 0% Pruitt, Joshua — 12 — 33% Roy, Hannah — 7 — 43% Smith, Jennifer — 5 — 60%	+ 4/14 (29%) students
Cause and Effect assign	+ 7/14 (50%) students	+ 1/14 (7%) students	+ 5/14 (36%) students	+ 1/14 (7%) students
Chronology/Sequence assign	+ 4/14 (29%) students	+ 1/14 (7%) students	+ 7/14 (50%) students	+ 2/14 (14%) students
Draw Conclusions assign	+ 2/14 (14%) students	− 2/14 (14%) students User / Items / % Correct Chao,	+ 8/14 (57%) students	+ 2/14 (14%) students

Students are grouped by their level of performance on each skill, informing optimal groups for teacher-led small-group instruction.

See how many students are performing at each level by skill. Expand to see individual performance by student.

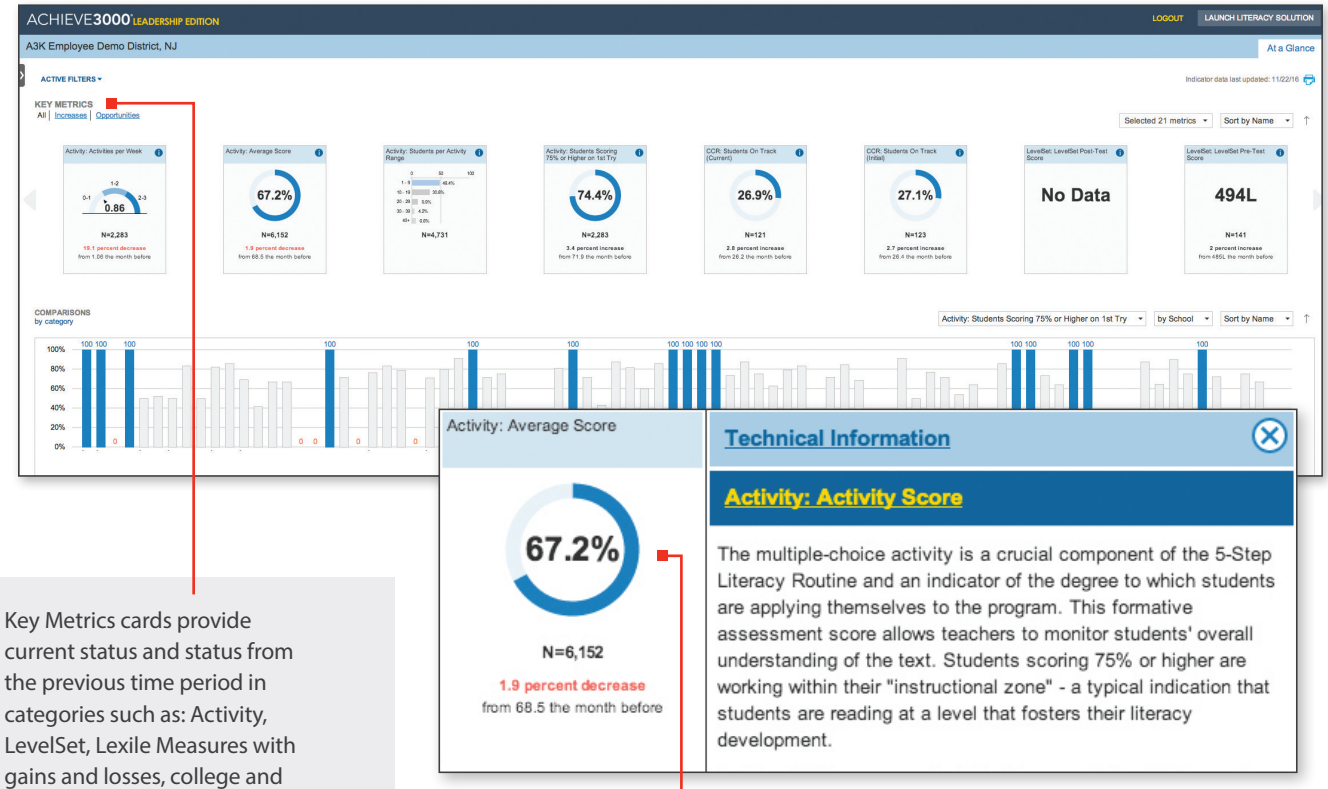
Directly assign lessons with additional practice opportunities for each skill.

The Skills Report is only available to customers with an Achieve3000 Access, Boost, Español or Achieve Intensive license. This report is not available for customers with a Pro subscription.

Making the Most of Your Implementation

DATA UPDATED DAILY

- Dynamic dashboard fueled by daily student data makes it quick and easy to monitor the health of your implementation and demonstrate success on a daily basis
- See an easy at-a-glance overview of your districts, schools and teachers
- Plan on the go with access anytime, anywhere and on any device
- 21 Key Metric cards focus on essential performance and usage data to drive a successful implementation



Key Metrics cards provide current status and status from the previous time period in categories such as: Activity, LevelSet, Lexile Measures with gains and losses, college and career readiness, login metrics for students and more.

An Information icon (i) on each key metric card provides that metric's description and technical information on how it is calculated, as well as suggested action steps.

21 Key Metrics to monitor data at a glance

Activity
- Activities per week
- Average score
- Students per activity range
- Students scoring 75% or higher on 1st try

College and Career Readiness
- Students on track (Current)
- Students on track (Initial)

LevelSet
- Post-test score
- Pre-test score
- Students who completed the post-test
- Students who completed the pre-test

Lexiles
- Gains in Lexiles
- Lexile measure

Logins
- Number of student logins
- Number of teacher logins
- Student logins during/outside school hours
- Students who logged in during the date range
- Teacher logins during/outside school hours
- Teachers who logged in during the date range

Time Spent
- In Activities
- In Articles
- In Thought Questions

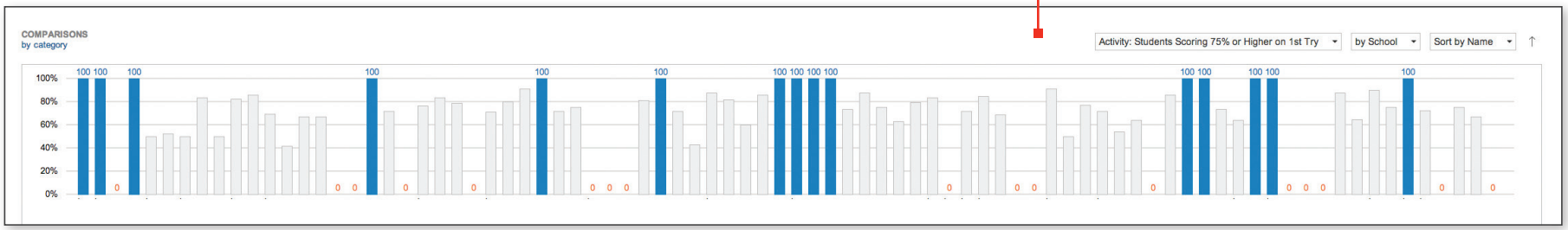
Identify Trends and Areas that Need Attention

DATA UPDATED DAILY

How it helps:

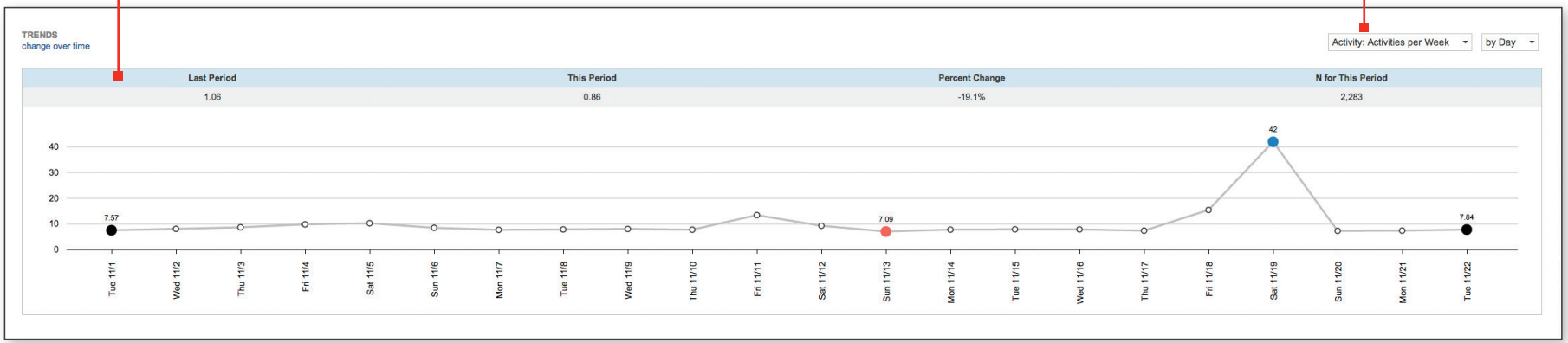
- Compare performance by school, grade level, teacher or class
- Monitor trends by day, week or month

The Comparisons chart compares performance on key metrics across schools, grades, classes and teachers.



The Trends chart allows you to monitor trends across time and see variation by day, week or month.

Filters focus your data by date, school, grade, teacher or class.

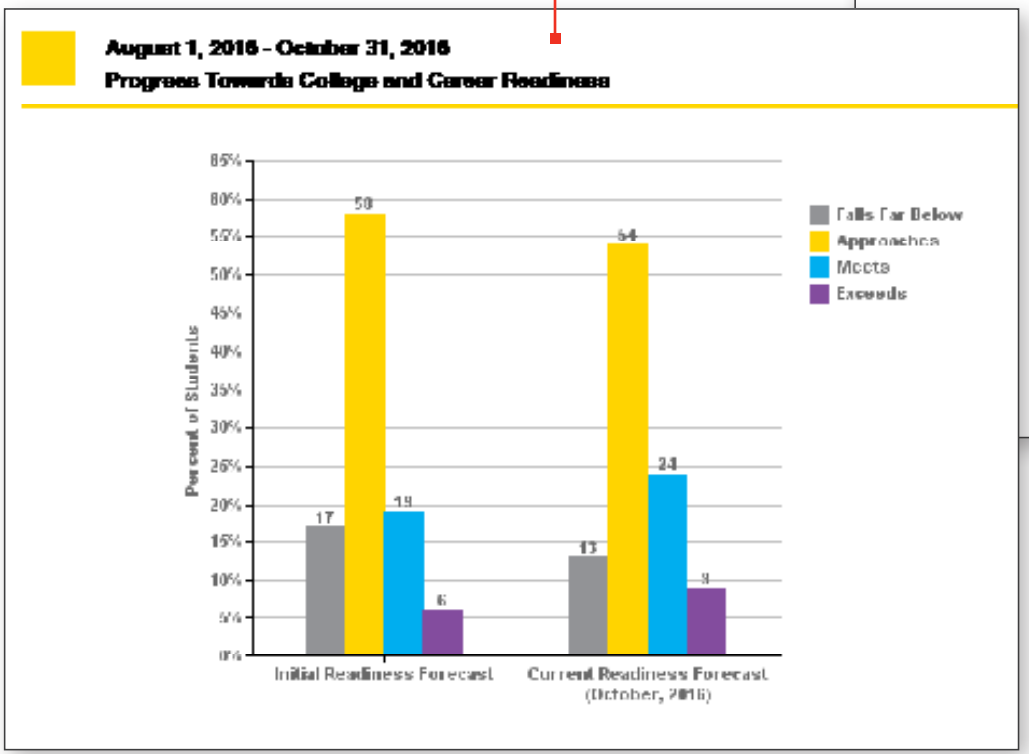


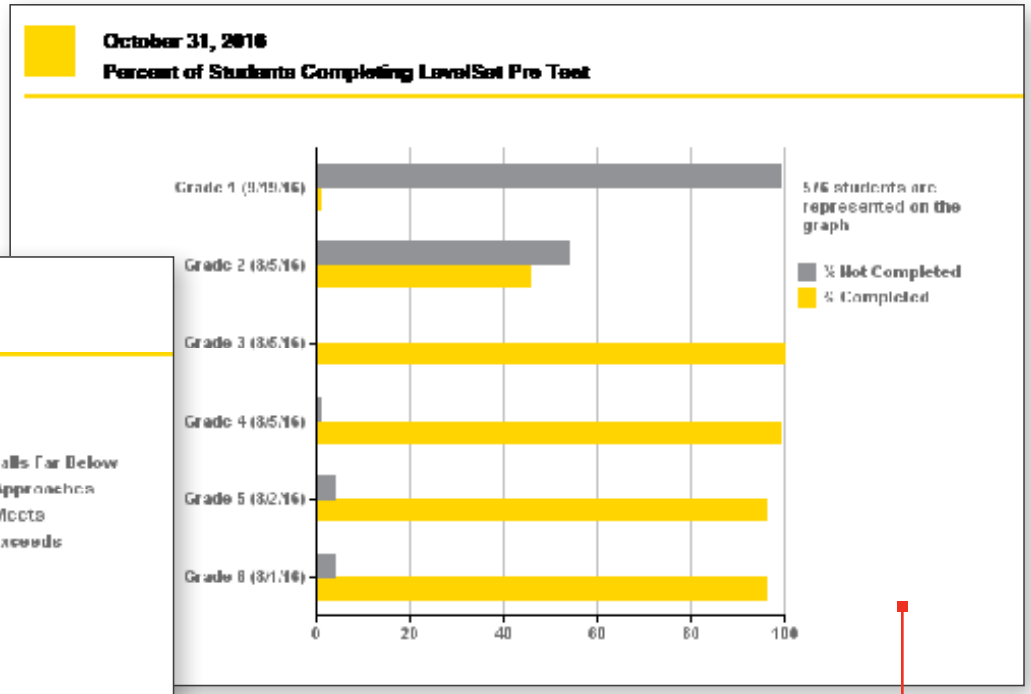
Performance Reports Delivered Monthly*

Achieve3000 Performance Reports are distributed to district and school administrators mid-month, every month after implementation has started:

- At-a-glance view allows you to track student progress and monitor the success of your implementation
- Delivered directly to your email inbox each month

Use this data to monitor your students' progress towards college and career readiness over the course of the school year.





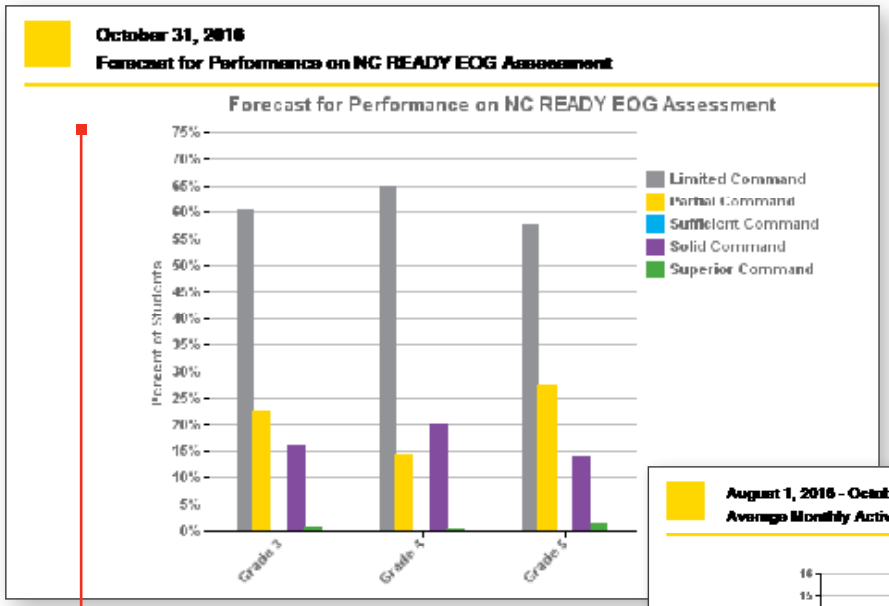
Use this report to see how your students are progressing through the LevelSet test administration.

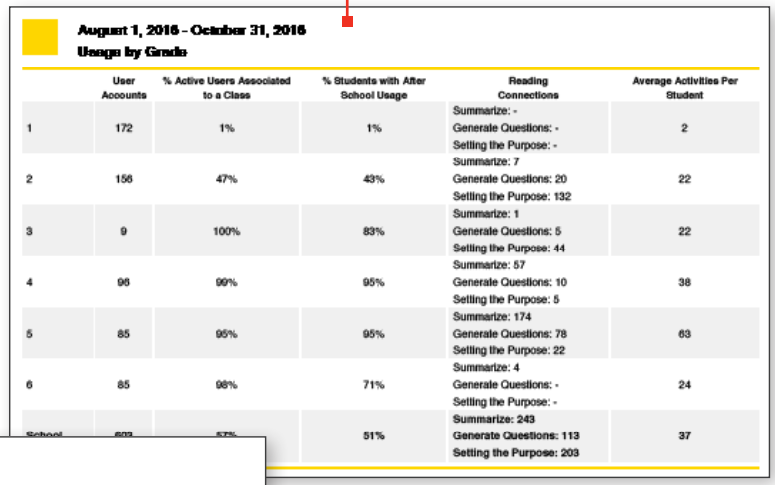
*APRs are delivered every month during the school year, excluding February and June.

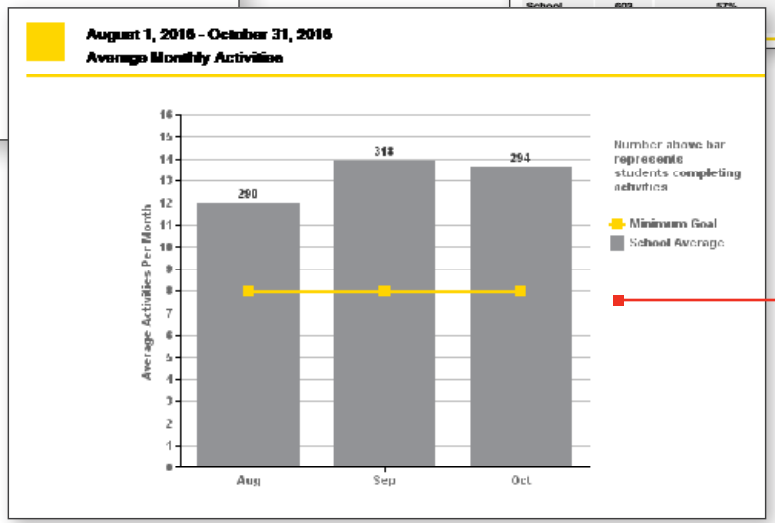
Regularly Monitor Implementation Success

- School and district reports include implementation messages and data highlights organized by school, grade or class, depending on recipient

Monitor program usage in key areas (by class and total for all classes) for your Achieve3000 implementation.







See students' forecast for performance on your state assessment based on current Lexile measures.

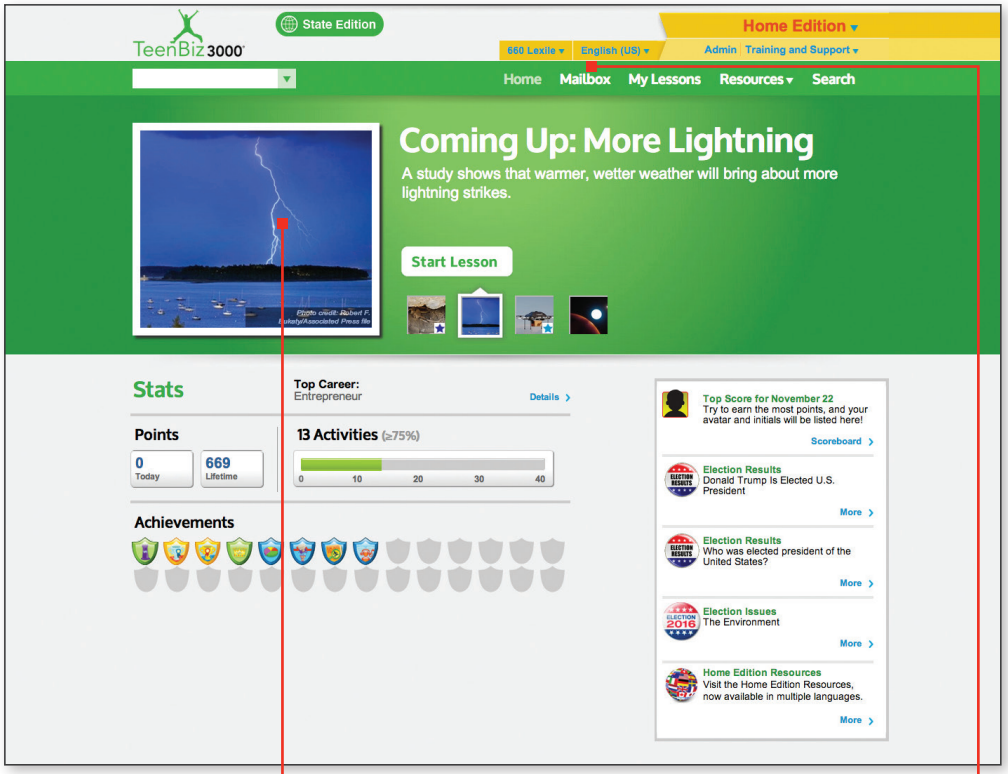
Note: Forecasting report only available for select states.

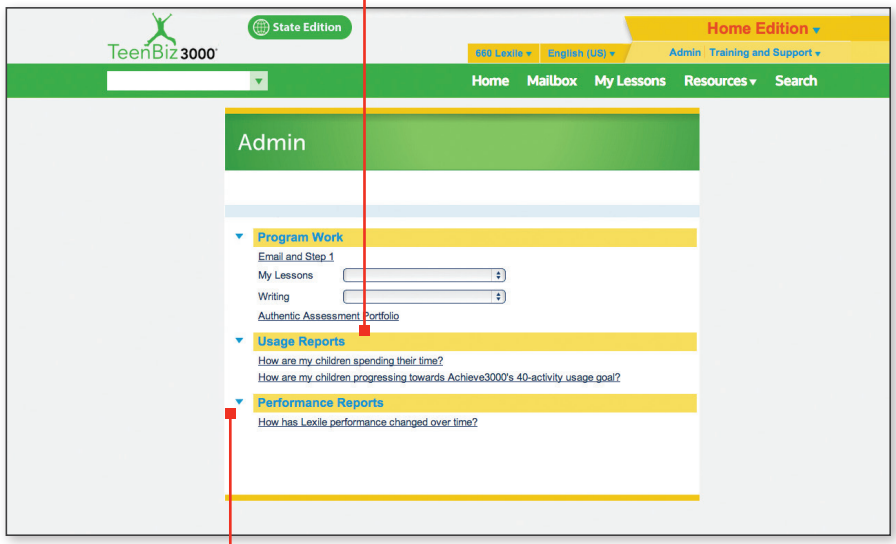
Compare the actual number of activities completed against the activity completion goal of 2 per week (8 per month), plus monitor progress to ensure maximum Lexile gains.

Engage Families with the Home Edition

- Designed to support family literacy and available in English and Spanish
- Increases family involvement and extends the reading experience beyond the school day
- The included Home Resource Site is available in 23 languages and helps parents understand what they can do to support their children

Program work allows parents to see lessons and activity performance for all of their children enrolled in Achieve3000.





Usage and Performance reports for families provide parents with access to key metrics for their children, including how their Lexile level has grown over time.

Family members can view the lessons their children are currently assigned and adjust the Lexile level to support their own literacy needs.

The simulated email system fosters three-way communication, allowing families, students and teachers to engage in conversations.

Partner with Families to Increase Reading Gains

DATA UPDATED DAILY

How it helps:

- Targeted usage and performance reports help families monitor their children's progress and empower them to get involved in their children's learning

ACHIEVE3000 REPORTS

My Lessons Activities

August 7, 2016 - December 7, 2016

View activities and scores.

#	User Name	Activity	Activity Type	Lexile	Part 1 First Try	Part 1 Second Try	Part 2 First Try	Part 2 Second Try	Date	Class Completed
1	Boyd, Frances	Starbucks Under Fire	Lexile Level	940L	100%	100%	N/A	N/A	Dec/6/2016 4:09 PM	No class specified
2	Boyd, Kevin	Live from the Ocean Floor	Lexile Level	720L	88%	100%	N/A	N/A	Dec/5/2016 5:56 PM	No class specified
3	Boyd, Frances	Would You Get Sick for Science?	Lexile Level	940L	88%	100%	N/A	N/A	Nov/29/2016 4:36 PM	No class specified
4	Boyd, Kevin	A New Starting Line in Alaska	Lexile Level	720L	75%	100%	N/A	N/A	Nov/28/2016 9:46 PM	No class specified
5	Boyd, Frances	Glass Beaches?	Lexile Level	940L	63%	88%	N/A	N/A	Nov/22/2016 7:40 PM	No class specified
6	Boyd, Kevin	Danny's Heart	Lexile Level	720L						
7	Boyd, Kevin	Enthusiasm and Attitude	Lexile Level	720L						
8	Boyd, Kevin	Dressed-Up Junk Food?	Lexile Level	720L						

Families can view activity performance and lesson details for their children.

ACHIEVE3000 REPORTS

How are my children spending their time?

August 1, 2016 - December 6, 2016

Identify the components of the program which users are utilizing.

#	User Name	Lexile	Total Logins	First Login	Last Login	Activities	Avg Weekly Activities	Activity Avg Score	Reading Connections: Summarize (Total)	Reading Connections: Generate Questions (Total)	Reading Connections: Setting the Purpose (Total)	Emails Sent	Program Hours	Mail	My Lessons	Activities	Tl Qu
			51			30	1.7[1]	81%	0	0	1	70	14h 18m	12%	7%	7%	
			6			14	0.8[1]	82%	0	0	0	32	44m			3%	

und that 40 sessions is a key benchmark for academic improvement. For significant gains, Achieve3000 recommends that students complete one to two reading activities per week.

ack' for College and Career Readiness. Students without a Lexile level for the current school year will not have a forecast for College and Career readiness.

. student is a Developing Reader and will have sustained practice at the current Lexile level. Administer an interim LevelSet assessment at mid-year to measure progress and update the Lexile level in the p

llowing exception: *All activities.*

Families can see how their children are spending their time in Achieve3000.

ACHIEVE3000 REPORTS

How has Lexile performance changed over time?

September 1, 2016 - December 12, 2016

Track changes in Lexile/reading activity performance

#	User Name	Grade	September 2016	October 2016	November 2016	December 2016	GROWTH	Initial Expected Post-Test Score	Current Expected Post-Test Score	MC Activities
1	Boyd, Frances	6	Pre-Test: 9/7 (Time:21m/30 items) Lexile: 925L(47, 48) 4 Activities (4) Adjustment on 9/30 Lexile: 940L	6 Activities (5) Adjustment on 10/31 Lexile: 940L	2 Activities (2) Lexile: 940L	2 Activities (2) Lexile: 940L	+15L	970L (±82)	990L	14
			Pre-Test: 9/7[1] (Time:50m/30 items) Lexile:							

Families can track their children's monthly changes in Lexile levels.

ACHIEVE3000®

THE LEADER IN DIFFERENTIATED INSTRUCTION®

To learn more about Achieve3000's proven solutions, please visit

achieve3000.com

Phone: 888-968-6822

Email: info@achieve3000.com

DISTRICT INITIAL PURCHASE

License quantities are based on the provided student enrollment estimates (RFP page 14). A 1,300 minimum license purchase is required for the extended cost per license. Purchases below the minimum will be offered at $42/license. Because Achieve3000 is web-based, shipping does not apply.

Product	Qty	Unit Cost	2020-2021 School Year
Achieve3000 Middle School Licenses 1 Teacher per Middle School (10 total) 105 Students per Middle School (1050 total)	1050	$30.00	$31,500.00
Achieve3000 High School Licenses 1 Teacher per High School (4 total) 70 Students per High School (280 total)	280	$30.00	$8,400.00
Professional Development See below for detailed PD plan, includes 1 centralized day for initial training, 5 days for Middle School site-based PD, 2 days for High School site-based PD	8	$2,695.00	$21,560.00
Total Cost			**$61,460.00**

PURCHASES OVER 10-YEAR CONTRACT

A 1,300 minimum license purchase is required for the extended cost per license. Purchases below the minimum will be subject to Achieve3000 list prices in the designated school year.

Product	2021-2022 Unit Cost	2022-2023 Unit Cost	2023-2024 Unit Cost	2024-2025 Unit Cost	2025-2026 Unit Cost	2026-2027 Unit Cost	2027-2028 Unit Cost	2028-2029 Unit Cost	2029-2030 Unit Cost
Achieve3000 Licenses Quantities to be determined annually.	$30.00	$30.00	$30.60	$30.60	$30.60	$31.21	$31.21	$31.21	$31.21
Professional Development Number of days to be determined annually.	$2,695.00	$2,695.00	$2,748.90	$2,748.90	$2,748.90	$2,803.88	$2,803.88	$2,803.88	$2,803.88

Professional Development

Achieve3000 Professional Learning Services designed to empower teachers with effective instructional strategies and activities. We work with each customer to develop a comprehensive Customer Success Plan, with professional development and implementation services aligned to your goals and needs. Following a clearly outlined plan, we will establish the path for professional development that engages all stakeholders—principals, coaches, teachers, and parents —through a series of blended sessions, including onsite, live online, and on-demand online.

Professional Learning Sessions will be customized not only for your specific needs and academic goals, but also differentiated to meet the unique needs of each group of participants, with specialized sessions for school and district leadership, multi-subject teachers, reading and English language arts teachers, content-area teachers, and other groups to ensure the greatest impact. skills in Language Arts, Science, and Social Studies.

Recommendations for initial training include:

*1 centralized training day for middle and high school teachers - session to focus on initial introduction to program and platform training
*5 days for middle school site-based professional development - focused on side-by-side coaching, consulting and classroom modeling, as well as deep dive into data and leadership reporting
*2 days for high school site-based professional development - focused on side-by-side coaching, consulting and classroom modeling, as well as deep dive into data and leadership reporting

Following initial training, ongoing professional learning opportunities will support the implementation for the life of the contract. Detailed pricing has been provided above.

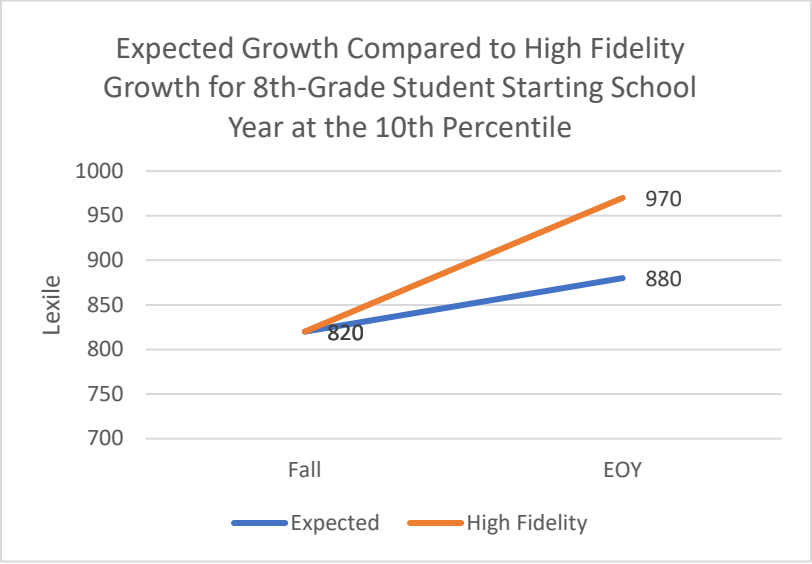
Exhibit C

Achieve3000 Responses for Poudre School District Evaluation Committee RFP 20-630-002 – Secondary Reading Intervention

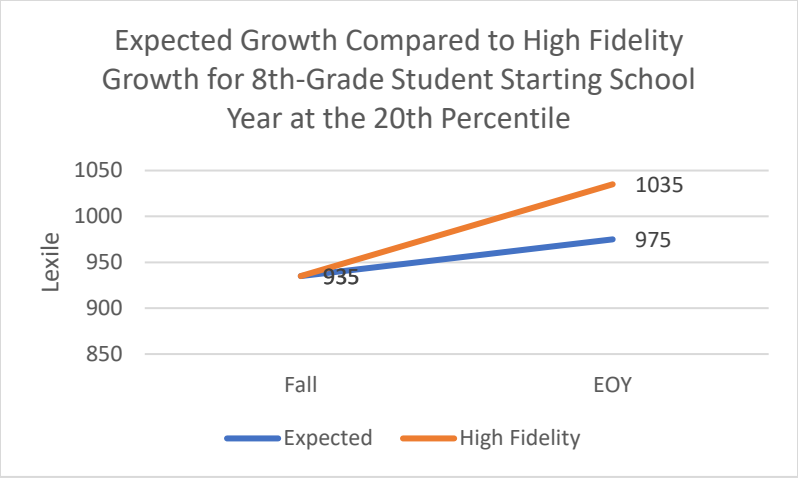
1. **Accelerates growth - What will your product do to accelerate each student's reading growth? How will the diagnostic test guide the teachers' instruction?**

Achieve3000's patented literacy solutions are driven by a proprietary engine that leverages built-in summative and ongoing formative assessments to accelerate learning gains, while maintaining the teacher's ability to lead whole-class instruction and engage all students in meaningful literacy experiences.

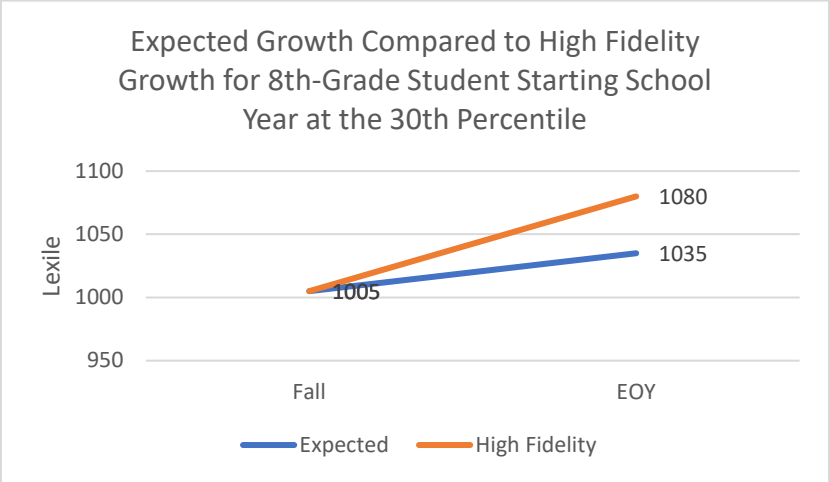
The estimated accelerated growth indicated in the charts below is based on results from the National Lexile Study conducted by MetaMetrics. In that study, struggling readers in middle school who used Achieve3000 with high fidelity – i.e., they completed at least one activity per week with good comprehension (an average 75% correct or higher on embedded comprehension items) – experienced 2.5 times their expected growth. Expected growth is based on research by MetaMetrics's of over 100,000 students at all Lexile levels. MetaMetrics' proprietary growth formula (MetaMetrics, 2004) considers the student's initial Lexile® measure and the length of time from the student's beginning-of-year measure to the end-of-year measure. The initial Lexile (Fall) in the charts is based on MetaMetrics 2017 Lexile norms for eighth grade.



[Student 1]



[Student 2]

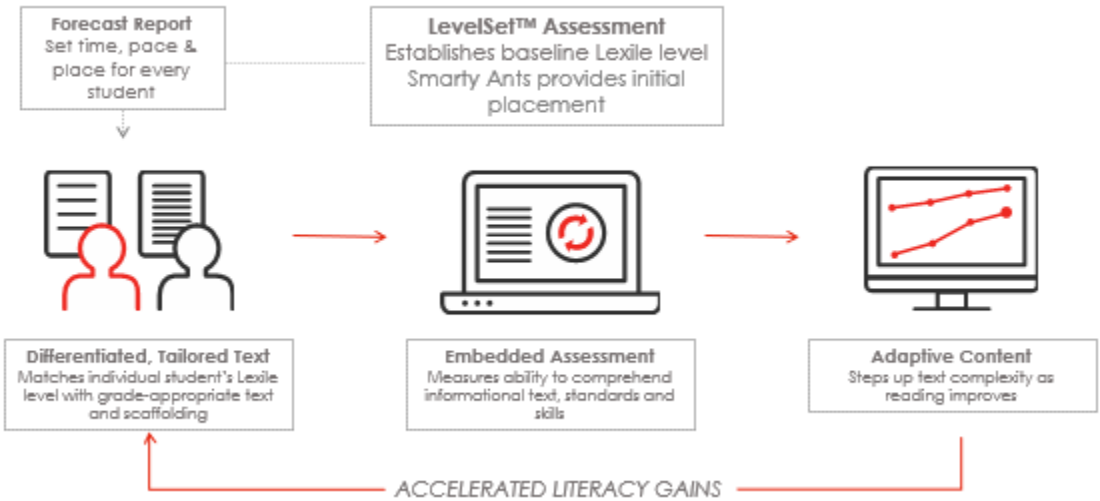


[Student 3]

LevelSet is the diagnostic used to guide instruction. Developed in collaboration with MetaMetrics®, Inc., the makers of the Lexile Framework for Reading®, the LevelSet™ academic screener establishes each student's initial Lexile reading level in English or in Spanish. LevelSet measures a student's ability to comprehend informational text and provides a scale score that matches reading ability with text complexity. It can be administered up to three times per year, first as a pre-test to establish a baseline Lexile level, forecast readiness for university and career benchmarks, match students with differentiated, tailored text; and identify the best solution and implementation that will promote accelerated growth for every student. Interim and post-test administrations provide a summative measure of student growth.

Using the LevelSet results, Achieve3000's adaptive text complexity system automatically matches students to grade-appropriate versions of a text, differentiating the same nonfiction lesson at up to 12 levels of English and up to 8 levels of Spanish. Students complete Colorado-**s**pecific, cross-disciplinary lessons using a specialized 5-Step Literacy Routine that strengthens reading and develops key literacy skills while building content-area knowledge and vocabulary simultaneously. Built-in scaffolds support student learning at every step, ensuring students of all ability levels can access the same grade-appropriate content and meet academic standards.

As part of every lesson, students complete an Activity, which is the embedded formative assessment. Each Activity includes multiple-choice items to assess students' comprehension of the article. The activity questions, as well as the reading selections, are written at the student's independent reading level. A component of the Achieve3000 patent uses the embedded assessment results to continually monitor student readiness for more complex text. When the system determines that a student is ready, it automatically increases student Lexile levels, thus exposing them to more and more complex text. In this way, the teacher is able to provide equitable learning experiences to all students, regardless of current reading levels, while accelerating learning for struggling students. See the figure below for the cycle of acceleration.



Our research shows that completion of 40 lessons in a semester and 80 over the course of the year results in double or triple the expected Lexile gains in a year.

2. **Usability - What information will the teachers and students see related to these profiles (such as data reports and skill-based needs reports)**

While each student has a unique, individual learning profile within the system, serving up text and activities written at each student's independent reading level, the student homepage is designed to ensure that all students within a class are treated equitably and feel very much a part of the larger class. All students within a class will see the same set of lessons and lesson collections. Only when they are

working within the lesson will students see differences in how the text is written and presented, and what scaffolds and supports are provided. This allows teachers to have both skills-based and mixed-ability groupings for text-based activities; students of varying reading abilities can easily work together in text explorations, annotations, and discussions.

For example, see below for Student #1's lesson, with a current Lexile of 400,

ARLINGTON, Texas (Achieve3000, November 7, 2019). In March 2019, an African American teen tried to get a job at an amusement park. He was turned down. Why? Because he had dreadlocks.

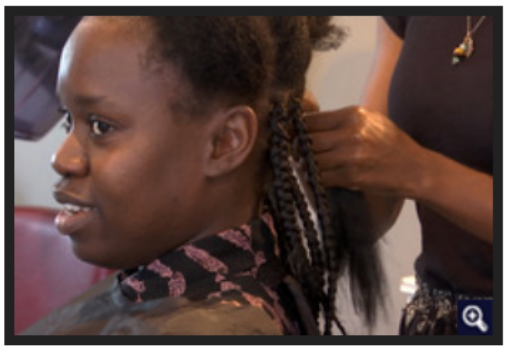


Photo credit: Associated Press

An African American girl gets her hair braided.

It's a problem many African Americans face. Some have been turned away from schools and jobs. Sports games, too. All because of how they style their hair.

Wait a minute. Are schools and companies ***allowed*** to make rules about how you can dress and wear your hair? They are. But the rules shouldn't affect only certain groups. That's racial discrimination. Take dress codes banning hairstyles like Afros or cornrows. They're not fair. Why? They mostly affect African Americans.

But are such rules illegal? Some places have special laws. Take California. In July 2019, the state passed the CROWN Act. What does this law say? Companies and public schools can't ban black hairstyles, like twists, braids, and dreadlocks. New York passed a law, too. Things are changing.

For student #2, whose current Lexile is 775, the text would look like this:

ARLINGTON, Texas (Achieve3000, November 7, 2019). Kerion Washington applied for a job at Six Flags Over Texas in March 2019. But the 17-year-old was turned down. The decision had nothing to do with his interview. And it had nothing to do with whether he could do the job. So why didn't the amusement park hire him? Believe it or not, it was because of his hairstyle. The length and style didn't violate any of the company's guidelines. But the African American teen was told that to get the job he'd need to cut off his dreadlocks.

Photo credit: Associated Press

An African American girl gets her hair braided. California's CROWN Act makes it illegal for employers and public schools to ban hairstyles such as braids.

Kerion Washington is just one of many people who've faced this kind of injustice. You might have seen news stories about African Americans facing similar situations: Students being turned away from schools. Athletes being disqualified from competitions. Workers being passed over for better positions. And all because of how they style their hair. These stories are examples of *hair discrimination*. And there's a lot more at stake than the freedom to follow the latest fashion trends. Hair discrimination affects people's civil rights. It's considered a form of racial discrimination. And some places now have special laws about it.

In July 2019, California passed the CROWN Act. It has a goal of Creating a Respectful and Open Workplace for Natural hair. What does the law say? It's illegal for the state's employers and public schools to ban black hairstyles, including braids, twists, and dreadlocks. New York passed a similar law soon after that.

And for Student #3, meeting grade-level expectations at a Lexile of 1000, would see this:

ARLINGTON, Texas (Achieve3000, November 7, 2019). Kerion Washington was turned down when he applied for a job at Six Flags Over Texas in March 2019. But the decision had nothing to do with the 17-year-old's interview, qualifications, or work ethic. Why wouldn't the amusement park hire him? Believe it or not, it was because of his hairstyle. The length and style didn't violate any of the company's employee guidelines. But the African American teen was told that to get the job he'd need to cut off his dreadlocks.

Photo credit: Associated Press

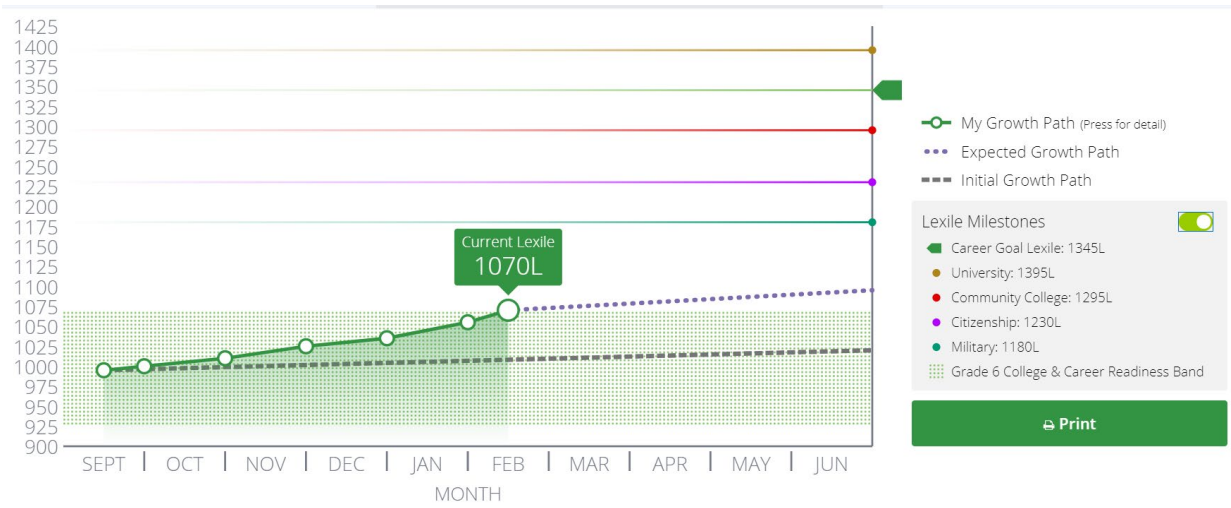
An African American girl gets her hair braided. California's CROWN Act makes it illegal for employers and public schools to ban hairstyles such as braids.

Kerion Washington is just one of many people who've faced this kind of injustice. Just comb through news headlines and social media and you'll find plenty of stories of African Americans confronting similar situations: from students being turned away from schools and athletes being disqualified from competitions to professionals being passed over for promotions. All because of how they style their hair. These incidents are examples of *hair discrimination*. And there's a whole lot more at stake than the freedom to follow trends. Hair discrimination affects people's civil rights. It's considered a form of racial discrimination, and some places now have specific laws against it.

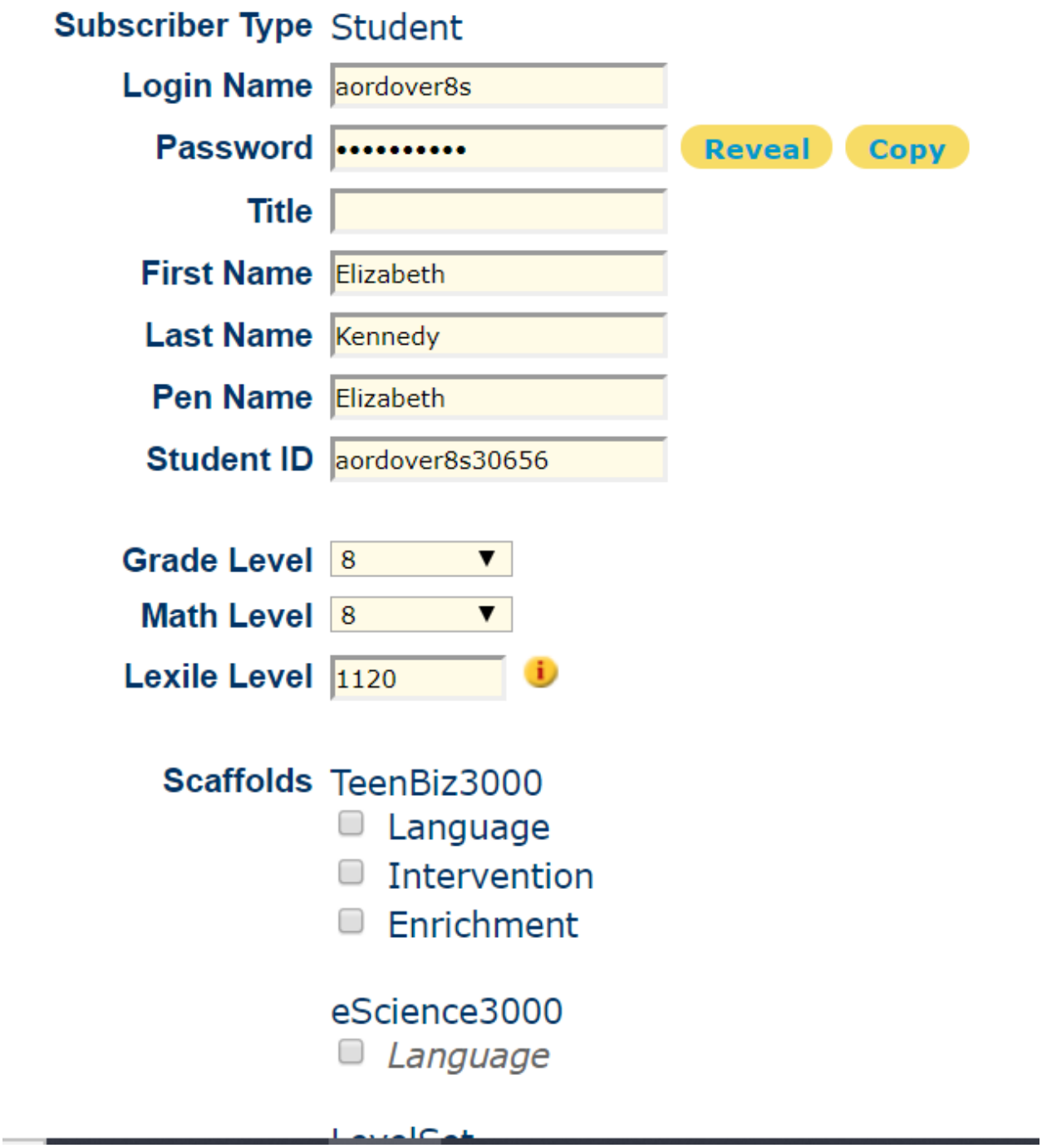
In July 2019, California passed the CROWN Act. It has the goal of Creating a Respectful and Open Workplace for Natural hair. The law makes it illegal for employers and public schools in the state to have policies that ban black hairstyles, such as braids, twists, and dreadlocks. The state of New York passed a similar law soon after that.

Students can find information related to their individual profiles in the top navigation bar of their homepage. They can see how many points they have earned by participating in lesson activities; how many of their activities have yielded correct-answer percentages of 75% of higher, and information about the career goal they have selected.

In our career center, students can learn about a wide variety of careers and select one as their “top career.” This selection allows our system to set a Lexile goal for them to aspire to, along with a variety of other targets shown on the student’s Lexile Tracker, available to students throughout the year within their top navigation bar.



Teachers have access to detailed information about each student's individual learning profile, with the ability to manage and change settings at an individual or class basis, as needed. (See figure below.)


Subscriber Type Student
Login Name aordover8s
Password ••••••••••
Reveal
Copy
Title
First Name Elizabeth
Last Name Kennedy
Pen Name Elizabeth
Student ID aordover8s30656
Grade Level 8
Math Level 8
Lexile Level 1120
Scaffolds TeenBiz3000
Language
Intervention
Enrichment
eScience3000
Language

Audio Support TeenBiz3000

- ☐ Full audio support
- ☐ No audio support
- ☑ Vocabulary audio support
- ☐ Stretch audio support

eScience3000

- ☑ *On*

Speech to Text Support TeenBiz3000

- ☐ No speech to text support
- ☑ Before reading poll speech to text support
- ☑ Reading connections speech to text support
- ☑ After reading poll speech to text support
- ☑ Thought question speech to text support

Highlight Toolbar TeenBiz3000

- ☑ On

eScience3000

- ☑ *On*

After Reading Poll Comment Feed ☑

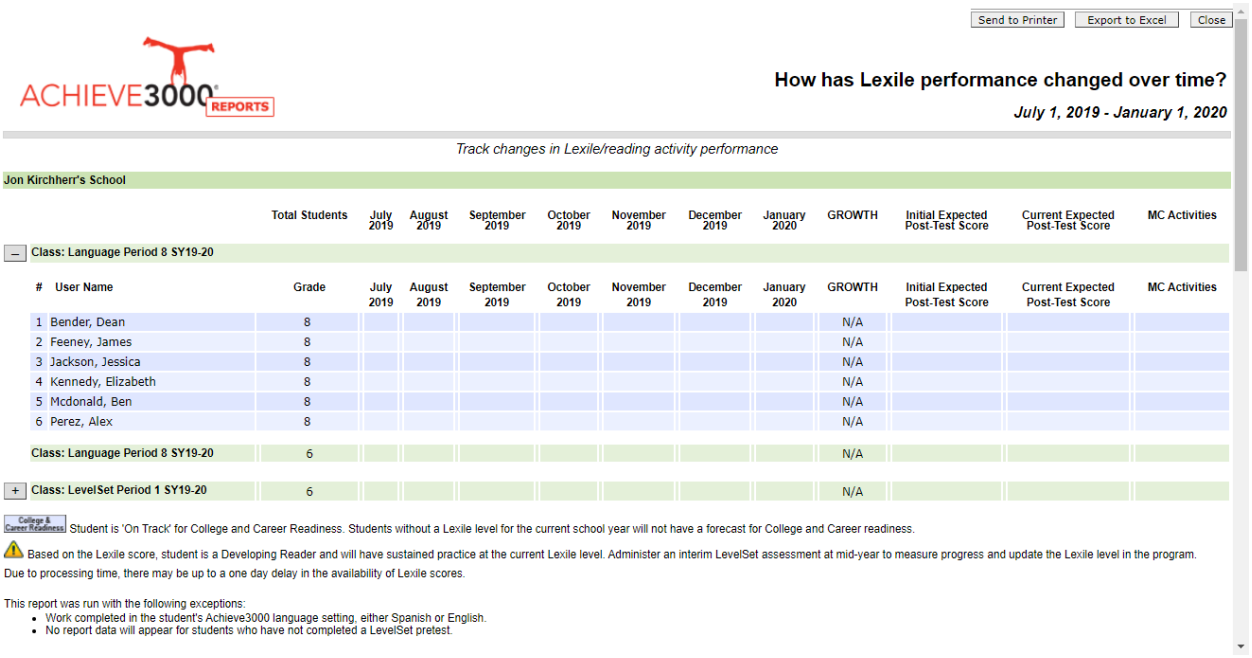
Gender ▼

Ethnicity ▼

Race ▼

User	Supervised Student Work Time Start Time	End Time	Peer-to-Peer Email	During School Avatars	Videos	Audio Support and Speech to Text Support	Highlight Toolbar	Scaffolds	Language
Gomez, William	7:00 AM	3:00 PM	No images or	☐	☑	Vocabulary audio su Speech to text supp	☑	Standard	English (US
Bender, Dean	7:00 AM	3:00 PM	No images or	☐	☑	Vocabulary audio su Speech to text supp	☑	Language	Spanish Su
Feeney, James	7:00 AM	3:00 PM	No images or	☐	☑	Vocabulary audio su Speech to text supp	☑	Interventior	English (US
Jackson, Jessica	7:00 AM	3:00 PM	No images or	☐	☑	Vocabulary audio su Speech to text supp	☑	Enrichment	English (US
Kennedy, Elizabeth	7:00 AM	3:00 PM	No images or	☐	☑	Vocabulary audio su Speech to text supp	☑	Standard	English (US
Mcdonald, Ben	7:00 AM	3:00 PM	No images or	☐	☑	Vocabulary audio su Speech to text supp	☑	Standard	English (US
Perez, Alex	7:00 AM	3:00 PM	No images or	☐	☑	Vocabulary audio su	☑	Language	Full Spanish

On the reporting side of our solution, teachers have access to detailed data about their students, including key, actionable information like time spent, average activity score, and Lexile growth. Teachers also will be able to see forecast information, tapping into Achieve3000 and MetaMetrics proprietary predictive algorithms, to help estimate how students will progress towards school, state, college and career goals.



Send to Printer | Export to Excel | Close

ACHIEVE3000 REPORTS

How has Lexile performance changed over time?

July 1, 2019 - January 1, 2020

Track changes in Lexile/reading activity performance

Jon Kirchherr's School

	Total Students	July 2019	August 2019	September 2019	October 2019	November 2019	December 2019	January 2020	GROWTH	Initial Expected Post-Test Score	Current Expected Post-Test Score	MC Activities
– **Class: Language Period 8 SY19-20**												

#	User Name	Grade	July 2019	August 2019	September 2019	October 2019	November 2019	December 2019	January 2020	GROWTH	Initial Expected Post-Test Score	Current Expected Post-Test Score	MC Activities
1	Bender, Dean	8								N/A			
2	Feeney, James	8								N/A			
3	Jackson, Jessica	8								N/A			
4	Kennedy, Elizabeth	8								N/A			
5	Mcdonald, Ben	8								N/A			
6	Perez, Alex	8								N/A			
	Class: Language Period 8 SY19-20	6								N/A			
+	**Class: LevelSet Period 1 SY19-20**	6								N/A			

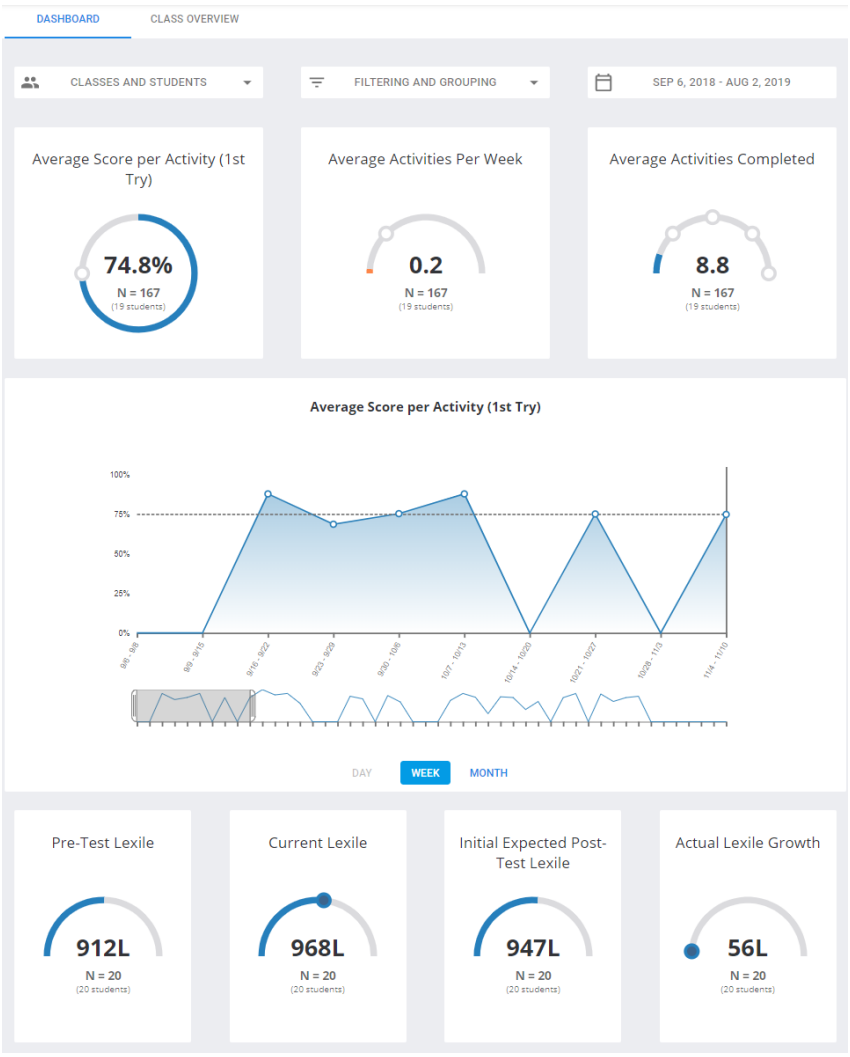
College & Career Readiness Student is 'On Track' for College and Career Readiness. Students without a Lexile level for the current school year will not have a forecast for College and Career readiness.

⚠ Based on the Lexile score, student is a Developing Reader and will have sustained practice at the current Lexile level. Administer an interim LevelSet assessment at mid-year to measure progress and update the Lexile level in the program.

Due to processing time, there may be up to a one day delay in the availability of Lexile scores.

This report was run with the following exceptions:

- Work completed in the student's Achieve3000 language setting, either Spanish or English.
- No report data will appear for students who have not completed a LevelSet pretest.

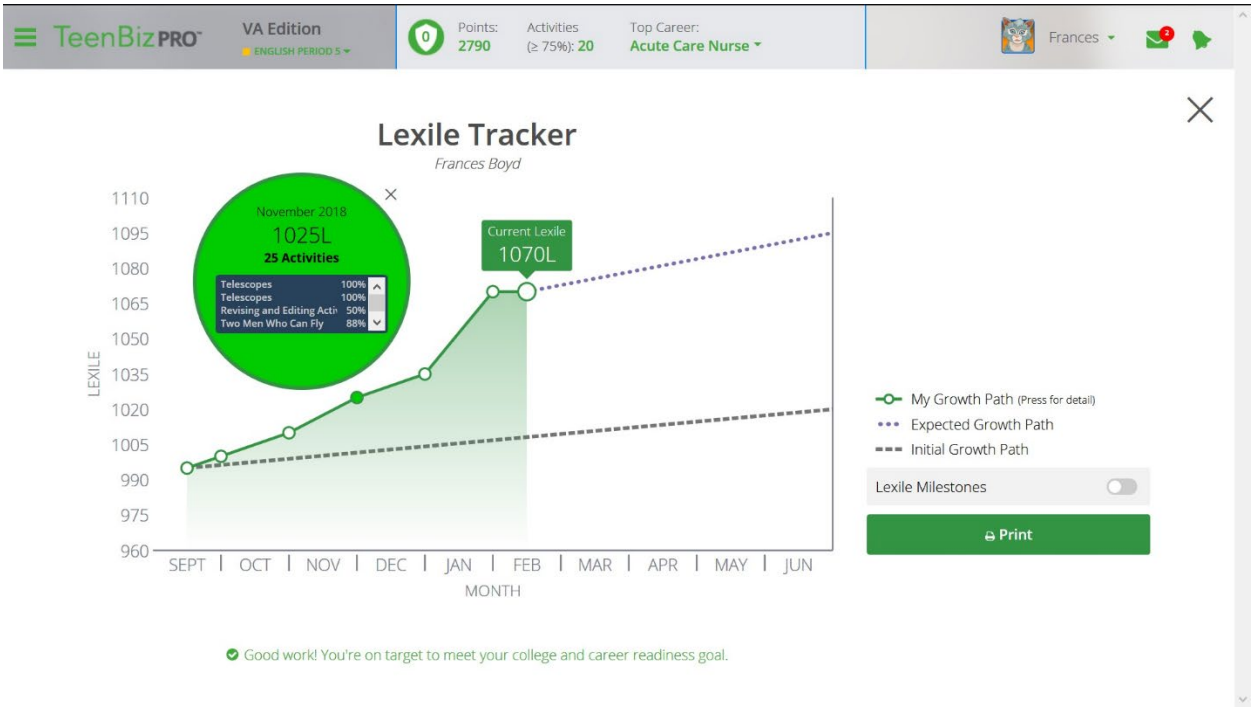


3. **Culture of Reading - How will students be engaged in the goal setting process? What elements promote student ownership of learning?**

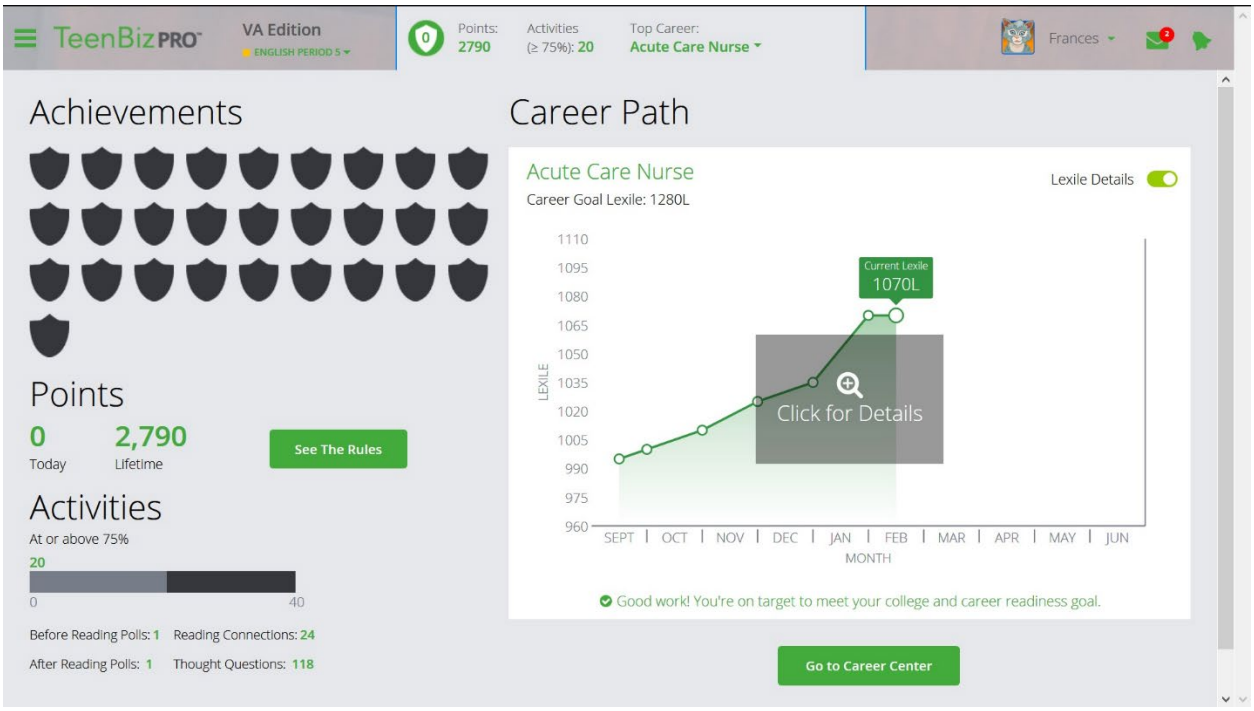
Achieve3000 understands the link between personalization and student motivation, and provides several opportunities to promote student ownership of goal setting and the learning process.

The Achieve3000 Career Center provides students with career information and helps them track their Lexile level and the progress required as they work toward the career of their choice. Through our partnership with MetaMetrics®, we identified the Lexile requirements for entry-level positions in each career. The Career Center is intended to help motivate students to work toward a career goal and make sense of Lexile scores within a real-world context. Students may select any career as their Top Career and then track their month-to-month Lexile gains in relation to that career. Selecting a Top Career, which is displayed on their home page, results in additional messaging letting students know how they are doing toward career readiness.

In addition to the Career Center, the Lexile Tracker provides students with insights into their own literacy growth over time, keeping them engaged in their lessons and motivated to learn more as the school year progresses.



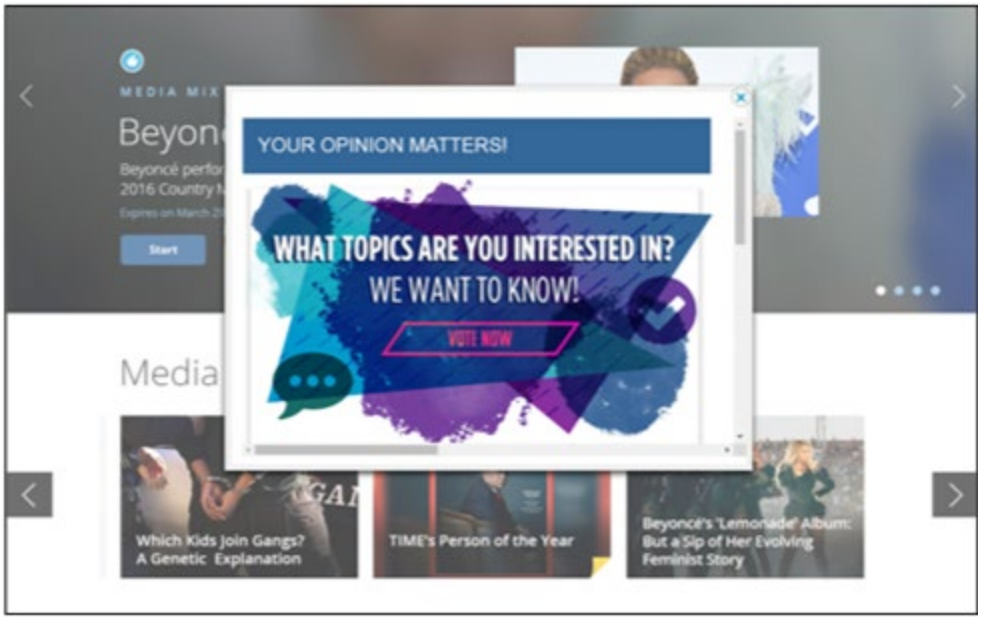
The Lexile Tracker offers students a visual representation of the path from where they are now to their college and career aims in the future. This keeps students focused on their long-term goals and encourages them as they see learning gaps gradually begin to close as they advance in their learning gains. In addition, should students begin to see their Lexile level decline, teachers can use this information to open a dialogue with the student about how to communicate a lack of understanding in learning material.



As students see their growth every time they log on to Achieve3000, they are reminded of how their hard work pays off in Lexile growth. Furthermore, it gives students a sense of agency over their learning, teaching them that it is up to them to apply themselves, ask for help where needed, and participate in class discussions.

Research shows that when children are given choices in reading instruction, their sense of self-efficacy improves, and they spend more time reading. Achieve3000 provides many opportunities for students to make choices in their instructional paths. Students have access to a full archive of over 15,000 lessons. When they search “My Lessons”, students can choose and complete lessons on topics of interest to them. That element of choice—the option to self-select topics of interest—helps to motivate and engage students in their own learning.

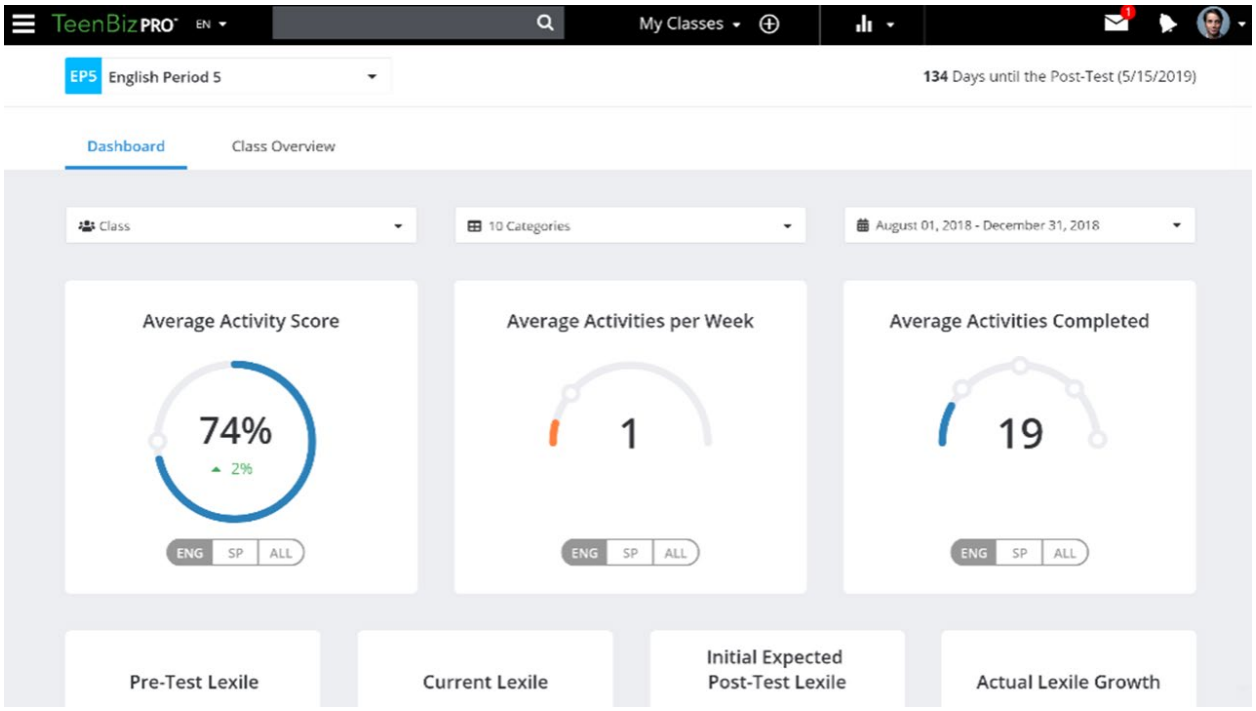
Finally, student engagement surveys provide a platform for students to have their voices heard, which engages students in new ways.



4. **Formative Instruction of Reading - How will students growth be progress monitored? What adjustments might we see related to the students learning trajectory?**

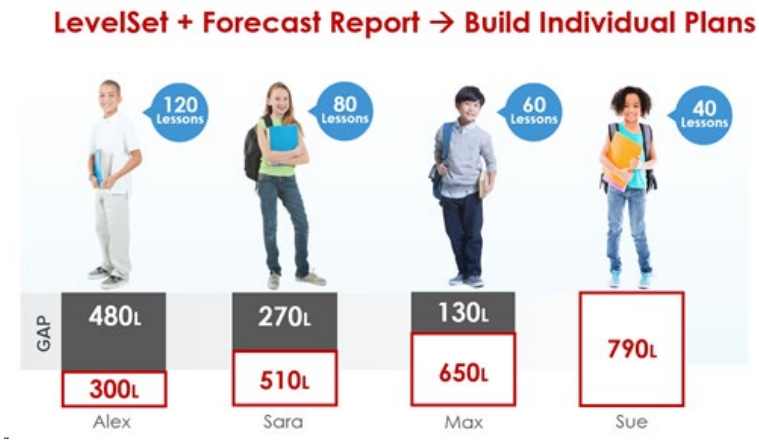
See number 2 above.

In addition, the dynamic reports available on the Achieve3000 platform guide data-driven instructional decisions, such as which students need further intervention, and which are meeting benchmark goals. The Data Center offers an easy-access way for teachers to view key metrics in just a few clicks.



5. **Instructional Planning and Practices - Based on the profiles, what would be each student's recommended instructional schedule? What would be the content of a teacher-directed targeted lesson to meet each student's needs? (Please include a sample or reference a lesson to see online.)**

LevelSet data drives Achieve3000's proprietary forecasting tool, giving every student his or her own differentiated success plan that tells you how much time on task is required to achieve the gains necessary for success, and to get on track for college and career expectations.

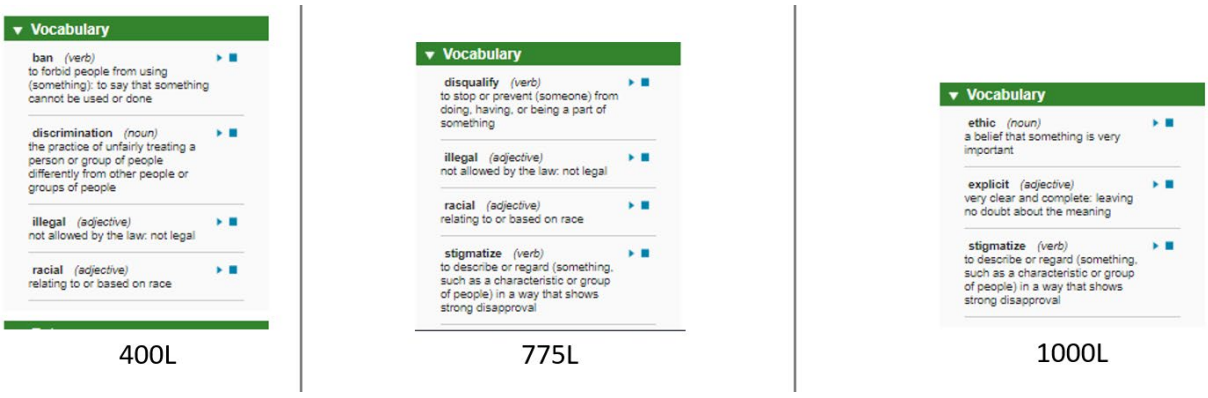


Students complete Colorado-specific, cross-disciplinary lessons using a proven-effective 5-Step Literacy Routine that strengthens reading and develops critical literacy knowledge and skills while building content-area knowledge and vocabulary simultaneously. When in the whole-class learning environment, students are reading the same grade-appropriate topics, tailored to their specific Lexile levels and empowering student collaboration and communication. When working in pull-out, intervention, small-group instruction, or independently, additional scaffolds are activated guaranteeing the equity of access and accountability to grade-appropriate content.

5-Step Literacy Routine

Step 1. Build background through the Before-Reading Poll: Students respond to an opinion statement, expressing and sharing their opinions based on prior experience and prior knowledge. This helps students begin to value the importance of evidence when formulating opinions. This activity also helps set a schema for what students will be thinking, reading, writing, and talking about in this particular lesson. Students can use Sentence Frames to guide the academic discussions that should be conducted in the classroom.

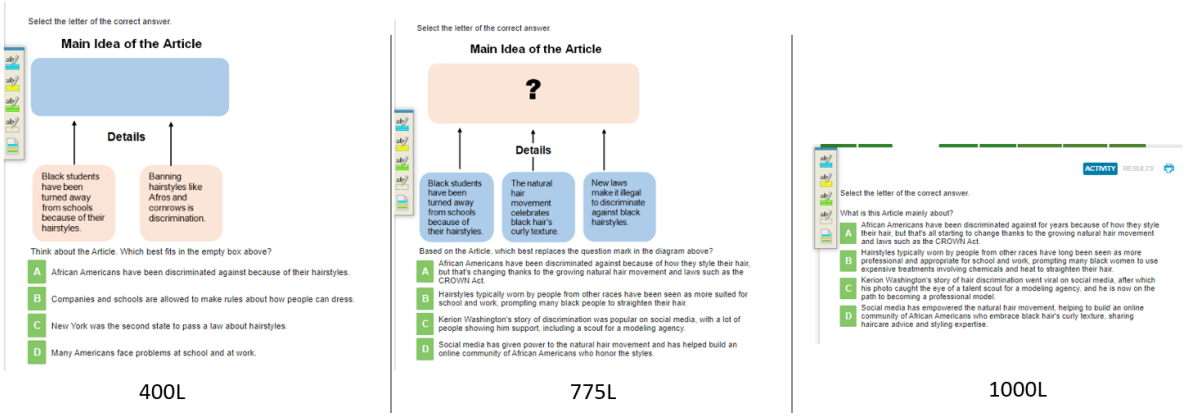
Step 2. Close reading with the Article: As students move into the Article tab, they receive a Vocabulary and Concept Preview with a summary of the day's reading along with an audio-supported dictionary to better set the schema for the upcoming topic. Additionally, students receive new articles every week. Within the solutions, students may be set-up to receive one of 12 levels in English, 12 levels in English with native-language supports, and 8 levels in Spanish of the lesson most closely matched to his or her specific Lexile level, ranging from a 150L to a 1350L, ensuring that all students are placed at their Lexile level, including the most struggling readers.



[Differentiated Vocabulary Support]

Step 3. Embedded assessment within the Activity that drives acceleration: The built-in assessment is embedded into the student routine. Students respond to questions that tap into their knowledge of vocabulary as well as questions about summarization, central ideas/details, and text structure and development. As previously mentioned, a component of the Achieve3000 patent uses the embedded assessment results to continually monitor student readiness for more complex text.

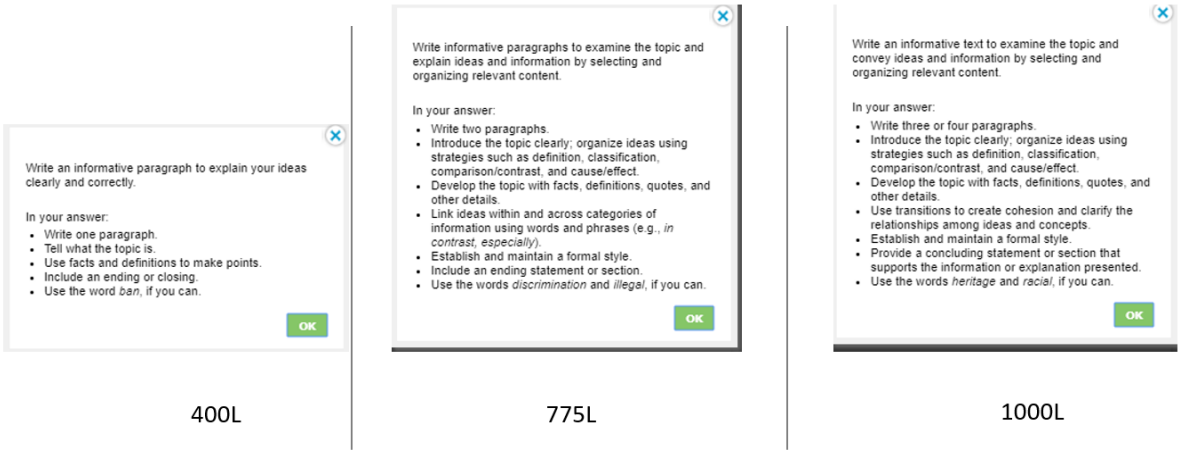
Once a student is ready, the system continues to send the grade-appropriate topic to the student and it automatically increases student Lexile levels, thus exposing them to more and more complex text.



[Differentiated Activity Questions]

Step 4. Learn the value of evidence through the After-Reading Poll: Students return to the opinion statement to express their opinions, factoring in any new information they may have acquired that day from the sources they read. That information may have confirmed their prior opinions or changed them, but regardless, has helped establish for students the importance and value of evidence. This becomes an opportunity for students to share and reflect on their learning. Use of the Comment Feed in the After-Reading Poll engages students in social participation with their peers as they write about and discuss their opinions and evidence.

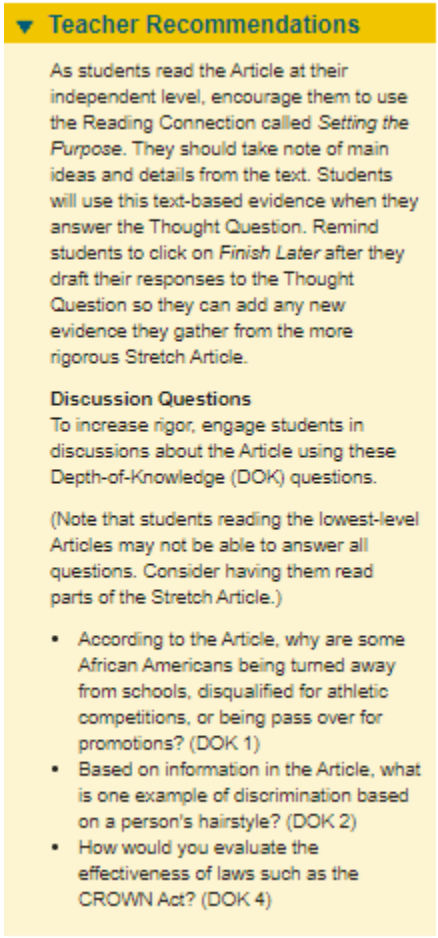
Step 5. Synthesize information from multiple sources in the Thought Question: Using the evidence captured through use of close-reading tools on multiple sources of information in Step 2 (the Article), students can draft/edit/revise their written responses, which address narrative, expository, and argument prompts. With all prompts, students are asked to include examples and reasons to support their responses. Students receive sentence starters and paragraph frames, which provide the added support that struggling students need to craft their constructed responses.



400L | 775L | 1000L

[Differentiated criteria for Thought-Question responses (aligned to the same question).]

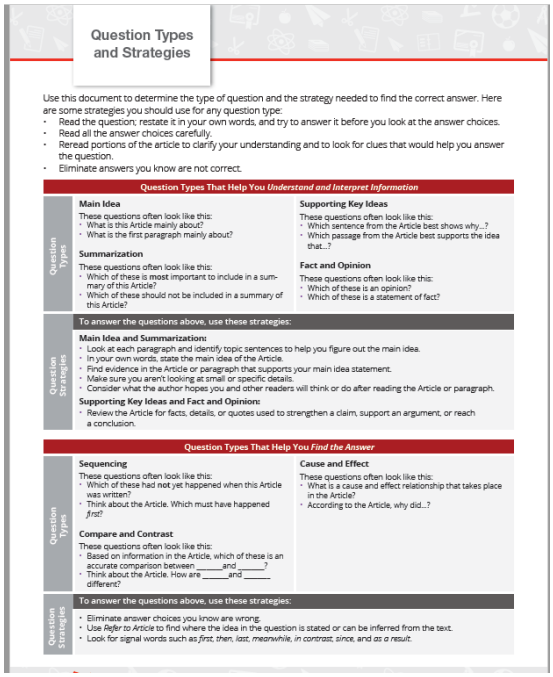
For teacher-directed support, every lesson includes extensive and comprehensive Teacher Recommendations, which provide at-point-of-use materials that change as teachers move from step to step of the literacy routine:



Step 1: The materials help teachers introduce the topic, often with supporting visual or auditory materials that set a better context for the day's lesson, and provide instruction on the academic and cross-disciplinary vocabulary associated with the content-area lesson.

Step 2: The materials provide specific information on how to use the Reading Connections and digital highlighting tools to build close-reading techniques and reading strategies.

Step 3: The recommendations for teachers during the activity focus on test-prep strategies, including how to help students recognize different item types such as technology-enhanced items and the Part A to Part B and multi-select, multiple-choice items.



Question Types and Strategies

Use this document to determine the type of question and the strategy needed to find the correct answer. Here are some strategies you should use for any question type:

- Read the question, restate it in your own words, and try to answer it before you look at the answer choices.
- Read all the answer choices carefully.
- Reread portions of the article to clarify your understanding and to look for clues that would help you answer the question.
- Eliminate answers you know are not correct.

Question Types That Help You *Understand and Interpret Information*

Question Types

Main Idea
These questions often look like this:
- What is this Article mainly about?
- What is the first paragraph mainly about?

Summarization
These questions often look like this:
- Which of these is most important to include in a summary of this Article?
- Which of these should not be included in a summary of this Article?

Supporting Key Ideas
These questions often look like this:
- Which sentence from the Article best shows why...?
- Which passage from the Article best supports the idea that...?

Fact and Opinion
These questions often look like this:
- Which of these is an opinion?
- Which of these is a statement of fact?

Question Strategies

To answer the questions above, use these strategies:

Main Idea and Summarization:
- Look at each paragraph and identify topic sentences to help you figure out the main idea.
- In your own words, state the main idea of the Article.
- Find evidence in the Article or paragraph that supports your main idea statement.
- Make sure you aren't looking at small or specific details.
- Consider what the author hopes you and other readers will think or do after reading the Article or paragraph.

Supporting Key Ideas and Fact and Opinion:
- Review the Article for facts, details, or quotes used to strengthen a claim, support an argument, or reach a conclusion.

Question Types That Help You *Find the Answer*

Question Types

Sequencing
These questions often look like this:
- Which of these had not yet happened when this Article was written?
- Think about the Article. Which must have happened *first*?

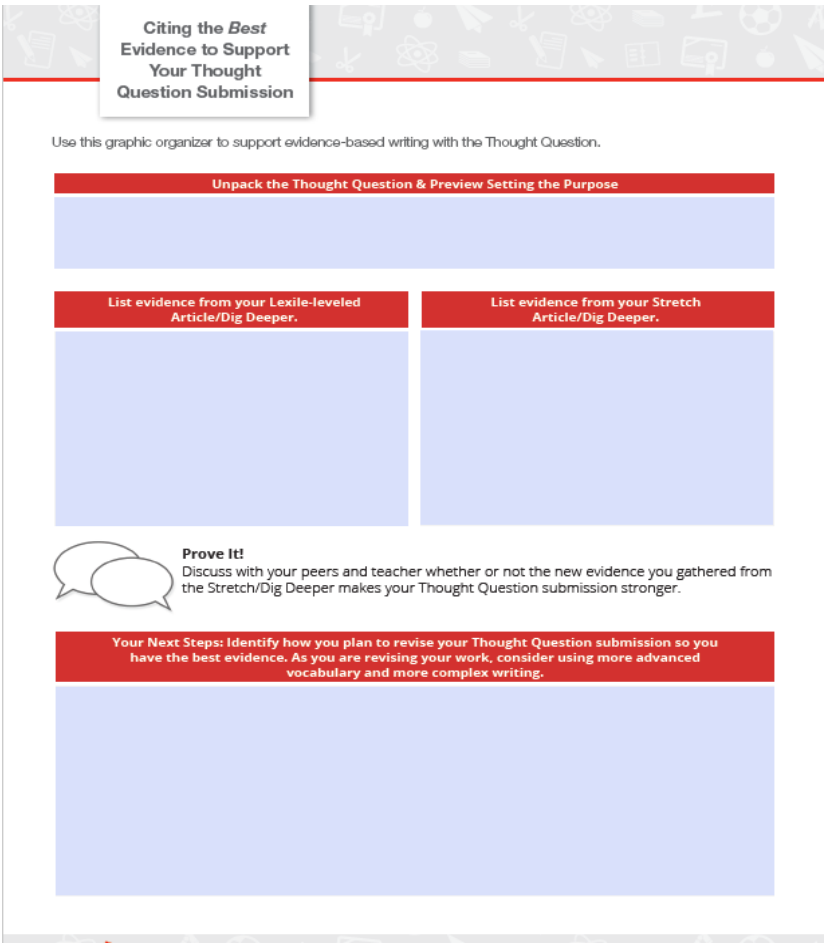
Compare and Contrast
These questions often look like this:
- Based on information in the Article, which of these is an accurate comparison between _____and _____?
- Think about the Article. How are _____and _____ different?

Cause and Effect
These questions often look like this:
- What is a cause and effect relationship that takes place in the Article?
- According to the Article, why did...?

Question Strategies

To answer the questions above, use these strategies:
- Eliminate answer choices you know are wrong.
- Use *Refer to Article* to find where the idea in the question is stated or can be inferred from the text.
- Look for signal words such as *first, then, last, meanwhile, in contrast, since,* and *as a result.*

Step 4: Reinforcement of the importance of evidence is a critical recommendation for the After-Reading Poll. Graphic organizers can be used to help students identify evidence for and against the opinion statement.



Step 5: With the Thought Questions, teachers are provided with information about what would be included in Thought Question responses. Customized rubrics are available to help teachers evaluate student work.

Delivered as a pop-up window to teachers, ELL and Struggling Readers Supports gives educators ideas for how to differentiate instruction further to help struggling readers in a small-group, teacher-led station.

Additional Clarification Questions –

6. **Do the materials, especially in the "Just for Me " and "Fluency Collection" seem age-appropriate for older students with low Lexile scores? For example, if an 18 year old reads at a 3rd grade lexile will he or she be given topics, graphics, and articles that are designed for a nine year old?**

Just for Me and Fluency collections are age appropriate. Because Achieve3000 Literacy prioritizes equity in the classroom, students are provided with grade-appropriate materials, regardless of their Lexile level. While some programs might give a tenth-grade student reading at a fourth-grade level fourth-

grade reading material, Achieve3000 ensures every student in the same grade reads the same grade-appropriate topics but each one receives it at their own specific Lexile with extra scaffolding enabled, as needed.

The Fluency collection, which is available for grades 2-12, includes read-aloud lessons designed for monthly use, provided to let students demonstrate reading and speaking skills at their current Lexile level. These lessons include teacher resources such as oral reading rubrics, fluency logs, and a fluency assessment tool that can help benchmark student fluency, including timing, recording, and saving student readings so educators can track fluency growth over the course of the school year.

The Just for Me collection, which is available for grades 6-12, is organized into one unit (four lessons) per month, and focuses on phonics and language development, with supports like reading summaries, vocabulary previews, songs, phonics and phonemic awareness scaffolding, and vocabulary flashcards.

A series of Reading Skills collections is also available for grades 2-12, including skills such as, *Cause and Effect, Cite Evidence, Compare and Contrast, Context Clues, Drawing Conclusions, Fact and Opinion, Main Idea, Making Inferences, Making Predictions, Sequence, Summarize,* and *Synonyms and Antonyms.* In these collections, students build key reading skills, with increasing focus on the skill through the lesson progression, and lesson-specific information for teachers about skills-based instruction.

7. **Do the two secondary programs TeenBizPro and EmpowerPro speak to each other and track over time so as to ensure that high school students are not repeating content they saw in middle school?**

Because new content is published weekly in each of our main collections, students will not have to repeat content in high school that they saw in middle school. Our new “Creating Connections” collections, launching in the spring of 2020, will replace some of our older, curriculum-aligned courses and will be specifically targeted to middle or high school students, to avoid any repetition of content.

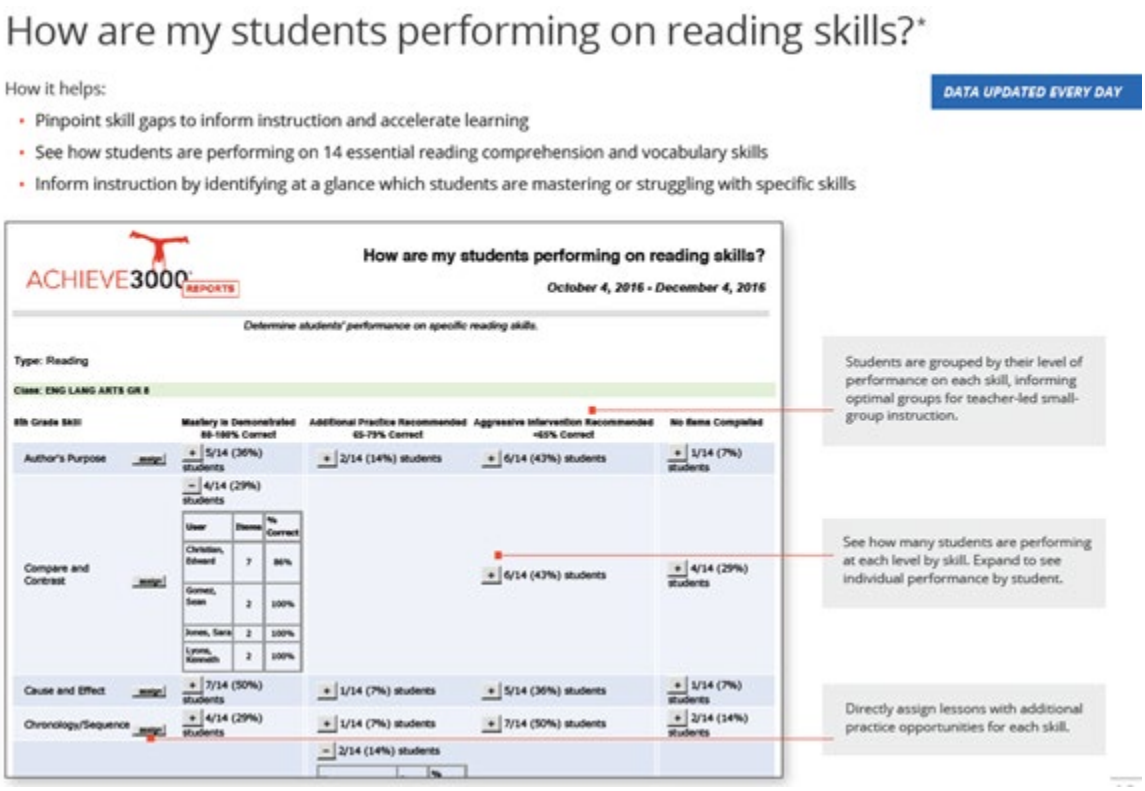
That said, our archive of over 15,000 articles can be searched by students and teachers, and there may be instances when a lesson is selected that has previously been assigned (or is slated to be assigned in the future) by one or more teachers. Our new teacher homepage design has provided improved tools to help teachers identify if a lesson has been assigned by another teacher in the same school.

8. **When will fiction launch into grades 9-12?**

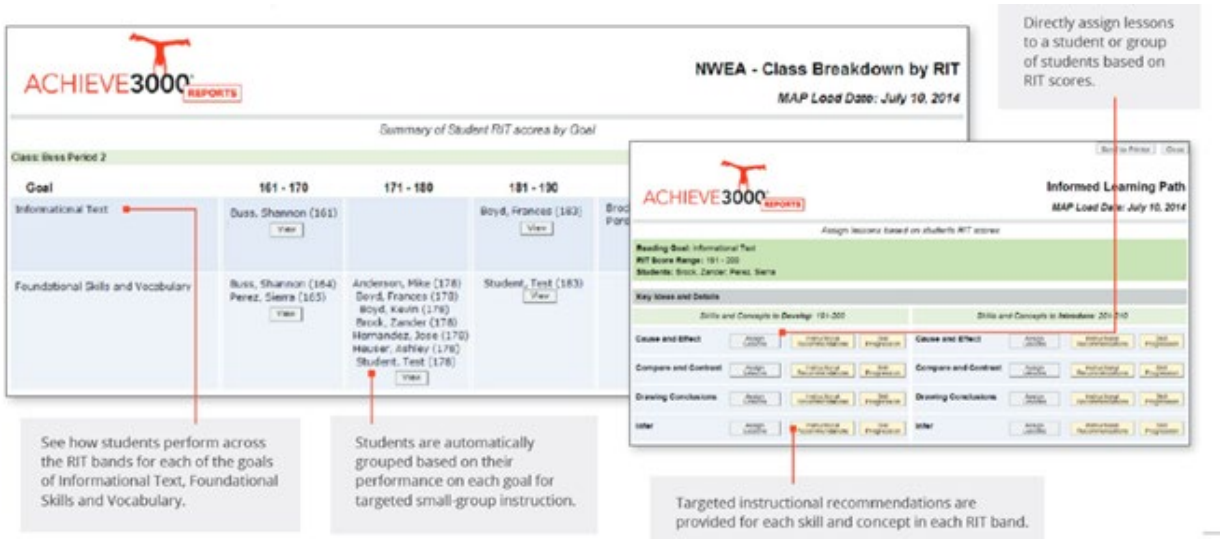
High-school fiction is not in the current roadmap, but our integration with Actively Learn provides teachers with access to a wealth of published stories, novels, and cross-genre text sets, all delivered through the Actively Learn collaborative workspace, where teachers can post their own comprehension questions and enable students to annotate text and engage in classroom discussion. Additional license costs apply for Actively Learn.

9. Can we see and track phonological awareness and skills like it separately from Lexile. In other words, can I break down the Lexile into the elements that make it up?

The Reading Skills report provides data on students' performance on very specific skills, organized by Reading Comprehension and Vocabulary.



In addition, Achieve3000 and Northwest Evaluation Association™ (NWEA) developed a powerful integration tool to allow educators to create MAP® Informed Learning Paths. Teachers can easily see each student's results by RIT ranges (with the Rasch Unit Scale) and assign lessons to address skills strengths and weaknesses. Instructional Recommendations for each skill and concept further help teachers to differentiate instruction.



10. How can students hold themselves accountable for their goals?

See number 3 above with regards to the Student Lexile Tracker and Career Center.

11. Do reports tell students of next steps in what they need to do or learn? While teachers may understand, do students understand next steps/scaffolds to get them to the next level?

The motivation center, at the top of the student homepage, gives students information about their current awarded points and success percentage, and the Lexile Tracker helps students see their current Lexile level, their actual vs. expected growth during the year, and a variety of goals to which they can be aspiring. All of our student-facing reporting is designed to reinforce the message that reading deeply, widely, and regularly is the key to growth and success.

12. Are the reports skills based?

See number 9 above.

13. Does the data travel with the student or is the data tied to the site?

If a student moves to a new school within the district, their data will move with them. Method for data transfer will depend on the rostering method selected and is subject to the Achieve3000 privacy policy.

14. Does the license travel with the student or is it tied to the site?

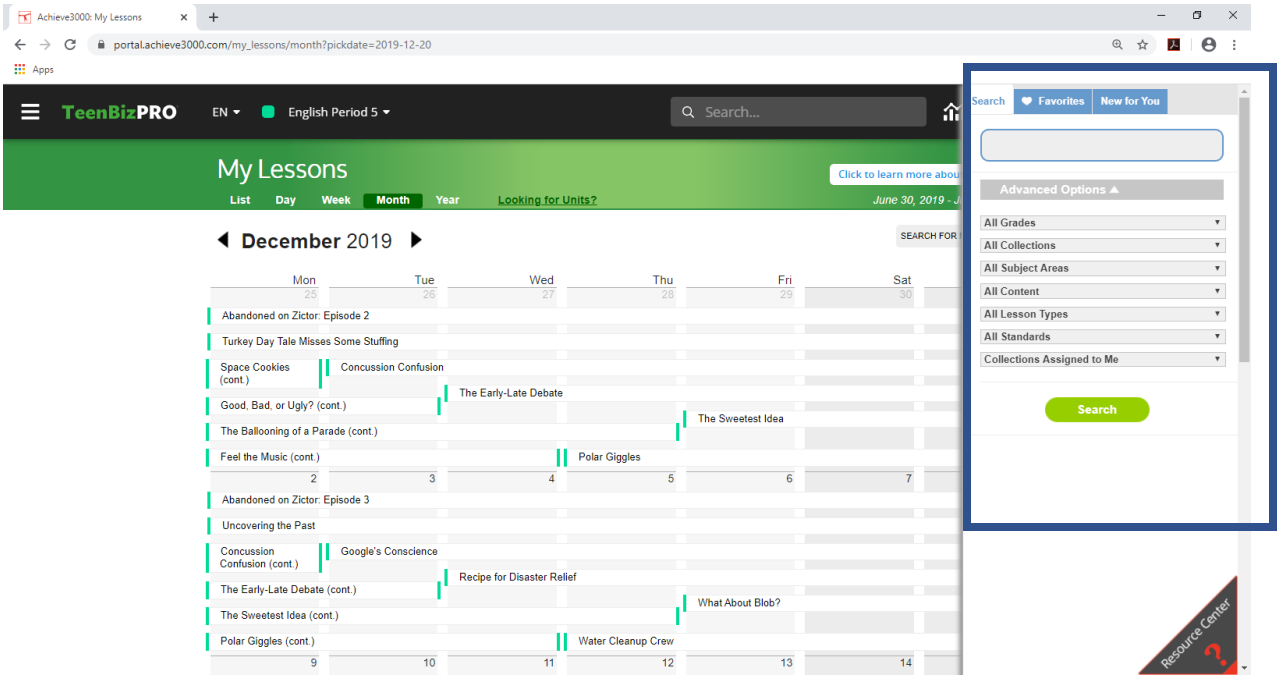
Licenses are tied to the site, however if a student moves to a new site that has Achieve3000 site licenses, they will have a license at the new school.

15. Are Reading Scaffolds adjustable by the teacher or limited to student's Lexile level?

Reading scaffolds for each student are adjustable by the teacher. The Teacher Admin interface includes User Administration functions whereby teachers can restrict students' supervised work time, access to in-program peer-to-peer email, access to in-program games and videos, audio support, level of scaffolding and language. (See number 2 above.)

16. Can the customized lessons be targeted by multiple options such as by Standard and topic?

Yes, lessons can be targeted by standard or topic. We provide customization tools to make it easy for teachers to map lessons to specific learning needs. Using the “Plan and Schedule” menu in the teacher edition, adding lessons is a simple drag and drop process once teachers find the lesson they want from the advanced search tool and searching by grade, lesson collection, subject area, lesson type, and standards.



17. What is your evidence of effectiveness based upon, school-wide use within in English classes or used in an intervention focused model for students who are reading below grade level? If you have specific data on intervention based use, please provide it.

Achieve3000 was proven effective in an independent, randomized controlled trial, which qualifies as strong evidence as defined by ESEA section 8101 (21) (A). Magnolia Consulting, an independent, third-party evaluator. assessed Achieve3000’s literacy products impact on student learning during the 2014–2015 school year. The researchers used a randomized control trial where approximately half of the 46 participating teachers in 3rd, 6th, and 9th grade from four school districts across the country were randomly assigned to either the treatment or control groups. The 1,012 participating students included 62% who received free or reduced-price lunch, 12% who received special education services, and 13%

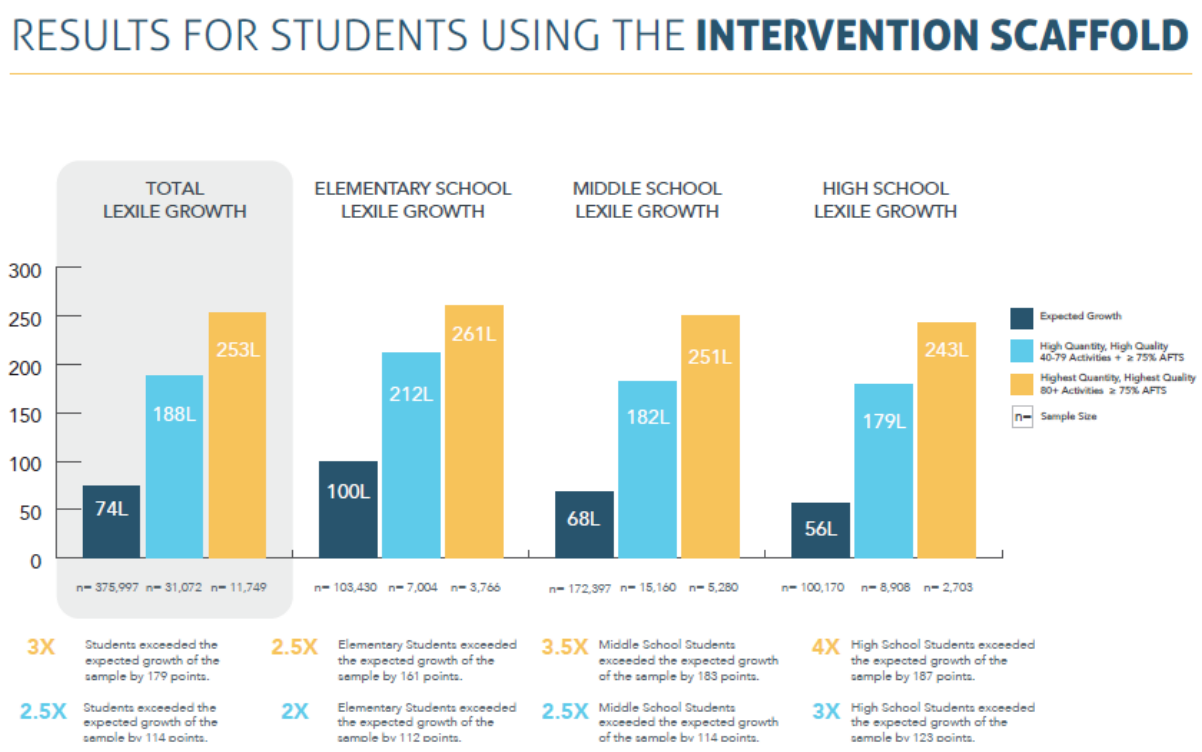
who were classified as English Language Learners. The students were measured at the beginning and end of the school year using the Gates MacGinite Reading Test, fourth edition (GMRT-4). Magnolia also measured program implementation using a mix of weekly logs, classroom observation, and usage data. The researchers concluded that Achieve3000 users made significant gains during the school year and performed better than students using their traditional ELA curriculum. Students who used Achieve3000 during the 2014–2015 school year demonstrated statistically significant and substantively important gains on the GMRT-4's Vocabulary, Reading Comprehension, and Total Reading measures (effect sizes of 0.43, 0.47, 0.48, respectively). In comparison to the control group, Achieve3000 users also made statistically significant gains on the GMRT-4 Reading Comprehension and Total Reading test scores (effect sizes of 0.22 and 0.20). The evidence for ESSA site recently reviewed a sub-sample in this study (grades 6 and 9) and found that the study met the ESSA criteria for strong evidence. Their review can be found here: https://www.evidenceforessa.org/programs/reading/middlehigh-school/achieve3000-secondary.

The Houston Independent School District in Texas measured the impact of Achieve3000 usage on students using scale score performance on the State of Texas Assessment of Academic Readiness program End-of-Course assessments (STAAR EOC) for English I, English II, and Biology and their probability of meeting both the Phase-in 1 and Phase-in 2 passing standards on the STAAR EOC English I and English II. The researchers collected local assessment and Achieve3000 usage data for the 2014-15 school year from 6,759 students across ninth and tenth grades. Of these students, 21.9% had limited English proficiency and 69% were considered at-risk due to economic disadvantage. Because the program was implemented voluntarily across the district, the researchers used a quasi-experimental design adjusting for demographics such as race, gender, economic status, special education status, and English language learner status to control for differences in implementation of the program. The Houston ISD found that increased usage of Achieve3000 was associated with greater achievement on the STAAR EOC exams and increased probability of meeting the Phase-in 1 and Phase-in 2 passing standards on the STAAR EOC exams. The report concluded that "…Achieve3000 does indeed lead to improved reading ability and comprehension for students in need of such improvement."

During the fall of the 2017-2018 school year, Bay District Schools launched its use of Achieve3000's literacy solutions for students in sixth through tenth grades who need intervention based on the district's Response to Intervention (RTI) model. In 2017-2018, there were 28,076 ethnically diverse students enrolled in preschool through 12th grades with 86 percent of students identified as white, 15 percent as black, eight percent as Hispanic, seven percent of students identified as one or more races, two percent as Asian, and about half of a percent as American Indian or Pacific Islander. Across the district, 18 percent of students had disabilities, three percent were English language learners, and 53 percent qualified for free and reduced lunch. Following the 2017-2018 school year, Achieve3000 conducted an analysis of Bay District Schools students' performance on the Florida State Assessment for English language arts (FSA ELA) (Grades 4-10) tests in relation to students' usage of Achieve3000's literacy solutions during the 2017-2018 school year. On average, students saw a scale score increase of 8 points from 2017 to 2018. However, students who completed 80 or more lessons and maintained an average first-try score of 75 percent or above on the embedded assessments gained an average of 14

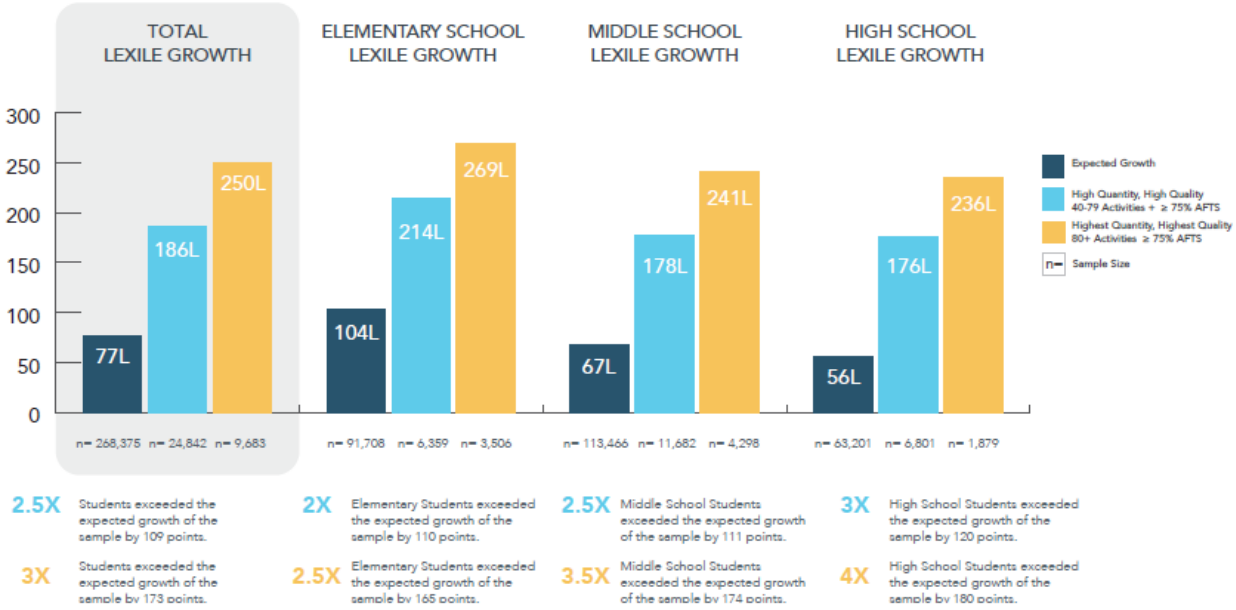
points. Fully 57 percent of students in middle and high school who completed 80 lessons and maintained an average first-try score of 75 percent or above on the embedded assessments made learning gains on the FSA ELA.

Finally, in the summer of 2019, MetaMetrics conducted an independent analysis of usage and performance data from the 2018-2019 school year. They employed multiple methods, including machine learning modeling. See the attached National Lexile Study, as well as a summary of results below.



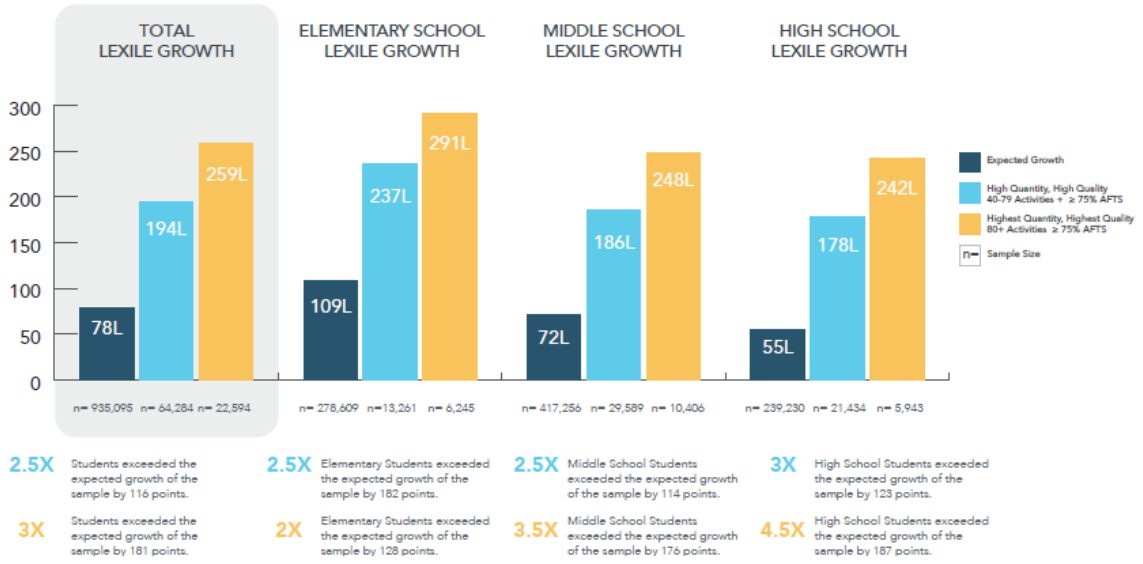
[National Lexile Study page 15]

RESULTS FOR ENGLISH LEARNERS USING THE **LANGUAGE SCAFFOLD**

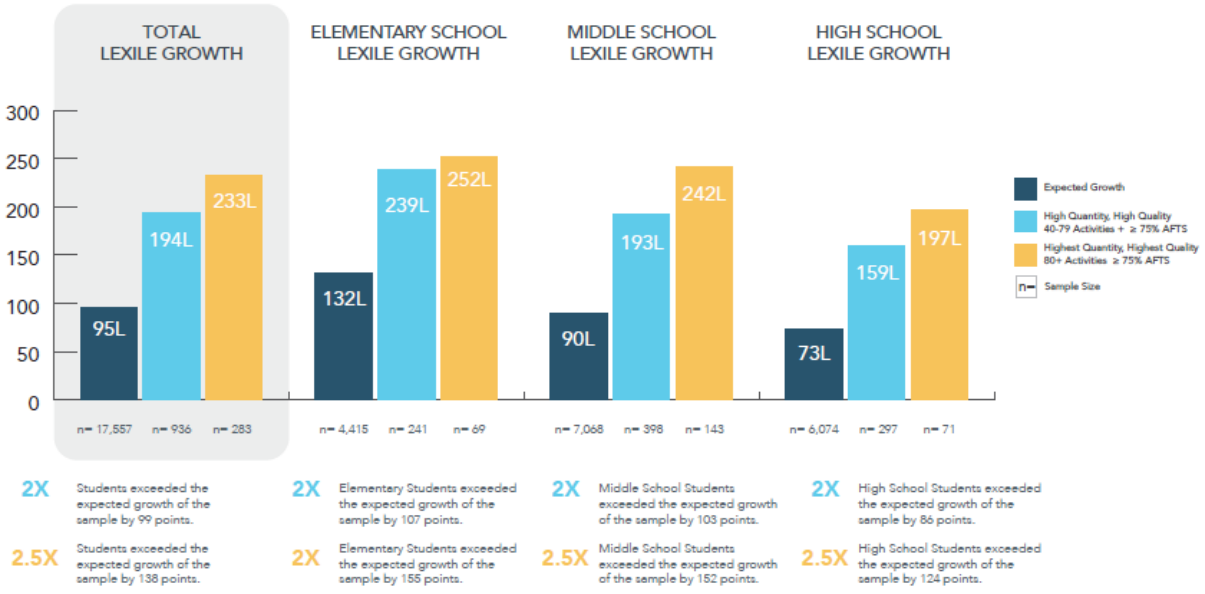


[National Lexile Study page 17]

RESULTS FOR **STRUGGLING READERS**



[National Lexile Study page 21]



[National Lexile Study page 25]

18. Will we be able to export district-wide data from your assessment and progress monitoring tool with a unique identifier (such as student i.d.) in a common file format such as csv?

Achieve3000 enables customers to export reports in multiple file formats including .csv, .xls, .xlsv, and .pdf.

19. Do you provide a Single Sign-on integration with your digital resources?

Yes, Achieve3000 supports single sign-on integration with an LMS that uses basic LTI specification or SAML in conjunction with either Active Directory or LDAP directory services. These options allow districts and schools to add a link to Achieve3000 in their learning management systems. Once students or teachers are signed into their management system, they are automatically signed into Achieve3000.

Exhibit D

February 26, 2020

Kelly Wooden, Senior Procurement Agent
Poudre School District
970-490-3617
kwooden@psdschools.org

Dear Kelly,

Thank you for the opportunity to provide clarifications regarding our response to Request for Proposals (RFP) # 20-630-002 – Secondary Reading Intervention Assessment Curriculum with Instructional Materials and Services. Our responses to your questions are included below.

1. **Tiered Pricing Structure** – the tiered pricing structure provided below is by student license. Teacher, Home, and Leadership access is included in the per student license cost.

   Achieve3000 Literacy (formerly Pro) with Boost Pricing for Poudre School District

Number of Licenses	License Cost (Per Student)
Up to 250	$42
251-499	$38
500-999	$33
1000+	$28

2. **Pricing for 10-Year Contract Term** – Achieve3000 agrees to hold the above tiered pricing firm for the duration of the 10-year contract in order to accommodate increases in enrollment throughout the contract period.

3. **Shipping and Handling** – No tangible materials are included in the Achieve3000 solution offering, it is a web-based program. Therefore, no shipping and handling costs apply.

4. **Lead Time** – The lead time is dependent on variables such as rostering, training, and time of year the purchase is made. However, Achieve3000 does our best to get a client up and running as soon as possible given these factors. **I**t is reasonable to expect a lead time of one to two weeks from when an order is received to when implementation begins. (Noting that there may be factors beyond our control might extend this timeline.)

5. **Professional Development** – Achieve3000 will provide one (1), in-person on site at a Poudre School District location, for no less than three (3) hours of professional development training at no cost to the District. Note that depending on the licenses purchased, we have a standard number of required professional development days, in order to ensure that the implementation

is set up for success. Once the schools have made their program selections, we will work with you to customize a professional development plan.

Number of Licenses	Number of Required PD Days	Professional Development Pricing
Up to 250	2	Onsite Session - $2,695.00 Online Session - $695
251-499	2	
500-999	3	
1000+	4*	

*Depending on the number of licenses over 1000 purchased, additional days might be recommended in order to ensure a successful implementation. Note that our original price proposal included a recommendation of 8 professional development days. As stated above, we will work with you to customize a professional development plan once schools have made their program selections.

6. **Updates** – New content is released on a weekly basis. In addition, there are typically one to two significant product updates per year, with other modifications and improvements made on an ongoing basis. Updates are pushed out automatically to customers at no additional cost. These new releases/changes are communicated to clients via the teacher dashboard, as well as via email.

We look forward to working with Poudre School District. Please let me know if there are any additional follow-up questions.

Best Regards,
Erin Rush, Director of Proposal Services
C: 614.512.5819
E: erin.rush@achieve3000.com

Exhibit E

Achieve3000
Differentiate. Accelerate. Achieve.

Scope of Work:
Achieve3000 will provide Poudre School District R-1 Achieve3000 licenses and Professional Learning Services for Secondary Reading Intervention Assessment Curriculum with Instruction Materials & Services. Products offered to Poudre School District include Achieve3000 Literacy (formerly TeenBizPro® for grades 6-8and EmpowerPro® for grades 9-12), Achieve3000 Literacy with Boost (formerly Boost and Access) and Professional Learning Services.

- **Achieve3000 Literacy** provides differentiated instruction designed to increase reading ability and comprehension by giving every student the tools they need to help move them along their just-right literacy journey. Customizable learning and language scaffolds give students frequent opportunities to learn and use academic vocabulary, practice close reading, find and cite evidence, write informally and formally, and demonstrate comprehension. Ongoing embedded assessments help teachers target instruction aligned to the CMAS and monitor progress.
- **Achieve3000 Literacy with Boost** enables further targeted and intensive intervention to accelerate the literacy gains of students who need additional supports and services, provides differentiated instruction and accelerated learning for the unique needs of your ESL students, and supports Native Spanish Language and dual-literacy with a suite of classroom tested scaffolds for students and point-of-use instructional supports for teachers.
- **Professional Learning Services –** Achieve3000 will work with Poudre School District to customize a training plan that meets the specific needs of the district. Training can include onsite and online sessions on topics such as product usage, helping teachers and leaders understand and interpret student usage, and performance data reporting.

What Student Data is collected through the use of they system?

Data Collected	General Purpose of Data Collection
Service Data:	Achieve3000 uses Service Data solely to deliver the Achieve3000 services to and through associated Subscribers, provide Students with individualized content within those Services, and provide Administrators with reports on Students' academic progress in using the Services. Achieve3000 does not collect any more individually identifiable information about Student and Administrators than is reasonably necessary to administer and provide our Services and individualized content to Students and their respective Subscriber institutions, to enable participation in Subscriber-sanctioned Student contents, and to generate Subscriber-requested reports on individual Student academic progress.
Students' first and last names	
Student email	
District/School name	
School Year	
Student login name/login password	
Student in-App Data (responses to questionnaires/activities, student work, student generated writing)	
Student enrollment	
Teachers' First and Last name	
Account Type (student, teacher, or administrator)	
User Grade level	
Administrator's First and Last name	
Administrator Title (only collected if provided by the user)	
Administrator curricular responsibilities (only collected if provided by the user)	

Race/ethnicity (optional, only collected by request of the District)	
Student demographic information (optional, including gender, preferred language)	
Socioeconomic status (optional, only collected by request of the District)	
Disabilities (optional, only collected by request of the District)	
Student Test scores (optional, only collected by request of the District)	
Parent first name, last name and email (optional, only collected if parent accesses home edition)	
Website Use Information:	
Standard log files	To understand how visitors' access and use the Website and to better tailor the content and content access options of the website to you and other website users.
Web beacons	
Pixel tags	
IP Address	
Browser Type	
Internet service provider (ISP)	
Device operating system	
Dates/times website it visited	

What third parties does the vendor partner with, and who may receive Student Data in any format? What is the purpose of these third-party partners?

***** Achieve3000 does not share personally identifiable and sensitive information with third parties or external business partners

Third Party Vendor	Purpose
You Tube	Video hosting
Google Analytics	Website usage
Amazon Web Services	Website hosting
FullStory	User Experience
Imperva	DDoS and Security Layer
Brightcove	Product Video Management

Name and Email for Contract Notices:
Erin Rush, proposal.services@achieve3000.com

Authorized Representative to sign the Contract:
Nicholas Bates, Chief Financial Officer